

SCHEDULE 10

Article 29

Deemed licence under the Marine and Coastal Access Act 2009 – generation assets

PART 1

Licensed marine activities

1.—(1) In this licence—

“the 2008 Act” means the Planning Act 2008⁽¹⁾;

“the 2009 Act” means the Marine and Coastal Access Act 2009⁽²⁾;

“Annex 1 Habitat” means such habitat as defined under the EU Council Directive 92/43/EEC⁽³⁾ on the Conservation of Natural Habitats and of Wild Fauna and Flora;

“authorised deposits” means the substances and articles specified in paragraph 2(4) of Part 1 of this Schedule;

“authorised scheme” means Work No. 1 described in paragraph 2 of Part 1 of this Schedule;

“Cefas” means the Centre for Environment, Fisheries and Aquaculture Science;

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

“condition” means a condition in Part 2 and references in this licence to numbered conditions are to conditions with those numbers in Part 2;

“draft written scheme of investigation: archaeology and cultural heritage (offshore)” means the document certified as the draft written scheme of investigation: archaeology and cultural heritage (offshore) 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 Marine and Coastal Access Act 2009;

“environmental statement” means the document certified as the environmental statement by the Secretary of State for the purposes of this Order and submitted with the application;

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

“HVAC offshore collector station” means a platform with one or more decks, whether open or fully clad, accommodating electrical power transformers, low, medium and/or high voltage switch gear, instrumentation, protection and control systems, neutral earthing resistors, reactive compensation, standby electrical generation equipment, fuelling facilities, auxiliary and uninterruptible power supply systems and transformers, accommodation and/or emergency shelter, craneage, metering stations, meteorological equipment, helicopter landing facilities, messing facilities, potable water storage, black water separation equipment, control hub, drainage facilities, access equipment, J-tubes, marking and lighting and other

⁽¹⁾ 1990 c.8.

⁽²⁾ 2009 c.23.

⁽³⁾ OJ No L 206, 22.7.93, p7.

associated equipment and facilities to enable the transmission of electronic communications and for electricity to be collected at, and exported from, the platform;

“jacket foundation” means a steel jacket/lattice-type structure constructed of steel which is fixed to the seabed at two or more points with steel pin piles or steel suction buckets and associated equipment including scour protection, J-tubes, corrosion protection systems and access platform(s) and equipment, and “discrete jacket foundation types” shall include pre-piled or post-piled jackets, three-legged or four legged jackets, or straight or battered leg jackets;

“JNCC” means the Joint Nature Conservation Committee;

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

“LAT” means lowest astronomical tide;

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

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

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

“MCA” means the Maritime and Coastguard Agency;

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

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

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

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

“offshore Order limits” means the limits shown on the works plan within which the authorised scheme may be carried out;

“offshore substation” means a HVAC collector station;

“the Order” means the East Anglia ONE Offshore Wind Farm Order 2014;

“Order limits boundary coordinates plan” means the document certified as the Order limits boundary coordinates plan by the Secretary of State for the purposes of this Order;

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

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

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

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

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

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

“undertaker” means East Anglia ONE Limited;

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

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

“Work No. 2” means up to two HVDC offshore converter stations;

“Work No. 3A” means up to four HVDC export cables from Work No. 2 to MHWS; 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 shall be construed as a reference to a statute, order, regulation or instrument as amended by any subsequent statute, order, regulation or instrument or as contained in any subsequent re-enactment.

(3) Unless otherwise indicated—

(a) all times shall be taken to be Greenwich Mean Time (GMT);

(b) all co-ordinates shall be taken to be latitude and longitude degrees and minutes to two decimal places.

(4) Except where otherwise notified in writing by the relevant organisation, the primary point of contact with the organisations listed below and the address for returns and correspondence shall be—

(a) Marine Management Organisation

Offshore Marine Licensing

Lancaster House

Hampshire Court

Newcastle upon Tyne

NE4 7YH

Tel: 0300 123 1032

(b) Marine Management Organisation (local office)

Marine Environment Team

Pakefield Road

Lowestoft

Suffolk

NR33 0HT

(c) Trinity House

Tower Hill

London

EC3N 4DH

Tel: 020 7481 6900

(d) The United Kingdom Hydrographic Office

Admiralty Way

Taunton

Somerset

TA1 2DN

Tel: 01823 337 900

(e) Maritime and Coastguard Agency

Navigation Safety Branch

Bay 2/04, Spring Place

105 Commercial Road

Southampton

SO15 1EG

Tel: 023 8032 9191

(f) Centre for Environment, Fisheries and Aquaculture Science

Pakefield Road

Lowestoft

Suffolk

NR33 0HT

Tel: 01502 562 244

(g) Natural England

Foundry House

3 Millsands

Riverside Exchange

Sheffield

S3 8NH

Tel: 0300 060 4911

(h) English Heritage

Eastgate Court

195-205 High Street

Guildford

GU1 3EH

Tel: 01483 252 057

(i) JNCC

Inverdee House

Baxter Street

Aberdeen

AB11 9QA

Tel: 01224 266 550.

