

Deemed Licence under the 2009 Act – Generation Assets  
(Licence 1 – Phase 1)

PART 1  
Interpretation

1. In this licence—

“the 2004 Act” means the Energy Act 2004;

“the 2008 Act” means the Planning Act 2008;

“the 2009 Act” means the Marine and Coastal Access Act 2009

“the 2017 Regulations” means the Conservation of Offshore Marine Habitats and Species Regulations 2017(a);

“accommodation platform” means a fixed structure providing offshore accommodation for personnel

“authorised deposits” means the substances and articles specified in paragraph 5 of Part 2 of this licence;

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

“cable protection” means measures for offshore cable crossings and where cable burial is not possible due to ground conditions or approaching offshore structures, to protect cables and fibre optic 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;

“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 4 of this licence;

“Defence Infrastructure Organisation Safeguarding” means Ministry of Defence Safeguarding, Defence Infrastructure Organisation, Kingston Road, Sutton Coldfield, West Midlands B75 7RL and any successor body to its functions;

“Development Principles” means the document certified as the Development Principles by the Secretary of State for the purposes of the Order;

“draft marine mammal mitigation protocol” means the document certified as the draft marine mammal mitigation protocol by the Secretary of State for the purposes of this Order;

“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 Part 4 (marine licensing) 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;

“gravity base system” 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, transition piece, corrosion protection systems, fenders and maintenance equipment, boat access systems, access ladders and access and rest platform(s) and equipment;

“HAT” means highest astronomical tide;

“in principle Norfolk Vanguard Southern North Sea Special Area of Conservation Site Integrity Plan” means the document certified as the in principle Norfolk Vanguard Southern North Sea

Special area of Conservation Site Integrity Plan by the Secretary of State for the purposes of this Order;

“jacket foundation” means a steel jacket/ lattice-type structure constructed of steel which is fixed to the seabed at three or more points with steel pin piles or steel suction caissons and associated equipment including scour protection, J-tubes, transition piece, corrosion protection systems, fenders and maintenance equipment, boat access systems, access ladders and access and rest 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;

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(a) S.I. 2017/1013.

“licence 2 (generation)” means the licence set out in Schedule 10 (deemed licence under the 2009 Act – generation assets (licence 2 – phase 2));

“licensed activities” means the activities specified in Part 3 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), any cable, and any component part of any wind turbine generator, offshore electrical substation, accommodation platform or meteorological mast described in Part 1 of Schedule 1 (authorised development) not including the alteration, removal or replacement of foundations), to the extent assessed in the environmental statement; and “maintenance” is 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;

“marker buoy” means any floating device used for marker or navigation purposes, including LIDAR buoys and wave buoys;

“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;

“measurement buoy” means any floating device used for measurement purposes, including LIDAR buoys and wave buoys;

“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, transition piece, corrosion protection systems, fenders and maintenance equipment, boat access systems, access ladders and access and rest platform(s) and equipment;

“Norfolk Vanguard East” means the eastern area located in the offshore Order limits within which wind turbine generators will be situated;

“Norfolk Vanguard West” means the western area located in the offshore Order limits within which wind turbine generators will be situated;

“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 cables offshore;

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

“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 Part 2 of this licence;

“the Order” means the Norfolk Vanguard Offshore Wind Farm Order 2022;

“outline fisheries liaison and co-existence plan” means the document certified as the outline fisheries liaison and co-existence plan by the Secretary of State for the purposes of this Order;

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

“pin piles” means steel cylindrical piles driven and/or drilled into the seabed to secure steel jacket foundations;

“relevant site” means a European offshore marine site or a European site as defined in the 2017 Regulations;

“scour protection” means measures to prevent loss of seabed sediment around any marine structure placed in or on the seabed by use of protective aprons, mattresses with or without frond devices, or rock and gravel placement.

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

“statutory historic body” means Historic Buildings and Monuments Commission for England (Historic England) or its successor in function;

“statutory nature conservation body” means an organisation charged by government with advising on nature conservation matters;

“suction caisson” means a large diameter steel cylindrical shell which penetrates the seabed assisted by a hydrostatic pressure differential for fixity of foundations;

“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;

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

“undertaker” means Norfolk Vanguard Limited (Company No. 08141115) whose registered office is at 5th Floor, 70 St Mary Axe, London EC3A 8BE;

“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 up to three blades connected at the hub, nacelle and ancillary electrical and other equipment which may include corrosion protection systems, helicopter landing facilities and other associated equipment, fixed to a foundation; and

“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); and
  - (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 points of contact with the organisations listed below and the addresses for returns and correspondence are—
  - (a) Marine Management Organisation  
Marine Licensing  
Lancaster House  
Hampshire Court  
Newcastle Business Park  
Newcastle upon Tyne  
NE4 7YH  
Tel: 0300 123 1032;

- (b) Marine Management Organisation (local office)  
Lowestoft Office  
Pakefield Road  
Lowestoft  
Suffolk  
NR33 0HT  
Tel: 01502 573 149;
- (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 3817 2426;
- (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) Historic England

Cannon Bridge  
 House 25  
 Dowgate Hill  
 London  
 EC4R 2YA  
 Tel: 020 7973 3700

## PART 2

### Licensed Marine Activities – General

1. 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 (approval of decommissioning programmes) of the 2004 Act, including any modification to the programme under section 108 (reviews and revisions of decommissioning programmes), and the completion of such programme has been confirmed by the Secretary of State in writing.

2. The provisions of section 72 (variation, suspension, revocation and transfer) of the 2009 Act apply to this licence except that the provisions of section 72(7) and (8) relating to the transfer of the licence only apply to a transfer not falling within article 6 (benefit of the Order).

3. 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.

4. Any amendments to or variations from the approved plans, protocols or statements must be minor or immaterial and it must be demonstrated to the satisfaction of the MMO that they are unlikely to give rise to any materially new or materially different environmental effects from those assessed in the environmental statement.

5. 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 (including fibre optic cable) sandwave preparation works; and
- (g) marine coatings, other chemicals and timber.

6. The grid coordinates for the authorised scheme 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° 55' 0.308" N	3° 4' 42.589" E	6	53° 2' 36.817" N	2° 34' 16.309" E
2	52° 49' 53.975" N	3° 5' 22.789" E	7	52° 49' 38.834" N	2° 34' 15.809" E
3	52° 46' 19.050" N	3° 2' 16.682" E	8	52° 48' 47.472" N	2° 33' 28.343" E
4	52° 45'	2° 45'	9	52° 48'	2° 26'

	10.584" N	33.989" E		3.133" N	37.427" E
5	52° 51'	2° 45'	10	52° 56'	2° 18'
	41.636" N	34.220" E		9.089" N	33.231" E

## PART 3

### Details of Licensed Marine Activities

1. Subject to the licence conditions at Part 4, 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) (licensable marine activities) of the 2009 Act—

- (a) the deposit at sea of the substances and articles specified in paragraph 5 of Part 2 of this licence;
- (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;
- (d) the disposal of up to 37,736,390m<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 (including fibre optic cable) sandwave preparation works at disposal site references HU215 and HU216 within the extent of the Order limits seaward of MHWS, comprising—
  - (i) 36,000,000 m<sup>3</sup> for cable and fibre optic cable installation;
  - (ii) 1,648,824 m<sup>3</sup> for the wind turbine generators;
  - (iii) 75,000 m<sup>3</sup> for the accommodation platform; and
  - (iv) 12,566 m<sup>3</sup> for the meteorological masts;
- (e) the removal of static fishing equipment; and
- (f) the disposal of drill arisings in connection with any foundation drilling up to 400,624m<sup>3</sup>

2.—(1) Such activities are authorised in relation to the construction, maintenance and operation of Work No. 1 (phase 1)—

- (a) an offshore wind turbine generating station with ~~a gross electrical output of over 100 MW and an electrical export capacity of up to 1,800 MW at the point of connection to the offshore electrical platform(s) referred to at Work No. 2~~ comprising up to 14558 wind turbine generators each fixed to the seabed by one of the following foundation types: monopile (piled or suction caisson), jacket (piled or 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 two accommodation platforms fixed to the seabed within the area shown on the works plan by one of the following foundation types: jacket (piled or suction caisson) or gravity base;
- (c) up to two meteorological masts fixed to the seabed within the area shown on the works plan by one of the following foundation types: monopile (piled or suction caisson), jacket (piled or suction caisson) or gravity base;
- (d) up to two LIDAR measurement buoys fixed to the seabed within the area shown on the works plan by one of the following foundation types: monopile (piled) or floating and up to two wave measurement buoys fixed to the seabed within the area shown on the works plan by one foundation type (floating); and
- (e) a network of subsea array cables and fibre optic 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 offshore cable crossings.

(2) In connection with 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 including:

- (a) scour protection around the foundations of the offshore structures;
- (b) cable protection measures such as the placement of rock and/or concrete mattresses, with or without frond devices;
- (c) the removal of material from the seabed required for the construction of Work No. 1 and the disposal of up to 37,736,390 cubic metres of inert material of natural origin within the Order limits produced during construction drilling, seabed preparation for foundation works, cable installation preparation such as sandwave clearance, boulder clearance and pre-trenching and excavation of horizontal directional drilling exit pits; and
- (d) removal of static fishing equipment;

(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) beacons, fenders and other navigational warning or ship impact protection works.

## PART 4

### Conditions

#### Design parameters

1.—(1) Subject to paragraph (2), each wind turbine generator forming part of the authorised scheme must not—

- (a) exceed a height of 350 metres when measured from HAT to the tip of the vertical blade;
- (b) exceed a height of 198.5 metres to the height of the centreline of the generator shaft forming part of the hub when measured from HAT;
- (c) exceed a rotor diameter of 303 metres;
- (d) be less than 800 metres from the nearest wind turbine generator in either direction perpendicular to the approximate prevailing wind direction (crosswind) or be less than 800 metres from the nearest wind turbine generator in either direction which is in line with the approximate prevailing wind direction (downwind); or
- (e) have a draught height which is less than the minimum draught height specified for the relevant wind turbine generator capacity in the table below—

<i>Wind Turbine Generator Capacity</i>	<i>Minimum draught height</i>
Up to and including 14.6MW	35m from MHWS
14.7MW and above	30m from MHWS

(2) References to the location of a wind turbine generator in paragraph (1) above are references to the centre point of that turbine.

(3) The total number of wind turbine generators must not exceed ~~14558~~ and must be configured such that at any time—

- (a) no more than two-thirds of the total number of wind turbine generators (rounded to the nearest whole number) must be located in Norfolk Vanguard West; and



- (b) no more than one-half of the total number of wind turbine generators (rounded to the nearest whole number) must be located in Norfolk Vanguard East.

2.—(1) The dimensions of any accommodation platform forming part of the authorised scheme must not exceed 100 metres in height when measured from HAT, 90 metres in length and 60 metres in width.

- (2) Each meteorological mast must not exceed a height of 200 metres above HAT.
- (3) Each meteorological mast must not have more than one supporting foundation.

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

<i>Work</i>	<i>Length</i>	<i>Cable protection (m<sup>2</sup> and m<sup>3</sup>)</i>
Work No. 1(e) (array)	600 kilometres	389,000m <sup>2</sup> 198,500 m <sup>3</sup>

4.—(1) In relation to a wind turbine generator, each foundation using piles must not have—

- (a) more than four driven piles;
- (b) in the case of single pile structures, a pile diameter which is more than 15 metres; or
- (c) in the case of two or more pile structures, have a pile diameter which is more than five metres.

(2) In relation to a wind turbine generator, each foundation must not have a seabed footprint area (excluding scour protection) of greater than 1,963 m<sup>2</sup>.

5.—(1) In relation to a meteorological mast, each foundation using piles must not have—

- (a) more than four driven piles;
- (b) in the case of single pile structures, a pile diameter which is more than 10 metres; or
- (c) in the case of two or more pile structures, have a pile diameter which is more than three metres.

(2) In relation to a meteorological mast, each foundation must not have a seabed footprint area (excluding scour protection) of greater than 314 m<sup>2</sup>.

6.—(1) In relation to an accommodation platform, each foundation using piles must not have—

- (a) more than six driven piles; or
- (b) a pile diameter which is more than three metres.

(2) In relation to an accommodation platform, each foundation must not have a seabed footprint area (excluding scour protection) of greater than 7,500 m<sup>2</sup>.

7.—(1) In relation to any LIDAR measurement buoys, each foundation using piles must not have a pile diameter of greater than 10 metres.

(2) In relation to any LIDAR measurement buoys, each foundation must not have a seabed footprint area (excluding scour protection) of greater than 79m<sup>2</sup> per buoy and 157 m<sup>2</sup> in total.

(3) In relation to any wave measurement buoys, each foundation must not have a seabed footprint area (excluding scour protection) of greater than 150m<sup>2</sup> per buoy and 300 m<sup>2</sup> in total.

### Phasing of the authorised scheme

8.—(1) Taken together with works authorised and proposed to be constructed pursuant to licence 2 (generation)—

~~(a) the total electrical export capacity of the authorised scheme must not exceed 1,800MW at the point of connection to the offshore electrical platform(s);~~

~~(b)~~(a) the total number of wind turbine generators forming part of the authorised scheme must not exceed ~~14558~~;

- ~~(e)~~(b) the total number of accommodation platforms forming part of the authorised scheme must not exceed two;
- ~~(d)~~(c) the total number of meteorological masts forming part of the authorised scheme must not exceed two;
- ~~(e)~~(d) the total number of LIDAR measurement buoys forming part of the authorised scheme must not exceed two;
- ~~(f)~~(e) the total number of wave measurement buoys forming part of the authorised scheme must not exceed two;
- ~~(g)~~(f) the total amount of scour protection for the wind turbine generators, accommodation platform(s), meteorological masts and measurement buoys forming part of the authorised scheme must not exceed 5,176,703m<sup>2</sup> and 25,883,515 m<sup>3</sup>;
- ~~(h)~~(g) the total amount of inert material of natural origin disposed within the offshore Order limits as part of the authorised scheme must not exceed 37,736,390 m<sup>3</sup>;
- ~~(i)~~(h) the total amount of disposal for drill arisings in connection with any foundation drilling must not exceed 400,624 m<sup>3</sup>; and
- ~~(j)~~(i) the total length of cable and the amount of cable protection must not exceed the figures stated in condition 3 of this licence.

(2) Prior to the commencement of the authorised scheme the undertaker must give notice to the MMO detailing—

- (a) whether the authorised scheme will be constructed—
  - (i) in a single offshore phase under this licence; or
  - (ii) in two offshore phases under this licence and licence 2 (generation); and
- (b) where the authorised scheme will be constructed in two offshore phases—
  - (i) prior to the commencement of phase 1, the total number of wind turbine generators accommodation platforms, meteorological masts, LIDAR measurement buoys and wave measurement buoys to be constructed in that phase; and
  - (ii) prior to the commencement of phase 2, the total number of wind turbine generators accommodation platforms, meteorological masts, LIDAR measurement buoys and wave measurement buoys to be constructed in that phase.

## Notifications and inspections

9.—(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 17; and
  - (ii) the masters and transport managers responsible for the vessels notified to the MMO in accordance with condition 17; and
- (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 17 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 of details regarding the vessel routes, timings and locations relating to the construction of the authorised scheme or relevant part—

- (a) at least fourteen days 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 construction of all offshore activities,

and 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 fibre optic cables) and the expected vessel routes from the construction ports to the relevant location. Copies of all notices must be provided to the MMO, MCA 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 and monitoring programme approved under condition 14(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 within five days.

(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 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, the Kingfisher Information Service of Seafish and the UK Hydrographic Office.

(12) In case of exposure of cables on or above the seabed, the undertaker must within three days following identification of a potential cable exposure, notify mariners by issuing a notice to mariners and by informing Kingfisher Information Service of the location and extent of exposure. Copies of all notices must be provided to the MMO and MCA within five days.

### **Aids to navigation**

**10.**—(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 to 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 as set out in the aids to navigation management plan agreed pursuant to condition 14(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 9(11) and condition 9(12) are invoked, the undertaker must lay down such marker buoys, exhibit such lights and take such other steps for preventing danger to navigation as directed by Trinity House.

### **Colouring of structures**

**11.**—(1) Except as otherwise required by Trinity House the undertaker must colour all structures forming part of the authorised scheme yellow (colour code RAL 1023) from at least HAT 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 paint the remainder of the structures submarine grey (colour code RAL 7035).

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

**12.**—(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(a) (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 this licence. This information must be submitted to the MMO by 15 February each year for the months August to January inclusive, and by 15 August each year for the months February to July inclusive. In the event that no activity has taken place during the reporting period the undertaker must provide a null (0) return to the MMO.

(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 disposal site references HU215 and HU216 within the extent of the Order limits seaward of MHWS. Any other materials must be screened out before disposal of the inert material 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.

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(a) S.I. 2002/1355.

(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 14(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**

13.—(1) If, due to stress of weather or any other cause the master of a vessel determines that it is necessary to make a deposit which is not authorised under this licence, whether within or outside of the Order limits, because the safety of human life and/or of the vessel is threatened, within 48 hours the undertaker must notify full details of the circumstances of the deposit 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**

14.—(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, in accordance with the Development Principles—
  - (i) the proposed location and choice of foundation of all wind turbine generators, offshore electrical platforms, accommodation platforms and meteorological masts;
  - (ii) the height to the tip of the vertical blade of all wind turbine generators;
  - (iii) the height to the centreline of the generator shaft forming part of the hub of all wind turbine generators;
  - (iv) the rotor diameter and spacing of all wind turbine generators;
  - (v) the height of all lattice towers forming part of all meteorological masts;
  - (vi) the height, length and width of all accommodation platforms;
  - (vii) the dimensions of all foundations;
  - (viii) the length and arrangement of all cables (including fibre optic cables) comprising Work No. 1(e);
  - (ix) the proposed layout of all wind turbine generators (in accordance with the recommendations for layout contained in MGN543 and its annexes), accommodation platforms and meteorological masts including any exclusion zones identified under sub-paragraph (1)(h)(iv);
  - (x) 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 (ix) above) and showing the indicative programming of particular works as set out in the indicative programme to be provided under sub-paragraph (1)(b)(iv);
  - (xi) any exclusion zones/micrositing requirements identified in any mitigation scheme pursuant to sub-paragraph (1)(i); and

- (xii) the grid coordinates of the centre point of the proposed location for each wind turbine generator, offshore electrical platform, substation and meteorological mast.

to ensure conformity with the description of Work No. 1 and compliance with conditions 1 to 8 above.

- (b) A construction programme and monitoring plan (which accords with the offshore 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;
  - (iii) proposed pre-construction surveys, baseline report format and content, construction monitoring, post-construction surveys and monitoring and related reporting in accordance with sub-paragraph (1)(h) and conditions 17, 18, 19 and 20; and
  - (iv) an indicative written construction programme for all wind turbine generators accommodation platforms, meteorological masts, measurement buoys and cables (including fibre optic cables) comprised in the works in Part 3 (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 pre-construction monitoring;
- (bb) at least four months prior to construction, detail on construction monitoring; and
- (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 (1)(i);
  - (ii) soft start procedures with specified duration periods;
  - (iii) cable (including fibre optic cable) installation
  - (iv) contractors;
  - (v) vessels, vessels maintenance and vessels transit corridors; and
  - (vi) associated and ancillary works.
- (d) A project environmental management plan (in accordance with the outline 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 (which accords with the outline fisheries liaison and co-existence plan) to ensure relevant fishing fleets are notified of

commencement of licensed activities pursuant to condition 9 and to address the interaction of the licensed activities with fishing activities; and

- (vi) procedures to be followed within vessels transit corridors to minimise disturbance to red-throated diver during operation and maintenance activities.
- (e) A scour protection and cable protection plan (in accordance with the outline scour protection and cable protection plan) providing details of the need, type, sources, quantity, distribution and installation methods for scour protection and cable (including fibre optic cable) protection. For the avoidance of doubt “distribution” in this sub- paragraph must include quantities in respect of each structure comprised in the offshore works and intended to be subject to scour protection.
- (f) In the event that piled 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 and 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 (including fibre optic 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 (including fibre optic cables) 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 fibre optic 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) An archaeological written scheme of investigation in relation to the offshore Order limits seaward of mean low water, which 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 18(2)(a) and in accordance with the offshore 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 10 for the lifetime of the authorised scheme.
- (l) In relation to ornithological monitoring—
  - (i) a plan setting out the aims, objectives and timing for ornithological monitoring which must be submitted to the MMO (in consultation with the relevant statutory nature conservation body) at least four months prior to the first pre-construction survey (as referred to in condition 14(1)(b)(aa)), and
  - (ii) an ornithological monitoring plan setting out the methods for ornithological monitoring which must be submitted to the MMO (in consultation with the relevant statutory nature conservation body) in accordance with the details and timescales approved pursuant to the plan referred to in sub-paragraph (i).
- (m) In the event that piled foundations are proposed to be used, at least six months prior to commencement of licensed activities, a site integrity plan which accords with the principles set out in the in principle Norfolk Vanguard Southern North Sea Special Area of Conservation Site Integrity Plan, and which the MMO is satisfied would provide such mitigation as is necessary to avoid adversely affecting the integrity (within the meaning of the 2017 Regulations) of a relevant site, to the extent that harbour porpoise are a protected feature of that site.

