

REVISION STATUS: 10

REVISION DATE: 06/03/2024

RR-T02-006

Page 1 of 42

<u>Robin Rigg Offshore Windfarm</u> <u>Marine Coordination Procedure</u> <u>T02 – 006</u>

Documen	t Control/Amendment History:			
Version:	Reason for Change:	Date of Issue:	Prepared:	Checked:
1	Initial Issue [DRAFT]	31/01/2017	[Re	dacted]
2	Official Issue [FINAL]	11/03/2017		
3	Non-Windfarm Traffic – Information Added.	24/04/2017		
4	CTV Charter Change	30/01/2018		
5	CTV Charter Change / RWE Amendments	25/01/2020		
6	Amended Dockside crane information and photograph	23/04/2020		
7	Single Vessel Operations / Requirements	03/05/2020		
8	Added Whitehaven Operations Flowchart	25/08/2020		
9	Review / Updated for 2022 Onwards	06/03/2022		
10	Review / Updated for 2024 Onwards	06/03/2024		



REVISION STATUS: 10	REVISION DATE: 06/03/2024	RR-T02-006	Page 2 of 42

Document Index

1	Scope	
2	Application4	
3	Definitions	
4	Marine Coordination Procedure – RR Windfarm Information6	
	4.1 Background Information	6
	4.2 Turbine & Cable Layout / Schematic	7
	4.3 Turbine Locations – Latitudes & Longitudes	8
	4.4 WTG Structure	9
	4.4.1 WTG Fendering / Ladders / J Tubes / Vessel Access	10
	4.4.2 WTG Davit Crane / Chain Hoist	11
	4.5 Windfarm Lighting & Markings	11
	4.5.1 Aviation Lights	11
	4.5.2 Marine Lights	11
	4.5.3 Turbine / Substation Identification Lights	12
	4.5.4 Additional Windfarm Markings / Equipment (Marker Buoys / Fog Horns / Etc.):	12
	4.6 Anchorage Zones & Restrictions	13
	4.7 Windfarm Transit Route / Transit Gates	13
	4.8 Statutory Safety Zones / Exclusions Zones / UXO Survey Coverage	13
	4.9 Notice to Mariners / Navigational Hazards	14
	4.10 Non-Windfarm Traffic (Transiting in the Field)	14
5	General Communication 14	
5	5.1 Emergency Communication / Initial Response	15
		15
6	Interface with Vessels	
	6.1 Crew Transfer Vessels (CTV's)	16
	6.2 Survey Vessels	20
	6.3 Jack-Up/Contracted Vessels	20
_		
/		22
	7.1 Management of Access & Egress	22
	7.1.1 Approach Channel(s):	22
	7.1.2 Depth of water / Dock Gates:	23
	7.2 [Redacted]	23
	7.2.1 [Neudoleu] :	24
	7.3 Access Restrictions & Surveys	24
	7.4 Bertning Arrangements	25
	7.5 Vessel Refuelling	26
	7.6 Loading of Cargo / Davit Crane Location & Operation	26
8	Roles and Responsibilities	
	8.1 Windfarm Operational Structure	27
	8.2 Safety Management Responsibility	28
	8.3 Marine Management and Marine Co-ordinator Responsibilities	28
	8.4 Control Room Manning	29
	8.5 Vessel Operators	29



RE	VISION STATUS: 10	REVISION DATE: 06/03/2024	RR-T02-006	Page 3 of 42
9 Car	riage of Dangerous Go	ods / Hazardous Cargo		
10 Cre	w Transfer Vessels Red	quirements		
10.1	Equipment Provided	on board the Vessel		
10.2	Equipment provided	by the site owner		
11 Cre	w Transfer Vessel Avai	lability		
11.1	Multiple Vessels avai	lable		
11.2	Only One Vessel Ava	ilable		
12 Off	shore Operations			
12.1	Transfer List			
12.2	Access Team Require	ements		
12.3	Allowable Conditions	for Offshore Operations		
12.	3.1 Spring Tides			
12.	3.2 Lightning			
12.	3.3 Snow & Ice .			
12.	3.4 Poor Visibilit	у		
12.	3.5 Hours of Dar	kness		
12.4	Site Rules			
12.5	Health, Safety and Er	nvironmental Issues		
13 Op	erating Vessels from	[Redacted]		40



REVISION STATUS: 10

REVISION DATE: 06/03/2024 RR-T02-006 Pa

Page 4 of 42

1 Scope

This document is designed to provide safety related guidance on the Marine Coordination at Robin Rigg Offshore Wind Farm. Specifically, it focuses on normal operational procedures employed by RWE at Robin Rigg and its associated Marine Transfer Procedure, Emergency Plan, and to bridge any other emergency plans in force. It does not detail the scope of work or associated method statements, nor form any substitute for management instructions at Robin Rigg but as supplementary information to sit alongside these instructions.

The purpose of this procedure is to ensure that a safe system of work is put into place for Marine Coordination and to ensure that all risks are as low as reasonably practicable. This document will also provide the service Vessel Master and crew operating on the wind farm with guidance and information relating to the functions that the service vessel will perform and site-specific operational considerations for the wind farm. Service vessels should refer to their own procedures in conjunction with the handbook and any other relevant wind farm procedures.

Note: This procedure does not apply to the Supervision of persons once transferred onto an offshore location, nor to the climbing of WTG tower access ladder and any associated specific PPE. For this, please refer to the Marine Transfer Procedure: TO2 – 004.

2 Application

This procedure is provided for reference to those persons directly involved with the Marine Coordination and those organising offshore operations at Robin Rigg.

During the induction and authorisation session by an RWE Representative, authorised personnel will be provided with information regarding Robin Rigg site guide containing site safety rules and pertinent information.

Transfer of any other plant, apparatus or equipment should be covered by separate procedures and risk assessments by those transferring such items.



REVISION STATUS: 10

REVISION DATE: 06/03/2024 RR-T02-006

Page 5 of 42

3 Definitions

ABBREVIATION	DEFINITION
СТV	Crew Transfer Vessel
CD	Chart Datum
GWO	Global Wind Organisation
HSE	Health, Safety and Environment or Health and Safety Executive
HSSE	Health, Safety, Security and Environment
IMCA	International Marine Contractors Association
IMDG	International Maritime Dangerous Goods
IMO	International Maritime Organization
IS	Immersion Suit
JUV	Jack Up Vessel
LOLER	Lifting Operations & Lifting Equipment Regulations
MARPOL	Marine Pollution
MC	Marine Coordinator
MCA	Maritime and Coastguard Agency
NOK	Next of Kin
0&M	Operation and Maintenance
PLB	Personal Locator Beacon
РОВ	Personnel on board
PPE	Personal Protective Equipment
PTL	Planned Transfer List
RROWF	Robin Rigg Offshore Windfarm
ТР	Transition Piece
TS	Transfer Supervisor
UHF	Ultra-High Frequency (Radio)
VHF	Very High Frequency (Radio)
WAH	Working at Height
WTG	Wind Turbine Generator



REVISION STATUS: 10

REVISION DATE: 06/03/2024 RR-T02-006

Page 6 of 42

4 Marine Coordination Procedure – RR Windfarm Information

4.1 Background Information

The Robin Rigg Offshore Wind Farm (RROWF) is 11km from the Dumfries and Galloway coast and 13km North West of the Port of Workington. The offshore wind farm comprises of 58 x Vestas V90 3MW Mk8 Wind Turbine Generators (WTG) which are connected to the 2 offshore substations by subsea cables.

All transfers are authorised by the Marine Coordinator who is located in the Operations & Maintenance Facility for Robin Rigg [Redacted]

[Redacted] of operations with [Redacted] . Vessels transiting to any other locations other than [Redacted] Robin Rigg Wind Offshore Farm SHALL ensure the Control Room is informed. If transfers are to take place from other ports, then this will be reviewed by the Marine Coordinator and Vessel Master prior to embarkation.