Details of licensed marine activities

2.—(1) Subject to the licence conditions, this licence authorises the undertaker (and any agent or contractor acting on their behalf) to carry out the following licensable marine activities under section 66(1) of the 2009 Act—

- (a) the deposit at sea of the substances and articles specified in sub-paragraph (4);
- (b) the construction of works in or over the sea and/or on or under the sea bed; and

- (c) the removal of sediment samples for the purposes of informing environmental monitoring under this licence during pre-construction, construction and operation.

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

Work No. 1—

- (a) an offshore wind turbine generating station with a gross electrical output capacity of up to 1,200 MW comprising up to 240 wind turbine generators each fixed to the seabed by one of three foundation types (namely, jacket foundation, gravity base foundation or suction caisson foundation), fitted with rotating blades and situated within the area shown on the works plan and further comprising paragraphs (b) to (d);
- (b) up to three HVAC offshore collector stations fixed to the seabed within the area shown on the works plan by one of two foundation types (namely jacket foundation or gravity base foundation);
- (c) up to one meteorological mast fixed to the seabed within the area shown on the works plan by one of four foundation types (namely jacket foundation, gravity base foundation, suction caisson foundation or monopile foundation);
- (d) a network of subsea cables within the area shown on the works plan between the WTGs and the HVAC offshore collector stations, up to two interconnection cables between the HVAC offshore collector stations, up to ten export cables between the HVAC offshore collector stations and Work No. 2, and up to one interconnection cable between the HVDC offshore converter stations comprising Work No. 2 for the transmission of electricity and electronic communications between these different structures including one or more cable crossings.

(3) And 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;
- (b) buoys, beacons, fenders and other navigational warning or ship impact protection works;
- (c) temporary works for the benefit or protection of land or structures affected by the authorised scheme; and
- (d) the disposal of up to 5,603,500 metres³ of inert material of natural origin within the offshore Order limits produced during construction drilling and seabed preparation for foundation works and cable sandwave preparation works at disposal site reference TH23 East Anglia ONE.

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

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

3. The grid coordinates for the authorised scheme are specified below and more particularly shown on the Order limits boundary coordinates plan—

Coordinates for the Order limits seaward of MHWS

<i>Point</i>	<i>Latitude (DMS)</i>	<i>Longitude (DMS)</i>
A	52° 17' 50.395"	2° 21' 1.372"
B	52° 19' 10.175"	2° 27' 36.407"
C	52° 23' 22.654"	2° 31' 40.044"
D	52° 21' 53.636"	2° 34' 13.872"
E	52° 18' 15.833"	2° 34' 13.645"

<i>Point</i>	<i>Latitude (DMS)</i>	<i>Longitude (DMS)</i>
F	52° 7' 14.982"	2° 32' 58.021"
G	52° 4' 46.512"	2° 31' 2.669"
H	52° 4' 45.732"	2° 28' 1.913"

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

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

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

PART 2

Conditions

Design parameters for wind turbines

1.—(1) No wind turbine generator forming part of the authorised scheme shall—

- (a) exceed a height of 200 metres when measured from LAT to the tip of the vertical blade;
- (b) exceed a height of 120 metres to the height of the centreline of the generator shaft forming part of the hub when measured from LAT;
- (c) exceed a rotor diameter of 170 metres;
- (d) be less than 675 metres from the nearest WTG in either direction perpendicular to the approximate prevailing wind direction (crosswind) or be less than 900 metres from the nearest WTG in either direction which is in line with the approximate prevailing wind direction (downwind);
- (e) have a distance of less than 22 metres between the lowest point of the rotating blade of the wind turbine and MHWS;
- (f) except with the consent of the Secretary of State, have an electrical output of less than 5 MW.

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

2. No meteorological mast, wind turbine generator or HVAC offshore collector station forming part of the authorised scheme shall be erected within the areas hatched black on the works plan, whose coordinates are specified below and more particularly shown on the Order limits boundary coordinates plan—

Coordinates for restricted build area

<i>Point</i>	<i>Latitude (DMS)</i>	<i>Longitude (DMS)</i>
i	52° 17' 29.501"	2° 21' 18.183"
ii	52° 19' 32.953"	2° 29' 16.557"
iii	52° 19' 47.657"	2° 34' 8.460"
iv	52° 20' 36.356"	2° 34' 8.509"
v	52° 20' 18.296"	2° 28' 48.188"
vi	52° 23' 17.520"	2° 31' 41.224"
vii	52° 21' 52.244"	2° 34' 8.586"

<i>Point</i>	<i>Latitude (DMS)</i>	<i>Longitude (DMS)</i>
viii	52° 18' 15.948"	2° 34' 8.368"
ix	52° 7' 15.824"	2° 32' 52.848"
x	52° 4' 49.734"	2° 30' 59.349"
xi	52° 4' 48.985"	2° 28' 5.706"

3.—(1) The total number of HVAC offshore collector stations forming part of the authorised scheme must not exceed three.

(2) The dimensions of any HVAC offshore collector stations forming part of the authorised scheme (excluding towers, helipads, masts and cranes) must not exceed 60 metres in height when measured from LAT, 30 metres in length and 40 metres in width.

4.—(1) The total length of the cables comprising Work No. 1(d) must not exceed 680 kilometres.

(2) The total amount of cable protection for the cables comprising Work No. 1(d) must not exceed 3,000 metres³.

