

Deemed licence under the 2009 Act – generation assets (licence 2 – phase 2)

PART 1

Licensed marine activities

1.—(1) In this licence—

“the 2004 Act” means the Energy Act 2004(a);

“the 2007 Regulations” means the Offshore Marine Conservation (Natural Habitats, &c.) Regulations 2007(b);

“the 2009 Act” means the Marine and Coastal Access Act 2009(c);

“authorised deposits” means the substances and articles specified in paragraph 4 of Part 1 of this licence;

“authorised scheme” means Work No. 1 described in paragraph 3 of Part 1 of this licence or any part of that work;

“buoy” means any floating device used for navigational purposes or measurement purposes, including LiDAR buoys, wave buoys and guard buoys;

- (a) 2004 c.20.
- (b) S.I. 2007/1842.
- (c) 2009 c.23.

“cable protection” means measures for cable crossings and where cable burial is not possible due to ground conditions, to protect cables and prevent loss of seabed sediment by use of grout bags, protective aprons, mattresses, flow energy dissipation (frond) devices or rock and gravel dumping;

“Cefas” means the Centre for Environment, Fisheries and Aquaculture Science or any successor body to its function;

“commence” means the first carrying out of any part of the licensed activities save for pre-construction surveys and monitoring and “commenced” and “commencement” must be construed accordingly;

“condition” means a condition in Part 2 of this licence;

“Defence Infrastructure Organisation Safeguarding” means Ministry of Defence Safeguarding, Defence Infrastructure Organisation, St George's House, DIO Head Office, DMS Whittington, Lichfield, Staffordshire WS14 9PY and any successor body to its functions;

“draught height” means the distance between the lowest point of the rotating blade of the wind turbine generator and MHWS;

“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 the Order;

“European offshore marine site” has the meaning given in regulation 15 of the 2007 Regulations;

~~“European site” has the meaning given in regulation 24 of the 2007 Regulations;~~

“gravity base foundation” means a structure principally of steel, concrete, or steel and concrete which rests on the seabed either due to its own weight with or without added ballast or additional skirts and associated equipment including scour protection, J-tubes, corrosion protection systems and access platform(s) and equipment;

“habitat of principal importance” means a habitat type designated pursuant to section 41 of the Natural Environment and Rural Communities Act 2006(a)

“in principle monitoring plan” means the document certified as the in principle monitoring plan by the Secretary of State for the purposes of the Order;

“jacket foundation” means a steel jacket/ lattice-type structure constructed of steel which is fixed to the seabed at two or more points with steel pin piles or steel suction caissons and associated equipment including scour protection, J-tubes, corrosion protection systems and access platform(s) and equipment;

“Kingfisher Fortnightly Bulletin” means the bulletin published by the Humber Seafood Institute or such other alternative publication approved in writing by the MMO for the purposes of this licence;

“LAT” means lowest astronomical tide;

“licence 1 (generation)” means the licence set out in Schedule 10 (deemed licence under the 2009 – generation assets (licence 1 – phase 1));

“licensed activities” means the activities specified in Part 1 of this licence;

“maintain” includes inspect, upkeep, repair, adjust, and alter and further includes remove, reconstruct and replace (but only in relation to any of the ancillary works in Part 2 of Schedule 1 (ancillary works) to the Order and any component part of any wind turbine generator, offshore electrical station, accommodation platform or meteorological mast described in Part 1 of Schedule 1 (authorised development) to the Order not including the alteration, removal or replacement of foundations), to the extent assessed in the environmental statement; and “maintenance” must be construed accordingly;

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

“MCA” means the Maritime and Coastguard Agency;

(a) 2006 c.16.

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

“meteorological mast” means a mast housing equipment to measure wind speed and other wind characteristics, including a topside housing electrical, communication and associated equipment and marking and lighting;

“monopile foundation” means a steel pile, typically cylindrical, driven and/ or drilled into the seabed and associated equipment including scour protection, J-tubes, corrosion protection systems and access platform(s) and equipment;

“notice to mariners” means a notice issued by the undertaker to mariners to inform them of issues that affect the safety of navigation;

“offshore cables” means any Alternating Current (AC) or Direct Current (DC) cables offshore and includes fibre optic cables either within the cable or laid alongside;

“offshore Order limits” means the limits shown on the works plan within which the authorised scheme may be carried out, whose grid coordinates are set out in paragraph 5 of Part 1 of this licence;

“offshore platform” means any offshore electrical station and any offshore accommodation platform;

“the Order” means the East Anglia THREE Offshore Wind Farm Order 2017;

“outline navigation monitoring strategy” means the document certified as the outline navigation monitoring strategy by the Secretary of State for the purposes of the Order;

“outline offshore operations and maintenance plan” means the document certified as the outline offshore operations and maintenance plan by the Secretary of State for the purposes of the Order;

