# SCHEDULE 13 Article 11

# Deemed licence under Marine and Coastal Access Act 2009 - array

#### PART 1

### Licensed marine activities

1.—

# (1) In this licence—

"the 2008 Act" means the Planning Act 2008;

"the 2009 Act" means the Marine and Coastal Access Act 2009;

"Annex 1 Habitat" means such habitat as defined under the EU Council Directive 92/43/EEC on the Conservation of Natural Habitats and of Wild Fauna and Flora<sup>1</sup>;

"array" means Work No.-1 as set out in paragraph 2(2) of this licence;

"authorised deposits" means the substances and articles specified in paragraph 2(3) of this licence:

"authorised scheme" means Work No. 1 described in paragraph 2 of this licence or any part of that work;

"commence" means the first carrying out of any part of the licensed activities, save for pre-construction surveys and monitoring;

"condition" means a condition in Part 2 of this licence;

"enforcement officer" means a person authorised to carry out enforcement duties under Chapter 3 of the 2009 Act;

"environmental statement" means the document certified as the environmental statement by the Secretary of State for the purposes of this Order and submitted with the application on 1 March 2013;

"gravity base foundation" means a structure principally of concrete, steel or steel and concrete which rests on the seabed either due to its own weight with or without added ballast or skirts, including associated sea bed preparation, scour protection, J-tubes, corrosion protection systems, boat landings comprising an access ladder with vertical boat fenders fitted either side and work platforms and equipment;

"IBGS foundation" means an Inward Battered Guide Structure foundation, a jacket-type concrete, steel or steel and concrete structure which is pre-fabricated with three tubular raking legs, which is installed over a pre-driven central pile, with up to three smaller diameter raking piles driven through the legs to pin the foundation to the seabed, including associated scour protection, J-tubes, corrosion protection systems, boat landings comprising an access ladder with vertical boat fenders fitted either side, access and work platforms and equipment; "jacket foundation" means a jacket/lattice type structure constructed of concrete, steel or steel and concrete which is fixed to the seabed at three or more points with driven or pre-installed piles or suction cans, including associated scour

protection, J-tubes, corrosion protection systems, boat landings comprising an access ladder with vertical boat fenders fitted either side, access and work platforms and equipment;

"JNCC" means the Joint Nature Conservation Committee;

"Kingfisher Fortnightly Bulletin" means the bulletin published by the Humber Seafood Institute or such other alternative publication approved in writing by the MMO;

"LAT" means lowest astronomical tide;

"licensed activities" means the activities specified in Part 1 of this licence; "maintain" includes inspect, repair, adjust and alter, and further includes remove, reconstruct and replace any of the ancillary works and any component part of any wind turbine generator or offshore substation described in Part 1 of Schedule 1 (authorised development) to the Order to the extent assessed in the environmental statement; and "maintenance" shall be construed accordingly;

"Marine Management Organisation" or "MMO" means the body created under the Marine and Coastal Access Act 2009 which is responsible for the monitoring and enforcement of this licence;

"MCA" means the Maritime and Coastguard Agency;

"mean high water springs" or "MHWS" means the highest level which spring tides reach on average over a period of time;

"monopile foundation" means a steel, concrete, or steel and concrete large diameter pile, typically cylindrical, driven and/or drilled into the seabed, including associated scour protection, transition piece, J-tubes, corrosion protection systems, boat landings comprising an access ladder with vertical boat fenders fitted either side, access and work platforms and equipment;

"notice to mariners" includes any notice to mariners which may be issued by the Admiralty, Trinity House, Queen's harbourmasters, government departments and harbour and pilotage authorities;

"the Order" means the Rampion Offshore Wind Farm Order 2014;

"Order limits" means the limits shown on the works plan within which the authorised scheme may be carried out, whose grid coordinates seaward of MHWS are set out in paragraph 3 of Part 1 of this licence;

"outline cable specification and installation plan" means the document certified by the Secretary of State as the outline cable specification and installation plan for the purposes of the Order;

"outline diver mitigation plan" means the document certified by the Secretary of State as the outline diver mitigation plan for the purposes of the Order;

"outline fisheries liaison strategy" means the document certified by the Secretary of State as the outline fisheries liaison strategy for the purposes of the Order;

"outline offshore written scheme of archaeological investigation" means the document certified as the outline offshore written scheme of archaeological investigation by the Secretary of State for the purposes of the Order;

"piling restriction plan" means the plan certified as the piling restriction plan by the Secretary of State for the purposes of the Order;

"suction can" means a steel cylindrical structure which is fixed to the base of the foundation and partially penetrates the seabed and remains in place using its own weight and hydrostatic pressure differential;

"suction caisson foundation" means a large diameter steel cylindrical structure which partially penetrates the seabed and remains in place using its own weight and a hydrostatic pressure differential, attached to a vertical central column which supports the transition piece, including associated scour protection, J-tubes, corrosion protection systems, boat landings comprising an access ladder with vertical boat fenders fitted either side, access platform(s) and equipment;

"Trinity House" means The Corporation of Trinity House of Deptford Strond;

"tripod foundation" means a steel or concrete or steel and concrete jacket/lattice type structure consisting of three main legs linked by cross-braces supporting a single central support for the transition piece which is fixed to the seabed with driven or pre-installed piles or suction cans, including associated scour protection, J-tubes, corrosion protection systems, boat landings comprising an access ladder with vertical boat fenders fitted either side, access and work platforms and equipment;

"undertaker" means Rampion Offshore Wind Limited;

"vessel" includes every description of vessel, however propelled or moved, and includes a jack-up barge, floating crane, non-displacement craft, a personal watercraft, a seaplane on the surface of the water, a hydrofoil vessel, a hovercraft or any other amphibious vehicle and any other thing constructed or adapted for movement through, in, on or over water and which is at the time in, on or over water;

"wind turbine generator" or "WTG" means a structure comprising a tower, rotor with three horizontal axis blades connected at the hub, nacelle containing mechanical and electrical equipment, ancillary equipment including access ladders and platforms, lifts, cables, corrosion protection systems, maintenance equipment, helihoist facilities and other associated equipment, fixed to a foundation;

"Work no.2" means the work of that number authorised by Part 1 of Schedule 1 to the Order.