5.—(1) In relation to a WTG, each gravity base foundation must not have—

- (a) diameter at the level of the seabed which is more than 50 metres;
- (b) a base height, where there is a flat base and a cylindrical shaft, which is more than 10 metres above the level of the seabed;
- (c) a column diameter, where there is a flat or conical base, of more than 7.5 metres at LAT.

(2) In relation to a WTG, each suction caisson foundation must not have—

- (a) a diameter at the level of the seabed which is more than 25 metres;
- (b) a base height where there is a flat base, which is more than 5 metres above the level of the seabed;
- (c) a column diameter which is more than 7.5 metres at LAT.

(3) In relation to a WTG, each jacket foundation must not have—

- (a) a width spacing between its legs at the level of the seabed which is more than 35 metres;
- (b) a pile diameter which is more than 2.5 metres in the case of pin piles or a suction bucket diameter of more than 5 metres;
- (c) more than one pile per leg or more than one suction bucket per leg;
- (d) more than four legs.

(4) In relation to a meteorological mast, each monopile foundation must not have a diameter greater than 6.5 metres.

(5) The total number of WTGs with gravity base foundations must not exceed 240.

(6) The total amount of scour protection for the WTGs and HVDC offshore converter stations forming part of the authorised scheme must not exceed 3.5 kilometres².

Notifications and inspections

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

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

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

(3) Copies of this licence must also be available for inspection at the following locations—

- (a) the undertaker's registered address;
- (b) any site office located at or adjacent to the construction site and used by the undertaker or its agents and contractors responsible for the loading, transportation or deposit of the authorised deposits; and
- (c) on board each vessel and at the office of any transport manager with responsibility for vessels from which authorised deposits or removals are to be made.

(4) The document referred to in sub-paragraph (1)(a) must be available for inspection by an authorised enforcement officer at all times at the locations set out in sub-paragraph (3).

(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 local MMO office in writing at least ten working days prior to the commencement of the licensed activities or any part of them and within ten working days of completion of any works comprised in the licensed activities.

(7) Prior to the commencement of the licensed activities the undertaker must publish in the Kingfisher Fortnightly Bulletin details of the vessel routes (if appropriate), timings and locations relating to the construction of the authorised scheme.

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

(9) The undertaker must ensure that the notices to mariners are updated and reissued at regular intervals, and at least fortnightly, and supplemented with VHF radio broadcasts agreed with the MCA in accordance with the construction programme approved under condition 11(a). Copies of all notices must be provided to the MMO.

(10) The undertaker must notify—

- (a) the Hydrographic Office of both the commencement (within two weeks), progress and completion (within two weeks) of the authorised scheme in order that all necessary amendments to nautical charts are made; and
- (b) the MMO, MCA and Trinity House once the authorised scheme is completed and any required lighting or marking has been established.

Offshore safety management

7.—(1) The authorised scheme shall not commence until the MMO, in consultation with the MCA, has confirmed in writing that the undertaker has taken into account and adequately addressed all MCA recommendations contained within MGN 371 “Offshore Renewable Energy Installations (OREIs) – Guidance on UK Navigational Practice, Safety and Emergency Response Issues” and its annexes including full details of the Emergency Co-operation Plans (ERCoP) for the construction, operation and decommissioning as appropriate to the authorised scheme.

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

Aids to navigation

8.—(1) The undertaker must at or near the authorised scheme during the whole period of the construction, operation, alteration, replacement or decommissioning of the authorised scheme exhibit such lights, marks, sounds, signals and other aids to navigation and take such other steps for the prevention of danger to navigation as Trinity House may from time to time direct.

(2) The undertaker must ensure that timely and efficient notices to mariners and other navigational warnings of the position and nature of the authorised scheme seaward of MHWS, are issued during and after the period of construction, alteration, replacement or decommissioning of the authorised scheme, such information to be

promulgated to mariners in the shipping and fishing industry as well as to recreational mariners, in accordance with condition 6(8) and (9).

(3) The undertaker must notify Trinity House as soon as reasonably practicable of both the progress and completion of the authorised scheme seaward of MHWS and any aids for navigation established from time to time.

(4) The undertaker must provide reports on the availability of aids to navigation periodically as requested by Trinity House.

(5) The undertaker must colour all structures yellow from at least highest astronomical tide to a height directed by Trinity House, or must colour the structure as directed by Trinity House from time to time.

(6) Subject to sub-paragraph (6), unless the Secretary of State otherwise directs, the undertaker must ensure that the wind turbine generators must be painted submarine grey (colour code RAL 7035).

(7) In case of injury to, or destruction or decay of, the authorised scheme or any part thereof the undertaker must as soon as reasonably practicable notify Trinity House and must lay down such buoys, exhibit such lights and take such other steps for preventing danger to navigation as Trinity House may from time to time direct.

Chemicals, drilling and debris

9.—(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⁽⁴⁾.

(2) All protective coatings and paints must be suitable for use in the marine environment and, where necessary, approved by the Health and Safety Executive. The use of such coatings must accord with best environmental practice.

(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) Where foundation drilling works are proposed, in the event that any system other than water-based mud is proposed the MMO's written approval in relation to the proposed disposal of any arisings must be obtained before the drilling commences, which may also require a marine licence.

(5) 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.

(6) The undertaker must ensure that any oil, fuel or chemical spill within the marine environment is reported to the MMO, Marine Pollution Response Team.