“outline written scheme of investigation (offshore)” means the document certified as the outline written scheme of investigation (offshore) by the Secretary of State for the purposes of the Order;

“relevant site” means a European offshore marine site and a European site;

“single offshore phase” means carrying out all offshore works as a single construction operation;

“statutory historic body” means Historic England or its successor in function;

“suction caissons” means large diameter steel cylindrical shells which penetrate the seabed assisted by hydrostatic pressure differential for fixity of steel jacket foundations;

“suction caisson foundation” means a tubular steel structure which penetrates the seabed assisted by a hydrostatic pressure differential and associated equipment, including scour protection, J-tubes, corrosion protection systems and access platform(s) and equipment;

“Trinity House” means the Corporation of Trinity House of Deptford Strond;

“two offshore phases” means carrying out the offshore works as two separate construction operations pursuant to the deemed marine licences set out in schedules 10, 12 and 14 (Licence 1 – Phase 1) of the Order and schedules 11, 13 and 15 (Licence 2 –Phase 2) of the Order respectively;

“UK Hydrographic Office” means the UK Hydrographic Office of Admiralty Way, Taunton, Somerset, TA1 2DN;

“undertaker” means East Anglia THREE Limited;

“vessel” means every description of vessel, however propelled or moved, and includes a 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” means a structure comprising a tower, rotor with three blades connected at the hub, nacelle and ancillary electrical and other equipment which may include J-tube(s), transition piece, access and rest platforms, access ladders, boat access systems, corrosion protection systems, fenders and maintenance equipment, helicopter landing facilities and other associated equipment, fixed to a foundation;

“Work No. 2” means the offshore electrical stations;

“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 is 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 are taken to be Greenwich Mean Time (GMT);
- (b) all co-ordinates are 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 are—

- (a) Marine Management Organisation

Offshore Marine Licensing

Lancaster House

Hampshire Court

Newcastle Business Park

Newcastle upon Tyne

NE4 7YH

Tel: 0300 123 1032;

- (b) Marine Management Organisation (local office)

Marine Environment Team

Pakefield Road

Lowestoft

Suffolk

NR33 0HT;

- (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 2/20, Spring Place

105 Commercial Road

Southampton

SO15 1EG

Tel: 020 38172433;

(f) Centre for Environment, Fisheries and Aquaculture Science  
Pakefield Road  
Lowestoft  
Suffolk  
NR33 0HT  
Tel: 01502 562 244;

(g) Natural England  
York (head office),  
Foss House  
Kings Pool  
1-2 Peasholme Green  
York  
YO1 7PX  
Tel: 0300 060 3900;

(h) Historic England  
4<sup>th</sup> Floor  
Cannon Bridge  
House  
25 Dowgate Hill  
London  
EC4R 2YA  
Tel: 0207 973 3700.

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

2. Subject to the licence conditions, 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—

- (a) the deposit at sea of the substances and articles specified in paragraph 4 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 disposal of up to 2,513,743 m<sup>3</sup> of inert material of natural origin within the offshore Order limits produced during construction drilling or seabed preparation for foundation works and cable sandwave preparation works at disposal site reference HU212 within the extent of the Order limits seaward of MHWS, comprising—
  - (i) 1,219,768 m<sup>3</sup> for cable installation;
  - (ii) 1,200,000 m<sup>3</sup> for the wind turbine generators;
  - (iii) 73,225 m<sup>3</sup> for the accommodation platform; and
  - (iv) 20,750 m<sup>3</sup> for the meteorological masts.

3. Such activities are authorised in relation to the construction, maintenance and operation of—

(1) Work No. 1 (phase 2)—

- (a) an offshore wind turbine generating station comprising up to 100 wind turbine generators each fixed to the seabed by one of four foundation types (namely, monopile, jacket, suction caisson or gravity base), fitted with rotating blades and situated within the area shown on the works plan and further comprising (b) to (e) below;
- (b) up to one accommodation platform fixed to the seabed within the area shown on the works plan by one of two foundation types (namely jacket or gravity base);

- (c) up to two meteorological masts fixed to the seabed within the area shown on the works plan by one of four foundation types (namely monopile, jacket, suction caisson or gravity base);
- (d) up to 12 buoys fixed to the seabed within the area shown on the works plans;
- (e) a network of subsea inter-array cables within the area shown on the works plan between the wind turbine generators and between the wind turbine generators and Work No.2 including one or more cable crossings.

(2) 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 scheme and which fall within the scope of the work assessed by the environmental statement and the provisions of this licence.

(3) In connection with such Work No. 1, ancillary works within the Order limits which have been subject to an environmental impact assessment recorded in the environmental statement comprising—

- (a) temporary landing places, moorings or other means of accommodating vessels in the construction and/ or maintenance of the authorised scheme; and
- (b) marking buoys, beacons, fenders and other navigational warning or ship impact protection works.