The below map outlines the location of the Robin Rigg Offshore Wind Farm.



Figure 1 – Location of Robin Rigg Offshore Wind Farm



REVISION STATUS: 10

REVISION DATE: 06/03/2024 RR-T02-006 Page 7 of 42

4.2 Turbine & Cable Layout / Schematic

The following schematic is indicative of the offshore site layout (including cable routes) and WTG numbering.



Figure 2 – Schematic of Site Layout



REVISION STATUS: 10

REVISION DATE: 06/03/2024 RR-T02-006

Page 8 of 42

4.3 **Turbine Locations – Latitudes & Longitudes**

ROBIN RIGG EAST			EST		
Turbine	Coor	dinates	Turbine	Coord	linates
	Latitude	Longitude		Latitude	Longitude
*A1	54 46.290	-03 42.031	F1	54 45.534	-03 44.410
A2	54 46.195	-03 41.607	F2	54 45.465	-03 43.995
**B1	54 46.150	-03 42.560	F3	54 45.341	-03 43.593
B2	54 46.056	-03 42.188	F4	54 45.244	-03 43.198
B3	54 45.955	-03 41.776	F5	54 45.150	-03 42.816
B4	54 45.867	-03 41.394	F6	54 45.048	-03 42.405
B5	54 45.745	-03 41.029	G1	54 45.307	-03 44.589
C1	54 46.035	-03 43.127	G2	54 45.205	-03 44.186
C2	54 45.936	-03 42.714	G3	54 45.109	-03 43.750
C3	54 45.840	-03 42.340	G4	54 45.019	-03 43.354
C4	54 45.733	-03 41.928	G5	54 44.924	-03 42.976
C5	54 45.642	-03 41.558	G6	54 44.829	-03 42.569
C6	54 45.537	-03 41.171	G7	54 44.733	-03 42.182
D1	54 45.911	-03 43.700	G8	54 44.638	-03 41.777
D2	54 45.810	-03 43.297	H1	54 44.983	-03 44.333
D3	54 45.702	-03 42.870	H2	54 44.873	-03 43.913
D4	54 45.607	-03 42.496	H3	54 44.786	-03 43.526
D5	54 45.508	-03 42.093	H4	54 44.699	-03 43.130
D6	54 45.415	-03 41.721	H5	54 44.604	-03 42.733
D7	54 45.314	-03 41.318	H6	54 44.509	-03 42.329
E1	54 45.758	-03 44.207	H7	54 44.424	-03 41.925
E2	54 45.671	-03 43.863	J1	54 44.620	-03 44.085
E3	54 45.571	-03 43.449	J2	54 44.530	-03 43.688
E4	54 45.469	-03 43.041	J3	54 44.448	-03 43.292
E5	54 45.375	-03 42.659	J4	54 44.362	-03 42.896
E6	54 45.279	-03 42.256	J5	54 44.272	-03 42.500
E7	54 45.170	-03 41.870	J6	54 44.194	-03 42.128
E8	54 45.075	-03 41.482	K1	54 44.300	-03 43.852
F7	54 44.947	-03 42.025	K2	54 44.210	-03 43.448
F8	54 44.851	-03 41.632	K3	54 44.120	-03 43.060
Site Locati	on	Latitude		Longitude	
Offshore Su	ubstation(s)	54 44.793		-03 41.552	

* A1 – Turbine Structure removed.
** B1 – Monopile structure only.

Figure 3 - Latitude and Longitude of Robin Rigg Structures



REVISION STATUS: 10

REVISION DATE: 06/03/2024 RR-T02-006

Page 9 of 42

4.4 WTG Structure

A pictorial arrangement of the WTG is shown in Fig 4, and for the purposes of general planning it may be assumed that all structures are identical. Further general arrangement drawings are available on request for detailed planning purposes.



Fig 4. General WTG Dimensions



REVISION STATUS: 10

REVISION DATE: 06/03/2024 RR-T02-006

Page 10 of 42

4.4.1 WTG Fendering / Ladders / J Tubes / Vessel Access

Each WTG foundation has one access ladder located to the South East side of each WTG foundation. The ladder is set back behind two vertical fenders (boat landings) designed for CTV's with an approved fendering system to apply pressure against to allow personnel to undertake a Marine Transfer.

This access ladder allows personnel to climb onto the first (intermediate) platform approximately +13m CD. A second ladder complete with a 'ladder cage' is fitted part way across the intermediate platform giving access to the tower base.

All ladders are fitted with a Latchway inertia reel fall arrest system. These shall be used as the fall arrest system for all routine transfers gaining access to the structures. The double hook method should only be utilized when the Latchway system is unserviceable and there is an unavoidable need for access (such as to repair/replace the installed Latchway device or an emergency rescue situation).

All Crew Transfer Vessels should meet the G9/+ Criteria and provide a safety gap between vessel fendering and transition piece access ladder of 500mm minimum to 650mm maximum.

The following Transition Piece drawings show details on the structure, layout, and measurements:





REVISION STATUS: 10

REVISION DATE: 06/03/2024 RR-T02-006

Page 11 of 42

4.4.2 WTG Davit Crane / Chain Hoist

Each WTG is fitted with an individual Davit Arm, allowing a separate portable chain hoist to be attached and used for all lifting of cargo operations from the Crew Transfer Vessel.

The normal sized Chain Hoist to be used is rated at 160kg, which are located inside the turbine, at the ground controller level. For heavier lifting operations, 240kg chain hoists are also available and can be fitted to the Davit Arm.

The chain hoists are PAT tested and serviced annually, and can be transferred to and from shore for this to be carried out. All service records / PAT Test records are available to view in the Robin Rigg Control Room.

Each Chain Hoist has been labelled with a unique identification number, which can also be tracked in the RR Control Room.

For all lifting operations guidance, please refer to the Lifting Ops Procedure and Loading of Cargo Risk Assessment.

The davit crane has 2 lifting eyes:

- Internal lifting eye rated at 800kg, certified for man-riding.
- External lifting eye rated at 250kg, NOT certified for man-riding.

4.5 Windfarm Lighting & Markings

Specific turbines around Robin Rigg Offshore Windfarm are fitted with Navigational lights, compromising of aviation and marine lights which illuminate in certain sequences to provide information to mariners / aviators. Co-ordinates for these are shown above on Page 8, and information on these can be found below:

4.5.1 Aviation Lights

Aviation lights show a constant illuminated red light during hours of darkness and are located on the top of the WTG Nacelle Roof. These are located on the following 8 WTG Locations: A2, B5, C1, E1, F8, G1, J6, and K1.

4.5.2 Marine Lights

All Marine lights have a Nominal Range of 5 Nautical Miles and flash yellow in colour. The locations and sequences are shown below:

Location	Correct Character / Sequence
WTG A2 (North & South Light)	Flash Yellow Once - Every 5 Seconds - (Fl Y 5s)
WTG G1 (North & South Light)	Flash Yellow Once - Every 5 Seconds - (Fl Y 5s)
WTG B5 (North & South Light)	Flash Yellow 4 Times - Every 12 Seconds - (Fl(4) Y 12s)
WTG K1 (North & South Light)	Flash Yellow 4 Times - Every 12 Seconds - (Fl(4) Y 12s)
WTG J6 (North & South Light)	Flash Yellow 4 Times - Every 12 Seconds - (Fl(4) Y 12s)





REVISION STATUS: 10

REVISION DATE: 06/03/2024 RR-T02-006

Page 12 of 42

4.5.3 Turbine / Substation Identification Lights

Each individual turbine and substation are also fitted with LED Sign Lights showing the locations unique identification; such as RR D1, RR H7 for the turbines or RRW / RRE for the substation. These are located on both sides of the turbine (North Side light and South Side Light) and automatically turn on during hours of darkness. These illuminate in a white colour to enhance clear visibility.