(7) The undertaker must ensure that any waste and/or debris arising from the construction of the authorised scheme or from equipment or temporary works placed below MHWS are removed on completion of the authorised scheme.

(8) At least 10 days prior to the commencement of the licensed activities the undertaker must submit and obtain the MMO's approval of an audit sheet covering all aspects of the construction of the authorised scheme. The audit sheet must include details of—

- (a) loading facilities;
- (b) vessels;
- (c) equipment;
- (d) shipment routes;
- (e) working schedules; and
- (f) all components and materials to be used in the construction of the authorised scheme.

(9) The audit sheet must be maintained throughout the construction of the authorised scheme and any changes notified immediately in writing to the MMO.

⁽⁴⁾ S.I. 2002/1355 as amended by S.I. 2011/982.

(10) In the event that the MMO becomes aware that any of the materials on the audit sheet cannot be accounted for it shall require the undertaker to carry out a side scan sonar survey to plot all obstructions across the relevant area(s) within the offshore Order limits where construction works and related activities have been carried out. In the event that the missing material is not located, the survey area may be extended at the discretion of the MMO. Local fishermen shall be invited to send a representative to be present during the survey. Any new obstructions that the MMO believes to be associated with the authorised scheme must be removed at the undertaker's expense.

(11) The undertaker must inform the MMO of the location and quantities of inert material disposed of each month under this licence, by submission of a disposal return by 31 January each year for the months August to January inclusive, and by 31 July each year for the months February to July inclusive.

(12) The undertaker must ensure that only inert material of natural origin, produced during construction drilling and seabed preparation for foundation works and cable sandwave preparation works shall be disposed of within the offshore Order limits (disposal site reference TH23 East Anglia ONE).

(13) 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.

(14) 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 the undertaker must locate the material and recover it unless otherwise agreed with the MMO.

Force majeure

10. If, due to stress of weather or any other cause the master of a vessel determines that it is necessary to deposit the authorised deposits outside of the Order limits because the safety of human life and/or of the vessel is threatened, within 48 hours full details of the circumstances of the deposit must be notified to the MMO.

Pre-construction plans and documentation

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

- (a) a design plan at a scale of between 1:25,000 and 1:50,000, including detailed representation on the most suitably scaled admiralty chart, to be agreed in writing with the MMO in consultation with Trinity House and the MCA which shows—
 - (i) the proposed location and choice of foundation of all wind turbine generators, offshore substations and the meteorological mast;
 - (ii) the height to the tip of the vertical blade; height to the centreline of the generator shaft forming part of the hub;
 - (iii) rotor diameter and spacing of all wind turbine generators;
 - (iv) the height length and width of all offshore substations;
 - (v) the height of all lattice towers forming part of the meteorological mast;
 - (vi) the length and arrangement of all cables comprising Work No. 1(d);
 - (vii) the dimensions of all gravity base foundations;
 - (viii) the dimensions of all jacket foundations;
 - (ix) the dimensions of all suction caisson foundations;
 - (x) in relation to the meteorological mast, the dimensions of each monopile foundation;
 - (xi) the proposed layout of all wind turbine generators, offshore substations and meteorological masts including any exclusion zones under condition 2 and/or identified under sub-paragraph (h)(iv);
 - (xii) a plan showing the indicative layout of all wind turbine generators, offshore substations and meteorological masts including all exclusion zones (insofar as not shown in paragraph (xi)) and showing the indicative programming of particular works as set out in the indicative programme to be provided under sub-paragraph (b)(iv); and

- (xiii) any exclusion zones/micrositing requirements identified in any mitigation scheme pursuant to sub-paragraph (i);
- to ensure conformity with the description of Work No. 1 and compliance with conditions 1 to 5;
- (b) a construction programme and 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 monitoring and related reporting in accordance with sub-paragraph (h) and conditions 17, 18 and 19; and
 - (iv) an indicative written construction programme for all wind turbine generators, offshore substations, meteorological masts and cables comprised in the works at paragraph 2(2) of Part 1 (licensed marine activities) (insofar as not shown in paragraph (ii));

with details pursuant to paragraph (iii) to be submitted to the MMO as part of the monitoring plan in accordance with the following—

 - (aa) at least four months prior to the first survey, detail of the pre-construction surveys and an outline of all proposed monitoring;
 - (bb) at least four months prior to construction, detail on construction monitoring;
 - (cc) at least four months prior to commissioning, detail of post-construction (and operational) monitoring;

unless otherwise agreed in writing with the MMO;
 - (c) a construction method statement in accordance with the construction methods assessed in the environmental statement and including details of—
 - (i) drilling methods and disposal of drill arisings and material extracted during seabed preparation for foundation works and cable sandwave preparation works;
 - (ii) soft start procedures with specified duration periods;
 - (iii) WTG, meteorological mast and offshore substation location and installation, including scour protection;
 - (iv) cable installation, including cable protection;
 - (v) contractors;
 - (vi) vessels and vessels transit corridors; and
 - (vii) associated and ancillary works;
 - (d) a project environmental management plan to include details of—
 - (i) a marine pollution contingency plan to address the risks, methods and procedures to deal with any spills and collision incidents during construction and operation of the authorised scheme in relation to all activities carried out;
 - (ii) a chemical risk assessment to include information regarding how and when chemicals are to be used, stored and transported in accordance with recognised best practice guidance;
 - (iii) waste management and disposal arrangements;
 - (iv) the appointment and responsibilities of a fisheries liaison officer and an environmental liaison officer; and
 - (v) a fisheries liaison and coexistence plan to ensure relevant fishing fleets are notified of commencement of licensed activities pursuant to condition 6 and to address the interaction of the licensed activities with fishing activities;
 - (e) a scour protection management and cable armouring plan providing details of the need, type, sources, quantity and installation methods for scour protection;
 - (f) only when driven or part-driven pile foundations are proposed to be used as part of the foundation installation, a marine mammal mitigation protocol in line with JNCC guidelines for minimising acoustic disturbance to marine mammals;