4. The substances or articles authorised for deposit at sea are—

- (a) iron and steel, copper and aluminium;
- (b) stone and rock;
- (c) concrete;
- (d) sand and gravel;
- (e) plastic and synthetic;
- (f) material extracted from within the offshore Order limits during construction drilling or seabed preparation for foundation works and cable sandwave preparation works; and
- (g) marine coatings, other chemicals and timber.

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

**Table 1**

<i>Point</i>	<i>Latitude (DMS)</i>	<i>Longitude (DMS)</i>	<i>Point</i>	<i>Latitude (DMS)</i>	<i>Longitude (DMS)</i>
1	52° 30' 20.026"N	2° 48' 33.266"E	3	52° 45' 10.569" N	2° 45' 33.773" E
2	52° 31' 32.067"N	2° 45' 31.868" E	4	52° 46' 18.078" N	3° 02' 15.841" E

6. This licence remains 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, and the completion of such programme has been confirmed by the Secretary of State in writing.

7. The provisions of section 72 of the 2009 Act apply to this licence except that the provisions of section 72(7) relating to the transfer of the licence only apply to a transfer not falling within article 5 (benefit of the Order).

8. With respect to any condition which requires the licensed activities be carried out in accordance with the plans, protocols or statements approved under this Schedule, the approved details, plan or scheme are taken to include any amendments that may subsequently be approved in writing by the MMO.

9. Any amendments to or variations from the approved plans, protocols or statements must be minor or immaterial where it has been demonstrated that the subject matter of the approval 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 (3), wind turbine generators forming part of the authorised scheme must not—

- (a) exceed a height of 282 metres when measured from LAT to the tip of the vertical blade;
- (b) exceed a height of 150.6 metres to the height of the centreline of the generator shaft forming part of the hub when measured from LAT;
- (c) exceed a rotor diameter of 250 metres;
- (d) be less than 675 metres from the nearest wind turbine generator in either direction perpendicular to the approximate prevailing wind direction (crosswind) or be less than 900 metres from the nearest wind turbine generator in either direction which is in line with the approximate prevailing wind direction (downwind);
- (e) have a draught height of less than 24 metres from MHWS.

(2) In condition 1(1) above, references to the location of a wind turbine generator are references to the centre point of that turbine.

2.—(1) The dimensions of any accommodation platform forming part of the authorised scheme must not exceed 60 metres in height when measured from LAT, 70 metres in length and 70 metres in width.

(2) Each meteorological mast must not exceed a height of 160 metres above LAT.

(3) Each meteorological mast must not have more than one supporting foundation.

(4) The dimensions of any buoy forming part of the authorised scheme must not exceed 6 metres in height (excluding any apparatus or equipment fixed to the buoy), 4 metres in length and 4 metres in width and the anchor footprint must not exceed 4m<sup>2</sup>.

(5) Offshore platforms forming part of the authorised scheme must not be erected within the platform exclusion zone, whose co-ordinates are specified below—

<i>Point</i>	<i>Latitude (DMS)</i>	<i>Longitude (DMS)</i>	<i>Point</i>	<i>Latitude (DMS)</i>	<i>Longitude (DMS)</i>
1	52° 30' 20.0268" N	2° 48' 33.264"E	3	52° 32' 10.4568" N	2° 45' 31.9572" E
2	52° 31' 32.0664" N	2° 45' 31.8672" E	4	52° 30' 48.7369" N	2° 48' 57.7512" E

(6) In the event that driven or part-driven pile foundations are proposed to be used, the hammer energy used to drive or part-drive the pile foundations must not exceed 3,500kJ.

(7) The total number of gravity base foundations must not exceed 100.

3.—The total length of the cables and the volume of their cable protection must not exceed the following—

<i>Work</i>	<i>Length</i>	<i>Cable protection</i>
Work No. 1(e) (inter-array)	550 kilometres	49,500 m <sup>3</sup>