"works plan" means the plan certified as the works plan by the Secretary of State for the purposes of the Order.

- (2) A reference to any statute, order, regulation or similar instrument shall be construed as a reference to a statute, order, regulation or instrument as amended by any subsequent statute, order, regulation or instrument or as contained in any subsequent re-enactment.
- (3) Unless otherwise indicated—
  - (a) all times shall be taken to be Greenwich Mean Time (GMT);
  - (b) all co-ordinates shall be taken to be latitude and longitude degrees and minutes to two decimal places.
- (4) Except where otherwise notified in writing by the relevant organisation, the primary point of contact with the organisations listed below and the address for returns and correspondence shall be—
  - (a) Marine Management Organisation

Offshore Licensing Team

Lancaster House

Hampshire Court

Newcastle Business Park

Newcastle upon Tyne

NE4 7YH

Tel: 0300 123 1032

Email: marine.consents@marinemanagement.org.uk;

(b) Marine Management Organisation (Coastal Office)

South Eastern Coastal Office

Shoreham Office

Pilots' Watch House

**Basin Road South** 

Portslade

West Sussex

**BN41 1WD** 

Tel; 01273 419 122

Email: shoreham@marinemanagement.org.uk;

(c) Trinity House

Tower Hill

London

EC3N 4DH

Tel: 020 7481 6900;

(d) The United Kingdom Hydrographic Office

Admiralty Way

**Taunton** 

Somerset TA1 2DN

Tel; 01823 337 900;

(e) Maritime and Coastguard Agency

Navigation Safety Branch

Bay 2/04

Spring Place

105 Commercial Road

Southampton

SO15 1EG

Tel: 023 8032 9191;

(f) Centre for Environment, Fisheries and Aquaculture Science

Pakefield Road

Lowestoft

Suffolk

NR33 0HT

Tel: 01502 562 244;

(g) Natural England

Area 1C, Nobel House

17 Smith Square

London

SW1P 2AL

Tel: 0300 060 4911;

(h) English Heritage

**Eastgate Court** 

195-205 High Street

Guildford

**GUI 3EH** 

Tel: 01483 252 057;

(i) JNCC

Inverdee House

**Baxter Street** 

Aberdeen

AB11 9QA

Tel: 01224 266 550.

### **Details of licensed marine activities**

- (1) This licence authorises the undertaker (and any agent or contractor acting on their behalf) to carry out the following licensable marine activities under section 66(1) of the 2009 Act, subject to the conditions—
  - (a) the deposit at sea of the substances and articles specified in sub-paragraph (3) below;
  - (b) the construction of works in or over the sea and/or on or under the sea bed;
  - (c) the removal of sediment samples for the purposes of informing environmental monitoring under this licence during pre-construction, construction and operation; and
  - (d) the dredging of the seabed and the disposal of 165,995m³ of inert material of natural origin, to include no more than 50,400m³ of chalk, produced during the drilling installation of or seabed preparation for foundations for Work No. 1 at disposal site reference WI117 Rampion OWF, whose coordinates are specified below—

Point	Latitude (DMS)	Longitude (DMS)
1	50° 41′ 11.35 N	000° 21' 55.86 W
2	50° 42' 24.83 N	000° 13′ 45.70 W
5	50° 38' 34.92 N	000° 09' 02.89 W
6	50° 37'08.17 N	000° 15'42.14 W
7	50° 38′ 13.35 N	000° 16′ 17.09 W
8	50° 37'03.36 N	000° 20'36.10 W
19	50° 40'55.07 N	000° 05'50.01 W

(2) The works referred to in (1)(b) comprise—

## Work No. 1-

- (a) an offshore wind turbine generating station with a gross electrical output capacity of up to 700 MW comprising up to 175 wind turbine generators each fixed to the seabed by one of six foundation types (namely, monopile foundation, tripod foundation, jacket foundation, IBGS foundation, gravity base foundation or suction caisson foundation), fitted with rotating blades and situated within the area hatched red on the works plan and further comprising (b) below;
- (b) a network of cables laid underground within the area hatched red on the works plan between the WTGs, and Work No. 2, for the transmission of electricity and electronic communications between these different structures and including one or more cable crossings;

and associated development within the meaning of section 115(2) of the 2008 Act

in connection with such Work No. 1 and to the extent that they do not otherwise form part of any such work, further associated development comprising such other works as may be necessary or expedient for the purposes of or in connection with the relevant part of the authorised project and which fall within the scope of the work assessed by the environmental statement and the provisions of this licence:

and in connection with such Work No 1, works comprising—

- (a) temporary landing places or other means of accommodating vessels in the construction and/or maintenance of the authorised scheme; and
- (b) buoys, beacons, fenders and other navigational warning or ship impact protection works
- (3) The substances or articles authorised for deposit at sea are—
  - (a) steel, copper and aluminium;
  - (b) stone and rock;
  - (c) concrete;
  - (d) sand and gravel;
  - (e) plastic and synthetic;
  - (f) material extracted from within the Order limits seaward of MHWS during construction drilling or seabed preparation;
  - (g) marine coatings, other chemicals (where in accordance with condition 9(1)) and timber.