- (g) a cable specification and installation plan, to include—
 - (i) technical specification of offshore cables below MHWS, including a desk-based assessment of attenuation of electro-magnetic field strengths, shielding and cable burial depth in accordance with industry good practice; and
 - (ii) a detailed cable laying plan for the Order limits, incorporating a burial risk assessment to ascertain suitable burial depths and cable laying techniques, including cable protection and including contingency plans if burial is not achieved through preferred techniques;
 - (iii) appropriate methods such as trawl or drift net to be deployed along the offshore subsea cables within the authorised scheme as agreed in writing by the MMO, following the survey referred to in condition 19(2)(d) to assess any seabed obstructions resulting from burial of cables as part of the authorised scheme;
- (h) a written scheme of archaeological investigation in relation to the offshore Order limits seaward of mean low water in accordance with the draft written scheme of investigation: archaeology and cultural heritage (offshore), industry good practice and in consultation with English Heritage (and, if relevant, Suffolk Coastal District Council) to include—
 - (i) details of responsibilities of the undertaker, archaeological consultant and contractor;
 - (ii) a methodology for any further site investigation including any specifications for geophysical, geotechnical and diver or remotely operated vehicle investigations;
 - (iii) archaeological analysis and reporting of survey data, and timetable, which is to be submitted to the MMO within four months of any survey being completed;
 - (iv) delivery of any mitigation including, where necessary, identification and modification of archaeological exclusion zones;
 - (v) monitoring during and post construction, including a conservation programme for finds;
 - (vi) archiving of archaeological material; and
 - (vii) a reporting and recording protocol, including reporting of any wreck or wreck material during construction, operation and decommissioning of the authorised scheme;
- (i) a mitigation scheme for any Annex 1 features identified by the survey referred to in condition 17(2)(b);
- (j) an offshore operations and maintenance and monitoring plan, in accordance with the outline offshore operations and maintenance and monitoring 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) a coexistence statement demonstrating how the scheme design and construction methods, including cable specification, installation and armouring, reasonably avoids or mitigates effects on other marine users, including fisheries.

12.—(1) Any archaeological reports produced in accordance with condition 11(h)(iii) are to be agreed with English Heritage (and, if relevant, Suffolk Coastal District Council).

(2) The undertaker must ensure that a copy of any agreed archaeological report is deposited with the National Monuments Record, by submitting an English Heritage OASIS form with a digital copy of the report. If the report relates to the foreshore, the undertaker must notify Suffolk County Council that the OASIS report has been submitted to the National Monuments Record.

13.—(1) Each programme, statement, plan, protocol or scheme required to be approved under condition 11 must be submitted for approval at least four months prior to the intended start of construction, except where otherwise stated or unless otherwise agreed in writing by the MMO.

(2) No licensed activities shall commence until the MMO has approved in writing each programme, statement, plan, protocol or scheme required to be approved under condition 11 and the licensed activities must be carried out in accordance with the approved plans, protocols, statements, schemes and details approved under condition 11, unless otherwise agreed in writing by the MMO.

Foundation restrictions

14. No gravity base foundations may be installed in any area of the seabed with mobile sand waves of 5 metres or more, as identified by the swath-bathymetry survey carried out under condition 17(2)(c), unless otherwise agreed in writing by the MMO.

Reporting of engaged agents, contractors and vessels

15.—(1) The undertaker must provide the following information to the MMO as soon as is reasonably practicable prior to the agent, contractor or vessel engaging in the licensed activities—

- (a) the name and function of any agent or contractor appointed to engage in the licensed activities; 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.

Equipment and operation of vessels engaged in licensed activities

16.—(1) All vessels employed to perform the licensed activities must be constructed and equipped to be capable of the proper performance of such activities in accordance with the conditions of this licence and (save in the case of remotely operated vehicles or vessels) must comply with sub-paragraphs (2) to (7).

(2) All motor powered vessels must be fitted with—

- (a) electronic positioning aid to provide navigational data;
- (b) radar;
- (c) echo sounder; and
- (d) multi-channel VHF.

(3) No radio beacon or radar beacon operating on the marine frequency bands must be installed or used without the prior written approval of the Secretary of State.

(4) All vessels' names or identification must be clearly marked on the hull or superstructure.

(5) All vessels must exhibit signals in accordance with the requirements of the International Regulations for the Prevention of Collisions at Sea.

(6) All communication on VHF working frequencies must be in English.

(7) No vessel shall engage in the licensed activities until all the equipment specified in sub-paragraph (2) is fully operational.