- 4.—(1) In relation to a wind turbine generator, each gravity base foundation must not have—
- a diameter at the level of the seabed which is more than 60 metres;
  - a base height, where there is a flat base and a cylindrical shaft, which is more than 12 metres above the level of the seabed;
  - a base height, where there is a conical base, which is more than 2 metres above the level of the seabed;
  - a column diameter, where there is a flat or conical base, which is more than 9 metres at LAT.
- (2) In relation to a wind turbine generator, each suction caisson foundation must not have—
- a diameter at the level of the seabed which is more than 30 metres;
  - a base height where there is a flat base, which is more than 5 metres above the level of the seabed;
  - a column diameter which is more than 9 metres at LAT.
- (3) In relation to a wind turbine generator, each jacket foundation must not have—
- a width spacing between its legs at the level of the seabed which is more than 43.5 metres;
  - a pile diameter which is more than 4 metres in the case of pin piles or a suction caisson diameter which is more than 10 metres;
  - more than one pile per leg or more than one suction caisson per leg;
  - more than four legs.
- (4) In relation to a wind turbine generator, each monopile foundation forming part of the authorised scheme must not have a diameter which is more than 12 metres.
- 5.—(1) In relation to a meteorological mast, each gravity base foundation must not have a diameter at the level of the seabed which is more than 20 metres.
- (2) In relation to a meteorological mast, each suction caisson foundation must not have a diameter at the level of the seabed which is more than 15 metres.
- (3) In relation to a meteorological mast, each jacket foundation must not have a footprint at the seabed which is more than 625 m<sup>2</sup>.
- (4) In relation to a meteorological mast, each monopile foundation forming part of the authorised development must not have a diameter which is more than 8 metres.
- (5) In relation to an accommodation platform, each gravity base foundation must not have a footprint of more than 15,855 m<sup>2</sup>.
- (6) In relation to an accommodation platform, each jacket foundation must not have—



- (a) a footprint at the seabed which is more than 15,855 m<sup>2</sup>;
- (b) more than one pile per leg or more than one suction caisson per leg

### **Phasing of the authorised scheme**

6.-(1) In the case of two offshore phases, taken together the combined offshore phases for generation asset (licence 1 – phase 1) and generation asset (licence 2- phase 2), must not exceed –

- (a) the disposal of up to 2,513,743 m<sup>3</sup> of inert material of natural origin within the offshore Order limits produced during construction drilling or seabed preparation for foundation works and cable sandwave preparation works at disposal site reference HU212 within the extent of the Order limits seaward of MHWS, comprising –
  - (i) 1,219,768 m<sup>3</sup> for cable installation;
  - (ii) 1,200,000 m<sup>3</sup> for the wind turbine generators;
  - (iii) 73,225 m<sup>3</sup> for the accommodation platform; and
  - (iv) 20,750 m<sup>3</sup> for the meteorological masts;
- (b) an offshore wind turbine generating station comprising up to 100 wind turbine generators;
- (c) up to one accommodation platform;
- (d) up to two meteorological masts;
- (e) up to 12 buoys fixed to the sea bed; and
- (f) up to 2,572,460 m<sup>2</sup> of scour protection for the wind turbine generators, accommodation platform and meteorological masts.

### **Notifications and inspections**

7.—(1) The undertaker must ensure that—

- (a) a copy of this licence (issued as part of the grant of the Order) and any subsequent amendments or revisions to it is provided to—
  - (i) all agents and contractors notified to the MMO in accordance with condition 15; and
  - (ii) the masters and transport managers responsible for the vessels notified to the MMO in accordance with condition 15;
- (b) within 28 days of receipt of a copy of this licence those persons referred to in paragraph (a) above must provide a completed confirmation form to the MMO confirming receipt of this licence.

(2) Only those persons and vessels notified to the MMO in accordance with condition 15 are permitted to carry out the licensed activities.

(3) Copies of this licence must 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 sub-paragraph (1)(a) must be available for inspection by an authorised enforcement officer at the locations set out in sub-paragraph (3)(b) above.

(5) The undertaker must 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 five days prior to the commencement of the licensed activities or any part of them, and within five days of completion of the licensed activities.

(7) The undertaker must inform the Kingfisher Information Service of Seafish by email to [kingfisher@seafish.co.uk](mailto:kingfisher@seafish.co.uk) of details regarding the vessel routes, timings and locations relating to the construction of the authorised scheme or relevant part—

- (a) at least ten days prior to the commencement of offshore activities, for inclusion in the Kingfisher Fortnightly Bulletin and offshore hazard awareness data; and
- (b) on completion of construction of all offshore activities.

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

(8) A notice to mariners must be issued at least ten days prior to the commencement of the licensed activities or any part of them advising of the start date of Work No. 1 (wind turbine generators or other offshore construction activities including array cables) and the expected vessel routes from the construction ports to the relevant location. Copies of all notices must be provided to the MMO and UKHO within five days.

(9) The notices to mariners must be updated and reissued at weekly intervals during construction activities and at least five days before any planned operations and maintenance works and supplemented with VHF radio broadcasts agreed with the MCA in accordance with the construction programme approved under condition 13(1)(b). Copies of all notices must be provided to the MMO and UKHO within five days.

(10) The undertaker must notify the UK Hydrographic Office both of the commencement (within ten days), progress and completion of construction (within ten days) of the licensed activities in order that all necessary amendments to nautical charts are made and the undertaker must send a copy of such notifications to the MMO.

(11) In case of damage to, or destruction or decay of, the authorised scheme seaward of MHWS or any part thereof the undertaker must as soon as possible 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 UK Hydrographic Office.