4.5.4 Additional Windfarm Markings / Equipment (Marker Buoys / Fog Horns / Etc.):

WTG A1 structure has been removed and is currently marked with a yellow marker buoy. WTG B1 is a Monopile / Transition Piece section only. WTG K1 is fitted with an automatic fog horn. No access is permitted if it is sounding unless the following applies:

- a. If visibility is not reduced and the foghorn is operating (due to a faulty foghorn unit) then access to K1 can be undertaken, however ear protection must be worn. On arrival the foghorn must be de-energised or silenced and a repair effected before carrying out any further work.
- b. If personnel are already transferred to K1 and the foghorn operates, noise levels within the WTG are within acceptable levels and work may continue. However, exposure times outside of the WTG must be minimised and ear protection worn, either to carry out repairs to the foghorn (following a fault) or to transfer back to the vessel.
- Hearing protection is to be worn at all times when transferring to and from the above WTG's, when the c. horn is sounding. (Hearing protection is available on the CTV's and on WTG's that are fitted with fog horns).
- d. When accessing WTG where fog horns are installed, the fog horn is to be switched off whilst on the turbine and back to auto on departure. (1 hour alarm mute button is located on the side of the fog horn controller box, located in the ground floor of WTG K1).
- Where conditions are foggy and the fog horn cannot be switched off, hearing protection must be worn e. when accessing the external platform. Works on the external platform when the fog horn is sounding should only be undertaken where absolutely essential and subject to a specific risk assessment.



REVISION STATUS: 10

REVISION DATE: 06/03/2024 RR-T02-006 F

Page 13 of 42

4.6 Anchorage Zones & Restrictions

There are no defined anchorage zones at Robin Rigg Wind Farm. Vessel Master should follow their own company procedures for anchoring if required, and these should comply with the Renewables UK Guidelines. Any planned anchoring events MUST be authorised with the RWE. A guide for anchoring distances and restrictions can be seen below:



Minimum recommended clearances for renewable energy projects

Element	Direction	Fixed structure or	Subsea Pipeline or Cable		
		floating vessel	Horizontal	Vertical	
Jack-up Hull	Any	3.0 m	-	3.0 m (afloat)	
Legfooting	Any	5.0 m	10.0 m	3.0 m (afloat)	
Mooring Line	Not crossing	5.0 m	50.0 m	-	
Mooring Line	Crossing	5.0 m	-	5.0 m	
Anchor	Drag sector away	50 m	50 m	-	
Anchor	Drag parallel to	150 m	150 m	-	
Anchor	Drag sector toward	250 m	250 m	-	

4.7 Windfarm Transit Route / Transit Gates

Windfarm passage plans should be available to view onboard each individual vessel and be provided by the vessel management company. These transit routes can be on electronic navigational equipment, with a backup passage plan shown on up-to-date charts in case of system failure. All transit routes / passage plans should comply with Marine Law and Regulations set by the MCA, and ensure the vessel transits along the safest passage at all time.

There are no set Transit Gates at Robin Rigg Windfarm, and entrance / exit from any area of site is allowed. The Vessel Master should inform the Marine Co-ordinator of when the vessel is entering / exiting the Windfarm Boundary with a specific time stamp as per the G9/+ Guidance. For further information on best practise passage plans and location to enter / exit the windfarm boundary, please contact the Robin Rigg Marine Co-ordinators or Robin Rigg Control Room.

4.8 Statutory Safety Zones / Exclusions Zones / UXO Survey Coverage

There are no specific Statutory Safety Zones for Robin Rigg. All vessel traffic is allowed to enter the Windfarm Boundary; however, pleasure craft should stay clear of all Offshore Structures and Service Vessels. Crew Transfer Vessels have clearance to approach all offshore locations during operational hours.



REVISION STATUS: 10	REVISION DATE: 06/03/2024	RR-T02-006	Page 14 of 42
			-

Exclusion Zones are implemented during various offshore work campaigns such as Jack-Up Vessel, Dive operations and blade repair works, where there is increased risk and third-party input could affect operations. The Marine Coordinator will inform all Windfarm traffic of the exclusion zone by VHF Radio in form of a "Sécurité Message", stated all details of the exclusion area including size in metres, locations, vessel, times etc.

Vessels may be permitted into the exclusion zone for operational purposes and permission to do so must be obtained from the Marine Co-ordinator and Jack-Up Vessel Master/Dive Supervisor.

All Vessel Masters are to remain extra vigilant at all times during passage and whilst inside the Windfarm Boundary for any UXO (Unexploded Ordnance). If sighted, the Robin Rigg Control Room must be informed immediately, who will then contact the MCA directly.

4.9 Notice to Mariners / Navigational Hazards

All RWE Notice to Mariners will be issued via email to all vessels and vessel management companies from a Third-Party Organisation. [Redacted] is currently used for this service, and will dispatch all relevant wind farm information / navigational hazards to all local mariners on RWE's behalf. [Redacted] can be contacted on the following telephone numbers: [Redacted]

[Redacted] also issue and operate a Notice to Mariners system, which is issued via email to all Port Users and relevant parties. Previous / current Notice to Mariners can be provided on request from the Robin Rigg Control Room / [Redacted] for any Navigational Hazards or Offshore Operations which may affect other mariners.

4.10 Non-Windfarm Traffic (Transiting in the Field)

The position of Robin Rigg OSWF is that of very shallow waters and is not a standard navigable track for private/commercial vessels, so any disturbance from Non-Windfarm Traffic is extremely low.

During occasions where private/non-windfarm commercial vessels may come close to the RR OSWF boundary, or transit through the windfarm, the CTV Site Vessels will act as guard vessels. The CTV's will report if any vessels are coming close to the OSWF to the Marine Co-ordinator, who shall instruct a nominated site vessel to make contact with the vessel either verbally or by way of VHF, to inform them of any hazards to navigation such as statutory safety or exclusions zones applying to the windfarm, current traffic levels, and marine operations taking place.

If the observed vessel enters the wind farm limits, Marine Coordination should advise all service vessels of the vessel's position, course and speed at intervals of not more than 15 minutes until the vessel has cleared the wind farm limits.

5 General Communication

It is essential that proper communication is kept with the Robin Rigg Control Room (RRCR) during all vessel operations and during any incident. A full log will be maintained by the Duty Control Room detailing vessel location, personnel movements and key operations.

All vessel movement communication with the Robin Rigg Control Room and inter vessel communication, shall be by VHF radic [Redacted] If for operational reasons VHF communications are not possible then telephone



REVISION STATUS: 10 REVISION DATE: 06/03/2024 RR-102-006 Page 15 of 4	REVISION STATUS: 10	REVISION DATE: 06/03/2024	RR-T02-006	Page 15 of 42

communications and /or UHF radio may be used. The preferred telephone method is via the main Robin Rigg Control Room office desk phone and mobile phone use should be kept to a minimum.

If the Marine Co-ordinator is unavailable or difficulty is experienced in raising the Marine Co-ordinator then the RWE Wind Control Room (OOCRE) may be contacted directly to convey key information – please note that the OOCRE is not based at Robin Rigg, however they will be able to record and act on information as necessary.

All personnel transfers to and from the WTG must be communicated to the RRCR confirming the number of personnel on the WTG. The appropriate VHF channels and telephone numbers for Emergency and/or Incident controllers are as follows:

[Redacted]

For inter WTG and WTG to vessel communication UHF radio communication is to be used. Working frequencies are determined by the vessel Master; however, for safety coordination including vessel transfers, the Robin Rigg open [Redacted] is to be used by personnel communicating directly with the CTV.

All conversations with the Control Room are recorded, for safety and investigation purposes.