**3.** The grid coordinates for the authorised scheme are specified below—

### Coordinates for the Order limits seaward of MHWS

Point	Latitude (DMS)	Longitude (DMS)	
1	50° 41' 11.35 N	000° 21′55.86 W	
2	50° 42' 24.83 N	000° 13′ 45.70 W	
3	50° 40' 39.19 N	000° 04' 26.23 W	
4	50° 39'31.72 N	000° 01′28.06 W	
5	50° 38'34.92 N	000° 09'02.89 W	
6	50° 37'08.17 M	000° 15'42.14 W	
7	50° 38' 13.35 N	000° 16′ 17.09 W	
8	50° 37' 03.36 N	000° 20′ 36.10 W	
9	50° 41′23.11 N	000° 20'37.74 W	

### 4.

This licence shall remain in force until the authorised scheme has been decommissioned in accordance with a programme approved by the Secretary of State under section 106 of the 2004 Act, including any modification to the programme under section 108 of that Act, and the completion of such programme has been confirmed by the Secretary of State in writing.

## 5.

The provisions of Section 72 of the 2009 Act shall apply to this licence save that the provisions of Section 72(7) relating to the transfer of the licence shall only apply to a transfer not falling within article 7 of the Order (benefit of the Order).

#### 6.

Where the words 'unless otherwise agreed' or 'unless otherwise stated' appear in the conditions in Part 2, any such agreement or statement may only be given in relation to immaterial changes where it has been demonstrated to the satisfaction of MMO that the subject matter of the approval or agreement sought is unlikely to give rise to any materially new or materially different environmental effects from those assessed in the environmental statement.

#### PART 2

## **Conditions**

## **Design parameters**

#### 1.

- (1) Subject to paragraph (2), no wind turbine generator forming part of the authorised scheme shall—
  - (a) exceed a height of 210 metres when measured from LAT to the tip of the vertical blade;
  - (b) exceed a height of 124 metres when measured from LAT to the height of the centreline of the generator shaft forming part of the hub;
  - (c) exceed a rotor diameter of 172 metres;
  - (d) be less than 600 metres from the nearest WTG in either direction perpendicular to the approximate prevailing wind direction (crosswind) or be less than 600 metres from the nearest WTG in either direction which is in line with the approximate prevailing wind direction (downwind);
  - (e) have a distance of less than 22 metres between the lowest point of the rotating blade of the wind turbine and MHWS.
- (2) References to the location of a wind turbine generator are references to the centre point of the tower of that WTG.
- (3) The layout of all wind turbine generators within the Order limits shall comprise an overall contiguous arrangement of offshore structures, and within such overall contiguous arrangement there shall be no more than three contiguous groupings each comprising wind turbine generators of a similar size, and each such grouping shall be laid out in a regular pattern such that along each row axis within the grouping there is an approximately equal distance between wind turbine generators.
- (4) For the purposes of this condition, "similar size" means a wind turbine with a difference in rotor diameter of less than 15%.
- (5) No wind turbine generator forming part of the authorised scheme shall be erected within the area hatched black on the works plan (the "exclusion zone for wind turbine generators and offshore substations"), whose coordinates are specified below—

Point	Latitude (DMS)	Longitude (DMS)
3	50° 40'39.19 N	000° 04' 26.23 W
4	50° 39'31.72 N	000° 01'28.06 W
5	50° 38' 34.92 N	000° 09' 02.89 W
19	50° 40'55.07 N	000° 05' 50.01 W

#### 2.—

- (1) The total length of the cables comprising Work No. 1(b) shall not exceed 230 kilometres.
- (2) The total amount of cable protection for the cables comprising Work No. 1(b) shall not exceed 0.23km3.

#### 3

- (1) Each monopile foundation forming part of the authorised scheme shall not have a diameter greater than 6.5 metres.
- (2) Each gravity base foundation forming part of the authorised scheme shall not have—
  - (a) a diameter at the level of the seabed which is greater than 34 metres;
  - (b) a base height, where there is a flat base, which is greater than 10 metres above the level of the seabed.
- (3) Each jacket foundation forming part of the authorised scheme shall not have—
  - (a) a width spacing between each leg at the level of the seabed which is greater

than 32 metres:

- (b) a leg diameter which is greater than 2.6 metres;
- (c) a pile diameter which is more than 2.6 metres;
- (d) more than one pile per leg;
- (e) more than four legs.
- (4) Each tripod foundation forming part of the authorised scheme shall not have—
  - (a) a pile diameter which is greater than 2.8 metres;
  - (b) more than one pile per leg;
  - (c) more than three legs;
  - (d) a column diameter which is greater than 4.5 metres.
- (5) Each suction caisson foundation forming part of the authorised scheme shall not have—
  - (a) a diameter at the level of the seabed which is more than 35 metres;
  - (b) a column diameter which is more than 6.5 metres.
- (6) Each IBGS foundation forming part of the authorised scheme shall not have—
  - (a) a width spacing between each leg at the level of the seabed which is greater than 26 metres:
  - (b) a central pile diameter which is greater than 2.8 metres; and
  - (c) a raking pile diameter which is greater than 1.5 metres.
- (7) No more than 154 monopile foundations shall be installed as part of the authorised scheme.
- (8) No more than 122 jacket foundations shall be installed as part of the authorised scheme.
- (9) No more than 124 IBGS foundations shall be installed as part of the authorised scheme.
- (10) No more than 165 tripod foundations shall be installed as part of the authorised scheme.
- (11) No more than 78 gravity base foundations shall be installed as part of the authorised scheme.
- (12) No more than 118 suction caisson foundations shall be installed as part of the authorised scheme.
- (13) The total amount of scour protection for the WTGs forming part of the authorised scheme shall not exceed 831,400m3.