(2) Pre-commencement surveys and 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 (offshore), and which has been submitted to and approved by the MMO.

(3) 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 5,000kJ.

15.—(1) Any archaeological reports produced in accordance with condition 14(h)(iii) must be agreed with the MMO in consultation with the statutory historic body.

(2) The design plan required by condition 14(1)(a) must be prepared by the undertaker and determined by the MMO in accordance with the Development Principles.

(3) Each programme, statement, plan, protocol or scheme required to be approved under condition 14 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.

(4) 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 14.

(5) Unless otherwise agreed in writing with the undertaker, the MMO must use reasonable endeavours to determine an application for approval made under condition 14 as soon as practicable and in any event within a period of four months commencing on the date the application is received by the MMO.

(6) The licensed activities must be carried out in accordance with the plans, protocols, statements, schemes and details approved under condition 14, unless otherwise agreed in writing by the MMO.



(7) No part of the authorised scheme may commence until the MMO, in consultation with the MCA, has confirmed in writing that the undertaker has taken into account and, so far as is applicable to that stage of the project, adequately addressed all MCA recommendations as appropriate to the authorised scheme contained within MGN543 “Offshore Renewable Energy Installations (OREIs) – Guidance on UK Navigational Practice, Safety and Emergency Response Issues” and its annexes.

### **Post-construction plans and documents**

16. The undertaker must conduct a swath bathymetric survey to IHO S44ed5 Order 1a across the area(s) within the Order limits in which construction works were carried out and provide the data and survey report(s) to the MCA and UKHO.

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

17. —(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.

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

18. —(1) The undertaker must, in discharging condition 14(1)(b), submit details (which accord with the offshore in principle monitoring plan) for written approval by the MMO in consultation with the 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 Annex 1 reef 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;
- (c) any ornithological monitoring required by the ornithological monitoring plan submitted in accordance with condition 14(1)(l); and
- (d) or contribute to any marine mammal monitoring referred to in the in principle monitoring plan submitted in accordance with condition 14(1)(b).

(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**

19.—(1) The undertaker must, in discharging condition 14(1)(b), submit details (which accord with the offshore in principle monitoring plan) for approval by the MMO in consultation with the relevant statutory nature conservation 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 the event that driven or part-driven pile foundations are proposed, 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 unless the MMO otherwise agrees in writing.

(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. If, in the opinion of the MMO in consultation with Natural England, the assessment shows significantly different impacts to those assessed in the environmental statement or failures in mitigation, all piling activity must cease until an update to the marine mammal mitigation protocol and further monitoring requirements have been agreed.

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

(5) In the event that piled foundations are proposed to be used, the details submitted in accordance with the offshore in principle monitoring plan must include proposals for monitoring marine mammals.

## **Post construction**

20.—(1) The undertaker must, in discharging condition 14(1)(b), submit details (which accord with the offshore 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) a survey to determine any change in the location, extent and composition of any benthic habitats of conservation, ecological and/or economic importance constituting Annex 1 reef habitats identified in the pre-construction survey in the parts of the Order limits in which construction works were carried out. The survey design must be informed by the results of the pre-construction benthic survey;
- (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 (including fibre optic cables) have been buried or protected;
- (c) any ornithological monitoring required by the ornithological monitoring plan submitted in accordance with condition 14(1)(l);
- (d) post-construction traffic monitoring in accordance with the outline marine traffic monitoring strategy, including the provision of reports on the results of that monitoring

periodically as requested by the MMO in consultation with the MCA and Trinity House;  
and

- (e) undertake or contribute to any marine mammal monitoring referred to in the in principle monitoring plan submitted in accordance with condition 14(1)(b).

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

(4) Following installation of cables (including fibre optic cables), the cable monitoring plan required under condition 14(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 authorised scheme and reviewed as specified within the plan, following cable burial surveys, or as instructed by the MMO.

### **Reporting of impact pile driving**

**21.**—(1) Only when driven or part-driven pile foundations are proposed to be used as part of the foundation installation the undertaker must provide the following information to the UK 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 to satisfy the Marine Noise Registry’s Forward Look requirements;
- (b) at six month intervals following the commencement of pile driving, information on the locations and dates of impact pile driving to satisfy the Marine Noise Registry’s Close Out requirements; and
- (c) within 12 weeks of completion of impact pile driving, information on the locations and dates of impact pile driving 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; and
- (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.

### **Reporting of scour and cable protection**

**22.**—(1) Not more than 4 months following completion of the construction phase of the authorised scheme, the undertaker must provide the MMO and the relevant statutory nature conservation bodies with a report setting out details of the cable and scour protection used for the authorised scheme.

(2) The report must include the following information—

- (a) location of the cable protection and scour protection;
- (b) volume of cable protection and scour protection; and
- (c) any other information relating to the cable protection as agreed between the MMO and the undertaker.

## Completion of construction

23.—(1) The undertaker must submit a close out report to the MMO and the relevant statutory nature conservation body within three months of the date of completion of construction. The close out report must confirm the date of completion of construction and must include the following details—

- (a) the final number of installed turbine generators;
- (b) the installed wind turbine generator parameters relevant for ornithological collision risk modelling.

(2) Following completion of construction, no further construction activities can be undertaken under this licence.

## SCHEDULE 10

Article 32

### Deemed Licence under the 2009 Act – Generation Assets (Licence 2 – Phase 2)

#### PART 1

##### Interpretation

1.—(1) In this licence—

“the 2004 Act” means the Energy Act 2004;

“the 2008 Act” means the Planning Act 2008;

“the 2009 Act” means the Marine and Coastal Access Act 2009;

“the 2017 Regulations” means the Conservation of Offshore Marine Habitats and Species Regulations 2017(a);

“accommodation platform” means a fixed structure providing offshore accommodation for personnel

“authorised deposits” means the substances and articles specified in paragraph 5 of Part 2 of this licence;

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

“cable protection” means measures for offshore cable crossings and where cable burial is not possible due to ground conditions or approaching offshore structures, to protect cables and fibre optic 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;

“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 4 of this licence;

“Defence Infrastructure Organisation Safeguarding” means Ministry of Defence Safeguarding, Defence Infrastructure Organisation, Kingston Road, Sutton Coldfield, West Midlands B75 7RL and any successor body to its functions;

“Development Principles” means the document certified as the Development Principles by the Secretary of State for the purposes of the Order;

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(a) S.I. 2017/1013.

“draft marine mammal mitigation protocol” means the document certified as the draft marine mammal mitigation protocol by the Secretary of State for the purposes of this Order;

“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 this Order;

“gravity base system” 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, transition piece, corrosion protection systems, fenders and maintenance equipment, boat access systems, access ladders and access and rest platform(s) and equipment;

“HAT” means highest astronomical tide;

“in principle Norfolk Vanguard Southern North Sea Special Area of Conservation Site Integrity Plan” means the document certified as the in principle Norfolk Vanguard Southern North Sea Special area of Conservation Site Integrity Plan by the Secretary of State for the purposes of this Order;

“jacket foundation” means a steel jacket/ lattice-type structure constructed of steel which is fixed to the seabed at three or more points with steel pin piles or steel suction caissons and associated equipment including scour protection, J-tubes, transition piece, corrosion protection systems, fenders and maintenance equipment, boat access systems, access ladders and access and rest 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;

“licence 1 (generation)” means the licence set out in Schedule 9 (deemed licence under the 2009 Act – generation assets (licence 1 – phase 1));

“licensed activities” means the activities specified in Part 3 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), any cable and any component part of any wind turbine generator, offshore electrical substation, accommodation platform or meteorological mast described in Part 1 of Schedule 1 (authorised development) not including the alteration, removal or replacement of foundations), to the extent assessed in the environmental statement; and “maintenance” is 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;

“marker buoy” means any floating device used for marker or navigation purposes, including LIDAR buoys and wave buoys;

“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;

“measurement buoy” means any floating device used for measurement purposes, including LIDAR buoys and wave buoys;

“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, transition piece,

corrosion protection systems, fenders and maintenance equipment, boat access systems, access ladders and access and rest platform(s) and equipment;

“Norfolk Vanguard East” means the eastern area located in the offshore Order limits within which wind turbine generators will be situated;

“Norfolk Vanguard West” means the western area located in the offshore Order limits within which wind turbine generators will be situated;

“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 cables offshore;

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

“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 Part 2 of this licence;

“the Order” means the Norfolk Vanguard Offshore Wind Farm Order 2022;

“outline fisheries liaison and co-existence plan” means the document certified as the outline fisheries liaison and co-existence plan by the Secretary of State for the purposes of this Order;

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

“pin piles” means steel cylindrical piles driven and/or drilled into the seabed to secure steel jacket foundations;

“relevant site” means a European offshore marine site or a European site as defined in the 2017 Regulations;

“scour protection” means measures to prevent loss of seabed sediment around any marine structure placed in or on the seabed by use of protective aprons, mattresses with or without frond devices, or rock and gravel placement.

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

“statutory historic body” means Historic Buildings and Monuments Commission for England (Historic England) or its successor in function;

“statutory nature conservation body” means an organisation charged by government with advising on nature conservation matters;

“suction caisson” means a large diameter steel cylindrical shell which penetrates the seabed assisted by a hydrostatic pressure differential for fixity of foundations;

“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;

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

“undertaker” means Norfolk Vanguard Limited (Company No. 08141115) whose registered office is at 5th Floor, 70 St Mary Axe, London EC3A 8BE;

“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 up to three blades connected at the hub, nacelle and ancillary electrical and other equipment which may include corrosion protection systems, helicopter landing facilities and other associated equipment, fixed to a foundation; and

“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); and
- (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 points of contact with the organisations listed below and the addresses for returns and correspondence are—

(a) Marine Management Organisation

Marine Licensing  
Lancaster House  
Hampshire Court  
Newcastle Business Park  
Newcastle upon Tyne  
NE4 7YH  
Tel: 0300 123 1032;

(b) Marine Management Organisation (local office)

Lowestoft Office  
Pakefield Road  
Lowestoft  
Suffolk  
NR33 0HT  
Tel: 01502 573 149;

(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 3817 2426;

(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) Historic England

Cannon Bridge

House 25

Dowgate Hill

London

EC4R 2YA

Tel: 020 7973 3700

## PART 2

### Licensed Marine Activities – General

**1.** 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 (approval of decommissioning programmes) 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.

**2.** The provisions of section 72 (variation, suspension, revocation and transfer) of the 2009 Act apply to this licence except that the provisions of section 72(7) and (8) relating to the transfer of the licence only apply to a transfer not falling within article 6 (benefit of the Order).

**3.** 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.

4. Any amendments to or variations from the approved plans, protocols or statements must be minor or immaterial and it must be demonstrated to the satisfaction of the MMO that they are unlikely to give rise to any materially new or materially different environmental effects from those assessed in the environmental statement.

5. 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 (including fibre optic cable) sandwave preparation works; and
- (g) marine coatings, other chemicals and timber.

6. The grid coordinates for the authorised scheme 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° 55' 0.308" N	3° 4' 42.589" E	6	53° 2' 36.817" N	2° 34' 16.309" E
2	52° 49' 53.975" N	3° 5' 22.789" E	7	52° 49' 38.834" N	2° 34' 15.809" E
3	52° 46' 19.050" N	3° 2' 16.682" E	8	52° 48' 47.472" N	2° 33' 28.343" E
4	52° 45' 10.584" N	2° 45' 33.989" E	9	52° 48' 3.133" N	2° 26' 37.427" E
5	52° 51' 41.636" N	2° 45' 34.220" E	10	52° 56' 9.089" N	2° 18' 33.231" E

## PART 3

### Details of Licensed Marine Activities

1. Subject to the licence conditions at Part 4, 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) (licensable marine activities) of the 2009 Act—

- (a) the deposit at sea of the substances and articles specified in paragraph 5 of Part 2 of this licence;
- (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;
- (d) the disposal of up to 37,736,390 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 (including fibre optic cable) sandwave preparation works at disposal site references HU215 and HU216 within the extent of the Order limits seaward of MHWS, comprising—

- (i) 36,000,000 m<sup>3</sup> for cable and fibre optic cable installation;
- (ii) 1,648,824 m<sup>3</sup> for the wind turbine generators;
- (iii) 75,000 m<sup>3</sup> for the accommodation platform; and
- (iv) 12,566 m<sup>3</sup> for the meteorological masts;
- (e) the removal of static fishing equipment; and
- (f) The disposal of drill arisings in connection with any foundation drilling up to a total of 400,624m<sup>3</sup>.

2.—(1) Such activities are authorised in relation to the construction, maintenance and operation of Work No. 1 (phase 2)—

- (a) an offshore wind turbine generating station with a gross electrical output of over 100 MW an electrical export capacity of up to 1,800 MW at the point of connection to the offshore electrical platform(s) referred to at Work No. 2 comprising up to 14558 wind turbine generators each fixed to the seabed by one of the following foundation types: monopile (piled or suction caisson), jacket (piled or 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 two accommodation platforms fixed to the seabed within the area shown on the works plan by one of the following foundation types: jacket (piled or suction caisson) or gravity base;
- (c) up to two meteorological masts fixed to the seabed within the area shown on the works plan by one of the following foundation types: monopile (piled or suction caisson), jacket (piled or suction caisson) or gravity base;
- (d) up to two LIDAR measurement buoys fixed to the seabed within the area shown on the works plan by one of the following foundation types: monopile (piled) or floating and up to two wave measurement buoys fixed to the seabed within the area shown on the works plan by one foundation type (floating); and
- (e) a network of subsea array cables and fibre optic 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 offshore cable crossings.

(2) In connection with 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 including:

- (a) scour protection around the foundations of the offshore structures;
- (b) cable protection measures such as the placement of rock and/or concrete mattresses, with or without frond devices;
- (c) the removal of material from the seabed required for the construction of Work No. 1 and the disposal of up to 37,736,390 cubic metres of inert material of natural origin within the Order limits produced during construction drilling, seabed preparation for foundation works, cable installation preparation such as sandwave clearance, boulder clearance and pre-trenching and excavation of horizontal directional drilling exit pits; and
- (d) removal of static fishing equipment;

(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) beacons, fenders and other navigational warning or ship impact protection works.

## PART 4

### Conditions

#### Design parameters

1.—(1) Subject to paragraph (2), each wind turbine generator forming part of the authorised scheme must not—

- (a) exceed a height of 350 metres when measured from HAT to the tip of the vertical blade;
- (b) exceed a height of 198.5 metres to the height of the centreline of the generator shaft forming part of the hub when measured from HAT;
- (c) exceed a rotor diameter of 303 metres;
- (d) be less than 800 metres from the nearest wind turbine generator in either direction perpendicular to the approximate prevailing wind direction (crosswind) or be less than 800 metres from the nearest wind turbine generator in either direction which is in line with the approximate prevailing wind direction (downwind); or
- (e) have a draught height which is less than the minimum draught height specified for the relevant wind turbine generator capacity in the table below

<i>Wind Turbine Generator Capacity</i>	<i>Minimum draught height</i>
Up to and including 14.6MW	35m from MHWS
14.7 MW and above	30m from MHWS

(2) References to the location of a wind turbine generator in paragraph (1) above are references to the centre point of that turbine.

(3) The total number of wind turbine generators must not exceed ~~14558~~ and must be configured such that at any time—

- (a) no more than two-thirds of the total number of wind turbine generators (rounded to the nearest whole number) must be located in Norfolk Vanguard West; and
- (b) no more than one-half of the total number of wind turbine generators (rounded to the nearest whole number) must be located in Norfolk Vanguard East.

2.—(1) The dimensions of any accommodation platform forming part of the authorised scheme must not exceed 100 metres in height when measured from HAT, 90 metres in length and 60 metres in width.

(2) Each meteorological mast must not exceed a height of 200 metres above HAT.

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

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

<i>Work</i>	<i>Length</i>	<i>Cable protection (m<sup>2</sup> and m<sup>3</sup>)</i>
Work No. 1(e) (array)	600 kilometres	389,000 m <sup>2</sup> 198,500 m <sup>3</sup>

4.—(1) In relation to a wind turbine generator, each foundation using piles must not have—

- (a) more than four driven piles;
- (b) in the case of single pile structures, a pile diameter which is more than 15 metres; or
- (c) in the case of two or more pile structures, have a pile diameter which is more than five metres.

(2) In relation to a wind turbine generator, each foundation must not have a seabed footprint area (excluding scour protection) of greater than 1,963 m<sup>2</sup>.

- 5.—(1) In relation to a meteorological mast, each foundation using piles must not have—
- (a) more than four driven piles;
  - (b) in the case of single pile structures, a pile diameter which is more than 10 metres; or
  - (c) in the case of two or more pile structures, have a pile diameter which is more than three metres.

(2) In relation to a meteorological mast, each foundation must not have a seabed footprint area (excluding scour protection) of greater than 314 m<sup>2</sup>.

- 6.—(1) In relation to an accommodation platform, each foundation using piles must not have—
- (a) more than six driven piles; or
  - (b) a pile diameter which is more than three metres.

(2) In relation to an accommodation platform, each foundation must not have a seabed footprint area (excluding scour protection) of greater than 7,500 m<sup>2</sup>.

7.—(1) In relation to any LIDAR measurement buoys, each foundation using piles must not have a pile diameter of greater than 10 metres.

(2) In relation to any LIDAR measurement buoys, each foundation must not have a seabed footprint area (excluding scour protection) of greater than 79m<sup>2</sup> per buoy and 157 m<sup>2</sup> in total.

(3) In relation to any wave measurement buoys, each foundation must not have a seabed footprint area (excluding scour protection) of greater than 150m<sup>2</sup> per buoy and 300 m<sup>2</sup> in total.

### Phasing of the authorised scheme

8.—(1) Taken together with works authorised and proposed to be constructed pursuant to licence 1 (generation)—

~~(a) the total electrical export capacity of the authorised scheme must not exceed 1,800MW at the point of connection to the offshore electrical platform(s);~~

~~(b)~~(a) the total number of wind turbine generators forming part of the authorised scheme must not exceed 14558;

~~(c)~~(b) the total number of accommodation platforms forming part of the authorised scheme must not exceed two;

~~(d)~~(c) the total number of meteorological masts forming part of the authorised scheme must not exceed two;

~~(e)~~(d) the total number of LIDAR measurement buoys forming part of the authorised scheme must not exceed two;

~~(f)~~(e) the total number of wave measurement buoys forming part of the authorised scheme must not exceed two;

~~(g)~~(f) the total amount of scour protection for the wind turbine generators, accommodation platform(s), meteorological masts and measurement buoys forming part of the authorised scheme must not exceed 5,176,703 m<sup>2</sup> and 25,883,515 m<sup>3</sup>; and

~~(h)~~(g) the total amount of inert material of natural origin disposed within the offshore Order limits as part of the authorised scheme must not exceed 37,736,390 m<sup>3</sup>;

~~(i)~~(h) the total amount of disposal for drill arisings in connection with any foundation drilling must not exceed 400,624 m<sup>3</sup>; and

~~(j)~~(i) the total length of cable and the amount of cable protection must not exceed the figures stated in condition 3 of this licence.

(2) Prior to the commencement of the authorised scheme the undertaker must give notice to the MMO detailing—

- (a) whether the authorised scheme will be constructed—
  - (i) in a single offshore phase under this licence; or

- (ii) in two offshore phases under this licence and licence 1 (generation); and
- (b) where the authorised scheme will be constructed in two offshore phases—
  - (i) prior to the commencement of phase 1, the total number of wind turbine generators accommodation platforms, meteorological masts, LIDAR measurement buoys and wave measurement buoys to be constructed in that phase; and
  - (ii) prior to the commencement of phase 2, the total number of wind turbine generators accommodation platforms, meteorological masts, LIDAR measurement buoys and wave measurement buoys to be constructed in that phase.