5.1 Emergency Communication / Initial Response

Emergency communications shall be in accordance with this document and any associated Emergency Plans in force. It is a key requirement that the Vessel Master and Marine Coordinator are informed of any incident requiring enactment of emergency procedures, at the earliest practicable opportunity.

The Duty Engineer / Marine Coordinator will act as Emergency Coordinator for any incident if it is appropriate to the response. They shall appoint an Incident Controller on location to be the primary point of contact regarding incident information and response. When requested by the control room [Redacte or any other channel specified, is to be vacated and dedicated for EMERGENCY communication during an incident. Throughout any



REVISION STATUS: 10

REVISION DATE: 06/03/2024 RR-T02-006

Page 16 of 42

incident period this channel must ONLY be used for the communication of incident related information [Redacted] remain the normal working channel for all other communication.

Personnel at that location must STOP ALL WORK and fully assess the situation. The level of response to be undertaken shall depend on the seriousness of the emergency and/or injury.

Personnel should make safe the work area (isolating/contain) and immediately undertake Emergency Response, but at no time put themselves or anyone else involved in the emergency at further risk.

Personnel must immediately raise the alarm, informing the Control Room either directly or through the vessel Master. The Emergency Coordinator will then follow steps within the Emergency Response Plan and request Emergency Services as required.

All other remaining offshore teams should be stood down immediately during an emergency situation and informed to go to a place of safety and wait further instructions to prevent any further incidents occurring.

Any incident requiring a ladder rescue during the transfer procedure shall be conducted as per the Wind Turbine – 'Working at Height & Rescue Training', and in conjunction with the Vessel Master's advice on environmental conditions and the best use of the vessel and its position relative to the casualty.

6 Interface with Vessels

6.1 Crew Transfer Vessels (CTV's)

The prime purpose of the CTV's is to safely and efficiently transfer PAX and equipment to include materials to/from the RROWF. As per the Robin Rigg Marine Transfer Procedure, in some instances this will also include but not limited to service duties to JUV or other project vessels that maybe tasked with operations on site. Any tasks outside of the CTV's normal duties will require a comprehensive RA and MS.

All CTV's tasked with duties within the RROWF will be that of jet propulsion with all Master's and crew alike adhering to the certification requirements for the coding of the manned vessel. CCTV shall also be monitored for



REVISION

Robin Rigg Marine Coordination Procedure

STATUS: 10	REVISION DATE: 06/03/2024	RR-T02-006	Page 17 of 42
31A103. 10	REVISION DATE. 00/03/2024	KK-102-000	Fage 17 01 42

any potential safety breaches whilst the CTV's are operational these recordings should be stored electronically for at least 7 days. The CCTV recordings shall be made available to the MC upon request.

The MC or any appointed RWE safety person shall witness CTV crew's drills on a regular basis; this should not be undertaken in the event of any ongoing work on the CTV's in the interests of safety. Any concerns from the CTV Masters are to be raised with the MC for clarity and pro-active reporting structure to be maintained. The Masters decision will always be final in the interest of safety of the vessel and persons on-board.

Before CTV departure from Port of Workington, the Vessel Master will liaise with the Marine Co-ordinator informing them of the Vessel Crew onboard with NOK Numbers, confirm the number of PAX onboard, and if any safety inductions have been completed / are required. Once complete, a vessel outbound time should be provided before disembarkation.

During passage to RROWF, if any circumstances change out of normal operating procedures, the Marine Coordinator should be informed immediately. Once entering the windfarm boundary, a call should be on [Redacted]

to inform the MC that the vessel is now on site with an arrival time. Any further changes to the planned work will be communicated at this point.

CTV Vessel Masters are to ensure all operations are communicated efficiently to the Marine Co-ordinator by the primary means on [Redacted] . This is to include all PAX transfers to all offshore structures, including the team number, location, and transfer time. The same requirement of information is to be provided when the teams depart the offshore structure and transfer back onto the CTV. The vessel Transfer Supervisor is to assist with all offshore transfers as per the Marine Transfer Procedure T02-004.

Once offshore operations are complete, the Vessel Crew are responsible to ensure all personnel are accounted for before proceeding inbound to Port of Workington. Once a head count has been completed by the crew, and all personnel are safely seated, the Vessel Master is to contact the Marine Co-ordinator to confirm clearance to depart RROWF and begin passage back to Port; a departure time from site is also to be communicated.

On arrival back in port, and completion of offshore ops, the vessel Transfer Supervisor is to assist with PAX disembarkation and unloading of cargo. The Vessel Master is to communicate once again with the Marine Coordinator to inform that all PAX are safely ashore with a time. At this point, the MC will inform the vessel of the planned work for the following day consisting of a load out time and any other relevant operations information.



REVISION STATUS: 10

REVISION DATE: 06/03/2024 RR-

RR-T02-006

Page 18 of 42



REVISION DATE: 06/03/2024

REVISION STATUS: 10

RR-T02-006

Page 19 of 42



REVISION STATUS: 10

REVISION DATE: 06/03/2024 [Redacted] RR-T02-006

Page 20 of 42

6.2 Survey Vessels

Surveys Vessels working on site are to ensure that all vessel crew and surveyors undertake the appropriate site induction and provide all relevant certification to the Marine Coordinator / Site Staff to check suitability. Once all RAMS and procedures are in place and approved, the Survey Vessel should inform the Marine Coordinator of the days planned work ahead, of which the MC will advise of any restrictions / operations which may affect surveying.

When the vessel is ready to depart outbound from Port, a call to the Marine Co-ordinator should be made via or telephone if out of range, stating the crew onboard (NOK Numbers) and outbound time and estimated time of arrival on site or location. Arrival time on site / location should also be pa**sed** to the MC to record, along with any changes to the planned work. Begular communication should be kent with the

to the MC to record, along with any changes to the planned work. Regular communication should be kept with the Robin Rigg Control Room and any questions regarding site operations raised. Survey completion / end of working day / inbound times and arrival back in port should be passed to the MC to record in WF-Ops/Systematic.

Should any incidents or issues arise during passage to location, the Marine Coordinator should be informed immediately with all relevant details and information.

6.3 Jack-Up/Contracted Vessels

Jack up or any other specialised vessels contracted to carry out work at RROWF shall provide the Marine Coordinator with an IMO crew list and supply the necessary crew certification where required. Exclusion zone/s will be implemented prior to any lifting operations commencing within the RROWF boundaries. A CTV will be made available to the vessel in case of emergencies and be available to be within the windfarm boundary within 30 minutes, in accordance with any bridging plan in force.

A specific Emergency Response Plan shall be implemented when jack up vessels are deployed within the windfarm boundary.



REVISION STATUS: 10

RR-T02-006

Page 21 of 42

REVISION DATE: 06/03/2024 [Redacted]



REVISION STATUS: 10

REVISION DATE: 06/03/2024 RR-T02-006 I

Page 22 of 42

7.1 Management of Access & Egress

[Redacted] is the primary Port for all operations at Robin Rigg Offshore Windfarm. Secondary Ports include [Redacted] , and details on these can be available on request from the Robin Rigg Control Room.

The primary means of access to vessels at Robin Rigg wind farm is via the access steps inside [Redacted]

The last person transiting through the Access Steps gate is to ensure that it is properly closed to prevent unauthorised personnel gaining entry.

The code for the gate is [Redacted]

Access to the vessel shall always be by the safest and most appropriate method, normally the 'Access Steps'. Use of the North Jetty berthing ladders shall be minimised and wherever possible use made of the Access Steps. If this is not possible, persons using the North Jetty berthing ladders must use the fall arrest equipment fitted and be trained to do so. If for any reason the above cannot be followed, then access to vessel is to be in accordance with the CTV operators risk assessment.

PPE for crew accessing the vessel using the North Jetty ladders is available in the jetty locker. A minimum of 2 persons must be present during crew access to the vessels.