Pre-construction monitoring and surveys

17.—(1) The undertaker must, in discharging condition 11(b)(iii), submit the monitoring plan for approval by the MMO, in consultation with the relevant statutory nature conservation bodies, containing details 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, extent and composition of any benthic habitats of conservation, ecological or economic importance;

- (b) appropriate surveys to determine the location and extent of any benthic communities/benthos constituting Annex 1 Habitat in whole or in part inside the area(s) within the Order limits in which it is proposed to carry out construction works;
- (c) high resolution swath-bathymetry survey(s), to include a 100% coverage and side scan sonar, of the area(s) within the Order limits in which it is proposed to carry out construction works;
- (d) appropriate surveys of existing ornithological activity inside the area(s) within the Order limits in which it is proposed to carry out construction works, and any wider area(s) where appropriate, which is required to test predictions in the environmental statement concerning key ornithological interests of relevance to the authorised scheme;
- (e) appropriate surveys of existing marine mammal activity inside the area(s) within the Order limits in which it is proposed to carry out construction works and any wider area(s) where appropriate which is required to test predictions in the environmental statement concerning key marine mammal interests of relevance to the authorised scheme.

(3) The undertaker must carry out the surveys agreed under sub-paragraph (1) and provide the baseline report to the MMO in the agreed format in accordance with the agreed timetable, unless otherwise agreed in writing by the MMO in consultation with the relevant statutory nature conservation bodies.

Construction monitoring

18.—(1) The undertaker must, in discharging condition 11(b), submit the monitoring plan for approval by the MMO, in consultation with the relevant statutory nature conservation bodies, containing details of any proposed monitoring, including methodologies and timings, to be carried out during the construction of the authorised scheme. The survey proposals must specify each survey's objectives. In any event, such monitoring must include measurements of noise generated by the installation of the first four jacket foundations of each discrete jacket foundation type to be installed.

(2) The undertaker must carry out the surveys approved under sub-paragraph (1), including any further noise monitoring required in writing by the MMO, and provide the agreed reports in the agreed format in accordance with the agreed timetable, unless otherwise agreed in writing with the MMO in consultation with the relevant statutory nature conservation bodies.

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

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

Post construction

19.—(1) The undertaker must, in discharging condition 11(b), submit the monitoring plan for approval by the MMO, in consultation with the relevant statutory nature conservation bodies, containing details of proposed post-construction surveys, including methodologies and timings, and a proposed format, content and timings for providing reports on the results. The survey proposals must specify each survey's objectives and explain how it will assist in either informing a useful and valid comparison with the pre-construction position and/or will enable the validation or otherwise of key predictions in the environmental statement.

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

- (a) appropriate surveys of any benthic communities/benthos constituting Annex 1 Habitat in whole or in part inside the area(s) within the Order limits in which construction works were carried out;
- (b) where gravity base foundations are proposed and if existing data is not available, appropriate surveys to validate predictions made in the environmental statement in relation to habitat creation and the ability of structures to act as vectors for non-native species;
- (c) appropriate ornithological surveys covering the area(s) within the Order limits in which construction works were carried out, and any wider area(s) where appropriate, as required to test predictions in the

environmental statement concerning key ornithological interests of relevance to the authorised scheme;

- (d) one high resolution swath bathymetric survey across the area(s) within the Order limits in which construction works were carried out to assess any changes in bedform topography and such further monitoring as may be agreed to ensure scour equilibrium has been reached and that the cables have been buried;
- (e) appropriate marine mammal surveys covering the area(s) within the Order limits in which construction works were carried out and any wider area(s) where appropriate, as required to test predictions in the environmental statement concerning key marine mammal interests of relevance to the authorised scheme;
- (f) post-construction traffic monitoring in accordance with the outline navigation monitoring strategy, including the provision of reports on the results of that monitoring periodically as requested by the MCA.

(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.

SCHEDULE 11

Article 29

Deemed licence under the Marine and Coastal Access Act 2009 – transmission assets

PART 1

Licensed marine activities

1.—(1) In this licence—

“the 2008 Act” means the Planning Act 2008;

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

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

“authorised deposits” means the substances and articles specified in paragraph 2(3);

“authorised scheme” means Works No. 2 and 3A described in paragraph 2 of this licence;

“CAA” means the Civil Aviation Authority constituted by the Civil Aviation Act 1982;

“Cefas” means the Centre for Environment, Fisheries and Aquaculture Science;

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

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

“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;

“draft written scheme of investigation: archaeology and cultural heritage (offshore)” means the document certified as the draft written scheme of investigation: archaeology and cultural heritage (offshore) 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 Marine and Coastal Access Act 2009;

“environmental statement” means the document certified as the environmental statement by the Secretary of State for the purposes of this Order and submitted with the application;

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

“HVDC offshore converter station” means a platform with one or more decks, whether open or fully clad, accommodating electrical power transformers, AC equipment including phase reactors and AC filters, AC/DC converter with switching devices, DC equipment including DC capacitors and DC filters and associated equipment, switch gear, cooling systems, instrumentation, protection and control systems, standby electrical generation equipment, fuelling facilities, auxiliary and uninterruptible power supply systems and transformers, accommodation and/or emergency shelter, craneage, meteorological equipment, helicopter landing facilities, messing facilities, potable water storage, black water separation equipment, control hub, drainage facilities, access equipment, J-tubes, marking and lighting and other associated equipment and facilities to enable the transmission of electronic communication and the conversion and transmission of electricity;