### **Notifications and inspections**

- 9.—(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 17; and
    - (ii) the masters and transport managers responsible for the vessels notified to the MMO in accordance with condition 17; and
  - (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 17 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 fourteen days 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 construction of all offshore activities;
- and 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 fibre optic cables) and the expected vessel routes from the construction ports to the relevant location. Copies of all notices must be provided to the MMO, the MCA 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 and monitoring programme approved under condition 14(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 within five days.

(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 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, the Kingfisher Information Service of Seafish and the UK Hydrographic Office.

(12) In case of exposure of cables on or above the seabed, the undertaker must within three days following identification of a potential cable exposure, notify mariners by issuing a notice to mariners and by informing Kingfisher Information Service of the location and extent of exposure. Copies of all notices must be provided to the MMO and MCA within five days.

### **Aids to navigation**

**10.**—(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 to 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 as set out in the aids to navigation management plan agreed pursuant to condition 14(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 9(11) and condition 9(12) are invoked, the undertaker must lay down such marker buoys, exhibit such lights and take such other steps for preventing danger to navigation as directed by Trinity House.

### **Colouring of structures**

**11.**—(1) Except as otherwise required by Trinity House the undertaker must colour all structures forming part of the authorised scheme yellow (colour code RAL 1023) from at least HAT 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 paint the remainder of the structures submarine grey (colour code RAL 7035).

## **Chemicals, drilling and debris**

12.—(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(a) (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 this licence. This information must be submitted to the MMO by 15 February each year for the months August to January inclusive, and by 15 August each year for the months February to July inclusive. In the event that no activity has taken place during the reporting period the undertaker must provide a null (0) return to the MMO.

(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 disposal site references HU215 and HU216 within the extent of the Order limits seaward of MHWS. Any other materials must be screened out before disposal of the inert material 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 14(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**

13.—(1) If, due to stress of weather or any other cause the master of a vessel determines that it is necessary to make a deposit which is not authorised under this licence, whether within or outside of the Order limits, because the safety of human life and/or of the vessel is threatened, within 48 hours the undertaker must notify full details of the circumstances of the deposit to the MMO.

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

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(a) S.I. 2002/1355.

## Pre-construction plans and documentation

14.—(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, in accordance with the Development Principles—
  - (i) the proposed location and choice of foundation of all wind turbine generators, offshore electrical platforms, accommodation platforms and meteorological masts;
  - (ii) the height to the tip of the vertical blade of all wind turbine generators;
  - (iii) the height to the centreline of the generator shaft forming part of the hub of all wind turbine generators;
  - (iv) the rotor diameter and spacing of all wind turbine generators;
  - (v) the height of all lattice towers forming part of all meteorological masts;
  - (vi) the height, length and width of all accommodation platforms;
  - (vii) the dimensions of all foundations;
  - (viii) the length and arrangement of all cables (including fibre optic cables) comprising Work No. 1(e);
  - (ix) the proposed layout of all wind turbine generators (in accordance with the recommendations for layout contained in MGN543 and its annexes), accommodation platforms and meteorological masts including any exclusion zones identified under sub-paragraph (1)(h)(iv);
  - (x) 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 (ix) above) and showing the indicative programming of particular works as set out in the indicative programme to be provided under sub-paragraph (1)(b)(iv);
  - (xi) any exclusion zones/micrositing requirements identified in any mitigation scheme pursuant to sub-paragraph (1)(i); and
  - (xii) the grid coordinates of the centre point of the proposed location for each wind turbine generator, offshore electrical platform, substation and meteorological mast.

to ensure conformity with the description of Work No. 1 and compliance with conditions 1 to 8 above.

- (b) A construction programme and monitoring plan (which accords with the offshore 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;
  - (iii) proposed pre-construction surveys, baseline report format and content, construction monitoring, post-construction surveys and monitoring and related reporting in accordance with sub-paragraph (1)(h) and conditions 17, 18, 19 and 20; and
  - (iv) an indicative written construction programme for all wind turbine generators accommodation platforms, meteorological masts, measurement buoys and cables (including fibre optic cables) comprised in the works in Part 3 (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 pre-construction monitoring;



- (bb) at least four months prior to construction, detail on construction monitoring; and
- (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 (1)(i);
  - (ii) soft start procedures with specified duration periods;
  - (iii) cable (including fibre optic cable) installation;
  - (iv) contractors;
  - (v) vessels, vessels maintenance and vessels transit corridors; and
  - (vi) associated and ancillary works.
- (d) A project environmental management plan (in accordance with the outline 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 (which accords with the outline fisheries liaison and co-existence plan) to ensure relevant fishing fleets are notified of commencement of licensed activities pursuant to condition 9 and to address the interaction of the licensed activities with fishing activities; and
  - (vi) procedures to be followed within vessels transit corridors to minimise disturbance to red-throated diver during operation and maintenance activities.
- (e) A scour protection and cable protection plan (in accordance with the outline scour protection and cable protection plan) providing details of the need, type, sources, quantity, distribution and installation methods for scour protection and cable (including fibre optic cable) protection. For the avoidance of doubt “distribution” in this sub- paragraph must include quantities in respect of each structure comprised in the offshore works and intended to be subject to scour protection.
- (f) In the event that piled 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 and 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 (including fibre optic 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 (including fibre optic cables) 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 fibre optic 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) An archaeological written scheme of investigation in relation to the offshore Order limits seaward of mean low water, which 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 18(2)(a) and in accordance with the offshore 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 10 for the lifetime of the authorised scheme.
- (l) In relation to ornithological monitoring—
  - (i) a plan setting out the aims, objectives and timing for ornithological monitoring which must be submitted to the MMO (in consultation with the relevant statutory nature conservation body) at least four months prior to the first pre-construction survey (as referred to in condition 14(1)(b)(aa)), and
  - (ii) an ornithological monitoring plan setting out the methods for ornithological monitoring which must be submitted to the MMO (in consultation with the relevant statutory nature conservation body) in accordance with the details and timescales approved pursuant to the plan referred to sub-paragraph (i).
- (m) In the event that piled foundations are proposed to be used, a site integrity plan which accords with the principles set out in the in principle Norfolk Vanguard Southern North Sea Special Area of Conservation Site Integrity Plan, and which the MMO is satisfied

would provide such mitigation as is necessary to avoid adversely affecting the integrity (within the meaning of the 2017 Regulations) of a relevant site, to the extent that harbour porpoise are a protected feature of that site.

(2) Pre-commencement surveys and 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 (offshore), and which has been submitted to and approved by the MMO.

(3) 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 5,000kJ.

**15.**—(1) Any archaeological reports produced in accordance with condition 14(h)(iii) must be agreed with the MMO in consultation with the statutory historic body.

(2) The design plan required by condition 14(1)(a) must be prepared by the undertaker and determined by the MMO in accordance with the Development Principles.

(3) Each programme, statement, plan, protocol or scheme required to be approved under condition 14 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.

(4) 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 14.

(5) Unless otherwise agreed in writing with the undertaker, the MMO must use reasonable endeavours to determine an application for approval made under condition 14 as soon as practicable and in any event within a period of four months commencing on the date the application is received by the MMO.

(6) The licensed activities must be carried out in accordance with the plans, protocols, statements, schemes and details approved under condition 14, unless otherwise agreed in writing by the MMO.

(7) No part of the authorised scheme may commence until the MMO, in consultation with the MCA, has confirmed in writing that the undertaker has taken into account and, so far as is applicable to that stage of the project, adequately addressed all MCA recommendations as appropriate to the authorised scheme contained within MGN543 “Offshore Renewable Energy Installations (OREIs) – Guidance on UK Navigational Practice, Safety and Emergency Response Issues” and its annexes.

### **Post-construction plans and documents**

**16.** The undertaker must conduct a swath bathymetric survey to IHO S44ed5 Order 1a across the area(s) within the Order limits in which construction works were carried out and provide the data and survey report(s) to the MCA and UKHO.

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

**17.**—(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.

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

18.—(1) The undertaker must, in discharging condition 14(1)(b), submit details (which accord with the offshore in principle monitoring plan) for written approval by the MMO in consultation with the 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 Annex 1 reef 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;
- (c) any ornithological monitoring required by the ornithological monitoring plan submitted in accordance with condition 14(1)(l); and
- (d) or contribute to any marine mammal monitoring referred to in the in principle monitoring plan submitted in accordance with condition 14(1)(b).

(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**

19.—(1) The undertaker must, in discharging condition 14(1)(b), submit details (which accord with the offshore in principle monitoring plan) for approval by the MMO in consultation with the relevant statutory nature conservation 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 the event that driven or part-driven pile foundations are proposed, 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 unless the MMO otherwise agrees in writing.

(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. If, in the opinion of the MMO in consultation with Natural England, the assessment shows significantly different impacts to those assessed in the environmental statement or failures in mitigation, all piling activity must cease until an update to the marine mammal mitigation protocol and further monitoring requirements have been agreed.

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

(5) In the event that piled foundations are proposed to be used, the details submitted in accordance with the offshore in principle monitoring plan must include proposals for monitoring marine mammals.

### **Post construction**

**20.**—(1) The undertaker must, in discharging condition 14(1)(b), submit details (which accord with the offshore 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) a survey to determine any change in the location, extent and composition of any benthic habitats of conservation, ecological and/or economic importance constituting Annex 1 reef habitats identified in the pre-construction survey in the parts of the Order limits in which construction works were carried out. The survey design must be informed by the results of the pre-construction benthic survey;
- (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 (including fibre optic cables) have been buried or protected;
- (c) any ornithological monitoring required by the ornithological monitoring plan submitted in accordance with condition 14(1)(l);
- (d) post-construction traffic monitoring in accordance with the outline marine traffic monitoring strategy, including the provision of reports on the results of that monitoring periodically as requested by the MMO in consultation with the MCA and Trinity House; and
- (e) contribute to any marine mammal monitoring referred to in the in principle monitoring plan submitted in accordance with condition 14(1)(b).

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

(4) Following installation of cables (including fibre optic cables), the cable monitoring plan required under condition 14(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 authorised scheme and reviewed as specified within the plan, following cable burial surveys, or as instructed by the MMO.

### **Reporting of impact pile driving**

**21.**—(1) Only when driven or part-driven pile foundations are proposed to be used as part of the foundation installation the undertaker must provide the following information to the UK 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 to satisfy the Marine Noise Registry’s Forward Look requirements;
  - (b) at six month intervals following the commencement of pile driving, information on the locations and dates of impact pile driving to satisfy the Marine Noise Registry’s Close Out requirements; and
  - (c) within 12 weeks of completion of impact pile driving, information on the locations and dates of impact pile driving 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; and
  - (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.

### **Reporting of cable and scour protection**

22.—(1) Not more than 4 months following completion of the construction phase of the authorised scheme, the undertaker must provide the MMO and the relevant statutory nature conservation bodies with a report setting out details of the cable protection and scour protection used for the authorised scheme.

- (2) The report must include the following information—
- (a) Location of the cable protection and scour protection;
  - (b) volume of cable protection and scour protection; and
  - (c) any other information relating to the cable protection as agreed between the MMO and the undertaker.

### **Completion of construction**

23.—(1) The undertaker must submit a close out report to the MMO and the relevant statutory nature conservation body within three months of the date of completion of construction. The close out report must confirm the date of completion of construction and must include the following details—

- (a) the final number of installed turbine generators;
- (b) the installed wind turbine generator parameters relevant for ornithological collision risk modelling.

(2) Following completion of construction, no further construction activities can be undertaken under this licence.

Deemed Licence under the 2009 Act – Transmission Assets (Licence 1 –  
Phase 1)

PART 1

Interpretation

1.—(1) In this licence—

“the 2004 Act” means the Energy Act 2004;

“the 2008 Act” means the Planning Act 2008;

“the 2009 Act” means the Marine and Coastal Access Act 2009;

“the 2017 Regulations” means the Conservation of Offshore Marine Habitats and Species Regulations 2017(a);

“authorised deposits” means the substances and articles specified in paragraph 5 of Part 2 of this licence;

“authorised scheme” means Work Nos. 2, 3, 4A, and 4B described in Part 3 of this licence or any part of that work;

“cable protection” means measures for offshore cable crossings and where cable burial is not possible due to ground conditions or approaching offshore structures, to protect cables and fibre optic 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;

“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 4 of this licence;

“Defence Infrastructure Organisation Safeguarding” means Ministry of Defence Safeguarding, Defence Infrastructure Organisation, Kingston Road, Sutton Coldfield, West Midlands B75 7RL and any successor body to its functions;

“Development Principles” means the document certified as the Development Principles by the Secretary of State for the purposes of the Order;

“draft marine mammal mitigation protocol” means the document certified as the draft marine mammal mitigation protocol by the Secretary of State for the purposes of this Order;

“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;

“gravity base system” 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, transition piece, corrosion protection systems, fenders and maintenance equipment, boat access systems, access ladders and access and rest platform(s) and equipment;

“HAT” means highest astronomical tide;

“in principle Norfolk Vanguard Southern North Sea Special Area of Conservation Site Integrity Plan” means the document certified as the in principle Norfolk Vanguard Southern

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(a) S.I. 2017/1013.

North Sea Special Area of Conservation Site Integrity Plan by the Secretary of State for the purposes of this Order;

“jacket foundation” means a steel jacket/ lattice-type structure constructed of steel which is fixed to the seabed at three or more points with steel pin piles or steel suction caissons and associated equipment including scour protection, J-tubes, transition piece, corrosion protection systems, fenders and maintenance equipment, boat access systems, access ladders and access and rest 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;

“licence 2 (transmission)” means the licence set out in Schedule 12 (deemed licence under the 2009 Act – transmission assets (licence 2 – phase 2));

“licensed activities” means the activities specified in Part 3 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), any cable and any component part of any wind turbine generator, offshore electrical platform, accommodation platform or meteorological mast described in Part 1 of Schedule 1 (authorised development) not including the alteration, removal or replacement of foundations), to the extent assessed in the environmental statement; and “maintenance” is 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;

“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;

“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 cables offshore;

“offshore electrical platform” means a platform attached to the seabed by means of a foundation, with one or more decks, whether open or fully clad, accommodating electrical power transformers, switchgear, instrumentation, protection and control systems and other associated equipment and facilities to enable the transmission of electronic communications and for electricity to be collected at, and exported from, the platform;

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

“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 Part 2 of this licence;

“the Order” means the Norfolk Vanguard Offshore Wind Farm Order 2022;

“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 this Order;

“outline fisheries liaison and co-existence plan” means the document certified as the outline fisheries liaison and co-existence plan by the Secretary of State for the purposes of this 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 this Order;

“pin piles” means steel cylindrical piles driven and/or drilled into the seabed to secure steel jacket foundations;



“relevant site” means a European offshore marine site or a European site as defined in the 2017 Regulations;

“scour protection” means measures to prevent loss of seabed sediment around any marine structure placed in or on the seabed by use of protective aprons, mattresses with or without frond devices, or rock and gravel placement.

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

“statutory historic body” means Historic Buildings and Monuments Commission for England (Historic England) or its successor in function;

“statutory nature conservation body” means an organisation charged by government with advising on nature conservation matters;

“suction caisson” means a large diameter steel cylindrical shell which penetrates the seabed assisted by a hydrostatic pressure differential for fixity of foundations;

“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;

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

“undertaker” means Norfolk Vanguard Limited (Company No. 08141115) whose registered office is at 5th Floor, 70 St Mary Axe, London EC3A 8BE;

“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;

“Work No. 4C” means the onshore transmission works at the landfall consisting of up to two transition jointing pits and up to four cables to be laid in ducts underground and associated fibre optic cables laid within cable ducts from MHWS at Happisburgh South, North Norfolk; and

“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); and
- (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 points of contact with the organisations listed below and the addresses for returns and correspondence are—

- (a) Marine Management Organisation

Marine Licensing  
Lancaster House  
Hampshire Court  
Newcastle Business Park  
Newcastle upon Tyne  
NE4 7YH  
Tel: 0300 123 1032;

- (b) Marine Management Organisation (local office)  
Lowestoft Office  
Pakefield Road  
Lowestoft  
Suffolk  
NR33 0HT  
Tel: 01502 573 149;
- (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 3817 2426;
- (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) Historic England

Cannon Bridge  
 House 25  
 Dowgate Hill  
 London  
 EC4R 2YA  
 Tel: 020 7973 3700

## PART 2

### Licensed Marine Activities – General

1. 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 (approval of decommissioning programmes) 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.

2. The provisions of section 72 (variation, suspension, revocation and transfer) of the 2009 Act apply to this licence except that the provisions of section 72(7) and (8) relating to the transfer of the licence only apply to a transfer not falling within article 6 (benefit of the Order).

3. 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.

4. Any amendments to or variations from the approved plans, protocols or statements must be minor or immaterial and it must be demonstrated to the satisfaction of the MMO that they are unlikely to give rise to any materially new or materially different environmental effects from those assessed in the environmental statement.

5. 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 (including fibre optic cable) sandwave preparation works; and
- (g) marine coatings, other chemicals and timber.

6. The grid coordinates for the authorised scheme 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° 55' 0.308" N	3° 4' 42.589" E	269	52° 48' 36.617" N	1° 39' 45.198" E
2	52° 49' 53.975" N	3° 5' 22.789" E	270	52° 48' 36.608" N	1° 39' 45.442" E
3	52° 46' 19.050" N	3° 2' 16.682" E	271	52° 48' 36.111" N	1° 39' 58.227" E
4	52° 45' 10.584" N	2° 45' 33.989" E	272	52° 47' 53.162" N	1° 57' 17.842" E

5	52° 51' 41.636" N	2° 45' 34.220" E	273	52° 47' 51.688" N	1° 57' 48.405" E
6	53° 2' 36.817" N	2° 34' 16.309" E	274	52° 47' 50.436" N	1° 58' 0.642" E
7	52° 49' 38.834" N	2° 34' 15.809" E	275	52° 47' 48.214" N	1° 58' 12.320" E
8	52° 48' 47.472" N	2° 33' 28.343" E	276	52° 47' 42.495" N	1° 58' 33.820" E
9	52° 48' 3.133" N	2° 26' 37.427" E	277	52° 47' 36.793" N	1° 58' 49.157" E
10	52° 56' 9.089" N	2° 18' 33.231" E	278	52° 47' 27.713" N	1° 59' 7.719" E
11	52° 45' 11.467" N	2° 45' 30.454" E	279	52° 47' 19.963" N	1° 59' 19.409" E
12	52° 45' 11.943" N	2° 45' 28.711" E	280	52° 47' 10.581" N	1° 59' 30.409" E
13	52° 45' 12.967" N	2° 45' 25.281" E	281	52° 45' 3.401" N	2° 1' 51.874" E
14	52° 45' 14.081" N	2° 45' 21.928" E	282	52° 45' 3.127" N	2° 1' 52.189" E
15	52° 45' 15.285" N	2° 45' 18.661" E	283	52° 45' 2.287" N	2° 1' 53.183" E
16	52° 45' 15.920" N	2° 45' 17.061" E	284	52° 45' 1.635" N	2° 1' 53.925" E
17	52° 45' 17.254" N	2° 45' 13.933" E	285	52° 45' 1.351" N	2° 1' 54.277" E
18	52° 45' 17.952" N	2° 45' 12.407" E	286	52° 45' 0.388" N	2° 1' 55.510" E
19	52° 45' 19.409" N	2° 45' 9.432" E	287	52° 45' 0.110" N	2° 1' 55.877" E
20	52° 45' 20.533" N	2° 45' 7.335" E	288	52° 44' 59.840" N	2° 1' 56.258" E
21	52° 45' 20.944" N	2° 45' 6.567" E	289	52° 44' 58.926" N	2° 1' 57.587" E
22	52° 45' 21.741" N	2° 45' 5.178" E	290	52° 44' 58.663" N	2° 1' 57.982" E
23	52° 45' 23.389" N	2° 45' 2.488" E	291	52° 44' 58.407" N	2° 1' 58.390" E
24	52° 45' 24.240" N	2° 45' 1.188" E	292	52° 44' 57.545" N	2° 1' 59.812" E
25	52° 45' 25.993" N	2° 44' 58.685" E	293	52° 44' 57.298" N	2° 2' 0.233" E
26	52° 45' 27.812" N	2° 44' 56.313" E	294	52° 44' 57.059" N	2° 2' 0.667" E
27	52° 45' 29.693" N	2° 44' 54.076" E	295	52° 44' 56.253" N	2° 2' 2.175" E
28	52° 45' 31.632" N	2° 44' 51.980" E	296	52° 44' 56.022" N	2° 2' 2.621" E
29	52° 45' 32.623" N	2° 44' 50.985" E	297	52° 44' 55.800" N	2° 2' 3.078" E
30	52° 45'	2° 44'	298	52° 44'	2° 2' 4.667" E