Care should be taken if ice or other significant hazard is present at the available access points. Vessel crew are to assess the hazard and deem if transfer to the vessel is appropriate and inform the control room.

Quayside transfers not at the Port of Workington must be agreed by the Marine Coordinator and assessed by the vessel skipper prior to any embarkation. A map of the port showing berths and layout of all RWE Dockside Equipment can be seen below:

[Redacted]

7.1.1 Approach Channel(s):

On arrival at [Redacted] by vessel, [Redacted] can be contacted on [Redacted] [Redacted] o confirm Harbour Masters directions including further details or arrival and departure procedures. The harbour master will also provide information on tides, access and berthing arrangements.



REVISION STATUS: 10

REVISION DATE: 06/03/2024

RR-T02-006

Page 23 of 42



REVISION DATE: 06/03/2024

REVISION STATUS: 10

RR-T02-006

Page 24 of 42



REVISION STATUS: 10	REVISION DATE: 06/03/2024	RR-T02-006	Page 25 of 42
NEVISION STATUS. 10	REVISION DATE: 00/03/2024	111-102-000	Fage 23 01 42

The Marine Coordinator will plan any tidal restrictions at the port and this plan will be issued as a guidance notice to all CTV's operating on the RROWF. All CTV Masters are requested to also generate their own passage plan / tidal calculations to allow safe passage for their own vessels.

Surveys conducted by the [Redacted] are issued to all CTV's. Any changes from the previous surveys are calculated and amended accordingly with the issued tidal calculations as guidance only for planning purposes.

Vessel Masters are responsible to provide safe access / egress and berthing for the vessel to eliminate the possibility of grounding. All data provided by the Marine Co-ordinator as a guide does not take into account any tidal cuts due to high pressure or sea state on the day.

7.4 Berthing Arrangements

Berthing arrangements for the RROWF CTV's are within the [Redacted] and are advised acc if alternate berth is required, depending on shipping movements within the port. All CTV's shall call the [Redacted]

[Redacted] before inbound /outbound passage. The dock gates are manned approximately 2 hours either side of high water. Alternative berthing is also in place when the RROWF CTV's are required to remain outside of the [Redacted] tidal dock. Tide slides are in place and accessible at all states of tidal range and are maintained by RWE. These are located along the North Jetty.

During operations where the vessels are berthed on the Tide Slides, full training is to be provided by the Vessel Management Company to ensure all crew are certified to access the vessel along the North Jetty Dock Wall. This training shall meet the requirements of the Work at height Regulations. Any crew, who are not certified, must use the access steps for access / egress onto the vessel and the use of the dockside ladders is strictly prohibited. Tide slide Mooring Instructions are available in the control room; a layout drawing of the tide slides is shown below:



REVISION DATE: 06/03/2024

REVISION STATUS: 10

RR-T02-006 Page 26 of 42

7.5 Vessel Refuelling

Vessel refuelling can be undertaken in two locations at [Redacted] . The primary location for this is on main fuel berth, located inside the [Redacted] and fitted with a Self-Retracting Lifeline (SRL) on the Vessel Access Ladder. The secondary location for refuelling is in the Outer Basin, berthed on the access steps. Both locations and suitable and approved for refuelling operations and tidal conditions / dock gate open times will affect which location is used.

All personnel undertaking refuelling duties will be required to complete the refuelling familiarisation training by an RWE Representative and sign a training confirmation sheet. Personnel are required to read and understand the Refuelling Procedure – T02-003 "Fuelling the Workboat from the onshore Bulk Diesel Tank" which is available in the Robin Rigg Control Room. This refuelling procedure should be followed at all times with the correct Safety Equipment in place and ready to use, which is provided by site and located in a red storage box next to the fuel bowser.

Communications should be made between Vessel Master and Marine Coordinator prior to refuelling taking place to ensure this will not hinder any site operations / other vessels accessing the steps.

During refuelling operations, the vessel crews are to take great care and remain vigilant to allow a fast response time and prevent any incidents occurring. Any incidents such as spillages etc. should be reported to the Robin Rigg Control Room or the RWE Wind Control Room immediately and the correct emergency response procedure put into action.

Once refuelling ops are complete, the Vessel Master should contact the Marine Co-ordinator / Control Room to record the amount of fuel taken. If the Control Room is unmanned during out of office hours, then a phone call should be made to the RWE Wind Control Room to inform them of any fuelling operations and quantities taken. These refuelling figures should also be recorded in the "Vessel Bunker Sheet" inside the Fuel Bowser.

The fuel bowser is locked with a combination padlock. The code for this is [Redacted]

7.6 Loading of Cargo / Davit Crane Location & Oneration [Redacted]

All loading of cargo onto a Crew Transfer Vessel is to be carried out by competent and qualified personnel who are fully trained and certified to industry standard Rigging & Slinging practices, and who have also undertaken further training / familiarisation in the operation of our specific model of crane.

The maximum lifting weight of the dockside davits is 1000kg, and should not be operated in wind speeds over 14m/s.

All lifting operations below 500kg SHALL be in accordance with Risk Assessment ROB-OPS-RA-003. And all lifting equipment MUST be suitably certified and a in date inspection tag affixed. All lifting operations above 500kG should be in accordance with a specific lifting plan.



REVISION STATUS: 10

REVISION DATE: 06/03/2024 RR-T02-006

Page 27 of 42

8 Roles and Responsibilities

Wind farm operational positions based upon competency and experience of individuals drawn from competent person status. Depicted below is an overview of the RROWF management and team structure.

8.1 Windfarm Operational Structure





REVISION DATE: 06/03/2024

REVISION STATUS: 10

RR-T02-006

Page 28 of 42

8.2 Safety Management Responsibility

To ensure effective management and co-ordination of Heath Safety and Environment (HSE) site management will ensure activities between RROWF operations and vessel operations are suitably managed and communicated. This will include but not limited to the following:

- a. RAMS are performed for all marine operations within the wind farm, including routine operations;
- b. Develop a wind farm emergency response plan (ERP) and corresponding emergency response cooperation plan (ERCoP);
- c. SIMOPS operations;
- d. Develop a bridging document between the Contractor's management system and the wind farm management system;
- e. Promote reporting of hazardous observations and near-misses;
- f. Ensure investigation of incidents, identification of lessons learned and implementation of corrective actions;
- g. Share safety information and lessons learned with Contractors and Vessel Operators;
- h. Invite participation of service vessel marine crews in toolbox talks;
- i. Evaluate emergency drills, and conduct periodic reviews of all site safety procedures, RAMS.
- j. Share Environmental management and Marine Wildlife documentation with Contractors and Vessel Operators.

8.3 Marine Management and Marine Co-ordinator Responsibilities

Site management will develop and implement marine procedures in accordance with wind farm operator HSE policy, Licence Conditions, Environmental policies and the site safety procedures. In addition, site will develop and communicate marine procedures, in regard to but not limited to the following:

- a. Vessel suitability assessments and arrange for fit-for-purpose inspections for all service vessels;
- b. Vessel operator management system and the wind farm management system;
- c. Develop marine exercise scenarios in support of the wind farm ERP;
- d. Ensure that all personnel authorised to work in or visit the wind farm hold valid, appropriate and sufficient certification in accordance with statutory requirements and industry guidance;
- Review project work schedules to identify potential traffic or access conflicts; e.
- f. Manage and maintain weather forecasting services for the wind farm.

The Marine Coordinator operates within the RWE Robin Rigg agreed rules and procedures and will coordinate all offshore activities in accordance with these procedures and have the authority to decide on the most appropriate course of action with regard to vessel planning and deployment. This includes the manifesting of the vessel, its cargo and personnel, and where appropriate emergency response. The Marine Co-ordinator will have the authority to modify or cancel marine operations within the wind farm on the basis of current or forecasted weather conditions, in consultation with Vessel masters and site management.