# **Notifications and inspections**

- (1) The undertaker shall ensure that—
  - (a) a copy of this licence (issued as part of the grant of the Order) and any subsequent amendment or revision to it is provided to—
    - (i) all agents and contractors notified to the MMO in accordance with condition 12; and
    - (ii) the masters and transport managers responsible for the vessels notified to the MMO in accordance with condition 12;
  - (b) within 28 days of receipt of a copy of this licence those persons referred to in paragraph (a) above shall provide a completed confirmation form to the MMO confirming that they have read and will comply with the terms of the conditions of this licence.
- (2) Only those persons and vessels notified to the MMO in accordance with condition 12 are permitted to carry out the licensed activities.
- (3) Copies of this licence shall also be available for inspection at the following locations—
  - (a) the undertaker's registered address;

- (b) any site office located at or adjacent to the construction site and used by the undertaker or its agents and contractors responsible for the loading, transportation or deposit of the authorised deposits; and
- (c) on board each vessel or at the office of any transport manager with responsibility for vessels from which authorised deposits or removals are to be made.
- (4) The documents referred to in paragraph (1)(a) shall be available for inspection by an authorised enforcement officer at the locations set out in paragraph (3)(b) above.
- (5) The undertaker shall provide access, and if necessary appropriate transportation, to the offshore construction site or any other associated works or vessels to facilitate any inspection that the MMO considers necessary to inspect the works during construction and operation of the authorised scheme.
- (6) The undertaker must inform the MMO Coastal Office in writing at least 5 days prior to the commencement of the authorised project or any part thereof, and within 5 days of completion of the authorised project..
- (7) The Kingfisher Information Service of Seafish, must be informed of details of the vessel routes, timings and locations relating to the construction of the authorised project or any part thereof by email to kingfisher@seafish.co.uk:
  - a) at least 2 weeks prior to the commencement of offshore activities, for inclusion in the Kingfisher Fortnightly Bulletin and offshore hazard awareness data, and;
  - b) as soon as reasonably practicable and no later than 24 hours of completion of all offshore activities.

Confirmation of notification must be provided to the MMO within 5 days.

(8) The undertaker shall ensure that a notice to mariners is issued at least 10 working days prior to the commencement of the licensed activities or any part of them advising of the start date of Work No. 1 and the expected vessel routes from the local construction ports to the relevant location.

Copies of all notices must be provided to the MMO and UKHO within 5 days.

(9) The undertaker must ensure that local notice to mariners are updated and reissued at weekly intervals during construction activities and at least 5 days before any planned operations and maintenance works and supplemented with VHF radio broadcasts agreed with the MCA in accordance with the construction and monitoring programme approved under deemed marine licence condition 10 (1)(b).

Copies of all notices must be provided to the MMO and UKHO within 5 days.

- (10) The undertaker shall notify—
  - (a) the Hydrographic Office of both the commencement (within two weeks), progress and completion (within two weeks10 days) of the authorised scheme or any part of in order that all necessary amendments to nautical charts are made; and

Copies of all notices must be provided to the MMO within 5 days.

- (b) the MMO, MCA and Trinity House within two weeks once the authorised scheme is completed and any required lighting or marking has been established.
- (11) In case of damage to, or destruction or decay of, the authorised project or any part thereof the undertaker shall as soon as reasonably practicable and no later than 24 hours following the undertaker becoming aware of any such damage, destruction or decay, notify MMO, MCA, Trinity House and the UKHO.

# Navigational practice, safety and emergency response

5.—

(1) No part of the authorised project may commence until the MMO, in consultation with the MCA, has given written approval for an Emergency Response Co-operation Plan (ERCoP) which includes full details of the emergency response co-operation plans for the construction, operation and decommissioning phases of that part of the authorised project in accordance with the MCA recommendations contained within MGN543 "Offshore Renewable Energy Installations (OREIs) –

Guidance on UK Navigational Practice, Safety and Emergency Response Issues".

The ERCoP and associated guidance and requirements must be implemented as approved, unless otherwise agreed in writing by the MMO in consultation with the MCA.

The document must be reviewed at least annually or whenever changes are identified, whichever is sooner, and any proposed changes must be submitted to the MMO in writing for approval, in consultation with MCA.

(2) The undertaker will prepare and implement a project-specific Active Safety Management System, taking account of safety and mitigation measures as referred to in the navigation risk assessment in the environmental statement.

## Aids to navigation

#### 6.—

- (1) The undertaker shall during the whole period from the commencement of construction of the authorised project to the completion of decommissioning exhibit such lights, marks, sounds, signals and other aids to navigation, and to take such other steps for the prevention of danger to navigation as Trinity House may from time to time
- (2) The undertaker shall ensure that timely and efficient notices to mariners and other navigational warnings of the position and nature of the authorised scheme seaward of MHWS, are issued during and after the period of construction, alteration, replacement or decommissioning of the authorised scheme, such information to be promulgated to mariners in the shipping and fishing industry as well as to recreational mariners in accordance with conditions 4(8) and (9).
- (3) The undertaker must during the whole period from the commencement of construction of the authorised project to the completion of decommissioning keep Trinity House and the MMO informed of progress of the authorised project including;
  - (a) notice of commencement of construction of the authorised project within 24 hours of commencement having occurred;
  - (b) notice within 24 hours of any aids to navigation being established by the undertaker; and
  - (c) notice within 5 days of completion of construction of the authorised project.
- (4) The undertaker must report the availability of aids to navigation to Trinity House daily using the reporting system provided by Trinity House..
  - (5) In case of injury to, or destruction or decay of, the authorised scheme or any part thereof the undertaker shall as soon as reasonably practicable notify Trinity House and shall lay down such buoys, exhibit such lights and take such other steps for preventing danger to navigation as Trinity House may from time to time direct.
  - (6) The undertaker must during the whole period from the commencement of construction of the authorised project to the completion of decommissioning notify Trinity House and the MMO of any failure of the aids to navigation and the timescales and plans for remedying such failures, as soon as possible and no later than 24 hours following the undertaker becoming aware of any such failure.

## 7.—

(1) Except as otherwise required by Trinity House the undertaker must paint all structures forming part of the authorised project yellow (colour code RAL 1023) from at least HAT to a height as directed by Trinity House. Unless the MMO otherwise directs, the undertaker must paint the remainder of the structures submarine grey (colour code RAL 7035).