	33.626" N	50.027" E		55.053" N	
31	52° 45' 35.671" N	2° 44' 48.223" E	299	52° 44' 54.839" N	2° 2' 5.136" E
32	52° 45' 37.763" N	2° 44' 46.570" E	300	52° 44' 54.635" N	2° 2' 5.615" E
33	52° 45' 39.897" N	2° 44' 45.071" E	301	52° 44' 53.950" N	2° 2' 7.278" E
34	52° 45' 42.069" N	2° 44' 43.731" E	302	52° 44' 53.755" N	2° 2' 7.768" E
3	52° 45' 43.168" N	2° 44' 43.121" E	303	52° 44' 53.569" N	2° 2' 8.268" E
36	52° 45' 44.275" N	2° 44' 42.551" E	304	52° 44' 52.949" N	2° 2' 9.998" E
37	52° 45' 46.511" N	2° 44' 41.534" E	305	52° 44' 52.773" N	2° 2' 10.507" E
38	52° 45' 47.638" N	2° 44' 41.087" E	306	52° 44' 52.607" N	2° 2' 11.025" E
39	52° 45' 48.833" N	2° 44' 40.681" E	307	52° 44' 52.053" N	2° 2' 12.816" E
40	52° 46' 9.781" N	2° 44' 40.687" E	308	52° 44' 51.897" N	2° 2' 13.343" E
41	52° 46' 46.724" N	2° 44' 40.696" E	309	52° 44' 51.751" N	2° 2' 13.877" E
42	52° 46' 48.173" N	2° 44' 40.696" E	310	52° 44' 51.267" N	2° 2' 15.722" E
43	52° 46' 52.974" N	2° 44' 40.698" E	311	52° 44' 51.131" N	2° 2' 16.263" E
44	52° 46' 55.152" N	2° 44' 40.698" E	312	52° 44' 51.006" N	2° 2' 16.812" E
45	52° 46' 57.976" N	2° 44' 40.699" E	313	52° 44' 50.593" N	2° 2' 18.703" E
46	52° 47' 0.395" N	2° 44' 40.053" E	314	52° 44' 50.478" N	2° 2' 19.257" E
47	52° 47' 1.558" N	2° 44' 39.624" E	315	52° 44' 50.373" N	2° 2' 19.818" E
48	52° 47' 1.970" N	2° 44' 39.479" E	316	52° 44' 50.034" N	2° 2' 21.747" E
49	52° 47' 2.003" N	2° 44' 39.463" E	317	52° 44' 49.940" N	2° 2' 22.313" E
50	52° 47' 3.144" N	2° 44' 38.936" E	318	52° 44' 49.857" N	2° 2' 22.883" E
51	52° 47' 4.295" N	2° 44' 38.272" E	319	52° 44' 49.592" N	2° 2' 24.844" E
52	52° 47' 4.681" N	2° 44' 38.004" E	320	52° 44' 49.520" N	2° 2' 25.418" E
53	52° 47' 4.998" N	2° 44' 37.816" E	321	52° 44' 49.459" N	2° 2' 25.996" E
54	52° 47' 5.524" N	2° 44' 37.450" E	322	52° 44' 49.268" N	2° 2' 27.980" E
55	52° 47' 6.616" N	2° 44' 36.554" E	323	52° 44' 49.218" N	2° 2' 28.561" E

56	52° 47' 7.671" N	2° 44' 35.546" E	324	52° 44' 49.179" N	2° 2' 29.143" E
57	52° 47' 8.686" N	2° 44' 34.431" E	325	52° 44' 49.065" N	2° 2' 31.144" E
58	52° 47' 9.657" N	2° 44' 33.214" E	326	52° 44' 49.037" N	2° 2' 31.728" E
59	52° 47' 10.579" N	2° 44' 31.898" E	327	52° 44' 49.021" N	2° 2' 32.314" E
60	52° 47' 11.449" N	2° 44' 30.489" E	328	52° 44' 48.989" N	2° 2' 34.021" E
61	52° 47' 12.264" N	2° 44' 28.993" E	329	52° 44' 48.983" N	2° 2' 34.638" E
62	52° 47' 13.021" N	2° 44' 27.415" E	330	52° 44' 49.220" N	2° 15' 49.970" E
63	52° 47' 13.715" N	2° 44' 25.762" E	331	52° 44' 49.236" N	2° 15' 51.345" E
64	52° 47' 14.346" N	2° 44' 24.040" E	332	52° 44' 49.268" N	2° 15' 53.169" E
65	52° 47' 14.910" N	2° 44' 22.257" E	333	52° 44' 49.284" N	2° 15' 53.754" E
66	52° 47' 15.404" N	2° 44' 20.418" E	334	52° 44' 49.311" N	2° 15' 54.339" E
67	52° 47' 15.784" N	2° 44' 18.728" E	335	52° 44' 49.422" N	2° 15' 56.340" E
68	52° 47' 15.918" N	2° 44' 18.041" E	336	52° 44' 49.460" N	2° 15' 56.922" E
69	52° 47' 16.179" N	2° 44' 16.606" E	337	52° 44' 49.509" N	2° 15' 57.503" E
70	52° 47' 16.456" N	2° 44' 14.647" E	338	52° 44' 49.680" N	2° 15' 59.308" E
71	52° 47' 16.520" N	2° 44' 14.023" E	339	52° 44' 49.731" N	2° 15' 59.809" E
72	52° 47' 16.658" N	2° 44' 12.664" E	340	52° 44' 49.791" N	2° 16' 0.309" E
73	52° 47' 16.784" N	2° 44' 10.663" E	341	52° 44' 51.112" N	2° 16' 10.573" E
74	52° 47' 16.834" N	2° 44' 8.653" E	342	52° 44' 51.112" N	2° 16' 10.573" E
75	52° 47' 16.807" N	2° 44' 6.642" E	343	52° 45' 49.555" N	2° 23' 47.080" E
76	52° 47' 16.703" N	2° 44' 4.638" E	344	52° 45' 49.556" N	2° 23' 47.093" E
77	52° 47' 16.559" N	2° 44' 3.046" E	345	52° 45' 49.762" N	2° 23' 48.593" E
78	52° 47' 15.589" N	2° 43' 55.247" E	346	52° 45' 50.105" N	2° 23' 50.522" E
79	52° 47' 14.341" N	2° 43' 45.216" E	347	52° 45' 50.521" N	2° 23' 52.412" E
80	52° 47' 13.615" N	2° 43' 39.381" E	348	52° 45' 51.008" N	2° 23' 54.255" E
81	52° 47'	2° 43'	349	52° 45'	2° 23'

	13.538" N	38.765" E		51.565" N	56.044" E
82	52° 43' 46.039" N	2° 16' 19.075" E	350	52° 45' 52.188" N	2° 23' 57.772" E
83	52° 43' 45.182" N	2° 16' 10.004" E	351	52° 45' 52.876" N	2° 23' 59.431" E
84	52° 43' 44.634" N	2° 16' 0.162" E	352	52° 45' 53.626" N	2° 24' 1.017" E
85	52° 43' 44.531" N	2° 15' 54.221" E	353	52° 45' 54.434" N	2° 24' 2.521" E
86	52° 43' 44.490" N	2° 15' 51.462" E	354	52° 45' 55.299" N	2° 24' 3.939" E
87	52° 43' 44.512" N	2° 7' 23.550" E	355	52° 45' 56.215" N	2° 24' 5.265" E
88	52° 42' 44.166" N	2° 3' 14.512" E	356	52° 45' 57.180" N	2° 24' 6.493" E
89	52° 42' 43.152" N	2° 3' 9.802" E	357	52° 45' 58.191" N	2° 24' 7.619" E
90	52° 42' 42.369" N	2° 3' 4.946" E	358	52° 45' 59.242" N	2° 24' 8.639" E
91	52° 42' 31.534" N	2° 1' 44.644" E	359	52° 46' 0.330" N	2° 24' 9.547" E
92	52° 42' 31.056" N	2° 1' 40.338" E	360	52° 46' 1.450" N	2° 24' 10.341" E
93	52° 42' 30.948" N	2° 1' 39.044" E	361	52° 46' 2.598" N	2° 24' 11.017" E
94	52° 42' 30.701" N	2° 1' 34.686" E	362	52° 46' 3.770" N	2° 24' 11.573" E
95	52° 42' 30.654" N	2° 1' 30.309" E	363	52° 46' 4.960" N	2° 24' 12.007" E
96	52° 42' 30.675" N	2° 1' 29.003" E	364	52° 46' 6.165" N	2° 24' 12.317" E
97	52° 42' 30.833" N	2° 1' 25.173" E	365	52° 46' 7.380" N	2° 24' 12.501" E
98	52° 42' 33.173" N	2° 0' 49.768" E	366	52° 46' 8.022" N	2° 24' 12.532" E
99	52° 42' 34.216" N	2° 0' 40.941" E	367	52° 46' 9.762" N	2° 24' 12.670" E
100	52° 42' 34.439" N	2° 0' 39.649" E	368	52° 50' 9.656" N	2° 24' 31.707" E
101	52° 42' 35.302" N	2° 0' 35.379" E	369	52° 51' 3.549" N	2° 34' 15.864" E
102	52° 42' 41.649" N	2° 0' 7.655" E	370	52° 51' 3.486" N	2° 34' 19.188" E
103	52° 42' 43.788" N	2° 0' 0.073" E	371	52° 51' 3.295" N	2° 34' 22.530" E
104	52° 42' 44.149" N	1° 59' 59.016" E	372	52° 51' 2.978" N	2° 34' 25.846" E
105	52° 42' 45.445" N	1° 59' 55.557" E	373	52° 51' 2.535" N	2° 34' 29.122" E
106	52° 42' 55.437" N	1° 59' 30.877" E	374	52° 51' 1.968" N	2° 34' 32.346" E

107	52° 42' 55.855" N	1° 59' 29.924" E	375	52° 51' 1.280" N	2° 34' 35.504" E
108	52° 42' 58.378" N	1° 59' 24.593" E	376	52° 51' 0.473" N	2° 34' 38.585" E
109	52° 42' 58.842" N	1° 59' 23.685" E	377	52° 50' 59.551" N	2° 34' 41.577" E
110	52° 43' 0.673" N	1° 59' 20.588" E	378	52° 50' 58.516" N	2° 34' 44.466" E
111	52° 43' 2.861" N	1° 59' 17.394" E	379	52° 50' 57.374" N	2° 34' 47.243" E
112	52° 43' 17.859" N	1° 58' 57.179" E	380	52° 50' 56.129" N	2° 34' 49.896" E
113	52° 43' 19.625" N	1° 58' 54.953" E	381	52° 50' 54.785" N	2° 34' 52.414" E
114	52° 43' 21.284" N	1° 58' 53.106" E	382	52° 50' 53.348" N	2° 34' 54.787" E
115	52° 43' 21.796" N	1° 58' 52.576" E	383	52° 50' 51.823" N	2° 34' 57.007" E
116	52° 43' 23.547" N	1° 58' 50.895" E	384	52° 50' 50.218" N	2° 34' 59.065" E
117	52° 45' 46.103" N	1° 56' 43.184" E	385	52° 50' 48.537" N	2° 35' 0.952" E
118	52° 46' 2.160" N	1° 56' 27.260" E	386	52° 50' 46.788" N	2° 35' 2.661" E
119	52° 46' 3.532" N	1° 56' 26.078" E	387	52° 50' 44.977" N	2° 35' 4.185" E
120	52° 46' 17.577" N	1° 56' 12.146" E	388	52° 50' 43.112" N	2° 35' 5.518" E
121	52° 46' 37.038" N	1° 55' 33.566" E	389	52° 50' 41.200" N	2° 35' 6.655" E
122	52° 46' 51.513" N	1° 54' 38.977" E	390	52° 50' 39.248" N	2° 35' 7.591" E
123	52° 46' 58.151" N	1° 53' 21.115" E	391	52° 50' 37.265" N	2° 35' 8.323" E
124	52° 46' 59.490" N	1° 52' 52.341" E	392	52° 50' 33.492" N	2° 35' 9.272" E
125	52° 47' 32.039" N	1° 39' 38.159" E	393	52° 50' 32.920" N	2° 35' 9.346" E
126	52° 47' 32.129" N	1° 39' 36.152" E	394	52° 46' 31.498" N	2° 26' 1.301" E
127	52° 47' 32.273" N	1° 39' 33.526" E	395	52° 46' 31.407" N	2° 26' 1.294" E
128	52° 47' 32.388" N	1° 39' 31.565" E	396	52° 46' 31.505" N	2° 26' 1.330" E
129	52° 47' 32.521" N	1° 39' 29.607" E	397	52° 46' 30.476" N	2° 26' 1.280" E
130	52° 47' 32.673" N	1° 39' 27.652" E	398	52° 46' 29.257" N	2° 26' 1.347" E
131	52° 47' 32.844" N	1° 39' 25.702" E	399	52° 46' 28.043" N	2° 26' 1.540" E
132	52° 47'	1° 39'	400	52° 46'	2° 26' 1.859"



	33.028" N	23.714" E		26.839" N	E
133	52° 47' 33.217" N	1° 39' 21.768" E	401	52° 46' 25.650" N	2° 26' 2.301" E
134	52° 47' 33.425" N	1° 39' 19.828" E	402	52° 46' 24.480" N	2° 26' 2.866" E
135	52° 47' 33.652" N	1° 39' 17.893" E	403	52° 46' 23.333" N	2° 26' 3.551" E
136	52° 47' 33.896" N	1° 39' 15.964" E	404	52° 46' 22.215" N	2° 26' 4.353" E
137	52° 47' 34.155" N	1° 39' 13.999" E	405	52° 46' 21.130" N	2° 26' 5.269" E
138	52° 47' 34.419" N	1° 39' 12.073" E	406	52° 46' 20.230" N	2° 26' 6.150" E
139	52° 47' 34.701" N	1° 39' 10.153" E	407	52° 46' 20.081" N	2° 26' 6.296" E
140	52° 47' 35.001" N	1° 39' 8.241" E	408	52° 46' 19.074" N	2° 26' 7.430" E
141	52° 47' 35.320" N	1° 39' 6.337" E	409	52° 46' 18.112" N	2° 26' 8.665" E
142	52° 47' 35.827" N	1° 39' 3.397" E	410	52° 46' 17.199" N	2° 26' 9.998" E
143	52° 47' 36.193" N	1° 39' 1.398" E	411	52° 46' 16.338" N	2° 26' 11.422" E
144	52° 47' 36.599" N	1° 38' 59.313" E	412	52° 46' 15.534" N	2° 26' 12.933" E
145	52° 47' 37.000" N	1° 38' 57.371" E	413	52° 46' 14.788" N	2° 26' 14.524" E
146	52° 47' 37.497" N	1° 38' 55.056" E	414	52° 46' 14.105" N	2° 26' 16.189" E
147	52° 47' 37.906" N	1° 38' 53.193" E	415	52° 46' 13.486" N	2° 26' 17.921" E
148	52° 47' 38.332" N	1° 38' 51.340" E	416	52° 46' 12.935" N	2° 26' 19.714" E
149	52° 47' 38.777" N	1° 38' 49.499" E	417	52° 46' 12.453" N	2° 26' 21.561" E
150	52° 47' 39.239" N	1° 38' 47.670" E	418	52° 46' 12.042" N	2° 26' 23.454" E
151	52° 48' 59.902" N	1° 33' 32.091" E	419	52° 46' 11.704" N	2° 26' 25.386" E
152	52° 49' 1.602" N	1° 33' 25.973" E	420	52° 46' 11.440" N	2° 26' 27.349" E
153	52° 49' 2.819" N	1° 33' 19.121" E	421	52° 46' 11.252" N	2° 26' 29.335" E
154	52° 49' 3.674" N	1° 33' 13.073" E	422	52° 46' 11.139" N	2° 26' 31.337" E
155	52° 49' 3.797" N	1° 33' 6.096" E	423	52° 46' 11.103" N	2° 26' 33.346" E
156	52° 49' 2.898" N	1° 32' 57.549" E	424	52° 46' 11.144" N	2° 26' 35.356" E
157	52° 49' 4.139" N	1° 32' 54.271" E	425	52° 46' 11.261" N	2° 26' 37.357" E

158	52° 49' 4.845" N	1° 32' 52.212" E	426	52° 46' 11.399" N	2° 26' 38.780" E
159	52° 49' 5.188" N	1° 32' 51.467" E	427	52° 46' 11.399" N	2° 26' 38.781" E
160	52° 49' 6.147" N	1° 32' 49.575" E	428	52° 46' 11.399" N	2° 26' 38.782" E
161	52° 49' 7.035" N	1° 32' 47.473" E	429	52° 47' 4.976" N	2° 33' 42.433" E
162	52° 49' 7.208" N	1° 32' 46.999" E	430	52° 47' 5.398" N	2° 33' 45.780" E
163	52° 49' 8.015" N	1° 32' 44.486" E	431	52° 47' 6.051" N	2° 33' 50.967" E
164	52° 49' 8.663" N	1° 32' 42.319" E	432	52° 47' 6.366" N	2° 33' 53.472" E
165	52° 49' 8.910" N	1° 32' 41.417" E	433	52° 47' 6.366" N	2° 33' 53.472" E
166	52° 49' 9.102" N	1° 32' 41.019" E	434	52° 47' 6.366" N	2° 33' 53.473" E
167	52° 49' 9.635" N	1° 32' 40.648" E	435	52° 47' 6.675" N	2° 33' 55.224" E
168	52° 49' 9.807" N	1° 32' 40.345" E	436	52° 47' 7.088" N	2° 33' 57.116" E
169	52° 49' 9.768" N	1° 32' 39.737" E	437	52° 47' 7.573" N	2° 33' 58.962" E
170	52° 49' 9.855" N	1° 32' 38.941" E	438	52° 47' 8.126" N	2° 34' 0.754" E
171	52° 49' 10.086" N	1° 32' 38.247" E	439	52° 47' 8.747" N	2° 34' 2.485" E
172	52° 49' 10.218" N	1° 32' 37.939" E	440	52° 47' 9.433" N	2° 34' 4.148" E
173	52° 49' 10.691" N	1° 32' 36.993" E	441	52° 47' 10.180" N	2° 34' 5.737" E
174	52° 49' 11.553" N	1° 32' 35.417" E	442	52° 47' 10.987" N	2° 34' 7.246" E
175	52° 49' 12.200" N	1° 32' 33.887" E	443	52° 47' 11.849" N	2° 34' 8.668" E
176	52° 49' 12.742" N	1° 32' 32.736" E	444	52° 47' 12.764" N	2° 34' 9.998" E
177	52° 49' 13.080" N	1° 32' 31.922" E	445	52° 47' 13.727" N	2° 34' 11.230" E
178	52° 49' 13.507" N	1° 32' 31.040" E	446	52° 47' 14.736" N	2° 34' 12.361" E
179	52° 49' 14.325" N	1° 32' 29.767" E	447	52° 47' 15.785" N	2° 34' 13.384" E
180	52° 49' 14.340" N	1° 32' 29.796" E	448	52° 47' 16.872" N	2° 34' 14.297" E
181	52° 49' 15.178" N	1° 32' 31.478" E	449	52° 47' 17.991" N	2° 34' 15.096" E
182	52° 49' 15.638" N	1° 32' 32.401" E	450	52° 47' 19.138" N	2° 34' 15.777" E
183	52° 49'	1° 33'	451	52° 47'	2° 34'