Where practicable, the Marine Coordinator will consult and work closely with the Vessel Master to ensure site operations are planned and executed as efficiently and safely as possible.

During Marine Co-ordinator shift change periods, a full handover procedure should be undertaken and followed as per G9/+ Compliance using the Robin Rigg Marine Co-ordinator Handover Notes to ensure all relevant marine / operations information is captured, and the Duty MC coming on duty is aware of all necessary information, restrictions and HSE.



REVISION STATUS: 10

REVISION DATE: 06/03/2024 RR-T02-006 Page 29 of 42

8.4 Control Room Manning

There shall always be a minimum of one person stationed in the Control Room when personnel are transferred offshore, to cover the duties of Marine Coordinator and Emergency Coordinator. Whenever possible a second person shall be available to assist upon request with either Emergency Response or other Control Room duties either associated with Marine Coordination or Control Person responsibilities.

The following are examples of scenarios where a 2nd person would not be required to cover the above duties, but it must be ensured that the Duty person is suitably trained and authorised.

- a. Emergency call out when a limited number of PAX are required to go offshore. The on-call duty engineer will enact the role of MC.
- b. When limited number of technicians are offshore and only 1 vessel is deployed.
- c. Night Shift control room operations, for example during jack up vessel campaigns when work is being carried out and offshore transfers are not required to other locations other than the JUV point of work.

Where a 2nd person is available then they must be contactable at all times to assist in the Control Room upon request.

Note: All the above conditions are subject to a dynamic Risk Assessment at the time.

8.5 Vessel Operators

Vessel Operators providing service vessels for use with marine operations within the RROWF will:

- a. Ensure all vessels provided for use with marine operations are fit-for-purpose, in compliance with flag Administration and coastal Administration regulatory requirements and maintained in good condition;
- b. Cooperate in the planning and execution of inspections and surveys as required;
- c. Ensure that all marine crew are appropriately trained and maintain the required certification;
- d. Maintain a vessel management system and establish appropriate bridging documents to the wind farm management system (including the ERP); and comply with and work with the site management in planning and conducting marine operations.

8.6 Masters Role and Responsibilities

Vessel Masters are to follow the vessel company and RWE procedures at all times and ensure the vessel is in a serviceable and operational condition before any PAX embark the vessel. The vessel should be clean and well kept, and provide all facilities and equipment as per site rules and guidance.

The Vessel Master will ensure Safe Access / Egress for all personnel to board the vessel, and a head count should be regularly undertaken to match the issued transfer sheet before transiting on the vessel. The Vessel Master / Transfer Supervisor will ensure that any new personnel on the vessel, who have not undertaken an induction, will receive a full familiarisation of safety equipment and locations. A record will be kept on-board the vessel of all inducted personnel.

A constant monitoring of passenger welfare should be carried out and any unwell / sea sick personnel should be reported to the Marine Coordinator / Control Room for action.

The Vessel Master shall also ensure that Emergency Drills are carried out on a regular basis as per company procedures and inform the Marine Coordinator with information on these taking places. Emergency Drills involving passengers onboard can also be carried out where practical to improve awareness across the whole team.

Vessel masters are to ensure that PLB's are monitored on the correct frequency.



REVISION STATUS: 10

REVISION DATE: 06/03/2024 RR-T02-006

Page 30 of 42

9 Carriage of Dangerous Goods / Hazardous Cargo

All persons requesting the transfer of dangerous cargo must provide details of substances to the Marine Coordinator.

All carriage of dangerous goods and hazardous cargo must comply with Annex III, regulation 4.3 and chapter 5.4, paragraph 5.4.3.1 of the International Maritime Dangerous Goods Code (IMDG). This states international guidelines for the safe transportation or shipment of hazardous materials by water on a vessel. IMDG Code is intended to protect crew members and to prevent marine pollution in the safe transportation of hazardous materials by vessel.

The implementation of the Code is mandatory, and all vessel masters are required to be trained in the requirements of the IMDG Code and to ensure that all dangerous cargo and hazardous material is securely fastened onboard in the suitable consignment gas/cargo cages provided and stored correctly on the vessel in the correct packing groups and with adequate distances in-between.

Communication between the Vessel Master and Marine Coordinator must take place before dangerous goods are being carried on a transfer vessel, and both parties are to ensure that the correct daily manifest / paperwork is in place, stating the Hazardous Cargo being carried, with quantity, size, packing group and that the correct labelling is in place in compliance with IMDG code requirements. The vessel Master must ensure that the goods are checked and verified prior to departure.

10 Crew Transfer Vessels Requirements

All transfer vessels must provide the Marine Coordinator with evidence that the vessels are designed and built to meet or exceed the UK Maritime & Coastguard Agency code; "The Small Commercial Vessel & Pilot Boat Code of Practice MGN 280", specifically Category 2 Brown Code, or 2016 equivalent under the G9/+ Good Practice Guidelines, 60 nautical miles for a Safe Haven, 12 passengers and 2 crew. NB including <u>all</u> recommendations and advisory items pertinent to the Vessel.

All Vessels will have been designed and built in accordance with Lloyds Register (LR) or DNV standards.

The Owner will obtain and maintain all licences, insurances and keep all records that are required for the operation of a "work boat" registered and operating within UK waters. The vessels must have been subject to a Marine Inspection for small workboats (MISW) in accordance with IMCA M189/S004 within the last twelve months.

All Vessel crew must provide the Marine Coordinator with evidence of training and experience, meeting the minimum competencies i.e. Master/ Crew qualification, offshore sea survival certificate and medical certificate as detailed in MGN280 and G9/+ Good Practice guidelines for the safe management of small service vessels.

All Vessel crew members will be trained in offshore survival, will be fully qualified First Aiders and will have access to a complete and valid first aid kit and lifesaving equipment, including defibrillator.

Safety Checks will be performed by Vessel Master prior to departure each working day. The Marine Coordinator reserves the right to request any ad-hoc Vessel Audits.

The Vessel Operators will provide a Transfer Supervisor (TS) on-board the transfer vessel, which shall be located at the point of transfer (e.g. vessel bow) during all Marine Transfers.

Prior to Vessel departure, all new personnel or personnel whom have not boarded the vessel within 6 months must be given a Vessel Safety Brief and Tour including but not limited to: -

- a. Procedure in case of emergency. (General alarm on ships whistle and or verbal command given by the Master).
- b. Location of flares, lifesaving equipment, fire safety equipment, Muster station (to include alternative Muster station where required) and IMDG rules of carriage.



REVISION STATUS: 10

REVISION DATE: 06/03/2024 RR-T02-006

Page 31 of 42

c. Location of Welfare facilities.

Vessel Master shall record the date and names of those persons who have received the Vessel Safety Brief and vessel tour. All persons transferring on the CTV shall carry their NOK ID card and have this available on request by the CTV crews.

Vessel crews to ensure all hatches / gates remain closed when not in use and that all areas are kept clean, tidy and clear of obstructions.

All transfer personnel to remain seated during transit to the windfarm and further remain seated whilst the CTV manoeuvres into position at the offshore asset. Persons shall only leave their seats when advised to do so by the Vessel Master or Transfer Supervisor.

Access to the deck of the vessel during transit or transfer is by permission of vessel crew only, access only in pairs (minimum) life jackets and PLB's must be worn.

Vessel crews are to monitor all personnel on board; transfers shall not go ahead if anyone is deemed unfit to do so.

Vessel Master or Transfer Supervisor shall keep a continuously updated Daily Log recording the date, time, name and location of each transferring individual on or off the Vessel, which shall be communicated to the Marine Coordinator as soon as reasonably practicable after the transfer has taken place.