# Chemicals, drilling and debris

- (1) Unless otherwise agreed in writing by the MMO all chemicals used in the construction of the authorised scheme, including any chemical agents placed within any monopile void shall be selected from the List of Notified Chemicals approved for use by the offshore oil and gas industry under the Offshore Chemicals Regulations 20021.
- (2) The undertaker shall ensure that any coatings/treatments are suitable for use in the marine environment and are used in accordance with guidelines approved by Health and Safety Executive

and the Environment Agency Pollution Prevention Control Guidelines.

- (3) The storage, handling, transport and use of fuels, lubricants, chemicals and other substances shall be undertaken so as to prevent releases into the marine environment, including bunding of 110% of the total volume of all reservoirs and containers.
- (4) Where foundation drilling works are proposed, in the event that any system other than water-based mud is proposed the MMO's written approval in relation to the proposed disposal of any arisings shall be obtained before the drilling commences, which may also require a marine licence.
- (5) The undertaker shall ensure that any debris arising from the construction of the authorised scheme or temporary works placed below MHWS are removed on completion of the authorised scheme.
- (6) At least two months prior to the commencement of the licensed activities the undertaker shall submit to the MMO an audit sheet covering all aspects of the construction of the licenced activities or any part of them, which shall include details of—
  - (a) loading facilities;
  - (b) vessels;
  - (c) equipment;
  - (d) shipment routes;
  - (e) working schedules; and
  - (f) all components and materials to be used in the construction of the authorised scheme.
- (7) The audit sheet shall be maintained throughout the construction of the authorised scheme (or relevant part) and any changes notified immediately in writing to the MMO which must give written approval prior to any change being implemented.
- (8) In the event that the MMO becomes aware that any of the materials on the audit sheet cannot be accounted for it shall—
  - (a) require the undertaker to carry out a side scan sonar survey to plot all obstructions across the relevant area(s) within the Order limits seaward of MHWS where construction works and related activities related to those materials have been carried out and, if the initial survey does not locate the missing materials, over such wider area as the MMO may reasonably request; and
  - (b) invite local fishermen to send a representative to be present during the survey, and any new obstructions that the MMO believes to be associated with the authorised scheme shall be removed at the undertaker's expense.
- (9) The undertaker shall inform the MMO of the location and quantities of material disposed of each month under the Order, by submission of a disposal return by 31 January each year for the months August to January inclusive, and by 31 July each year for the months February to July inclusive.
- (10) The undertaker shall ensure that only inert material of natural origin, produced during the drilling installation of or seabed preparation for foundations and drilling mud shall be disposed of within the offshore Order limits (disposal site reference WI117 Rampion OWF), and that any other materials are screened out before disposal at this site.
- (11) The undertaker shall ensure that any rock material used in the construction of the authorised scheme is from a recognised source, free from contaminants and containing minimal fines.
- (12) In the event that any rock material used in the construction of the authorised scheme is misplaced or lost below MHWS, the undertaker shall report the loss to the MMO's District Marine Office within 48 hours and if the MMO shall reasonably consider such material to constitute a navigation or environmental hazard (dependent on the size and nature of the material) the undertaker shall endeayour to locate the material and recover it.
- (13) The undertaker shall undertake the methods agreed under condition 10(1)(g)(iii) following the high resolution swath bathymetric survey referred to in condition 16(3)(f), and if any such obstructions resulting from burial of cables be identified which, in the reasonable opinion of the MMO, may be considered to interfere with fishing, the undertaker shall take such steps to remove them as the MMO in its reasonable opinion shall require.

- (14) The undertaker shall ensure that no waste concrete slurry or wash water from concrete or cement works are discharged into the marine environment, and that concrete and cement mixing and washing areas are contained to prevent run off entering the water through the freeing ports.
- (15) The undertaker shall ensure that any oil, fuel or chemical spill within the marine environment is reported to the MMO, Marine Pollution Response Team.

# Force majeure

#### 9.—

- (1) If, due to stress of weather or any other cause the master of a vessel determines that it is necessary to deposit the authorised deposits outside of the Order limits because the safety of human life and/or of the vessel is threatened, within 48 hours full details of the circumstances of the deposit shall be notified to the MMO.
- (2) The unauthorised deposits shall be removed at the expense of the undertaker unless written approval is obtained from the MMO.

## **Pre-construction plans and documentation**

- (1) The authorised project shall not commence until the following have been submitted to and approved by the MMO. Each programme, statement, plan, protocol, scheme or other detail required to be approved under this condition must be submitted to the MMO for approval at least 4 months prior to the commencement of the authorised project except where otherwise stated.
  - (a) subject to the requirements set out in paragraphs (2) and (3), a design plan at a scale of between 1:25,000 and 1:50,000, including detailed representation on the most suitably scaled admiralty chart;
  - (b) a construction and monitoring programme to include details of—
    - (i) the proposed construction start date;
    - (ii) proposed timings for mobilisation of plant, delivery of materials and installation works;
    - (iii) proposed pre-construction surveys, baseline report format and content, construction monitoring, post-construction monitoring and related reporting in accordance with conditions 10(1)(h), 14, 15 and 16; and
    - (iv) an indicative written construction programme for all wind turbine generators and cables comprised in the works at paragraph 2(2) of Part 1 (licensed marine activities) of this licence (insofar as not shown in (ii) above);
  - (c) a construction method statement in accordance with the construction methods assessed in the environmental statement and including details of—
    - (i) drilling methods and disposal of drill arisings and material extracted during seabed preparation for foundation works;
    - (ii) WTG and offshore substations' location and installation, including scour protection;
    - (iii) cable installation;
    - (iv) contractors;
    - (v) vessels and vessels transit corridors;
      - (vi) proposals to reduce the impacts of noise and vibration from construction works;
      - (vii) a protocol for routeing vessels to and from the wind farm to minimise impacts on marine mammals and marine users;