	45.178" N	31.705" E		20.309" N	16.338" E
184	52° 49' 45.944" N	1° 33' 33.513" E	452	52° 47' 21.499" N	2° 34' 16.777" E
185	52° 49' 46.772" N	1° 33' 35.540" E	453	52° 47' 22.704" N	2° 34' 17.091" E
186	52° 49' 47.579" N	1° 33' 37.591" E	454	52° 47' 23.918" N	2° 34' 17.280" E
187	52° 49' 48.363" N	1° 33' 39.664" E	455	52° 47' 25.496" N	2° 34' 17.365" E
188	52° 49' 49.126" N	1° 33' 41.760" E	456	52° 48' 2.953" N	2° 26' 36.184" E
189	52° 49' 49.866" N	1° 33' 43.878" E	457	52° 48' 2.518" N	2° 26' 33.730" E
190	52° 49' 50.585" N	1° 33' 46.016" E	458	52° 48' 1.985" N	2° 26' 31.328" E
191	52° 49' 51.280" N	1° 33' 48.175" E	459	52° 48' 1.357" N	2° 26' 28.991" E
192	52° 49' 51.952" N	1° 33' 50.354" E	460	52° 48' 1.009" N	2° 26' 27.849" E
193	52° 49' 52.602" N	1° 33' 52.551" E	461	52° 48' 0.243" N	2° 26' 25.626" E
194	52° 49' 53.228" N	1° 33' 54.767" E	462	52° 47' 59.827" N	2° 26' 24.547" E
195	52° 49' 53.831" N	1° 33' 57.000" E	463	52° 47' 58.931" N	2° 26' 22.461" E
196	52° 49' 54.410" N	1° 33' 59.251" E	464	52° 47' 57.954" N	2° 26' 20.477" E
197	52° 49' 54.965" N	1° 34' 1.518" E	465	52° 47' 57.436" N	2° 26' 19.526" E
198	52° 49' 55.496" N	1° 34' 3.800" E	466	52° 47' 56.343" N	2° 26' 17.712" E
199	52° 49' 56.003" N	1° 34' 6.098" E	467	52° 47' 55.181" N	2° 26' 16.022" E
200	52° 49' 56.486" N	1° 34' 8.409" E	468	52° 47' 53.953" N	2° 26' 14.462" E
210	52° 49' 56.944" N	1° 34' 10.735" E	469	52° 47' 53.316" N	2° 26' 13.734" E
202	52° 49' 57.378" N	1° 34' 13.073" E	470	52° 47' 52.000" N	2° 26' 12.384" E
203	52° 49' 57.786" N	1° 34' 15.423" E	471	52° 47' 51.322" N	2° 26' 11.763" E
204	52° 49' 58.171" N	1° 34' 17.784" E	472	52° 47' 49.931" N	2° 26' 10.635" E
205	52° 49' 58.530" N	1° 34' 20.157" E	473	52° 47' 48.498" N	2° 26' 9.662" E
206	52° 49' 58.864" N	1° 34' 22.539" E	474	52° 47' 47.030" N	2° 26' 8.847" E
207	52° 49' 59.173" N	1° 34' 24.930" E	475	52° 47' 45.531" N	2° 26' 8.195" E
208	52° 49' 59.456" N	1° 34' 27.330" E	476	52° 47' 44.124" N	2° 26' 7.739" E

209	52° 49' 59.714" N	1° 34' 29.738" E	477	52° 47' 42.819" N	2° 26' 7.446" E
210	52° 49' 59.947" N	1° 34' 32.153" E	478	52° 47' 42.518" N	2° 26' 7.422" E
211	52° 50' 0.154" N	1° 34' 34.574" E	479	52° 47' 40.198" N	2° 26' 6.759" E
212	52° 50' 0.336" N	1° 34' 37.001" E	480	52° 47' 32.505" N	2° 26' 6.180" E
213	52° 50' 0.492" N	1° 34' 39.433" E	481	52° 50' 2.151" N	2° 35' 9.316" E
214	52° 50' 0.623" N	1° 34' 41.869" E	482	52° 47' 39.858" N	2° 35' 10.667" E
215	52° 50' 0.727" N	1° 34' 44.308" E	483	52° 47' 38.680" N	2° 35' 10.728" E
216	52° 50' 0.806" N	1° 34' 46.750" E	484	52° 47' 37.466" N	2° 35' 10.917" E
217	52° 50' 0.859" N	1° 34' 49.193" E	485	52° 47' 36.261" N	2° 35' 11.231" E
218	52° 50' 0.887" N	1° 34' 51.638" E	486	52° 47' 35.071" N	2° 35' 11.670" E
219	52° 50' 0.888" N	1° 34' 54.083" E	487	52° 47' 33.900" N	2° 35' 12.231" E
220	52° 50' 0.864" N	1° 34' 56.528" E	488	52° 47' 32.753" N	2° 35' 12.912" E
221	52° 50' 0.814" N	1° 34' 58.972" E	489	52° 47' 31.634" N	2° 35' 13.711" E
222	52° 50' 0.739" N	1° 35' 1.414" E	490	52° 47' 30.547" N	2° 35' 14.623" E
223	52° 50' 0.637" N	1° 35' 3.854" E	491	52° 47' 29.498" N	2° 35' 15.647" E
224	52° 50' 0.510" N	1° 35' 6.290" E	492	52° 47' 28.489" N	2° 35' 16.777" E
225	52° 50' 0.357" N	1° 35' 8.722" E	493	52° 47' 27.525" N	2° 35' 18.010" E
226	52° 50' 0.178" N	1° 35' 11.150" E	494	52° 47' 26.611" N	2° 35' 19.340" E
227	52° 49' 59.974" N	1° 35' 13.572" E	495	52° 47' 25.748" N	2° 35' 20.762" E
228	52° 49' 59.745" N	1° 35' 15.987" E	496	52° 47' 24.942" N	2° 35' 22.271" E
229	52° 49' 59.490" N	1° 35' 18.396" E	497	52° 47' 24.194" N	2° 35' 23.860" E
230	52° 49' 59.209" N	1° 35' 20.797" E	498	52° 47' 23.509" N	2° 35' 25.523" E
231	52° 49' 58.903" N	1° 35' 23.190" E	499	52° 47' 22.888" N	2° 35' 27.254" E
232	52° 49' 58.573" N	1° 35' 25.573" E	500	52° 47' 22.334" N	2° 35' 29.046" E
233	52° 49' 58.217" N	1° 35' 27.947" E	501	52° 47' 21.849" N	2° 35' 30.892" E
234	52° 49'	1° 35'	502	52° 47'	2° 35'

	57.836" N	30.310" E		21.436" N	32.784" E
235	52° 49' 57.430" N	1° 35' 32.661" E	503	52° 47' 21.096" N	2° 35' 34.716" E
236	52° 49' 56.999" N	1° 35' 35.001" E	504	52° 47' 20.829" N	2° 35' 36.678" E
237	52° 49' 56.544" N	1° 35' 37.328" E	505	52° 47' 20.638" N	2° 35' 38.665" E
238	52° 49' 56.064" N	1° 35' 39.641" E	506	52° 47' 20.523" N	2° 35' 40.667" E
239	52° 49' 55.560" N	1° 35' 41.940" E	507	52° 47' 20.485" N	2° 35' 42.678" E
240	52° 49' 55.032" N	1° 35' 44.225" E	508	52° 47' 20.523" N	2° 35' 44.688" E
241	52° 49' 54.480" N	1° 35' 46.494" E	509	52° 47' 20.637" N	2° 35' 46.691" E
242	52° 49' 53.904" N	1° 35' 48.746" E	510	52° 47' 20.743" N	2° 35' 47.801" E
243	52° 49' 53.304" N	1° 35' 50.982" E	511	52° 47' 20.744" N	2° 35' 47.806" E
244	52° 49' 52.681" N	1° 35' 53.200" E	512	52° 47' 21.786" N	2° 35' 56.101" E
245	52° 49' 52.034" N	1° 35' 55.400" E	513	52° 48' 20.763" N	2° 43' 47.964" E
246	52° 49' 51.868" N	1° 35' 55.943" E	514	52° 48' 21.026" N	2° 43' 49.928" E
247	52° 48' 40.863" N	1° 39' 22.453" E	515	52° 48' 21.364" N	2° 43' 51.862" E
248	52° 48' 40.702" N	1° 39' 22.924" E	516	52° 48' 21.774" N	2° 43' 53.756" E
249	52° 48' 40.367" N	1° 39' 23.994" E	517	52° 48' 22.256" N	2° 43' 55.605" E
250	52° 48' 40.234" N	1° 39' 24.393" E	518	52° 48' 22.808" N	2° 43' 57.400" E
251	52° 48' 40.107" N	1° 39' 24.797" E	519	52° 48' 23.426" N	2° 43' 59.134" E
252	52° 48' 39.560" N	1° 39' 26.596" E	520	52° 48' 24.109" N	2° 44' 0.800" E
253	52° 48' 39.405" N	1° 39' 27.124" E	521	52° 48' 24.854" N	2° 44' 2.393" E
254	52° 48' 39.261" N	1° 39' 27.661" E	522	52° 48' 25.659" N	2° 44' 3.905" E
255	52° 48' 38.783" N	1° 39' 29.512" E	523	52° 48' 26.519" N	2° 44' 5.331" E
256	52° 48' 38.649" N	1° 39' 30.055" E	524	52° 48' 27.432" N	2° 44' 6.665" E
257	52° 48' 38.525" N	1° 39' 30.606" E	525	52° 48' 28.394" N	2° 44' 7.902" E
258	52° 48' 38.044" N	1° 39' 32.861" E	526	52° 48' 29.401" N	2° 44' 9.037" E
259	52° 48' 37.927" N	1° 39' 33.484" E	527	52° 48' 30.449" N	2° 44' 10.065" E

260	52° 48' 37.569" N	1° 39' 35.557" E	528	52° 48' 31.534" N	2° 44' 10.983" E
261	52° 48' 37.477" N	1° 39' 36.124" E	529	52° 48' 32.652" N	2° 44' 11.786" E
262	52° 48' 37.396" N	1° 39' 36.696" E	530	52° 48' 33.799" N	2° 44' 12.472" E
263	52° 48' 37.137" N	1° 39' 38.662" E	531	52° 48' 34.969" N	2° 44' 13.037" E
264	52° 48' 37.067" N	1° 39' 39.237" E	532	52° 48' 36.158" N	2° 44' 13.481" E
265	52° 48' 37.008" N	1° 39' 39.816" E	533	52° 48' 37.362" N	2° 44' 13.800" E
266	52° 48' 36.824" N	1° 39' 41.805" E	534	52° 48' 38.576" N	2° 44' 13.994" E
267	52° 48' 36.776" N	1° 39' 42.387" E	535	52° 48' 39.226" N	2° 44' 14.030" E
268	52° 48' 36.739" N	1° 39' 42.971" E	536	52° 51' 27.631" N	2° 44' 14.043" E

### PART 3

#### Details of Licensed Marine Activities

1. Subject to the licence conditions at Part 4, 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) (licensable marine activities) of the 2009 Act—

- (a) the deposit at sea of the substances and articles specified in paragraph 5 of Part 2 of this licence;
- (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;
- (d) the disposal of up to 11,475,000 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 (including fibre optic cable) sandwave preparation works at disposal site references HU213, HU214, HU215 and HU216 within the extent of the Order limits seaward of MHWS, comprising—
  - (i) 9,000,000 m<sup>3</sup> for cable (including fibre optic cable) installation;
  - (ii) 75,000 m<sup>3</sup> for the offshore electrical platforms;
  - (iii) 1,900,000 m<sup>3</sup> for the export cables (including fibre optic cables) within the Order limits excluding the Haisborough, Hammond and Winterton Special Area of Conservation; and
  - (iv) 500,000 m<sup>3</sup> for the export cables (including fibre optic cables) within the part of the Haisborough, Hammond and Winterton Special Area of Conservation that falls within the Order limits;
- (e) the removal of static fishing equipment; and
- (f) the disposal of drill arisings in connection with any foundation drilling up to 14,137 m<sup>3</sup>.

2.—(1) Such activities are authorised in relation to the construction, maintenance and operation of—

(2) *Work No. 2 (phase 1)* – up to two offshore electrical platforms fixed to the seabed within the area shown on the works plan by one of the following foundation types: jacket (piled or suction caisson) or gravity base.

(3) *Work No. 3 (phase 1)* – a network of subsea cables and fibre optic cables within the area shown on the works plan comprising Work No. 2 and for the transmission of electricity and electronic communications between the offshore electrical platforms including one or more cable crossings.

(4) *Work No. 4A (phase 1)* – up to four subsea export cables and fibre optic cables between Work No. 2 and Work No. 4B consisting of subsea cables and fibre optic cables along routes within the Order limits seaward of MHWS including one or more offshore cable crossings.

(5) *Work No. 4B (phase 1)* – up to four subsea export cables and fibre optic cables between Work No. 4A and Work No. 4C consisting of subsea cables and fibre optic cables along routes within the Order limits between MLWS and MHWS at Happisburgh South, North Norfolk.

(6) In connection with Work Nos. 2, 3, 4A and 4B 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.

(7) In connection with Work Nos. 2, 3, 4A and 4B, 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) beacons, fenders and other navigational warning or ship impact protection works.

## PART 4

### Conditions

#### Design parameters

1.—(1) The dimensions of any offshore electrical platform forming part of the authorised scheme (excluding towers, helipads, masts and cranes) must not exceed 100 metres in height when measured from HAT, 120 metres in length and 80 metres in width.

(2) In relation to an offshore electrical platform, each foundation using piles must not have—

- (a) more than 18 driven piles; or
- (b) a pile diameter which is more than five metres.

2. In relation to the offshore electrical platform(s), the foundations must not have a combined seabed footprint area (excluding scour protection) of greater than 15,000m<sup>2</sup>. The total length of the cables and the area and volume of their cable protection must not exceed the following—

<i>Work</i>	<i>Length</i>	<i>Cable protection (m<sup>2</sup> and m<sup>3</sup>)</i>
Work No. 3 (Interconnector link)	150 kilometres	76,000m <sup>2</sup> 38,000 m <sup>3</sup>
Work No. 4A and 4B (export cable)	400 kilometres	102,086m <sup>2</sup> 59,836 m <sup>3</sup>

#### Phasing of the authorised scheme

3.—(1) Taken together with works authorised and proposed to be constructed pursuant to licence 2 (transmission)—

- (a) the total number of offshore electrical platforms forming part of the authorised scheme must not exceed two;
- (b) the total amount of scour protection for the offshore electrical platforms forming part of the authorised scheme must not exceed 20,000m<sup>2</sup> and 100,000 m<sup>3</sup>; and
- (c) the total amount of inert material of natural origin disposed within the offshore Order limits as part of the authorised scheme must not exceed 11,475,000 m<sup>3</sup>;
- (d) the total amount of disposal for drill arisings in connection with any foundation drilling must not exceed 14,137m<sup>3</sup>;
- (e) the total length of cable and the amount of cable protection must not exceed the figures stated in condition 2 of this licence; and
- (f) in the Haisborough, Hammond and Winterton Special Area of Conservation, the total area of cable protection must not exceed 32,000m<sup>2</sup> and the total volume of cable protection must not exceed 20,800m<sup>3</sup>.

(2) Prior to the commencement of the authorised scheme the undertaker must give notice to the MMO detailing—

- (a) whether the authorised scheme will be constructed—
  - (i) in a single offshore phase under this licence; or
  - (ii) in two offshore phases under this licence and licence 2 (transmission); and
- (b) where the authorised scheme will be constructed in two offshore phases, the total number of offshore electrical platforms to be constructed in each phase.

#### **Notifications and inspections**

4.—(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 12; and
  - (ii) the masters and transport managers responsible for the vessels notified to the MMO in accordance with condition 12; and
- (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 12 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 of details regarding the vessel routes, timings and locations relating to the construction of the authorised scheme or relevant part—

- (a) at least fourteen days 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 construction of all offshore activities;

and 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. 2 and the expected vessel routes from the construction ports to the relevant location. A second notice to mariners must be issued advising of the start date of Work Nos. 3, 4A and 4B and the route of the sub-sea cables and fibre optic cables. Copies of all notices must be provided to the MMO, MCA 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 and monitoring programme approved under condition 9(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 within five days.

(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 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, the Kingfisher Information Service of Seafish and the UK Hydrographic Office.

(12) In case of exposure of cables on or above the seabed, the undertaker must within three days following identification of a potential cable exposure, notify mariners by issuing a notice to mariners and by informing Kingfisher Information Service of the location and extent of exposure. Copies of all notices must be provided to the MMO and MCA within five days.

### **Aids to navigation**

5.—(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 to 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 as set out in the aids to navigation management plan agreed pursuant to condition 9(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 4(11) and condition 4(12) are invoked, the undertaker must lay down such marker buoys, exhibit such lights and take such other steps for preventing danger to navigation as directed by Trinity House.

### **Colouring of structures**

6.—(1) Except as otherwise required by Trinity House the undertaker must colour all structures forming part of the authorised scheme yellow (colour code RAL 1023) from at least HAT 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 paint the remainder of the structures submarine grey (colour code RAL 7035).

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

7.—(1) Unless otherwise agreed in writing by the MMO all chemicals used in the construction of the authorised scheme 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(a) (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 this licence. This information must be submitted to the MMO by 15 February each year for the months August to January inclusive, and by 15 August 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 disposal site references HU213, HU214, HU215 and HU216 within the extent of the Order limits seaward of MHWS. Any other materials must be screened out before disposal of the inert material 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 undertake the survey agreed under condition 9(1)(h)(iii) following the swath-bathymetry survey referred to in condition 15(2)(b). Should any such obstructions resulting from burial of Work No. 4A or 4B (export cables and fibre optic cables) be identified which, in the reasonable opinion of the MMO, may be considered to interfere with fishing, the undertaker must take such steps to remove them as the MMO in its reasonable opinion may require.

(9) 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.

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(a) S.I. 2002/1355.

(10) 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 14(1)(d)(i).

(11) 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**

8.—(1) If, due to stress of weather or any other cause the master of a vessel determines that it is necessary to make a deposit which is not authorised under this licence, whether within or outside of the Order limits, because the safety of human life and/or of the vessel is threatened, within 48 hours the undertaker must notify full details of the circumstances of the deposit 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**

9.—(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, in accordance with the Development Principles—
  - (i) the proposed location and choice of foundation of all offshore electrical platforms;
  - (ii) the height, length and width of all offshore electrical platforms;
  - (iii) the length and arrangement of all cables (including fibre optic cables) comprising Work Nos. 3, 4A and 4B;
  - (iv) the dimensions of all foundations;
  - (v) the proposed layout of all offshore electrical platforms including any exclusion zones identified under sub-paragraph (1)(h)(iv);
  - (vi) a plan showing the indicative layout of all offshore electrical platforms including all exclusion zones (insofar as not shown in (v) above) and showing the indicative programming of particular works as set out in the indicative programme to be provided under sub-paragraph (1)(b)(iv); and
  - (vii) any exclusion zones/micrositing requirements identified in any mitigation scheme pursuant to sub-paragraph (1)(i);to ensure conformity with the description of Works No. 2, 3, 4A and 4B and compliance with conditions 1 to 3 above.
- (b) A construction programme and monitoring plan (which accords with the offshore 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;
  - (iii) proposed pre-construction surveys, baseline report format and content, construction monitoring, post-construction surveys and monitoring and related reporting in accordance with sub-paragraph (1)(h) and conditions 12, 13, 14 and 15; and

- (iv) an indicative written construction programme for all offshore electrical platforms and cables including fibre optic cables comprised in the works at Part 3 (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 pre-construction monitoring;
- (bb) at least four months prior to construction, detail on construction monitoring; and
- (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 (1)(i);
  - (ii) soft start procedures with specified duration periods;
  - (iii) offshore electrical platform location and installation, including scour protection;
  - (iv) cable (including fibre optic cable) installation;
  - (v) contractors;
  - (vi) vessels, vessels maintenance and vessels transit corridors; and
  - (vii) associated and ancillary works.
- (d) A project environmental management plan (in accordance with the outline 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; and
  - (v) a fisheries liaison and coexistence plan (which accords with the outline fisheries liaison and co-existence plan) 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.
- (e) A scour protection and cable protection plan (in accordance with the outline scour protection and cable protection plan) providing details of the need, type, sources, quantity, distribution and installation methods for scour protection and cable (including fibre optic cable) protection. For the avoidance of doubt “distribution” in this sub-paragraph must include quantities in respect of each structure comprised in the offshore works and intended to be subject to scour protection.
- (f) In the event that piled 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 and following current best practice as advised by the relevant statutory nature conservation bodies.