“jacket foundation” means a steel jacket/lattice-type structure constructed of steel which is fixed to the seabed at two or more points with steel pin piles or steel suction buckets and associated equipment including scour protection, J-tubes, corrosion protection systems and access platform(s) and equipment, and “discrete jacket foundation types” shall include pre-piled or post-piled jackets, three-legged or four legged jackets, or straight or battered leg jackets;

“JNCC” means the Joint Nature Conservation Committee;

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

“LAT” means lowest astronomical tide;

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

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

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

“MCA” means the Maritime and Coastguard Agency;

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

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

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

“offshore Order limits” means the limits shown on the works plan within which the authorised scheme may be carried out;

“offshore substation” means a HVDC converter station;

“the Order” means the East Anglia ONE Offshore Wind Farm Order 2014;

“Order limits boundary coordinates plan” means the document certified as the Order limits boundary coordinates plan by the Secretary of State for the purposes of this Order;

“outline Bawdsey bed level monitoring and remediation strategy” means the document certified as the outline Bawdsey bed level monitoring and remediation strategy by the Secretary of State for the purposes of this Order;

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

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

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

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

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

“undertaker” means East Anglia ONE Limited, which is the named undertaker, or any other person who has the benefit of this Order in accordance with section 156 of the 2008 Act for such time as that section applies to that person;

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

“Work No. 1” means the offshore generating stations comprising wind turbine generators, HVAC collector stations, meteorological masts and interconnecting subsea cables;

“Work No. 3B” means up to four cables and up to eight additional cable ducts laid underground from mean low water at Bawdsey Cliffs to the cable landfall; 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 shall be construed as a reference to a statute, order, regulation or instrument as amended by any subsequent statute, order, regulation or instrument or as contained in any subsequent re-enactment.

(3) Unless otherwise indicated—

(a) all times shall be taken to be Greenwich Mean Time (GMT);

(b) all co-ordinates shall be taken to be latitude and longitude degrees and minutes to two decimal places.

(4) Except where otherwise notified in writing by the relevant organisation, the primary point of contact with the organisations listed below and the address for returns and correspondence shall be—

(a) Marine Management Organisation

Offshore Marine Licensing

Lancaster House

Hampshire Court

Newcastle upon Tyne

NE4 7YH

Tel: 0300 123 1032

(b) Marine Management Organisation (local office)

Marine Environment Team

Pakefield Road

Lowestoft

Suffolk

NR33 0HT

- (c) Trinity House
Tower Hill
London
EC3N 4DH
Tel: 020 7481 6900

- (d) The United Kingdom Hydrographic Office
Admiralty Way
Taunton
Somerset
TA1 2DN
Tel: 01823 337 900

- (e) Maritime and Coastguard Agency
Navigation Safety Branch
Bay 2/04
Spring Place
105 Commercial Road
Southampton
SO15 1EG
Tel: 023 8032 9191

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

- (g) Natural England
Foundry House
3 Millsands
Riverside Exchange
Sheffield
S3 8NH
Tel: 0300 060 4911

- (h) English Heritage
Eastgate Court
195-205 High Street
Guildford
GU1 3EH
Tel: 01483 252 057

- (i) JNCC
Inverdee House
Baxter Street
Aberdeen
AB11 9QA
Tel: 01224 266 550.

Details of licensed marine activities

2.—(1) This licence authorises the undertaker (and any agent or contractor acting on their behalf) to carry out the following licensable marine activities under section 66(1) of the 2009 Act, subject to the conditions—

- (a) the deposit at sea of the substances and articles specified in sub-paragraph (3);
- (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.

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

Work No. 2 – up to two HVDC offshore converter stations fixed to the seabed within the area shown on the works plan by one of two foundation types (namely jacket foundation or gravity base foundation);

Work No. 3A – up to four HVDC export cables between Work No. 2 and MHWS consisting of subsea cables along routes within the Order limits seaward of MHWS including one or more cable crossings.

(3) And in connection with such Works No. 2 and 3A, 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;
- (b) buoys, beacons, fenders and other navigational warning or ship impact protection works;
- (c) temporary works for the benefit or protection of land or structures affected by the authorised scheme; and
- (d) the disposal of up to 245,000 metres³ of inert material of natural origin within the offshore Order limits produced during construction drilling and seabed preparation for foundation works and cable sandwave preparation works at disposal site reference TH23 East Anglia ONE.