### **Aids to navigation**

**8.**—(1) The undertaker must during the whole period from commencement of the licensed activities to completion of decommissioning seaward of MHWS exhibit such lights, marks, sounds, signals and other aids to navigation, and take such other steps for the prevention of danger to navigation as Trinity House may from time to time direct.

(2) The undertaker must during the period from the start of construction of the authorised scheme to completion of decommissioning seaward of MHWS keep Trinity House and the MMO informed of progress of the authorised scheme seaward of MHWS including the following—

- (a) notice of commencement of construction of the authorised scheme 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 five days of completion of construction of the authorised scheme.

(3) The undertaker must provide reports to Trinity House on the availability of aids to navigation in accordance with the frequencies set out in the aids to navigation management plan agreed pursuant to condition 13(1)(k) using the reporting system provided by Trinity House.

(4) The undertaker must during the whole period from commencement of the licensed activities to completion of decommissioning seaward of MHWS 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.

(5) In the event that the provisions of condition 7(11) are invoked, the undertaker must lay down such buoys, exhibit such lights and take such other steps for preventing danger to navigation as directed by Trinity House.

**9.**—(1) The undertaker must colour all structures yellow (colour code RAL 1023) from at least highest astronomical tide to a height directed by Trinity House, or must colour the structure as directed by Trinity House from time to time.

(2) Subject to sub-paragraph (1) above, unless the MMO otherwise directs, the undertaker must ensure that the wind turbine generators are painted light grey (colour code RAL 7035).

### **Aviation safety**

**10.**—The undertaker must notify the Defence Infrastructure Organisation Safeguarding, at least 14 days prior to the commencement of the authorised scheme, in writing of the following information—

- (a) the date of the commencement of construction of the authorised scheme;
- (b) the date any wind turbine generators are brought into use;
- (c) the maximum height of any construction equipment to be used;
- (d) the maximum heights of any wind turbine generator, mast and platform to be constructed;
- (e) the latitude and longitude of each wind turbine generator, mast and platform to be constructed,

and the Defence Infrastructure Organisation Safeguarding must be notified of any changes to the information supplied under this paragraph and of the completion of the construction of the authorised scheme. Copies of notifications must be provided to the MMO.

### **Chemicals, drilling and debris**

**11.**—(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, must be selected from the List of Notified Chemicals approved for use by the offshore oil and gas industry under the Offshore Chemicals Regulations 2002 (as amended).

(2) The undertaker must 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 must 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) The undertaker must 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.

(5) The undertaker must ensure that only inert material of natural origin, produced during the drilling installation of or seabed preparation for foundations, and drilling mud is disposed of within site disposal reference HU212 within the extent of the Order limits seaward of MHWS. Any other materials must be screened out before disposal at this site.

(6) The undertaker must 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.

(7) In the event that any rock material used in the construction of the authorised scheme is misplaced or lost below MHWS, the undertaker must report the loss to the District Marine Office within 48 hours and if the MMO reasonably considers such material to constitute a navigation or environmental hazard (dependent on the size and nature of the material) the undertaker must endeavour to locate the material and recover it.

(8) The undertaker must ensure that no waste concrete slurry or wash water from concrete or cement works are discharged into the marine environment. Concrete and cement mixing and washing areas should be contained to prevent run off entering the water through the freeing ports.

(9) The undertaker must ensure that any oil, fuel or chemical spill within the marine environment is reported to the MMO, Marine Pollution Response Team in accordance with the marine pollution contingency plan agreed under condition 13(1)(d)(i).

(10) All dropped objects must be reported to the MMO using the Dropped Object Procedure Form as soon as reasonably practicable and in any event within 24 hours of the undertaker becoming aware of an incident. On receipt of the Dropped Object Procedure Form, the MMO may require relevant surveys to be carried out by the undertaker (such as side scan sonar) if reasonable to do so and the MMO may require obstructions to be removed from the seabed at the undertaker's expense if reasonable to do so.

### **Force majeure**

**12.**—(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 within or 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 must be notified to the MMO.

(2) The unauthorised deposits must be removed at the expense of the undertaker unless written approval is obtained from the MMO.