- (g) A cable specification, installation and monitoring plan, for the installation and protection of cables outside of the Haisborough, Hammond and Winterton Special Area of Conservation, to include—
  - (i) technical specification of offshore cables (including fibre optic cable) 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 (including fibre optic cable) laying plan for the Order limits, incorporating a burial risk assessment to ascertain suitable burial depths and cable laying techniques, including cable landfall and cable protection measures;
  - (iii) proposals for monitoring offshore cables including cable (including fibre optic 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; and
  - (iv) appropriate methods such as a trawl or drift net to be deployed along Work No. 4A and 4B (export cables and fibre optic cables), following the survey referred to in condition 15(2)(b) to assess any seabed obstructions resulting from burial of the export cables and fibre optic cables.
- (h) An archaeological written scheme of investigation in relation to the offshore Order limits seaward of mean low water, which must accord with the outline written scheme of investigation (offshore) and industry good practice, in consultation with the statutory historic body (and, if relevant, North Norfolk District Council) 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 (and North Norfolk District Council where the report relates to the intertidal area) 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 13(2)(a) and in accordance with the offshore 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 5 for the lifetime of the authorised scheme.
- (l) In the event that piled foundations are proposed to be used, a site integrity plan which accords with the principles set out in the in principle Norfolk Vanguard Southern North Sea Special Area of Conservation Site Integrity Plan , and which the MMO is satisfied would provide such mitigation as is necessary to avoid adversely affecting the integrity (within the meaning of the 2017 Regulations) of a relevant site, to the extent that harbour porpoise are a protected feature of that site.

(2) Pre-commencement surveys and 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 (offshore), and which has been submitted to and approved by the MMO.

(3) 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 5,000 KJ.

**10.**—(1) Any archaeological reports produced in accordance with condition 9(1)(h)(iii) must be agreed with the MMO in consultation with the statutory historic body (and, if relevant, North Norfolk District Council).

(2) The design plan required by condition 9(1)(a) must be prepared by the undertaker and determined by the MMO in accordance with the Development Principles.

(3) Each programme, statement, plan, protocol or scheme required to be approved under condition 9 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.

(4) 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 9.

(5) Unless otherwise agreed in writing with the undertaker, the MMO must use reasonable endeavours to determine an application for approval made under condition 9 as soon as practicable and in any event within a period of four months commencing on the date the application is received by the MMO.

(6) The licensed activities must be carried out in accordance with the plans, protocols, statements, schemes and details approved under condition 9, unless otherwise agreed in writing by the MMO.

(7) No part of the authorised scheme may commence until the MMO, in consultation with the MCA, has confirmed in writing that the undertaker has taken into account and, so far as is applicable to that stage of the project, adequately addressed all MCA recommendations as appropriate to the authorised scheme contained within MGN543 “Offshore Renewable Energy Installations (OREIs) – Guidance on UK Navigational Practice, Safety and Emergency Response Issues” and its annexes.

### **Post-construction plans and documents**

**11.** The undertaker must conduct a swath bathymetric survey to IHO S44ed5 Order 1a across the area(s) within the Order limits in which construction works were carried out and provide the data and survey report(s) to the MCA and UKHO.

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

**12.**—(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.

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

13.—(1) The undertaker must, in discharging condition 9(1)(b), submit details (which accord with the offshore in principle monitoring plan) for written approval by the MMO in consultation with the 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 Annex 1 reef 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; and
- (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.

(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**

14.—(1) The undertaker must, in discharging condition 9(1)(b), submit details (which accord with the offshore in principle monitoring plan) for approval by the MMO in consultation with the relevant statutory nature conservation 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 the event that driven or part-driven pile foundations are proposed, 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 unless the MMO otherwise agrees in writing.

(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. If, in the opinion of the MMO in consultation with Natural England, the assessment shows significantly different impacts to those assessed in the environmental statement or failures in mitigation, all piling activity must cease

until an update to the marine mammal mitigation protocol and further monitoring requirements have been agreed.

(4) In the event that piled foundations are proposed to be used, details submitted in accordance with the in principle monitoring plan must include proposals for monitoring marine mammals.

### **Post construction**

**15.**—(1) The undertaker must, in discharging condition 9(1)(b), submit details (which accord with the offshore 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) a survey to determine any change in the location, extent and composition of any benthic habitats of conservation, ecological and/or economic importance constituting Annex 1 reef habitats identified in the pre-construction survey in the parts of the Order limits in which construction works were carried out. The survey design must be informed by the results of the pre-construction benthic survey;
- (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 including fibre optic cables have been buried or protected; and
- (c) or contribute to any marine mammal monitoring referred to in the in principle monitoring plan submitted in accordance with condition 9(1)(b).

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

(4) Following installation of cables, the cable (including fibre optic cables) monitoring plan required under condition 9(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 authorised scheme and reviewed as specified within the plan, following cable burial surveys, or as instructed by the MMO.

### **Reporting of impact pile driving**

**16.**—(1) Only when driven or part-driven pile foundations are proposed to be used as part of the foundation installation the undertaker must provide the following information to the UK 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 to satisfy the Marine Noise Registry's Forward Look requirements;
- (b) at six month intervals following the commencement of pile driving, information on the locations and dates of impact pile driving to satisfy the Marine Noise Registry's Close Out requirements; and
- (c) within 12 weeks of completion of impact pile driving, information on the locations and dates of impact pile driving 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—

“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; and

“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.

### **Reporting of scour and cable protection**

17.—(1) Not more than 4 months following completion of the construction phase of the authorised scheme, the undertaker must provide the MMO and the relevant statutory nature conservation bodies with a report setting out details of the cable protection and scour protection used for the authorised scheme.

(2) The report must include the following information—

- (a) location of the cable protection and scour protection;
- (b) volume of cable protection and scour protection; and
- (c) any other information relating to the cable protection as agreed between the MMO and the undertaker.

### **Restriction on cable installation construction works**

18. During the months of January to March inclusive, construction activities consisting of cable installation for Work No. 4A and Work No. 4B must only take place with one main cable laying vessel.

## **SCHEDULE 12**

Article 32

### **Deemed Licence under the 2009 Act – Transmission Assets (Licence 2 – Phase 2)**

#### **PART 1**

##### **Interpretation**

1.—(1) In this licence—

“the 2004 Act” means the Energy Act 2004;

“the 2008 Act” means the Planning Act 2008;

“the 2009 Act” means the Marine and Coastal Access Act 2009;

“the 2017 Regulations” means the Conservation of Offshore Marine Habitats and Species Regulations 2017 (a);

“authorised deposits” means the substances and articles specified in paragraph 5 of Part 2 of this licence;

“authorised scheme” means Work Nos. 2, 3, 4A, and 4B described in Part 3 of this licence or any part of that work;

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(a) S.I. 2017/1013.

“cable protection” means measures for offshore cable crossings and where cable burial is not possible due to ground conditions or approaching offshore structures, to protect cables and fibre optic 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;

“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 4 of this licence;

“Defence Infrastructure Organisation Safeguarding” means Ministry of Defence Safeguarding, Defence Infrastructure Organisation, Kingston Road, Sutton Coldfield, West Midlands B75 7RL and any successor body to its functions;

“Development Principles” means the document certified as the Development Principles by the Secretary of State for the purposes of the Order;

“draft marine mammal mitigation protocol” means the document certified as the draft marine mammal mitigation protocol by the Secretary of State for the purposes of this Order;

“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;

“gravity base system” 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, transition piece, corrosion protection systems, fenders and maintenance equipment, boat access systems, access ladders and access and rest platform(s) and equipment;

“HAT” means highest astronomical tide;

“in principle Norfolk Vanguard Southern North Sea Special Area of Conservation Site Integrity Plan” means the document certified as the in principle Norfolk Vanguard Southern North Sea Special Area of Conservation Site Integrity Plan by the Secretary of State for the purposes of this Order;

“jacket foundation” means a steel jacket/ lattice-type structure constructed of steel which is fixed to the seabed at three or more points with steel pin piles or steel suction caissons and associated equipment including scour protection, J-tubes, transition piece, corrosion protection systems, fenders and maintenance equipment, boat access systems, access ladders and access and rest 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;

“licence 1 (transmission)” means the licence set out in Schedule 11 (deemed licence under the 2009 Act – transmission assets (licence 1 – phase 1));

“licensed activities” means the activities specified in Part 3 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), any cable and any component part of any wind turbine generator, offshore electrical platform, accommodation platform or meteorological mast described in Part 1 of Schedule 1 (authorised development) not including the alteration, removal or replacement of foundations), to the extent assessed in the environmental statement; and “maintenance” is 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;

“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;

“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 cables offshore;

“offshore electrical platform” means a platform attached to the seabed by means of a foundation, with one or more decks, whether open or fully clad, accommodating electrical power transformers, switchgear, instrumentation, protection and control systems and other associated equipment and facilities to enable the transmission of electronic communications and for electricity to be collected at, and exported from, the platform;

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

“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 Part 2 of this licence;

“the Order” means the Norfolk Vanguard Offshore Wind Farm Order 2022;

“outline fisheries liaison and co-existence plan” means the document certified as the outline fisheries liaison and co-existence plan by the Secretary of State for the purposes of this 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 this 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 this Order;

“pin piles” means steel cylindrical piles driven and/or drilled into the seabed to secure steel jacket foundations;

“relevant site” means a European offshore marine site or a European site as defined in the 2017 Regulations;

“scour protection” means measures to prevent loss of seabed sediment around any marine structure placed in or on the seabed by use of protective aprons, mattresses with or without frond devices, or rock and gravel placement.

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

“statutory historic body” means Historic Buildings and Monuments Commission for England (Historic England) or its successor in function;

“statutory nature conservation body” means an organisation charged by government with advising on nature conservation matters;

“suction caisson” means a large diameter steel cylindrical shell which penetrates the seabed assisted by a hydrostatic pressure differential for fixity of foundations;

“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;

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

“undertaker” means Norfolk Vanguard Limited (Company No. 08141115) whose registered office is at 5th Floor, 70 St Mary Axe, London EC3A 8BE;

“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;

“Work No. 4C” means the onshore transmission works at the landfall consisting of up to two transition jointing pits and up to four cables to be laid in ducts underground and associated fibre optic cables laid within cable ducts from MHWS at Happisburgh South, North Norfolk; and

“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); and

(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 points of contact with the organisations listed below and the addresses for returns and correspondence are—

(a) Marine Management Organisation

Marine Licensing  
Lancaster House  
Hampshire Court  
Newcastle Business Park  
Newcastle upon Tyne  
NE4 7YH  
Tel: 0300 123 1032;

(b) Marine Management Organisation (local office)

Lowestoft Office  
Pakefield Road  
Lowestoft  
Suffolk  
NR33 0HT  
Tel: 01502 573 149;

(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 3817 2426;

(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) Historic England

Cannon Bridge

House 25

Dowgate Hill

London

EC4R 2YA

Tel: 020 7973 3700

## PART 2

### Licensed Marine Activities – General

**1.** 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 (approval of decommissioning programmes) 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.

**2.** The provisions of section 72 (variation, suspension, revocation and transfer) of the 2009 Act apply to this licence except that the provisions of section 72(7) and (8) relating to the transfer of the licence only apply to a transfer not falling within article 6 (benefit of the Order).

**3.** 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.

4. Any amendments to or variations from the approved plans, protocols or statements must be minor or immaterial and it must be demonstrated to the satisfaction of the MMO that they are unlikely to give rise to any materially new or materially different environmental effects from those assessed in the environmental statement.

5. 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 (including fibre optic cable) sandwave preparation works; and
- (g) marine coatings, other chemicals and timber.

6. The grid coordinates for the authorised scheme 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° 55' 0.308" N	3° 4' 42.589" E	269	52° 48' 36.617" N	1° 39' 45.198" E
2	52° 49' 53.975" N	3° 5' 22.789" E	270	52° 48' 36.608" N	1° 39' 45.442" E
3	52° 46' 19.050" N	3° 2' 16.682" E	271	52° 48' 36.111" N	1° 39' 58.227" E
4	52° 45' 10.584" N	2° 45' 33.989" E	272	52° 47' 53.162" N	1° 57' 17.842" E
5	52° 51' 41.636" N	2° 45' 34.220" E	273	52° 47' 51.688" N	1° 57' 48.405" E
6	53° 2' 36.817" N	2° 34' 16.309" E	274	52° 47' 50.436" N	1° 58' 0.642" E
7	52° 49' 38.834" N	2° 34' 15.809" E	275	52° 47' 48.214" N	1° 58' 12.320" E
8	52° 48' 47.472" N	2° 33' 28.343" E	276	52° 47' 42.495" N	1° 58' 33.820" E
9	52° 48' 3.133" N	2° 26' 37.427" E	277	52° 47' 36.793" N	1° 58' 49.157" E
10	52° 56' 9.089" N	2° 18' 33.231" E	278	52° 47' 27.713" N	1° 59' 7.719" E
11	52° 45' 11.467" N	2° 45' 30.454" E	279	52° 47' 19.963" N	1° 59' 19.409" E
12	52° 45' 11.943" N	2° 45' 28.711" E	280	52° 47' 10.581" N	1° 59' 30.409" E
13	52° 45' 12.967" N	2° 45' 25.281" E	281	52° 45' 3.401" N	2° 1' 51.874" E
14	52° 45' 14.081" N	2° 45' 21.928" E	282	52° 45' 3.127" N	2° 1' 52.189" E
15	52° 45' 15.285" N	2° 45' 18.661" E	283	52° 45' 2.287" N	2° 1' 53.183" E

16	52° 45' 15.920" N	2° 45' 17.061" E	284	52° 45' 1.635" N	2° 1' 53.925" E
17	52° 45' 17.254" N	2° 45' 13.933" E	285	52° 45' 1.351" N	2° 1' 54.277" E
18	52° 45' 17.952" N	2° 45' 12.407" E	286	52° 45' 0.388" N	2° 1' 55.510" E
19	52° 45' 19.409" N	2° 45' 9.432" E	287	52° 45' 0.110" N	2° 1' 55.877" E
20	52° 45' 20.533" N	2° 45' 7.335" E	288	52° 44' 59.840" N	2° 1' 56.258" E
21	52° 45' 20.944" N	2° 45' 6.567" E	289	52° 44' 58.926" N	2° 1' 57.587" E
22	52° 45' 21.741" N	2° 45' 5.178" E	290	52° 44' 58.663" N	2° 1' 57.982" E
23	52° 45' 23.389" N	2° 45' 2.488" E	291	52° 44' 58.407" N	2° 1' 58.390" E
24	52° 45' 24.240" N	2° 45' 1.188" E	292	52° 44' 57.545" N	2° 1' 59.812" E
25	52° 45' 25.993" N	2° 44' 58.685" E	293	52° 44' 57.298" N	2° 2' 0.233" E
26	52° 45' 27.812" N	2° 44' 56.313" E	294	52° 44' 57.059" N	2° 2' 0.667" E
27	52° 45' 29.693" N	2° 44' 54.076" E	295	52° 44' 56.253" N	2° 2' 2.175" E
28	52° 45' 31.632" N	2° 44' 51.980" E	296	52° 44' 56.022" N	2° 2' 2.621" E
29	52° 45' 32.623" N	2° 44' 50.985" E	297	52° 44' 55.800" N	2° 2' 3.078" E
30	52° 45' 33.626" N	2° 44' 50.027" E	298	52° 44' 55.053" N	2° 2' 4.667" E
31	52° 45' 35.671" N	2° 44' 48.223" E	299	52° 44' 54.839" N	2° 2' 5.136" E
32	52° 45' 37.763" N	2° 44' 46.570" E	300	52° 44' 54.635" N	2° 2' 5.615" E
33	52° 45' 39.897" N	2° 44' 45.071" E	301	52° 44' 53.950" N	2° 2' 7.278" E
34	52° 45' 42.069" N	2° 44' 43.731" E	302	52° 44' 53.755" N	2° 2' 7.768" E
3	52° 45' 43.168" N	2° 44' 43.121" E	303	52° 44' 53.569" N	2° 2' 8.268" E
36	52° 45' 44.275" N	2° 44' 42.551" E	304	52° 44' 52.949" N	2° 2' 9.998" E
37	52° 45' 46.511" N	2° 44' 41.534" E	305	52° 44' 52.773" N	2° 2' 10.507" E
38	52° 45' 47.638" N	2° 44' 41.087" E	306	52° 44' 52.607" N	2° 2' 11.025" E
39	52° 45' 48.833" N	2° 44' 40.681" E	307	52° 44' 52.053" N	2° 2' 12.816" E
40	52° 46' 9.781" N	2° 44' 40.687" E	308	52° 44' 51.897" N	2° 2' 13.343" E
41	52° 46'	2° 44'	309	52° 44'	2° 2' 13.877"

	46.724" N	40.696" E		51.751" N	E
42	52° 46' 48.173" N	2° 44' 40.696" E	310	52° 44' 51.267" N	2° 2' 15.722" E
43	52° 46' 52.974" N	2° 44' 40.698" E	311	52° 44' 51.131" N	2° 2' 16.263" E
44	52° 46' 55.152" N	2° 44' 40.698" E	312	52° 44' 51.006" N	2° 2' 16.812" E
45	52° 46' 57.976" N	2° 44' 40.699" E	313	52° 44' 50.593" N	2° 2' 18.703" E
46	52° 47' 0.395" N	2° 44' 40.053" E	314	52° 44' 50.478" N	2° 2' 19.257" E
47	52° 47' 1.558" N	2° 44' 39.624" E	315	52° 44' 50.373" N	2° 2' 19.818" E
48	52° 47' 1.970" N	2° 44' 39.479" E	316	52° 44' 50.034" N	2° 2' 21.747" E
49	52° 47' 2.003" N	2° 44' 39.463" E	317	52° 44' 49.940" N	2° 2' 22.313" E
50	52° 47' 3.144" N	2° 44' 38.936" E	318	52° 44' 49.857" N	2° 2' 22.883" E
51	52° 47' 4.295" N	2° 44' 38.272" E	319	52° 44' 49.592" N	2° 2' 24.844" E
52	52° 47' 4.681" N	2° 44' 38.004" E	320	52° 44' 49.520" N	2° 2' 25.418" E
53	52° 47' 4.998" N	2° 44' 37.816" E	321	52° 44' 49.459" N	2° 2' 25.996" E
54	52° 47' 5.524" N	2° 44' 37.450" E	322	52° 44' 49.268" N	2° 2' 27.980" E
55	52° 47' 6.616" N	2° 44' 36.554" E	323	52° 44' 49.218" N	2° 2' 28.561" E
56	52° 47' 7.671" N	2° 44' 35.546" E	324	52° 44' 49.179" N	2° 2' 29.143" E
57	52° 47' 8.686" N	2° 44' 34.431" E	325	52° 44' 49.065" N	2° 2' 31.144" E
58	52° 47' 9.657" N	2° 44' 33.214" E	326	52° 44' 49.037" N	2° 2' 31.728" E
59	52° 47' 10.579" N	2° 44' 31.898" E	327	52° 44' 49.021" N	2° 2' 32.314" E
60	52° 47' 11.449" N	2° 44' 30.489" E	328	52° 44' 48.989" N	2° 2' 34.021" E
61	52° 47' 12.264" N	2° 44' 28.993" E	329	52° 44' 48.983" N	2° 2' 34.638" E
62	52° 47' 13.021" N	2° 44' 27.415" E	330	52° 44' 49.220" N	2° 15' 49.970" E
63	52° 47' 13.715" N	2° 44' 25.762" E	331	52° 44' 49.236" N	2° 15' 51.345" E
64	52° 47' 14.346" N	2° 44' 24.040" E	332	52° 44' 49.268" N	2° 15' 53.169" E
65	52° 47' 14.910" N	2° 44' 22.257" E	333	52° 44' 49.284" N	2° 15' 53.754" E
66	52° 47' 15.404" N	2° 44' 20.418" E	334	52° 44' 49.311" N	2° 15' 54.339" E