- (viii) associated works;
  - (ix) areas within the Order limits in which construction activity will take place; and
  - (x) a schedule of planned maintenance (to be updated every three years to reflect any revised maintenance schedules, technologies or techniques);
- (d) a project environmental management and monitoring plan to include details of—
  - (i) a marine pollution contingency plan to address the risks, methods and procedures to deal with any spills and collision incidents during construction and operation of the authorised scheme in relation to all activities carried out;
  - (ii) a chemical risk assessment to include information regarding how and when chemicals are to be used, stored and transported in accordance with recognised best practice guidance;
  - (iii) waste management plan and disposal arrangements;
    - (iv) the appointment and responsibilities of a fisheries liaison officer and an environmental liaison officer; and
  - (v) a fisheries liaison plan (in accordance with the outline fisheries liaison strategy) to ensure relevant fishing fleets are notified of commencement of licensed activities pursuant to condition 4 and to address the interaction of the licensed activities with fishing activities during construction and operation;
- (e) a scour protection management and cable armouring plan, in accordance with the outline scour protection management and cable armouring plan, providing details of the need, type, sources, quantity and installation methods for scour protection;
- (f) in the event that driven or part-driven pile foundations are proposed to be used, a marine mammal mitigation protocol to be agreed in writing with the MMO in consultation with Natural England and JNCC and following current best practice as advised by the statutory nature conservation agencies, to include—
  - (i) identification of a Marine Mammal Monitoring Zone (MMMZ);
  - (ii) appointment of an appropriate number of suitably qualified marine mammal observer(s);
  - (iii) methods for the detection of marine mammals within the MMMZ whether visually (by the marine mammal observer(s)) or acoustically using Passive Acoustic Monitoring equipment or other means of detection;
  - (iv) a reporting methodology to enable efficient communication between the marine mammal observer(s) and the person responsible for approving commencement of piling;
  - (v) an appropriate soft start procedure whereby piling activities do not commence until an agreed time has elapsed and during which marine mammals have not been detected within the MMMZ;
  - (vi) where appropriate, methods for the application of acoustic deterrent devices;
- (g) a cable specification and installation plan (in accordance with the outline cable specification and installation plan), to include—
  - (i) technical specification of offshore cables below MHWS, including a desk-based assessment of attenuation of electro-magnetic field strengths, shielding and cable burial depth in accordance with industry good practice;
  - (ii) a detailed cable burial plan for the Order limits seaward of MHWS, incorporating a burial risk assessment to ascertain suitable burial depths and cable laying techniques; and
  - (iii) appropriate methods such as a trawl or drift net to be deployed along the offshore subsea cables between Work Nos. 1 and 2, following the survey referred to in condition 16(3)(f) to assess any seabed obstructions resulting from burial of the cables;

- (h) a written scheme of archaeological investigation in relation to the Order limits seaward of mean low water in accordance with the outline offshore written scheme of archaeological investigation, industry good practice and after consultation with English Heritage to include—
  - (i) details of responsibilities of the undertaker, archaeological consultant and contractor:
  - (ii) a methodology for any further site investigation including any specifications for geophysical, geotechnical and diver or remotely operated vehicle investigations;
  - (iii) analysis and reporting of survey data, and timetable, which is to be submitted to the MMO within four months of any survey being completed;
    - (iv) delivery of any mitigation including, where necessary, archaeological exclusion zones:
    - (v) monitoring during and post construction, including a conservation programme for finds;
    - (vi) archiving of archaeological material, inclusive of any completed and agreed archaeological reports produced through the written scheme of archaeological investigation which are to be deposited by the undertaker within a public archive in accordance with the OASIS (Online Access to the Index of archaeological investigations) system;
    - (vii) a reporting and recording protocol, including reporting of any wreck or wreck material during construction, operation and decommissioning of the authorised scheme; and
    - (viii) provision for a plan showing, in relation to the plan agreed pursuant to sub-paragraph (a), the indicative proposed location of installation vessels for construction of Work No. 1 and Work No. 2;
  - (i) a diver mitigation plan, which accords with the outline diver mitigation plan, to include details of—
    - (i) an appropriate soft start procedure;
    - (ii) appointment of a diver liaison officer; and
    - (iii) a diver communication plan, to include notification of the timing and duration of piling activities; and
  - (j) a mitigation scheme for any Annex 1 Habitat identified by the survey referred to in condition 14(2)(a).
- (2) Before approving the design plan required to be submitted under paragraph (1) (a), the MMO must consult with Trinity House and the MCA.
- (3) The design plan required to be approved under paragraph (1)(a) must—
  - (a) be prepared having regard to the need to—
    - (i) limit as far as possible the horizontal degree of view of wind turbine generators from the South Downs National Park and the Sussex Heritage Coast;
    - (ii) increase as far as possible the distance of the wind turbine generators from the South Downs National Park and the Sussex Heritage Coast;
    - (iii) locate the largest turbines, in any hybrid scheme, to the south-western portion of the Order limits; and
    - (iv) provide clear sight lines through the wind turbine layout in order that the regular geometric pattern of the array is apparent in views from the South Downs National Park and Sussex Heritage Coast; and
  - (b) to ensure conformity with the description of Work No. 1 and compliance with the principles set out in sub-paragraph (a) show—
    - (i) the proposed layout and location and choice of foundation of all

- WTGs together with a written statement of how, having regard to other constraints such as ecological effects, safety reasons or engineering and design parameters, those principles have been taken into account;
- (ii) the height to the tip of the vertical blade, height to the centreline of the generator shaft forming part of the hub, rotor diameter and spacing of all wind turbine generators;
- (iii) length and arrangement and location of all cables comprising Work No. 1(b);
- (iv) the dimensions of all monopile foundations;
- (v) the dimensions of all gravity base foundations;
- (vi) the dimensions of all jacket foundations;
- (vii) the dimensions of all tripod foundations;
- (viii) the dimensions of all suction caisson foundations;
- (ix) the dimensions of all IBGS foundations;
- (xi) any archaeological exclusion zones identified under paragraph (1)(h)(iv);
- (xii) any exclusion zones or micrositing requirements identified in any mitigation scheme pursuant to paragraph (1)(j); and
- (xiii) in plan form, the indicative programming of particular works as set out in the indicative written construction programme to be provided under paragraph (1)(b)(iv).