REVISION STATUS: 10

REVISION DATE: 06/03/2024 RR-T02-006

Page 32 of 42

10.1 Equipment Provided on board the Vessel

The following equipment must be located on the vessel for use offshore:

ITEM	DESCRIPTION AND REQUIREMENTS				
First Aid Kit (vessel)	First Aid kit to be valid and remain on vessel. Blanket or Space Blanket to be provided for treatment of hypothermia.				
AED (Vessel)	A defibrillator is available for use on each vessel.				
Grab Line for Man Over Board	Floating haul line (e.g. nylon) capable of supporting minimum SWL 100kg fitted with "grab loops" for ease of handling / karabiner attachment. Resistant to marine growth. Items to be stored in watertight containers.				
MOB recovery system	Used for assisting the recovery of person/s who have fallen overboard. System must comply with MCA requirements and be operable by one person.				
Boat hook	Used to 'hook' unconscious personnel who have fallen overboard and stabilise loads being lowered onto the deck.				
Lifejacket	Emergency Lifejackets are on-board.				
Stretcher	Chrysalis stretcher (including head/neck brace, tag lines), Metal ½ stretcher and spine board				
WAH Rescue Equipment	A working at height rescue kit suitable for use on the WTG.				
Radio (VHF and UHF) for Vessel Master	Serviceability and batteries to be checked. Minimum of 2 UHF to be held (1 for Master, 1 for Transfer Supervisor)				
PLB's	Only used if individual has not got a PLB when transferring or if personal PLB is defective.				
Spill Kits	Spill kits are required onboard all Crew Transfer Vessels. Spill kits are not required on any other site vessels such as survey/dive support vessels. Jack Up Vessels will carry their own spill kits.				



REVISION STATUS: 10

REVISION DATE: 06/03/2024 RR-T02-006

Page 33 of 42

10.2 Equipment provided by the site owner

The following equipment will be provided by Robin Rigg site operations:

ТҮРЕ	ITEM	VESSEL	WTG ACCESS	SUBSTATION ACCESS	DESCRIPTION AND REQUIREMENTS
PPE	Ear protection		YES		Earplugs are available for use whilst in the vicinity of WTGs RRK1 when necessary.
PPE	Transfer Connector		YES	YES	Transfer connector of one-handed operation design for connection to the Latchways Inertia reel system attachment point.
Comms	UHF Radio Access Team	YES	YES	YES	Batteries and agreed channel to be chosen. Alternative channel to be identified for selection if becomes unworkable.
Emergency	First Aid Kit (Access Team)		YES	YES	First Aid Kits are located on the offshore substations and every WTG.



REVISION STATUS: 10

REVISION DATE: 06/03/2024 RR-T02-006

Page 34 of 42

11 Crew Transfer Vessel Availability

11.1 Multiple Vessels available

If multiple vessels are working in the field, one vessel may temporarily leave the field when personnel are transferred for such tasks as Parts/Spares Runs and Exercises, as long as this does not exceed 30 minutes from the windfarm boundary. The Vessel Master & Marine Co-ordinator will discuss the requirement and temporarily assign that vessels teams to be looked after by another CTV within the windfarm boundary. At least one vessel must remain within the Windfarm boundary at all times if personnel are transferred onto an Offshore Substation or WTG.

If there is one vessel in the field or inbound to the [Redacted] , where possible a second vessel is to be on standby (no more than 30 minutes away from the windfarm boundary) to assist in the case of emergency. The standby vessel is to remain available until the working vessel is alongside and all personnel are ashore safely.

11.2 Only One Vessel Available

In the event of there being only ONE vessel available; operations can continue as normal. In circumstances where the working vessel is required to come back ashore (e.g. parts/PAX embarkment/disembarkation), then work may still continue offshore.

However, in these circumstances, (where PAX are offshore and the vessel is to leave the windfarm boundary) all working parties are to be informed, and a dynamic risk assessment shall be taken with consideration to;

- Is the reason for vessel return critical?
- Weather Forecast
- Tasks being undertaken offshore, Consideration to Standing Offshore Working Parties Down
- Offshore Conditions (including but not limited to, Sea State, Wind, Fog, Lightning & Lighting levels)
- Tidal Bar Restriction
- Duration of Returning Vessel Passage & Task

Following the dynamic risk assessment; agreement shall be sought from Marine Coordinator, Vessel Master, Offshore PAX.

Vessel is to remain underway at all times and MUST be available to return to the windfarm boundary within 30 minutes.



REVISION STATUS: 10

REVISION DATE: 06/03/2024 RR-T02-006

Page 35 of 42

12 Offshore Operations

12.1 Transfer List

Prior to Vessel departure, the Marine Coordinator will provide a Transfer List of all personnel to the Vessel Master, Transfer Supervisor and the teams accessing the WTG clearly indicating the proposed movements of all Access Teams throughout the working period (subject to change throughout the period).

The maximum number of persons (PAX) allowed on any vessel at any one time under normal operating conditions must not exceed the maximum certificated number for the vessel, plus crew members. Under emergency conditions this number may be exceeded to the maximum safe capacity of the vessel.

The maximum number of personnel carrying out work within the windfarm and/or transferred onto a structure must not exceed the combined maximum number of persons allowed on the vessels in operation under normal conditions.

At the Marine Coordinators and Vessel Master's discretion this number may be exceeded for short duration visits to the windfarm providing those persons do not transfer and that the maximum number of persons within the windfarm does not exceed the maximum number of vessel POB under emergency conditions. This will generally be confined to windfarm visitors accompanied at all times by RWE personnel. Prior to visitors transiting offshore under the above criteria the control room must consider the environmental conditions forecasted and ensure that personnel transferred in the field are not placed at risk of being stranded should conditions deteriorate.

A full list of any offshore visitors will also be provided to the Vessel Master, by the Marine Coordinator with the correct dispensation certification in place and held in the Marine Coordinators office.

Prior to Vessel departure, a briefing will be held to talk through the Planned Transfer List (PTL) with all persons on board the vessel to include the following topics: -

- a. Sailing Manifest is to include all PAX and vessel crew, with names and NOK Numbers.
- b. Review current and forecast Weather conditions, which shall be issued with the Transfer sheet
- c. Review Vessel departure / arrival times.
- d. Planned works for the day
- e. Any relevant HSSE updates and information.
- f. Confirm names of Access Team members.
- g. Confirm contact numbers are correct and undertake radio checks as required.
- h. Review equipment and perform any checks necessary (including PPE).
- i. Any Access / Tidal restrictions which may impact the working parties.
- j. Any hazardous cargo onboard.



REVISION STATUS: 10

REVISION DATE: 06/03/2024 RR-T02-006

Page 36 of 42

12.2 Access Team Requirements

An Access Team is defined as a minimum of two persons, authorised by the Site Manager, to undertake Marine Transfers onto offshore structures at the Robin Rigg Offshore Wind Farm.

Single person transfers to a WTG (ONLY) are permitted providing the vessel remains at that location **AND** the person transferring remains at the access deck / Ground controller level **AND** additional transfer authorised personnel are available on the vessel to provide assistance if required. It must also be noted that there must be a MINIMUM of 3 transfer authorised personnel within the windfarm boundary if no second vessel or transfer authorised persons are available to provide assistance in an emergency.

Single person transfers are NOT permitted onto the Offshore Substation.

Offshore Visitors are persons who do not undertake Marine Transfers, however there may be occasions, under exceptional circumstances, where the need to transfer arises and this must be authorised, and risk assessed by the Site Manager or nominated authority. All visitors must always be accompanied by authorised site personnel.

Personnel must wear the appropriate PPE prior to any transfer.

All personnel who are new to offshore transfer must be identified to the Transfer Supervisor on boarding the vessel and allocated a buddy/mentor who is experienced in offshore transfers on site for the first transfer.

At least two members of each Access Team must be a First Aider to minimum HSE First Aid at Work standards or equivalent.