67	52° 47' 15.784" N	2° 44' 18.728" E	335	52° 44' 49.422" N	2° 15' 56.340" E
68	52° 47' 15.918" N	2° 44' 18.041" E	336	52° 44' 49.460" N	2° 15' 56.922" E
69	52° 47' 16.179" N	2° 44' 16.606" E	337	52° 44' 49.509" N	2° 15' 57.503" E
70	52° 47' 16.456" N	2° 44' 14.647" E	338	52° 44' 49.680" N	2° 15' 59.308" E
71	52° 47' 16.520" N	2° 44' 14.023" E	339	52° 44' 49.731" N	2° 15' 59.809" E
72	52° 47' 16.658" N	2° 44' 12.664" E	340	52° 44' 49.791" N	2° 16' 0.309" E
73	52° 47' 16.784" N	2° 44' 10.663" E	341	52° 44' 51.112" N	2° 16' 10.573" E
74	52° 47' 16.834" N	2° 44' 8.653" E	342	52° 44' 51.112" N	2° 16' 10.573" E
75	52° 47' 16.807" N	2° 44' 6.642" E	343	52° 45' 49.555" N	2° 23' 47.080" E
76	52° 47' 16.703" N	2° 44' 4.638" E	344	52° 45' 49.556" N	2° 23' 47.093" E
77	52° 47' 16.559" N	2° 44' 3.046" E	345	52° 45' 49.762" N	2° 23' 48.593" E
78	52° 47' 15.589" N	2° 43' 55.247" E	346	52° 45' 50.105" N	2° 23' 50.522" E
79	52° 47' 14.341" N	2° 43' 45.216" E	347	52° 45' 50.521" N	2° 23' 52.412" E
80	52° 47' 13.615" N	2° 43' 39.381" E	348	52° 45' 51.008" N	2° 23' 54.255" E
81	52° 47' 13.538" N	2° 43' 38.765" E	349	52° 45' 51.565" N	2° 23' 56.044" E
82	52° 43' 46.039" N	2° 16' 19.075" E	350	52° 45' 52.188" N	2° 23' 57.772" E
83	52° 43' 45.182" N	2° 16' 10.004" E	351	52° 45' 52.876" N	2° 23' 59.431" E
84	52° 43' 44.634" N	2° 16' 0.162" E	352	52° 45' 53.626" N	2° 24' 1.017" E
85	52° 43' 44.531" N	2° 15' 54.221" E	353	52° 45' 54.434" N	2° 24' 2.521" E
86	52° 43' 44.490" N	2° 15' 51.462" E	354	52° 45' 55.299" N	2° 24' 3.939" E
87	52° 43' 44.512" N	2° 7' 23.550" E	355	52° 45' 56.215" N	2° 24' 5.265" E
88	52° 42' 44.166" N	2° 3' 14.512" E	356	52° 45' 57.180" N	2° 24' 6.493" E
89	52° 42' 43.152" N	2° 3' 9.802" E	357	52° 45' 58.191" N	2° 24' 7.619" E
90	52° 42' 42.369" N	2° 3' 4.946" E	358	52° 45' 59.242" N	2° 24' 8.639" E
91	52° 42' 31.534" N	2° 1' 44.644" E	359	52° 46' 0.330" N	2° 24' 9.547" E
92	52° 42'	2° 1' 40.338"	360	52° 46'	2° 24'

	31.056" N	E		1.450" N	10.341" E
93	52° 42' 30.948" N	2° 1' 39.044" E	361	52° 46' 2.598" N	2° 24' 11.017" E
94	52° 42' 30.701" N	2° 1' 34.686" E	362	52° 46' 3.770" N	2° 24' 11.573" E
95	52° 42' 30.654" N	2° 1' 30.309" E	363	52° 46' 4.960" N	2° 24' 12.007" E
96	52° 42' 30.675" N	2° 1' 29.003" E	364	52° 46' 6.165" N	2° 24' 12.317" E
97	52° 42' 30.833" N	2° 1' 25.173" E	365	52° 46' 7.380" N	2° 24' 12.501" E
98	52° 42' 33.173" N	2° 0' 49.768" E	366	52° 46' 8.022" N	2° 24' 12.532" E
99	52° 42' 34.216" N	2° 0' 40.941" E	367	52° 46' 9.762" N	2° 24' 12.670" E
100	52° 42' 34.439" N	2° 0' 39.649" E	368	52° 50' 9.656" N	2° 24' 31.707" E
101	52° 42' 35.302" N	2° 0' 35.379" E	369	52° 51' 3.549" N	2° 34' 15.864" E
102	52° 42' 41.649" N	2° 0' 7.655" E	370	52° 51' 3.486" N	2° 34' 19.188" E
103	52° 42' 43.788" N	2° 0' 0.073" E	371	52° 51' 3.295" N	2° 34' 22.530" E
104	52° 42' 44.149" N	1° 59' 59.016" E	372	52° 51' 2.978" N	2° 34' 25.846" E
105	52° 42' 45.445" N	1° 59' 55.557" E	373	52° 51' 2.535" N	2° 34' 29.122" E
106	52° 42' 55.437" N	1° 59' 30.877" E	374	52° 51' 1.968" N	2° 34' 32.346" E
107	52° 42' 55.855" N	1° 59' 29.924" E	375	52° 51' 1.280" N	2° 34' 35.504" E
108	52° 42' 58.378" N	1° 59' 24.593" E	376	52° 51' 0.473" N	2° 34' 38.585" E
109	52° 42' 58.842" N	1° 59' 23.685" E	377	52° 50' 59.551" N	2° 34' 41.577" E
110	52° 43' 0.673" N	1° 59' 20.588" E	378	52° 50' 58.516" N	2° 34' 44.466" E
111	52° 43' 2.861" N	1° 59' 17.394" E	379	52° 50' 57.374" N	2° 34' 47.243" E
112	52° 43' 17.859" N	1° 58' 57.179" E	380	52° 50' 56.129" N	2° 34' 49.896" E
113	52° 43' 19.625" N	1° 58' 54.953" E	381	52° 50' 54.785" N	2° 34' 52.414" E
114	52° 43' 21.284" N	1° 58' 53.106" E	382	52° 50' 53.348" N	2° 34' 54.787" E
115	52° 43' 21.796" N	1° 58' 52.576" E	383	52° 50' 51.823" N	2° 34' 57.007" E
116	52° 43' 23.547" N	1° 58' 50.895" E	384	52° 50' 50.218" N	2° 34' 59.065" E
117	52° 45' 46.103" N	1° 56' 43.184" E	385	52° 50' 48.537" N	2° 35' 0.952" E

118	52° 46' 2.160" N	1° 56' 27.260" E	386	52° 50' 46.788" N	2° 35' 2.661" E
119	52° 46' 3.532" N	1° 56' 26.078" E	387	52° 50' 44.977" N	2° 35' 4.185" E
120	52° 46' 17.577" N	1° 56' 12.146" E	388	52° 50' 43.112" N	2° 35' 5.518" E
121	52° 46' 37.038" N	1° 55' 33.566" E	389	52° 50' 41.200" N	2° 35' 6.655" E
122	52° 46' 51.513" N	1° 54' 38.977" E	390	52° 50' 39.248" N	2° 35' 7.591" E
123	52° 46' 58.151" N	1° 53' 21.115" E	391	52° 50' 37.265" N	2° 35' 8.323" E
124	52° 46' 59.490" N	1° 52' 52.341" E	392	52° 50' 33.492" N	2° 35' 9.272" E
125	52° 47' 32.039" N	1° 39' 38.159" E	393	52° 50' 32.920" N	2° 35' 9.346" E
126	52° 47' 32.129" N	1° 39' 36.152" E	394	52° 46' 31.498" N	2° 26' 1.301" E
127	52° 47' 32.273" N	1° 39' 33.526" E	395	52° 46' 31.407" N	2° 26' 1.294" E
128	52° 47' 32.388" N	1° 39' 31.565" E	396	52° 46' 31.505" N	2° 26' 1.330" E
129	52° 47' 32.521" N	1° 39' 29.607" E	397	52° 46' 30.476" N	2° 26' 1.280" E
130	52° 47' 32.673" N	1° 39' 27.652" E	398	52° 46' 29.257" N	2° 26' 1.347" E
131	52° 47' 32.844" N	1° 39' 25.702" E	399	52° 46' 28.043" N	2° 26' 1.540" E
132	52° 47' 33.028" N	1° 39' 23.714" E	400	52° 46' 26.839" N	2° 26' 1.859" E
133	52° 47' 33.217" N	1° 39' 21.768" E	401	52° 46' 25.650" N	2° 26' 2.301" E
134	52° 47' 33.425" N	1° 39' 19.828" E	402	52° 46' 24.480" N	2° 26' 2.866" E
135	52° 47' 33.652" N	1° 39' 17.893" E	403	52° 46' 23.333" N	2° 26' 3.551" E
136	52° 47' 33.896" N	1° 39' 15.964" E	404	52° 46' 22.215" N	2° 26' 4.353" E
137	52° 47' 34.155" N	1° 39' 13.999" E	405	52° 46' 21.130" N	2° 26' 5.269" E
138	52° 47' 34.419" N	1° 39' 12.073" E	406	52° 46' 20.230" N	2° 26' 6.150" E
139	52° 47' 34.701" N	1° 39' 10.153" E	407	52° 46' 20.081" N	2° 26' 6.296" E
140	52° 47' 35.001" N	1° 39' 8.241" E	408	52° 46' 19.074" N	2° 26' 7.430" E
141	52° 47' 35.320" N	1° 39' 6.337" E	409	52° 46' 18.112" N	2° 26' 8.665" E
142	52° 47' 35.827" N	1° 39' 3.397" E	410	52° 46' 17.199" N	2° 26' 9.998" E
143	52° 47'	1° 39' 1.398"	411	52° 46'	2° 26'

	36.193" N	E		16.338" N	11.422" E
144	52° 47' 36.599" N	1° 38' 59.313" E	412	52° 46' 15.534" N	2° 26' 12.933" E
145	52° 47' 37.000" N	1° 38' 57.371" E	413	52° 46' 14.788" N	2° 26' 14.524" E
146	52° 47' 37.497" N	1° 38' 55.056" E	414	52° 46' 14.105" N	2° 26' 16.189" E
147	52° 47' 37.906" N	1° 38' 53.193" E	415	52° 46' 13.486" N	2° 26' 17.921" E
148	52° 47' 38.332" N	1° 38' 51.340" E	416	52° 46' 12.935" N	2° 26' 19.714" E
149	52° 47' 38.777" N	1° 38' 49.499" E	417	52° 46' 12.453" N	2° 26' 21.561" E
150	52° 47' 39.239" N	1° 38' 47.670" E	418	52° 46' 12.042" N	2° 26' 23.454" E
151	52° 48' 59.902" N	1° 33' 32.091" E	419	52° 46' 11.704" N	2° 26' 25.386" E
152	52° 49' 1.602" N	1° 33' 25.973" E	420	52° 46' 11.440" N	2° 26' 27.349" E
153	52° 49' 2.819" N	1° 33' 19.121" E	421	52° 46' 11.252" N	2° 26' 29.335" E
154	52° 49' 3.674" N	1° 33' 13.073" E	422	52° 46' 11.139" N	2° 26' 31.337" E
155	52° 49' 3.797" N	1° 33' 6.096" E	423	52° 46' 11.103" N	2° 26' 33.346" E
156	52° 49' 2.898" N	1° 32' 57.549" E	424	52° 46' 11.144" N	2° 26' 35.356" E
157	52° 49' 4.139" N	1° 32' 54.271" E	425	52° 46' 11.261" N	2° 26' 37.357" E
158	52° 49' 4.845" N	1° 32' 52.212" E	426	52° 46' 11.399" N	2° 26' 38.780" E
159	52° 49' 5.188" N	1° 32' 51.467" E	427	52° 46' 11.399" N	2° 26' 38.781" E
160	52° 49' 6.147" N	1° 32' 49.575" E	428	52° 46' 11.399" N	2° 26' 38.782" E
161	52° 49' 7.035" N	1° 32' 47.473" E	429	52° 47' 4.976" N	2° 33' 42.433" E
162	52° 49' 7.208" N	1° 32' 46.999" E	430	52° 47' 5.398" N	2° 33' 45.780" E
163	52° 49' 8.015" N	1° 32' 44.486" E	431	52° 47' 6.051" N	2° 33' 50.967" E
164	52° 49' 8.663" N	1° 32' 42.319" E	432	52° 47' 6.366" N	2° 33' 53.472" E
165	52° 49' 8.910" N	1° 32' 41.417" E	433	52° 47' 6.366" N	2° 33' 53.472" E
166	52° 49' 9.102" N	1° 32' 41.019" E	434	52° 47' 6.366" N	2° 33' 53.473" E
167	52° 49' 9.635" N	1° 32' 40.648" E	435	52° 47' 6.675" N	2° 33' 55.224" E
168	52° 49' 9.807" N	1° 32' 40.345" E	436	52° 47' 7.088" N	2° 33' 57.116" E

169	52° 49' 9.768" N	1° 32' 39.737" E	437	52° 47' 7.573" N	2° 33' 58.962" E
170	52° 49' 9.855" N	1° 32' 38.941" E	438	52° 47' 8.126" N	2° 34' 0.754" E
171	52° 49' 10.086" N	1° 32' 38.247" E	439	52° 47' 8.747" N	2° 34' 2.485" E
172	52° 49' 10.218" N	1° 32' 37.939" E	440	52° 47' 9.433" N	2° 34' 4.148" E
173	52° 49' 10.691" N	1° 32' 36.993" E	441	52° 47' 10.180" N	2° 34' 5.737" E
174	52° 49' 11.553" N	1° 32' 35.417" E	442	52° 47' 10.987" N	2° 34' 7.246" E
175	52° 49' 12.200" N	1° 32' 33.887" E	443	52° 47' 11.849" N	2° 34' 8.668" E
176	52° 49' 12.742" N	1° 32' 32.736" E	444	52° 47' 12.764" N	2° 34' 9.998" E
177	52° 49' 13.080" N	1° 32' 31.922" E	445	52° 47' 13.727" N	2° 34' 11.230" E
178	52° 49' 13.507" N	1° 32' 31.040" E	446	52° 47' 14.736" N	2° 34' 12.361" E
179	52° 49' 14.325" N	1° 32' 29.767" E	447	52° 47' 15.785" N	2° 34' 13.384" E
180	52° 49' 14.340" N	1° 32' 29.796" E	448	52° 47' 16.872" N	2° 34' 14.297" E
181	52° 49' 15.178" N	1° 32' 31.478" E	449	52° 47' 17.991" N	2° 34' 15.096" E
182	52° 49' 15.638" N	1° 32' 32.401" E	450	52° 47' 19.138" N	2° 34' 15.777" E
183	52° 49' 45.178" N	1° 33' 31.705" E	451	52° 47' 20.309" N	2° 34' 16.338" E
184	52° 49' 45.944" N	1° 33' 33.513" E	452	52° 47' 21.499" N	2° 34' 16.777" E
185	52° 49' 46.772" N	1° 33' 35.540" E	453	52° 47' 22.704" N	2° 34' 17.091" E
186	52° 49' 47.579" N	1° 33' 37.591" E	454	52° 47' 23.918" N	2° 34' 17.280" E
187	52° 49' 48.363" N	1° 33' 39.664" E	455	52° 47' 25.496" N	2° 34' 17.365" E
188	52° 49' 49.126" N	1° 33' 41.760" E	456	52° 48' 2.953" N	2° 26' 36.184" E
189	52° 49' 49.866" N	1° 33' 43.878" E	457	52° 48' 2.518" N	2° 26' 33.730" E
190	52° 49' 50.585" N	1° 33' 46.016" E	458	52° 48' 1.985" N	2° 26' 31.328" E
191	52° 49' 51.280" N	1° 33' 48.175" E	459	52° 48' 1.357" N	2° 26' 28.991" E
192	52° 49' 51.952" N	1° 33' 50.354" E	460	52° 48' 1.009" N	2° 26' 27.849" E
193	52° 49' 52.602" N	1° 33' 52.551" E	461	52° 48' 0.243" N	2° 26' 25.626" E
194	52° 49'	1° 33'	462	52° 47'	2° 26'

	53.228" N	54.767" E		59.827" N	24.547" E
195	52° 49' 53.831" N	1° 33' 57.000" E	463	52° 47' 58.931" N	2° 26' 22.461" E
196	52° 49' 54.410" N	1° 33' 59.251" E	464	52° 47' 57.954" N	2° 26' 20.477" E
197	52° 49' 54.965" N	1° 34' 1.518" E	465	52° 47' 57.436" N	2° 26' 19.526" E
198	52° 49' 55.496" N	1° 34' 3.800" E	466	52° 47' 56.343" N	2° 26' 17.712" E
199	52° 49' 56.003" N	1° 34' 6.098" E	467	52° 47' 55.181" N	2° 26' 16.022" E
200	52° 49' 56.486" N	1° 34' 8.409" E	468	52° 47' 53.953" N	2° 26' 14.462" E
210	52° 49' 56.944" N	1° 34' 10.735" E	469	52° 47' 53.316" N	2° 26' 13.734" E
202	52° 49' 57.378" N	1° 34' 13.073" E	470	52° 47' 52.000" N	2° 26' 12.384" E
203	52° 49' 57.786" N	1° 34' 15.423" E	471	52° 47' 51.322" N	2° 26' 11.763" E
204	52° 49' 58.171" N	1° 34' 17.784" E	472	52° 47' 49.931" N	2° 26' 10.635" E
205	52° 49' 58.530" N	1° 34' 20.157" E	473	52° 47' 48.498" N	2° 26' 9.662" E
206	52° 49' 58.864" N	1° 34' 22.539" E	474	52° 47' 47.030" N	2° 26' 8.847" E
207	52° 49' 59.173" N	1° 34' 24.930" E	475	52° 47' 45.531" N	2° 26' 8.195" E
208	52° 49' 59.456" N	1° 34' 27.330" E	476	52° 47' 44.124" N	2° 26' 7.739" E
209	52° 49' 59.714" N	1° 34' 29.738" E	477	52° 47' 42.819" N	2° 26' 7.446" E
210	52° 49' 59.947" N	1° 34' 32.153" E	478	52° 47' 42.518" N	2° 26' 7.422" E
211	52° 50' 0.154" N	1° 34' 34.574" E	479	52° 47' 40.198" N	2° 26' 6.759" E
212	52° 50' 0.336" N	1° 34' 37.001" E	480	52° 47' 32.505" N	2° 26' 6.180" E
213	52° 50' 0.492" N	1° 34' 39.433" E	481	52° 50' 2.151" N	2° 35' 9.316" E
214	52° 50' 0.623" N	1° 34' 41.869" E	482	52° 47' 39.858" N	2° 35' 10.667" E
215	52° 50' 0.727" N	1° 34' 44.308" E	483	52° 47' 38.680" N	2° 35' 10.728" E
216	52° 50' 0.806" N	1° 34' 46.750" E	484	52° 47' 37.466" N	2° 35' 10.917" E
217	52° 50' 0.859" N	1° 34' 49.193" E	485	52° 47' 36.261" N	2° 35' 11.231" E
218	52° 50' 0.887" N	1° 34' 51.638" E	486	52° 47' 35.071" N	2° 35' 11.670" E
219	52° 50' 0.888" N	1° 34' 54.083" E	487	52° 47' 33.900" N	2° 35' 12.231" E