#### 11.—

- (1) Any archaeological reports produced in accordance with condition 10(1)(h)(iii) are to be agreed with English Heritage.
- (2) Each programme, statement, plan, protocol or scheme required to be approved under condition 10 shall be submitted for approval at least four months prior to the intended start of construction, except where otherwise stated or unless otherwise agreed in writing by the MMO.
- (3) The licensed activities shall be carried out in accordance with the approved plans, protocols, statements, schemes and details approved under condition 10, unless otherwise agreed in writing by the MMO.

### Reporting of engaged agents, contractors and vessels

## 12.—

- (1) The undertaker shall provide the following information to the MMO—
  - (a) the name and function of any agent or contractor appointed to engage in the licensed activities within seven days of appointment; and
  - (b) each week during the construction of the authorised scheme a completed Hydrographic Note HI02 listing the vessels currently and to be used in relation to the licensed activities.
- (2) Any changes to the supplied details shall be notified to the MMO in writing prior to the agent, contractor or vessel engaging in the licensed activities.

### Equipment and operation of vessels engaged in licensed activities

- (1) All vessels employed to perform the licensed activities shall be constructed and equipped to be capable of the proper performance of such activities in accordance with the conditions of this licence and (save in the case of remotely operated vehicles or vessels) shall comply with paragraphs (2) to (7) below.
- (2) All motor powered vessels shall be fitted with—
  - (a) electronic positioning aid to provide navigational data;

- (b) radar;
- (c) echo sounder; and
- (d) multi-channel VHF.
- (3) No radio beacon or radar beacon operating on the marine frequency bands shall be installed or used without the prior written approval of the Secretary of State.
- (4) All vessels' names or identification shall be clearly marked on the hull or superstructure.
- (5) All vessels shall exhibit signals in accordance with the requirements of the International Regulations for the Prevention of Collisions at Sea.
- (6) All communication on VHF working frequencies shall be in English.
- (7) No vessel shall engage in the licensed activities until all the equipment specified in paragraph (2) is fully operational.

# Pre-construction monitoring and surveys

- (1) The undertaker shall, in discharging condition 10(1)(b), submit details for written approval by the MMO in consultation with Natural England and JNCC of proposed pre-construction surveys, including methodologies and timings, and a proposed format and content for a pre-construction baseline report; and—
  - (a) the survey proposals shall specify each survey's objectives and explain how it will assist in either informing a useful and valid comparison with the post-construction position and/or will enable the validation or otherwise of key predictions in the environmental statement; and
  - (b) the baseline report proposals shall ensure that the outcome of the agreed surveys together with existing data and reports are drawn together to present a valid statement of the pre-construction position, with any limitations, and shall make clear what post-construction comparison is intended and the justification for this being required.
- (2) The pre-construction surveys referred to in paragraph (1) shall unless otherwise agreed with the MMO have due regard to, but not be limited to, the need to undertake—
  - (a) a survey(s), in combination with data derived from sub-paragraph (c) to determine the location and extent of any benthic Annex I Habitat in whole or in part inside the area(s) within the Order limits in which it is proposed to carry out construction works;
  - (b) a survey(s) to determine the location, extent and composition of any benthic habitats of the area(s) within the Order limits in which it is proposed to carry out construction works of conservation, ecological and or economic importance;
  - (c) a high resolution swath-bathymetric survey(s) to include a 100% coverage and side scan sonar survey of the area(s) within the Order limits in which it is proposed to carry out construction works, including a 500m buffer around the site of each works and inclusive of seabed anomalies or sites of historical or archaeological interest that lie within that 500m buffer;
  - (d) a survey(s) to determine the location and extent of the mussel beds in whole or in part inside the area(s) within the Order limits in which it is proposed to carry out construction works; and
  - (e) a survey(s) to determine the extent of fish and shellfish populations and spawning activity within the Order limits in which it is proposed to carry out construction works, and any wider areas where appropriate.
- (3) The undertaker shall carry out the surveys agreed under paragraph (1) and provide the baseline report to the MMO in the agreed format in accordance with the agreed timetable, unless otherwise agreed in writing by the MMO in consultation with Natural England and JNCC.
- (4) The pre-construction survey programme and pre-construction survey methodologies shall be submitted to the MMO for its written approval in consultation with Natural England and the JNCC at least four months prior to the commencement of any survey works.

### **Construction monitoring**

#### 15.—

- (1) Unless otherwise agreed, the undertaker shall, in discharging condition 10(1)(b), submit details for approval by the MMO in consultation with Natural England and JNCC of any proposed surveys or monitoring, including methodologies and timings, to be carried out during the construction of the authorised scheme.
- (2) The survey proposals submitted under paragraph (1) shall—
  - (a) specify each survey's objectives;
  - (b) where driven or part-driven pile foundations are proposed to be used, include monitored background noise measurements (during periods when piling is not being undertaken) and measurements of noise generated by the installation of the first four foundations of each discrete foundation type to be installed, unless otherwise agreed in writing with the MMO.
- (3) The undertaker shall carry out the surveys approved under paragraph (1) and provide the agreed reports in the agreed format in accordance with the agreed timetable, unless otherwise agreed in writing with the MMO in consultation with Natural England and JNCC.
- (4) The results of the initial noise measurements shall be provided to the MMO within four weeks of the installation of the last of the four piles, and the assessment of this report by the MMO shall determine whether any further noise monitoring is required.