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

**13.**—(1) The licensed activities or any part of those activities must not commence until the following (as relevant to that part) have been submitted to and approved in writing by the MMO—

- (a) 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, to be agreed in writing with the MMO in consultation with Trinity House and the MCA which shows—
- (i) the proposed location and choice of foundation of all wind turbine generators, accommodation platforms and meteorological masts;
  - (ii) the height to the tip of the vertical blade; height to the centreline of the generator shaft forming part of the hub;
  - (iii) rotor diameter and spacing of all wind turbine generators;
  - (iv) the height of all lattice towers forming part of the meteorological mast;
  - (v) the length and arrangement of all cables comprising Work No. 1(e);
  - (vi) the dimensions of all gravity base foundations;
  - (vii) the dimensions of all jacket foundations;
  - (viii) the dimensions of all suction caisson foundations;
  - (ix) the dimensions of all monopile foundations;
  - (x) the proposed layout of all wind turbine generators (in accordance with the recommendations for layout contained in MGN543), accommodation platforms and meteorological masts including any exclusion zones identified under sub-paragraph 13(1)(h)(iv);
  - (xi) a plan showing the indicative layout of all wind turbine generators, accommodation platforms and meteorological masts including all exclusion zones (insofar as not shown in (x) above) and showing the indicative programming of particular works as set out in the indicative programme to be provided under sub-paragraph 13(1)(b)(iv); and
  - (xii) any exclusion zones/micrositing requirements identified in any mitigation scheme pursuant to sub-paragraph 13(1)(i);
- to ensure conformity with the description of Work No. 1 and compliance with conditions 1 to 6 above.
- (b) A construction programme and monitoring plan (which accords with the in principle monitoring plan) to include details of—
- (i) the proposed construction start date;
  - (ii) proposed timings for mobilisation of plant delivery of materials and installation works and whether such works are to be carried out as a single offshore phase or as two offshore phases;
  - (iii) proposed pre-construction surveys, baseline report format and content, construction monitoring, post-construction monitoring and related reporting in accordance with sub-paragraph 13(1)(h) and conditions 17, 18 and 19; and
  - (iv) an indicative written construction programme for all wind turbine generators, accommodation platforms, meteorological masts, buoys and cables comprised in the works at paragraph 3(1) of Part 1 (licensed marine activities) of this Schedule (insofar as not shown in paragraph (ii) above);
- with details pursuant to paragraph (iii) above to be submitted to the MMO in accordance with the following—
- (aa) at least four months prior to the first survey, detail of the pre-construction surveys and an outline of all proposed monitoring;

- (bb) at least four months prior to construction, detail on construction monitoring;
  - (cc) at least four months prior to commissioning, detail of post-construction (and operational) monitoring;
- unless otherwise agreed in writing with the MMO.
- (c) A construction method statement in accordance with the construction methods assessed in the environmental statement and including details of—
    - (i) foundation installation methodology, including drilling methods and disposal of drill arisings and material extracted during seabed preparation for foundation works and having regard to any mitigation scheme pursuant to sub-paragraph 13(1)(i);
    - (ii) soft start procedures with specified duration periods;
    - (iii) cable installation;
    - (iv) contractors;
    - (v) vessels and vessels transit corridors, which minimises disturbance to red-throated diver; and
    - (vi) associated and ancillary works.
  - (d) A project environmental management plan covering the period of construction and operation 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 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 and disposal arrangements;
    - (iv) the appointment and responsibilities of a fisheries liaison officer;
    - (v) a fisheries liaison and coexistence plan to ensure relevant fishing fleets are notified of commencement of licensed activities pursuant to condition 7 and to address the interaction of the licensed activities with fishing activities; and
    - (vi) procedures to be adopted within vessels transit corridors to minimise disturbance to red-throated diver.
  - (e) A scour protection management and cable protection plan providing details of the need, type, sources, quantity and installation methods for scour protection and cable protection, which plan must be updated and resubmitted for approval if changes to it are proposed following cable laying operations.
  - (f) In the event that driven or part-driven pile foundations are proposed to be used, a marine mammal mitigation protocol in accordance with the draft marine mammal mitigation protocol, the intention of which is to prevent injury to marine mammals, following current best practice as advised by the relevant statutory nature conservation bodies.
  - (g) A cable specification, installation and monitoring 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 laying plan for the Order limits, incorporating a burial risk assessment to ascertain suitable burial depths and cable laying techniques, including cable protection; and
    - (iii) proposals for monitoring offshore cables including cable protection during the operational lifetime of the authorised scheme which includes a risk based approach to the management of unburied or shallow buried cables.
  - (h) A written scheme of archaeological investigation in relation to the offshore Order limits seaward of mean low water, which must be submitted at least 6 months prior to commencement of the licensed activities and must accord with the outline written scheme of investigation (offshore) and industry good practice, in consultation with the statutory historic body to include—
    - (i) details of responsibilities of the undertaker, archaeological consultant and contractor;
    - (ii) a methodology for further site investigation including any specifications for geophysical, geotechnical and diver or remotely operated vehicle investigations;