220	52° 50' 0.864" N	1° 34' 56.528" E	488	52° 47' 32.753" N	2° 35' 12.912" E
221	52° 50' 0.814" N	1° 34' 58.972" E	489	52° 47' 31.634" N	2° 35' 13.711" E
222	52° 50' 0.739" N	1° 35' 1.414" E	490	52° 47' 30.547" N	2° 35' 14.623" E
223	52° 50' 0.637" N	1° 35' 3.854" E	491	52° 47' 29.498" N	2° 35' 15.647" E
224	52° 50' 0.510" N	1° 35' 6.290" E	492	52° 47' 28.489" N	2° 35' 16.777" E
225	52° 50' 0.357" N	1° 35' 8.722" E	493	52° 47' 27.525" N	2° 35' 18.010" E
226	52° 50' 0.178" N	1° 35' 11.150" E	494	52° 47' 26.611" N	2° 35' 19.340" E
227	52° 49' 59.974" N	1° 35' 13.572" E	495	52° 47' 25.748" N	2° 35' 20.762" E
228	52° 49' 59.745" N	1° 35' 15.987" E	496	52° 47' 24.942" N	2° 35' 22.271" E
229	52° 49' 59.490" N	1° 35' 18.396" E	497	52° 47' 24.194" N	2° 35' 23.860" E
230	52° 49' 59.209" N	1° 35' 20.797" E	498	52° 47' 23.509" N	2° 35' 25.523" E
231	52° 49' 58.903" N	1° 35' 23.190" E	499	52° 47' 22.888" N	2° 35' 27.254" E
232	52° 49' 58.573" N	1° 35' 25.573" E	500	52° 47' 22.334" N	2° 35' 29.046" E
233	52° 49' 58.217" N	1° 35' 27.947" E	501	52° 47' 21.849" N	2° 35' 30.892" E
234	52° 49' 57.836" N	1° 35' 30.310" E	502	52° 47' 21.436" N	2° 35' 32.784" E
235	52° 49' 57.430" N	1° 35' 32.661" E	503	52° 47' 21.096" N	2° 35' 34.716" E
236	52° 49' 56.999" N	1° 35' 35.001" E	504	52° 47' 20.829" N	2° 35' 36.678" E
237	52° 49' 56.544" N	1° 35' 37.328" E	505	52° 47' 20.638" N	2° 35' 38.665" E
238	52° 49' 56.064" N	1° 35' 39.641" E	506	52° 47' 20.523" N	2° 35' 40.667" E
239	52° 49' 55.560" N	1° 35' 41.940" E	507	52° 47' 20.485" N	2° 35' 42.678" E
240	52° 49' 55.032" N	1° 35' 44.225" E	508	52° 47' 20.523" N	2° 35' 44.688" E
241	52° 49' 54.480" N	1° 35' 46.494" E	509	52° 47' 20.637" N	2° 35' 46.691" E
242	52° 49' 53.904" N	1° 35' 48.746" E	510	52° 47' 20.743" N	2° 35' 47.801" E
243	52° 49' 53.304" N	1° 35' 50.982" E	511	52° 47' 20.744" N	2° 35' 47.806" E
244	52° 49' 52.681" N	1° 35' 53.200" E	512	52° 47' 21.786" N	2° 35' 56.101" E
245	52° 49'	1° 35'	513	52° 48'	2° 43'

	52.034" N	55.400" E		20.763" N	47.964" E
246	52° 49' 51.868" N	1° 35' 55.943" E	514	52° 48' 21.026" N	2° 43' 49.928" E
247	52° 48' 40.863" N	1° 39' 22.453" E	515	52° 48' 21.364" N	2° 43' 51.862" E
248	52° 48' 40.702" N	1° 39' 22.924" E	516	52° 48' 21.774" N	2° 43' 53.756" E
249	52° 48' 40.367" N	1° 39' 23.994" E	517	52° 48' 22.256" N	2° 43' 55.605" E
250	52° 48' 40.234" N	1° 39' 24.393" E	518	52° 48' 22.808" N	2° 43' 57.400" E
251	52° 48' 40.107" N	1° 39' 24.797" E	519	52° 48' 23.426" N	2° 43' 59.134" E
252	52° 48' 39.560" N	1° 39' 26.596" E	520	52° 48' 24.109" N	2° 44' 0.800" E
253	52° 48' 39.405" N	1° 39' 27.124" E	521	52° 48' 24.854" N	2° 44' 2.393" E
254	52° 48' 39.261" N	1° 39' 27.661" E	522	52° 48' 25.659" N	2° 44' 3.905" E
255	52° 48' 38.783" N	1° 39' 29.512" E	523	52° 48' 26.519" N	2° 44' 5.331" E
256	52° 48' 38.649" N	1° 39' 30.055" E	524	52° 48' 27.432" N	2° 44' 6.665" E
257	52° 48' 38.525" N	1° 39' 30.606" E	525	52° 48' 28.394" N	2° 44' 7.902" E
258	52° 48' 38.044" N	1° 39' 32.861" E	526	52° 48' 29.401" N	2° 44' 9.037" E
259	52° 48' 37.927" N	1° 39' 33.484" E	527	52° 48' 30.449" N	2° 44' 10.065" E
260	52° 48' 37.569" N	1° 39' 35.557" E	528	52° 48' 31.534" N	2° 44' 10.983" E
261	52° 48' 37.477" N	1° 39' 36.124" E	529	52° 48' 32.652" N	2° 44' 11.786" E
262	52° 48' 37.396" N	1° 39' 36.696" E	530	52° 48' 33.799" N	2° 44' 12.472" E
263	52° 48' 37.137" N	1° 39' 38.662" E	531	52° 48' 34.969" N	2° 44' 13.037" E
264	52° 48' 37.067" N	1° 39' 39.237" E	532	52° 48' 36.158" N	2° 44' 13.481" E
265	52° 48' 37.008" N	1° 39' 39.816" E	533	52° 48' 37.362" N	2° 44' 13.800" E
266	52° 48' 36.824" N	1° 39' 41.805" E	534	52° 48' 38.576" N	2° 44' 13.994" E
267	52° 48' 36.776" N	1° 39' 42.387" E	535	52° 48' 39.226" N	2° 44' 14.030" E
268	52° 48' 36.739" N	1° 39' 42.971" E	536	52° 51' 27.631" N	2° 44' 14.043" E



## PART 3

### Details of Licensed Marine Activities

1. Subject to the licence conditions at Part 4, 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) (licensable marine activities) of the 2009 Act—

- (a) the deposit at sea of the substances and articles specified in paragraph 5 of Part 2 of this licence;
- (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;
- (d) the disposal of up to 11,475,000 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 (including fibre optic cable) sandwave preparation works at disposal site references HU213, HU214, HU215 and HU216 within the extent of the Order limits seaward of MHWS, comprising—
  - (i) 9,000,000 m<sup>3</sup> for cable (including fibre optic cable) installation;
  - (ii) 75,000 m<sup>3</sup> for the offshore electrical platforms;
  - (iii) 1,900,000 m<sup>3</sup> for the export cables (including fibre optic cables) within the Order limits excluding the Haisborough, Hammond and Winterton Special Area of Conservation; and
  - (iv) 500,000 m<sup>3</sup> for the export cables (including fibre optic cables) within the part of the Haisborough, Hammond and Winterton Special Area of Conservation that falls within the Order limits;
- (e) the removal of static fishing equipment; and
- (f) the disposal of drill arisings in connection with any foundation drilling up to 14,137 m<sup>3</sup>.

2.—(1) Such activities are authorised in relation to the construction, maintenance and operation of—

(2) *Work No. 2 (phase 2)* – up to two offshore electrical platforms fixed to the seabed within the area shown on the works plan by one of the following foundation types: jacket (piled or suction caisson) or gravity base.

(3) *Work No. 3 (phase 2)* – a network of subsea cables and fibre optic cables within the area shown on the works plan comprising Work No. 2 and for the transmission of electricity and electronic communications between the offshore electrical platforms including one or more cable crossings.

(4) *Work No. 4A (phase 2)* – up to four subsea export cables and fibre optic cables between Work No. 2 and Work No. 4B consisting of subsea cables and fibre optic cables along routes within the Order limits seaward of MHWS including one or more offshore cable crossings.

(5) *Work No. 4B (phase 2)* – up to four subsea export cables and fibre optic cables between Work No. 4A and Work No. 4C consisting of subsea cables and fibre optic cables along routes within the Order limits between MLWS and MHWS at Happisburgh South, North Norfolk.

(6) In connection with Work Nos. 2, 3, 4A and 4B 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.

(7) In connection with such Work Nos. 2, 3, 4A and 4B, 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) beacons, fenders and other navigational warning or ship impact protection works.

## PART 4

### Conditions

#### Design parameters

1.—(1) The dimensions of any offshore electrical platform forming part of the authorised scheme (excluding towers, helipads, masts and cranes) must not exceed 100 metres in height when measured from HAT, 120 metres in length and 80 metres in width.

(2) In relation to an offshore electrical platform, each foundation using piles must not have—

- (a) more than 18 driven piles; or
- (b) a pile diameter which is more than five metres.

(3) In relation to an offshore electrical platform, the foundations must not have a seabed footprint area (excluding scour protection) of greater than 15,000 m<sup>2</sup>.

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

<i>Work</i>	<i>Length</i>	<i>Cable protection (m<sup>2</sup> and m<sup>3</sup>)</i>
Work No. 3 (Interconnector link)	150 kilometres	76,000m <sup>2</sup> 38,000 m <sup>3</sup>
Work No. 4A and 4B (export cable)	400 kilometres	102,086m <sup>2</sup> 59,836 m <sup>3</sup>

#### Phasing of the authorised scheme

3.—(1) Taken together with works authorised and proposed to be constructed pursuant to licence 1 (transmission)—

- (a) the total number of offshore electrical platforms forming part of the authorised scheme must not exceed two;
- (b) the total amount of scour protection for the offshore electrical platforms forming part of the authorised scheme must not exceed 20,000m<sup>2</sup> and 100,000 m<sup>3</sup>; and
- (c) the total amount of inert material of natural origin disposed within the offshore Order limits as part of the authorised scheme must not exceed 11,475,000 m<sup>3</sup>;
- (d) the total amount of disposal for drill arisings in connection with any foundation drilling must not exceed 14,137 m<sup>3</sup>;
- (e) the total length of cable and the amount of cable protection must not exceed the figures stated in condition 2 of this licence; and
- (f) in the Haisborough, Hammond and Winterton Special Area of Conservation, the total area of cable protection must not exceed 32,000m<sup>2</sup> and the total volume of cable protection must not exceed 20,800m<sup>3</sup>.

(2) Prior to the commencement of the authorised scheme the undertaker must give notice to the MMO detailing—

- (a) whether the authorised scheme will be constructed—
  - (i) in a single offshore phase under this licence; or
  - (ii) in two offshore phases under this licence and licence 1 (transmission); and

- (b) where the authorised scheme will be constructed in two offshore phases, the total number of offshore electrical platforms to be constructed in each phase.

### **Notifications and inspections**

4.—(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 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 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 12 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 fourteen days 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 construction of all offshore activities;

and 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. 2 and the expected vessel routes from the construction ports to the relevant location. A second notice to mariners must be issued advising of the start date of Work Nos. 3, 4A and 4B and the route of the sub-sea cables and fibre optic cables. Copies of all notices must be provided to the MMO, MCA 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 and monitoring programme approved under condition 9(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 within five days.

(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 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, the Kingfisher Information Service of Seafish and the UK Hydrographic Office.

(12) In case of exposure of cables on or above the seabed, the undertaker must within three days following identification of a potential cable exposure, notify mariners by issuing a notice to mariners and by informing Kingfisher Information Service of the location and extent of exposure. Copies of all notices must be provided to the MMO and MCA within five days.

### **Aids to navigation**

5.—(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 to 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 as set out in the aids to navigation management plan agreed pursuant to condition 9(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 4(11) and condition 4(12) are invoked, the undertaker must lay down such marker buoys, exhibit such lights and take such other steps for preventing danger to navigation as directed by Trinity House.

### **Colouring of structures**

6.—(1) Except as otherwise required by Trinity House the undertaker must colour all structures forming part of the authorised scheme yellow (colour code RAL 1023) from at least HAT 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 paint the remainder of the structures submarine grey (colour code RAL 7035).

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

7.—(1) Unless otherwise agreed in writing by the MMO all chemicals used in the construction of the authorised scheme 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(a) (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 this licence. This information must be submitted to the MMO by 15 February each year for the months August to January inclusive, and by 15 August 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 disposal site references HU213, HU214, HU215 and HU216 within the extent of the Order limits seaward of MHWS. Any other materials must be screened out before disposal of the inert material 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 undertake the survey agreed under condition 9(1)(h)(iii) following the swath-bathymetry survey referred to in condition 15(2)(b). Should any such obstructions resulting from burial of Work No. 4A or 4B (export cables and fibre optic cables) be identified which, in the reasonable opinion of the MMO, may be considered to interfere with fishing, the undertaker must take such steps to remove them as the MMO in its reasonable opinion may require.

(9) 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.

(10) 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 14(1)(d)(i).

(11) 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**

8.—(1) If, due to stress of weather or any other cause the master of a vessel determines that it is necessary to make a deposit which is not authorised under this licence, whether within or outside of the Order limits, because the safety of human life and/or of the vessel is threatened, within 48 hours the undertaker must notify full details of the circumstances of the deposit to the MMO.

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

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(a) S.I. 2002/1355.

## Pre-construction plans and documentation

9.—(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, in accordance with the Development Principles—
  - (i) the proposed location and choice of foundation of all offshore electrical platforms;
  - (ii) the height, length and width of all offshore electrical platforms;
  - (iii) the length and arrangement of all cables (including fibre optic cables) comprising Work Nos. 3, 4A and 4B;
  - (iv) the dimensions of all foundations;
  - (v) the proposed layout of all offshore electrical platforms including any exclusion zones identified under sub-paragraph (1)(h)(iv);
  - (vi) a plan showing the indicative layout of all offshore electrical platforms including all exclusion zones (insofar as not shown in (v) above) and showing the indicative programming of particular works as set out in the indicative programme to be provided under sub-paragraph (1)(b)(iv); and
  - (vii) any exclusion zones/micrositing requirements identified in any mitigation scheme pursuant to sub-paragraph (1)(i);

to ensure conformity with the description of Works No. 2, 3, 4A and 4B and compliance with conditions 1 to 3 above.

- (b) A construction programme and monitoring plan (which accords with the offshore 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;
  - (iii) proposed pre-construction surveys, baseline report format and content, construction monitoring, post-construction surveys and monitoring and related reporting in accordance with sub-paragraph (1)(h) and conditions 12, 13, 14 and 15; and
  - (iv) an indicative written construction programme for all offshore electrical platforms and cables including fibre optic cables comprised in the works at Part 3 (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 pre-construction monitoring;
- (bb) at least four months prior to construction, detail on construction monitoring; and
- (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 (1)(i);
  - (ii) soft start procedures with specified duration periods;
  - (iii) offshore electrical platform location and installation, including scour protection;

- (iv) cable (including fibre optic cable) installation;
  - (v) contractors;
  - (vi) vessels, vessels maintenance and vessels transit corridors; and
  - (vii) associated and ancillary works.
- (d) A project environmental management plan (in accordance with the outline 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; and
  - (v) a fisheries liaison and coexistence plan (which accords with the outline fisheries liaison and co-existence plan) 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.
- (e) A scour protection and cable protection plan (in accordance with the outline scour protection and cable protection plan) providing details of the need, type, sources, quantity, distribution and installation methods for scour protection and cable (including fibre optic cable) protection. For the avoidance of doubt “distribution” in this sub- paragraph must include quantities in respect of each structure comprised in the offshore works and intended to be subject to scour protection.
- (f) In the event that piled 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 and following current best practice as advised by the relevant statutory nature conservation bodies.
- (g) A cable specification, installation and monitoring plan, for the installation and protection of cables outside of the Haisborough, Hammond and Winterton Special Area of Conservation, to include—
- (i) technical specification of offshore cables (including fibre optic cable) 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 (including fibre optic cable) laying plan for the Order limits, incorporating a burial risk assessment to ascertain suitable burial depths and cable laying techniques, including cable landfall and cable protection measures;
  - (iii) proposals for monitoring offshore cables including cable (including fibre optic 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; and
  - (iv) appropriate methods such as a trawl or drift net to be deployed along Work No. 4A and 4B (export cables and fibre optic cables), following the survey referred to in condition 15(2)(b) to assess any seabed obstructions resulting from burial of the export cables and fibre optic cables.
- (h) An archaeological written scheme of investigation in relation to the offshore Order limits seaward of mean low water, which must accord with the outline written scheme of investigation (offshore) and industry good practice, in consultation with the statutory historic body (and, if relevant, North Norfolk District Council) 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 (and North Norfolk District Council where the report relates to the intertidal area) 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 13(2)(a) and in accordance with the offshore 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 5 for the lifetime of the authorised scheme.
  - (l) In the event that piled foundations are proposed to be used, a site integrity plan which accords with the principles set out in the in principle Norfolk Vanguard Southern North Sea Special Area of Conservation Site Integrity Plan , and which the MMO is satisfied would provide such mitigation as is necessary to avoid adversely affecting the integrity (within the meaning of the 2017 Regulations) of a relevant site, to the extent that harbour porpoise are a protected feature of that site.

(2) Pre-commencement surveys and 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 (offshore), and which has been submitted to and approved by the MMO.

(3) 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 5,000KJ.

**10.**—(1) Any archaeological reports produced in accordance with condition 9(1)(h)(iii) must be agreed with the MMO in consultation with the statutory historic body (and, if relevant, North Norfolk District Council).

(2) The design plan required by condition 9(1)(a) must be prepared by the undertaker and determined by the MMO in accordance with the Development Principles.

(3) Each programme, statement, plan, protocol or scheme required to be approved under condition 9 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.

(4) 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 9.

(5) Unless otherwise agreed in writing with the undertaker, the MMO must use reasonable endeavours to determine an application for approval made under condition 9 as soon as practicable and in any event within a period of four months commencing on the date the application is received by the MMO.

(6) The licensed activities must be carried out in accordance with the plans, protocols, statements, schemes and details approved under condition 9, unless otherwise agreed in writing by the MMO.

(7) No part of the authorised scheme may commence until the MMO, in consultation with the MCA, has confirmed in writing that the undertaker has taken into account and, so far as is applicable to that stage of the project, adequately addressed all MCA recommendations as appropriate to the authorised scheme contained within MGN543 “Offshore Renewable Energy Installations (OREIs) – Guidance on UK Navigational Practice, Safety and Emergency Response Issues” and its annexes.

### **Post-construction plans and documents**

11. The undertaker must conduct a swath bathymetric survey to IHO S44ed5 Order 1a across the area(s) within the Order limits in which construction works were carried out and provide the data and survey report(s) to the MCA and UKHO.

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

12.—(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.

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

13.—(1) The undertaker must, in discharging condition 9(1)(b), submit details (which accord with the offshore in principle monitoring plan) for written approval by the MMO in consultation with the 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 Annex 1 reef 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; and

- (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.

(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**

14.—(1) The undertaker must, in discharging condition 9(1)(b), submit details (which accord with the offshore in principle monitoring plan) for approval by the MMO in consultation with the relevant statutory nature conservation 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 the event that driven or part-driven pile foundations are proposed, 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 unless the MMO otherwise agrees in writing.

(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. If, in the opinion of the MMO in consultation with Natural England, the assessment shows significantly different impacts to those assessed in the environmental statement or failures in mitigation, all piling activity must cease until an update to the marine mammal mitigation protocol and further monitoring requirements have been agreed.

(4) In the event that piled foundations are proposed to be used, the details submitted in accordance with the offshore in principle monitoring plan must include proposals for monitoring marine mammals.

### **Post construction**

15.—(1) The undertaker must, in discharging condition 9(1)(b), submit details (which accord with the offshore 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) a survey to determine any change in the location, extent and composition of any benthic habitats of conservation, ecological and/or economic importance constituting Annex 1 reef habitats identified in the pre-construction survey in the parts of the Order limits in which construction works were carried out. The survey design must be informed by the results of the pre-construction benthic survey;
- (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 including fibre optic cables have been buried or protected; and

- (c) or contribute to any marine mammal monitoring referred to in the in principle monitoring plan submitted in accordance with condition 9(1)(b).

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

(4) Following installation of cables, the cable (including fibre optic cables) monitoring plan required under condition 9(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 authorised scheme and reviewed as specified within the plan, following cable burial surveys, or as instructed by the MMO.

### **Reporting of impact pile driving**

16. —(1) Only when driven or part-driven pile foundations are proposed to be used as part of the foundation installation the undertaker must provide the following information to the UK 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 to satisfy the Marine Noise Registry’s Forward Look requirements;
- (b) at six month intervals following the commencement of pile driving, information on the locations and dates of impact pile driving to satisfy the Marine Noise Registry’s Close Out requirements; and
- (c) within 12 weeks of completion of impact pile driving, information on the locations and dates of impact pile driving 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; and
- (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.

### **Reporting of cable protection**

17. —(1) Not more than 4 months following completion of the construction phase of the authorised scheme, the undertaker must provide the MMO and the relevant statutory nature conservation bodies with a report setting out details of the cable protection used for the authorised scheme.

(2) The report must include the following information—

- (a) location of the cable protection;
- (b) volume of cable protection; and
- (c) any other information relating to the cable protection as agreed between the MMO and the undertaker.

### **Restriction on cable installation construction works**

18. During the months of January to March inclusive, construction activities consisting of cable installation for Work No. 4A and Work No 4B must only take place with one main cable laying vessel.