Maximum number of transfers permitted in 1 shift is to be assessed taking into consideration the individual, the task, and the environmental conditions.

Access Teams must check that all persons have the required PPE and ensure that communication channels are available (including Mobiles Telephones and UHF radios (x2 minimum in working party) with sufficient battery life for the duration of the work period).

On accessing any offshore structure, a radio check must be performed with the Vessel Master by the first person transferring onto the structure.

In the event of a passenger being sea sick or unwell a decision will be taken to return the vessel back to Port of Workington or to a WTG location to allow the person to dis-embark if environmental conditions allow. The decision will be made by the Vessel Master, Marine Coordinator and sick person. The Vessel Master's decision shall be final.

12.3 Allowable Conditions for Offshore Operations

Marine transfer shall remain at the discretion of Vessel Master and Transfer Supervisor; however, the following environmental conditions shall be considered noting that the Robin Rigg Control Room & Marine Co-ordinator will provide full support to Master's as required. **Any change to the local weather conditions shall be communicated by/to the Vessel Master, and Marine Coordinator**.



REVISION STATUS: 10

REVISION DATE: 06/03/2024 RR-T02-006

Page 37 of 42

12.3.1 Spring Tides

When operating in **Spring Tides** the following procedure will be undertaken:

- a. Plan work to avoid known shallow areas if possible during period of extreme low tides.
- b. The vessel Master is to keep in mind the times of low tides and plan transfers accordingly should it be necessary to operate in known shallow areas.
- c. Vessel Master is to advise the Marine Coordinator/Duty Engineer if tidal conditions could become an issue for the vessel accessing the Port / WTG's.
- d. If low tide occurs whilst personnel are working on structures which are known to be inaccessible at low tides then personnel are to retreat to a place of safety until vessel transfers are possible. If a low tide is expected to be either at the start of the work period or at the end of a work period then transfers are to be planned to avoid these times, e.g. If low tide is within 2 hours of the end of the working period then personnel are to be removed from the structure in a timely manner, to avoid stranding of PAX.
- e. Port access issues are also to be monitored, taking into account, additional debris at transfer location, low water etc.

12.3.2 Lightning

Lightning is monitored in the Robin Rigg and European Central Control Rooms, Marine Coordinator (O&M Staff) and the vessel crew using the WindQuest predictive lightning forecast and tracking system. This is also supplemented by e-mailed daily predictions and calls from WindQuest monitoring.

a. Evacuation from a WTG due to lightning will be considered by the Marine Coordinator, vessel Master and WTG personnel to reduce associated risks as far as practicable. WTG personnel shall follow standard procedures during any lightning event which will include placing themselves in a place of safety, away from the steel structure in the centre of the tower if evacuation is not possible or considered a higher risk.

12.3.3 Snow & Ice

Operations during **Snow/Ice** conditions or there is a risk of icing due to ambient temperatures at or below freezing.

- a. If on approach to WTG ice or snow is seen on the nacelle or blades, then no transfers are to take place;
- b. Gritting of vessel walkways is to be undertaken during periods of ice/snow by vessel crews;
- c. If ice is observed on monopile ladders, then no transfer is to take place;
- d. If the ambient temperature measured at the Wind Turbine Generator is 0 degrees Celsius or below but no snow or ice can be seen then the Marine Coordinator / Duty Engineer, on confirmation of vessel approach from the Master, is to pause the WTG during personnel transfers. The WTG is only to be paused immediately prior to vessel final approach to prevent any build-up of ice on the stationary blade.



REVISION DATE: 06/03/2024 RR-T02-006

Page 38 of 42

The following points are to be noted for operations during **Poor Visibility.**

- a. During periods of low visibility, the Master is to assess the conditions and ensure that safe passage to and from the windfarm can be achieved using all navigational equipment available.
- b. The minimum visibility required for transfers to take place is the ability for the transferee to overlook the full distance of the transfer to the next safe location e.g. from Transition piece platform to next platform or vessel deck. Where visibility is such that this cannot be achieved no transfers are to take place except under the following (essential transfer) conditions:
 - Personnel may be transferred off a WTG if there is a risk to life or the emergency plan is enacted. Where fog conditions are outside the normal parameters described above and personnel require transfer off the WTG. All actions are to be dynamically risk assessed by the vessel Master and Marine Coordinator and a decision to transfer made on the output of this assessment and agreement of the transferee.

12.3.5 Hours of Darkness

Operations during the hours of Darkness (Sunrise to Sunset)

- a. <u>Where possible</u> a second transfer vessel is to be made available and available inside the windfarm boundary within 30mins, if requested by the primary transfer vessel Master and/or Marine Coordinator;
- b. If conditions for transfer are not favourable, then the second vessel may be requested to remain inside the windfarm boundary by the Marine Coordinator during transfers/movements;
- c. Personnel transferring must activate their personal strobe lights and switch on helmet lights during the transfer process;
- d. Vessels must provide illumination on the monopile ladder;
- e. Personnel **MUST** wear immersion suits irrespective of the time of year or sea temperature.

12.4 Site Rules

Smoking (including E-Cigarettes) shall only be permitted in those areas designated as such and never inside any structure. On a WTG the designated area is on the access platform and on the substation it's the cable deck. Smoking on the vessel is only permitted in designated areas and with the permission of the Master (As per CTV operating policy). No smoking is permitted on the quayside or in the vicinity of the fuel tank.

All personnel must adhere to instructions from the Vessel Master and Transfer Supervisor at all times.

ALL personnel are to comply with the RWE UK Drugs & Alcohol (D&A) policy. Drugs Alcohol and substance abuse will not be tolerated on site!

All waste is to be retained / bagged, returned to shore and must be disposed of in accordance with local instructions and environmental legislation. No waste is to be discharged into the sea. Any spillages are to be reported to the Marine Coordinator.

The Site Manager and Marine Coordinator reserve the right to refuse access and prohibit transfer for any person failing to comply with the Marine Transfer Procedure, Marine Coordination Procedure and associated documents or other local site rules.



REVISION STATUS: 10 REVISION DATE: 06/03/2024 RR-T02-006 Page 39 of 42

12.5 Health, Safety and Environmental Issues

All Health, Safety and Environment issues, Emergency Coordination and Response activities must be in accordance with the Robin Rigg Emergency Response Plan.

All Health, Safety and Environment issues should be reported to the Site Manager and Environmental Representative without delay.

The RWE Drug and Alcohol Policy are enforced at Robin Rigg and all personnel are subject to testing. Persons found to be under the influence of drugs or alcohol will not be permitted to board a vessel.



REVISION STATUS: 10

REVISION DATE: 06/03/2024

Page 40 of 42

RR-T02-006

13 Operating Vessels from [Redacted]

[Redacted] is being utilised to operate an additional vessel, to support an additional work scope for Robin Rigg. The trial will demonstrate the feasibility of using Whitehaven in any future strategies for delivering work for Robin Rigg.

The marina operates a tidal lock gate system and also has associated tidal restriction. A project study has been carried out to deem suitable working/sailing times.

The flow chart demonstrates how work activities/communications will be carried out to ensure the "remote" work is carried out safely and efficiently.









REVISION STATUS: 10

RR-T02-006

Page 42 of 42

ASSOCIATED DOCUMENTS

- a. Marine Transfer Procedure RR-TO2–004
- b. Marine Transfer Risk Assessment ROB-RA-OPS-2028
- c. HSSE RR 901 Robin Rigg Windfarm Emergency Plan / ERCoP
- d. International Maritime Dangerous Goods Code (IMDG)
- e. Lifting Operations / Loading of Cargo Risk Assessment ROB-OPS-RA-003
- f. Vessel Refuelling Procedure T02-003 Fuelling the Workboat from the onshore Bulk Diesel Tank

REVISION DATE: 06/03/2024

g. RR Site Information Pack – RR-T08-005