- (iii) archaeological analysis of survey data, and timetable for reporting, which is to be submitted to the MMO within four months of any survey being completed;
  - (iv) delivery of any mitigation including, where necessary, identification and modification of archaeological exclusion zones;
  - (v) monitoring of archaeological exclusion zones during and post construction;
  - (vi) a requirement for the undertaker to ensure that a copy of any agreed archaeological report is deposited with the National Record of the Historic Environment, by submitting a Historic England OASIS (Online AccesS to the Index of archaeological investigationS') form with a digital copy of the report within six months of completion of construction of the authorised scheme, and to notify the MMO that the OASIS form has been submitted to the National Record of the Historic Environment within two weeks of submission;
  - (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) a timetable for all further site investigations, which must allow sufficient opportunity to establish a full understanding of the historic environment within the offshore Order Limits and the approval of any necessary mitigation required as a result of the further site investigations prior to commencement of licensed activities.
- (i) A mitigation scheme for any habitats of principal importance identified by the survey referred to in condition 17(2)(a) and in accordance with the in principle monitoring plan.
  - (j) An offshore operations and maintenance plan, in accordance with the outline offshore operations and maintenance plan, to be submitted to the MMO at least four months prior to commencement of operation of the licensed activities and to provide for review and resubmission every three years during the operational phase.
  - (k) An aids to navigation management plan to be agreed in writing by the MMO following consultation with Trinity House, to include details of how the undertaker will comply with the provisions of condition 8 for the lifetime of the authorised scheme.

(2) In the event that driven or part-driven pile foundations are proposed to be used, the licensed activities, or any phase of those activities must not commence until an East Anglia THREE Project Southern North Sea cSAC Site Integrity Plan which accords with the principles set out in the in principle East Anglia THREE Project Southern North Sea pSAC Site Integrity Plan has been submitted to the MMO and the MMO is satisfied that the plan, provides such mitigation as is necessary to avoid adversely affecting the integrity (within the meaning of the 2007 Regulations) of a relevant site, to the extent that harbour porpoise are a protected feature of that site.

(3) Pre-construction archaeological investigations and pre-commencement material operations which involve intrusive seabed works must only take place in accordance with a specific written scheme of investigation which is itself in accordance with the details set out in the outline offshore written scheme of investigation, and which has been submitted to and approved by the MMO.

14.—(1) Any archaeological reports produced in accordance with condition 13(1)(h)(iii) are to be agreed with the statutory historic body.

(2) Each programme, statement, plan, protocol or scheme required to be approved under condition 13 must be submitted for approval at least four months prior to the intended commencement of licensed activities, except where otherwise stated or unless otherwise agreed in writing by the MMO.

(3) No licensed activity may commence until for that licensed activity the MMO has approved in writing any relevant programme, statement, plan, protocol or scheme required to be approved under condition 13.

(4) The licensed activities must be carried out in accordance with the approved plans, protocols, statements, schemes and details approved under condition 13, unless otherwise agreed in writing by the MMO.

(5) No part of the authorised scheme may commence until the MMO, in consultation with the MCA, has given written approval of an Emergency Response Co-operation Plan (ERCoP) which includes full details of the plan for emergency, response and co-operation for the construction, operation and decommissioning phases of that part of the authorised scheme in accordance with the MCA recommendations contained within MGN543 “Offshore Renewable Energy Installations (OREIs) – Guidance on UK Navigational Practice, Safety and Emergency Response Issues”, and has confirmed in writing that the undertaker has taken into account and, so far as is applicable to that part of the authorised scheme, adequately addressed all MCA recommendations contained within MGN543 and its annexes.

### **Reporting of engaged agents, contractors and vessels**

**15.**—(1) The undertaker must 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 H102 listing the vessels currently and to be used in relation to the licensed activities.

(2) Any changes to the supplied details must be notified to the MMO in writing prior to the agent, contractor or vessel engaging in the licensed activities.

### **Foundation restrictions**

**16.** No gravity base foundations may be installed in any area of the seabed with mobile sand waves of five metres or more, as identified by the swath-bathymetry survey carried out under condition 17(2)(b), unless otherwise agreed in writing by the MMO.

### **Pre-construction monitoring and surveys**

**17.**—(1) The undertaker must, in discharging condition 13(1)(b), submit details (which accord with the in principle monitoring plan) for written approval by the MMO in consultation with relevant statutory bodies 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 must 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 must 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 must make clear what post-construction comparison is intended and the justification for this being required.

(2) The pre-construction surveys referred to in sub-paragraph (1) must, unless otherwise agreed with the MMO, have due regard to, but not be limited to, the need to undertake—

- (a) appropriate surveys to determine the location and extent of any benthic communities/benthos constituting habitats of principal importance 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 full sea floor coverage swath-bathymetry survey that meets the requirements of IHO S44ed5 Order 1a, and side scan sonar, of the area(s) within the Order limits in which it is

proposed to carry out construction works including a 500 metre buffer area around the site of each work, inclusive of seabed anomalies or sites of historic or archaeological interest that lie within that 500 metre buffer;

- (c) appropriate surveys of existing ornithological activity inside the area(s) within the Order limits in which it is proposed to carry out construction works, and any wider area(s) where appropriate, which is required to test predictions in the environmental statement concerning key ornithological interests of relevance to the authorised scheme; and
- (d) appropriate surveys of existing marine mammal activity inside the area(s) within the Order limits in which it is proposed to carry out construction works and any wider area(s) where appropriate which is required to test predictions in the environmental statement concerning key marine mammal interests of relevance to the authorised scheme.