## Post construction surveys

### 16.—

- (1) The undertaker shall, in discharging condition 10(1)(b), submit details for written approval by the MMO in consultation with Natural England and JNCC of proposed post-construction surveys, including methodologies and timings, and a proposed format, content and timings for providing reports on the results at least four months prior to the commencement of any survey works detailed within.
- (2) The survey proposals shall specify each survey's objectives and explain how it will assist in either informing a useful and valid comparison with the pre-construction position and/or will enable the validation or otherwise of key predictions in the environmental statement.
- (3) The post construction surveys referred to in paragraph (1) shall unless otherwise agreed with the MMO have due regard to but not be limited to the need to undertake—
  - (a) for the purpose of assessing any changes in seabed topography—
    - (i) a desk based assessment (which takes account of all factors which influence scour) to identify a sample of adjacent turbines with greatest potential for scour, to be submitted to the MMO; and
    - (ii) subsequently, one high resolution swath bathymetric survey and side scan sonar survey per annum around the sample of adjacent turbines to a distance of three turbine spacings, to be used to validate the desk based assessment,

further surveys may be required if there are significant differences between the modelled scour and recorded scour;

- (b) a survey(s) to determine the location, extent and composition of any benthic habitats of the area(s) within the Order limits in which construction works were carried out of conservation, ecological and or economic importance to validate predictions made in the environmental statement:
- (c) dependent on the outcome of the survey undertaken in condition 14(2)(a) above, a survey(s) to determine the effects of construction activity on any benthic Annex 1 Habitat in whole or in part inside the area(s) within the Order limits;
- (d) a survey(s) of the extent of fish and shellfish populations and spawning activity within the Order limits in which construction works were carried out, and any wider areas where appropriate, for comparison against the results of the baseline survey carried out under condition 14(2)(e);

- (e) a sidescan sonar and bathymetry survey(s) at the locations within the Order limits in which construction works were carried out after the first occurrence of a 1 in 10 year wave event within the Order limits seaward of MHWS in terms of wave height measured from the Greenwich Light Vessel Waverider buoy located at 50°23′.100N, 000°00′.00E; and
- (f) one high resolution swath bathymetric survey across the area(s) within the Order limits in which construction works were carried out to assess any changes in bedform topography and such further monitoring as may be agreed to ensure scour equilibrium has been reached and that the cables have been buried.
- (4) The undertaker shall carry out the surveys agreed under paragraph (1) for 3 years post-construction, which could be non-consecutive years, and provide the agreed reports in the agreed format in accordance with the agreed timetable, unless otherwise agreed in writing with the MMO in consultation with Natural England and JNCC.

# Black bream spawning

#### 17. —

- (1) No pile driving works for monopile foundations shall be carried out by or on behalf of the undertaker as part of or in relation to the authorised scheme between 15 April and 30 June each year, unless the MMO provides written confirmation to the undertaker beforehand that such works can take place in all or in a specified part of the Order limits, or during this period or part of this period.
- (2) No pile driving works for jacket foundations (pin piles) shall be carried out by or on behalf of the undertaker as part of or in relation to the authorised scheme between 15 April and 30 June each year within the black bream restriction zone unless the MMO provides written confirmation to the undertaker beforehand that such works can take place in all or in a specified part of the zone, or during this period or part of this period.
- (3) In considering whether to provide the confirmation referred to in (1) or (2) above, the MMO shall have regard to any report or reports provided to the MMO by or on behalf of the undertaker relating to such matters as additional baseline information piling management measures, installation techniques or noise propagation modelling.
- (4) In this condition, "black bream restriction zone" means the area shaded blue on the piling restriction plan whose coordinates are set out below—

Point	Latitude (DMS)	Longitude (DMS)
1	50° 41' 11.35 N	000° 21' 55.86 W
20	50° 37'44.16 N	000° 20'49.20 W
21	50° 42' 21.05 N	000° 14′ 11.00 W

## Herring spawning

- (1) No pile driving works for monopile foundations shall be carried out by or on behalf of the undertaker as part of or in relation to the authorised scheme between 20 November and 15 January each year, unless the MMO provides written confirmation to the undertaker beforehand that such works can take place in all or in a specified part of the Order limits, or during this period or part of this period.
- (2) No pile driving works for jacket foundations (pin piles) shall be carried out by or on behalf of the undertaker as part of or in relation to the authorised scheme between 20 November and 15 January each year unless the MMO provides written confirmation to the undertaker beforehand that such works can take place in all or in a specified part of the Order limits, or during this period or part of this period.
- (3) In considering whether to provide the confirmation referred to in (1) or (2) above, the MMO shall have regard to any report or reports provided to the MMO by or on behalf of the undertaker relating to such matters as additional baseline information, reduced spatial restrictions, piling management measures, installation techniques or noise propagation modelling.

# **Restrictions on monopile foundations**

## 19.—

- (1) Subject to paragraph (2), pile driving shall not occur for more than one monopile at any one time within the Order limits.
- (2) In the case of the proposed simultaneous piling of two or more monopiles within the Order limits, the proposal together with a calculation of projected noise measurements and contours within the scope of the assessment in the environmental statement shall be provided to the MMO and such simultaneous piling shall not take place until the proposal has been approved by the MMO.

# Monitoring of shoreline sediment morphology

# 20. —

- (1) The undertaker shall carry out monitoring of shoreline sediment morphology during operation of the array, unless otherwise agreed with the MMO in consultation with Natural England and JNCC.
- (2) This monitoring shall be carried out in conjunction with established regional coastal process monitoring programmes or, in the event that such programmes are discontinued, in accordance with a coastal process monitoring strategy between the shoreline limits of Beachy Head and Selsey Bill to be approved by the MMO in consultation with Natural England and JNCC.

# **Decommissioning**

## 21. —

- (1) This licence does not permit the decommissioning of the authorised scheme, and no authorised decommissioning activity shall commence until a decommissioning programme in accordance with an approved programme under section 105(2) of the 2004 Act has been submitted to the Secretary of State for approval.
- (2) At least four months prior to carrying out any proposed decommissioning activity the undertaker shall notify the MMO of the works to establish whether a marine licence is required.