(3) The undertaker must carry out the surveys agreed under sub-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 the relevant statutory nature conservation bodies.

### **Construction monitoring**

**18.**—(1) The undertaker must, in discharging condition 13(1)(b), submit details (which accord with the in principle monitoring plan) for approval by the MMO in consultation with the relevant statutory bodies of any proposed monitoring, including methodologies and timings, to be carried out during the construction of the authorised scheme. The survey proposals must specify each survey's objectives. In any event, such monitoring must include measurements of noise generated by the installation of the first four piled foundations of each piled foundation type to be installed.

(2) The undertaker must carry out the surveys approved under sub-paragraph (1), including any further noise monitoring required in writing by the MMO, 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 the relevant statutory nature conservation bodies.

(3) The results of the initial noise measurements monitored in accordance with sub-paragraph (1) must be provided to the MMO within six weeks of the installation of the first four piled foundations of each piled foundation type. The assessment of this report by the MMO will determine whether any further noise monitoring is required.

(4) Construction monitoring must include traffic monitoring in accordance with the outline navigation monitoring strategy, including the provision of reports on the results of that monitoring periodically as requested by the MMO in consultation with the MCA.

### **Post construction**

**19.**—(1) The undertaker must, in discharging condition 13(1)(b), submit details (which accord with the in principle monitoring plan) for approval by the MMO in consultation with relevant statutory bodies of proposed post-construction surveys, including methodologies and timings, and a proposed format, content and timings for providing reports on the results. The survey proposals must 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.

(2) The post-construction surveys referred to in sub-paragraph (1) must, unless otherwise agreed with the MMO, have due regard to, but not be limited to, the need to undertake—

- (a) appropriate surveys of any benthic communities/benthos constituting habitats of principal importance in whole or in part inside the area(s) within the Order limits in which construction works were carried out;
- (b) within twelve months of completion of the licensed activities, one full sea floor coverage swath-bathymetry survey that meets the requirements of IHO S44ed5 Order 1a 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 or assessment as may be agreed to ensure that cables have been buried or protected;

- (c) appropriate ornithological surveys covering the area(s) within the Order limits in which construction works were carried out, and any wider area(s) where appropriate, as required to test predictions in the environmental statement concerning key ornithological interests of relevance to the authorised scheme;
- (d) appropriate marine mammal surveys covering the area(s) within the Order limits in which construction works were carried out and any wider area(s) where appropriate, as required to test predictions in the environmental statement concerning key marine mammal interests of relevance to the authorised scheme; and
- (e) post-construction traffic monitoring in accordance with the outline navigation monitoring strategy, including the provision of reports on the results of that monitoring periodically as requested by the MMO in consultation with the MCA.

(3) The undertaker must carry out the surveys agreed under sub-paragraph (1) for up to 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 the relevant statutory nature conservation bodies.

(4) Following installation of cables, the cable monitoring plan required under condition 13(1)(g)(iii) must be updated with the results of the post installation surveys. The plan must be implemented during the operational lifetime of the project and reviewed as specified within the plan, following cable burial surveys, or as instructed by the MMO.

### **Reporting of impact pile driving/detonation of explosives**

**20.**—(1) Only when driven or part-driven pile foundations or detonation of explosives are proposed to be used as part of the foundation installation the undertaker must provide the following information to the Marine Noise Registry—

- (a) prior to the commencement of the licensed activities, information on the expected location, start and end dates of impact pile driving/detonation of explosives to satisfy the Marine Noise Registry’s Forward Look requirements;
- (b) at six month intervals following the commencement of pile driving/detonation of explosives, information on the locations and dates of impact pile driving/detonation of explosives to satisfy the Marine Noise Registry’s Close Out requirements;
- (c) within 12 weeks of completion of impact pile driving/detonation of explosives, information on the locations and dates of impact pile driving/detonation of explosives to satisfy the Marine Noise Registry’s Close Out requirements

(2) The undertaker must notify the MMO of the successful submission of Forward Look or Close Out data pursuant to paragraph (1) above within 7 days of the submission.

(3) For the purpose of this condition—

- (a) “Marine Noise Registry” means the database developed and maintained by JNCC on behalf of Defra to record the spatial and temporal distribution of impulsive noise generating activities in UK seas;
- (b) “Forward Look” and “Close Out” requirements are as set out in the UK Marine Noise Registry Information Document Version 1 (July 2015) or any updated information document.