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

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

3. The grid coordinates for the authorised scheme are specified below and more particularly shown on the Order limits boundary coordinates plan—

Coordinates for the Order limits seaward of MHWS

<i>Point</i>	<i>Latitude (DMS)</i>	<i>Longitude (DMS)</i>
1	52° 0' 0.777"	1° 25' 27.320"
2	52° 0' 41.137"	1° 27' 15.227"
3	52° 3' 53.611"	1° 35' 40.499"

<i>Point</i>	<i>Latitude (DMS)</i>	<i>Longitude (DMS)</i>
4	52° 5' 44.773"	1° 40' 57.350"
5	52° 8' 21.995"	1° 48' 34.767"
6	52° 9' 37.650"	1° 53' 5.293"
7	52° 9' 40.842"	1° 57' 7.198"
8	52° 11' 6.526"	2° 2' 15.690"
9	52° 12' 27.654"	2° 10' 3.953"
10	52° 12' 22.845"	2° 11' 9.965"
11	52° 13' 33.795"	2° 15' 22.225"
12	52° 13' 57.058"	2° 23' 6.622"
13	52° 9' 17.925"	2° 25' 36.436"
14	52° 11' 7.988"	2° 11' 30.888"
15	52° 10' 13.221"	2° 5' 28.775"
16	52° 8' 12.739"	1° 57' 41.369"
17	52° 8' 37.192"	1° 57' 49.886"
18	52° 8' 1.912"	1° 54' 31.662"
19	52° 8' 1.935"	1° 52' 54.350"
20	52° 4' 49.045"	1° 45' 5.590"
21	52° 2' 47.963"	1° 36' 38.722"
22	52° 2' 7.247"	1° 35' 19.374"
23	52° 0' 37.213"	1° 33' 17.008"
24	51° 58' 41.939"	1° 32' 27.850"
25	51° 57' 26.482"	1° 29' 55.449"
26	51° 57' 41.943"	1° 26' 39.492"
27	51° 59' 57.517"	1° 25' 20.806"
A	52° 17' 50.395"	2° 21' 1.372"
B	52° 19' 10.175"	2° 27' 36.407"
C	52° 23' 22.654"	2° 31' 40.044"
D	52° 21' 53.636"	2° 34' 13.872"
E	52° 18' 15.833"	2° 34' 13.645"
F	52° 7' 14.982"	2° 32' 58.021"
G	52° 4' 46.512"	2° 31' 2.669"
H	52° 4' 45.732"	2° 28' 1.913"

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

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

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

PART 2

Conditions

Design parameters

1. No HVDC offshore converter station forming part of the authorised scheme shall be erected within the areas hatched black on the works plan, whose coordinates are specified below and more particularly shown on the Order limits boundary coordinates plan—

Coordinates for restricted build area

<i>Point</i>	<i>Latitude (DMS)</i>	<i>Longitude (DMS)</i>
i	52° 17' 29.501"	2° 21' 18.183"
ii	52° 19' 32.953"	2° 29' 16.557"
iii	52° 19' 47.657"	2° 34' 8.460"
iv	52° 20' 36.356"	2° 34' 8.509"
v	52° 23' 17.520"	2° 31' 41.224"
vi	52° 21' 52.244"	2° 34' 8.586"
vii	52° 18' 15.948"	2° 34' 8.368"
viii	52° 20' 36.356"	2° 32' 52.848"
ix	52° 20' 18.296"	2° 28' 48.188"
x	52° 4' 49.734"	2° 30' 59.349"
xi	52° 4' 48.985"	2° 28' 5.706"

2.—(1) The total number of HVDC offshore converter stations forming part of the authorised scheme must not exceed 2.

(2) The dimensions of any HVDC offshore converter stations forming part of the authorised scheme (excluding towers, helipads, masts and cranes) must not exceed 60 metres in height when measured from LAT, 75 metres in length and 120 metres in width.

3.—(1) The total length of the cables comprising Work No. 3A must not exceed 400 kilometres.

(2) The total amount of cable protection for the cables comprising Work No. 3A must not exceed 24,000 metres³.

4. The total amount of scour protection for the HVAC offshore collector stations forming part of the authorised scheme must not exceed 0.029 kilometres².

Notifications and inspections

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

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

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

(3) Copies of this licence must also be available for inspection at the following locations—

- (a) the undertaker's registered address;

- (b) any site office located at or adjacent to the construction site and used by the undertaker or its agents and contractors responsible for the loading, transportation or deposit of the authorised deposits; and
- (c) on board each vessel and at the office of any transport manager with responsibility for vessels from which authorised deposits or removals are to be made.

(4) The document referred to in sub-paragraph (1)(a) must be available for inspection by an authorised enforcement officer at all times at the locations set out in sub-paragraph (3).

(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 local MMO office in writing at least ten working days prior to the commencement of the licensed activities or any part of them and within ten working days of completion of any works comprised in the licensed activities.

(7) Prior to the commencement of the licensed activities the undertaker must publish in the Kingfisher Fortnightly Bulletin details of the vessel routes (if appropriate), timings and locations relating to the construction of the authorised scheme.

(8) The undertaker must ensure that—

- (a) a notice to mariners is issued at least 10 working days prior to the commencement of the licensed activities or any part of them advising of the start date of Work No. 2 and the expected vessel routes from the local construction ports to the relevant location; and
- (b) a second notice to mariners is issued at least 10 working days prior to the commencement of Work No. 3A (subsea export cables to MHWS) and the route of the subsea export cables.

(9) The undertaker must ensure that the notices to mariners are updated and reissued at regular intervals, and at least fortnightly, and supplemented with VHF radio broadcasts agreed with the MCA in accordance with the construction programme approved under condition 11(a). Copies of all notices must be provided to the MMO.

(10) The undertaker must notify—

- (a) the Hydrographic Office of both the commencement (within two weeks), progress and completion (within two weeks) of the authorised scheme in order that all necessary amendments to nautical charts are made; and
- (b) the MMO, MCA and Trinity House once the authorised scheme is completed and any required lighting or marking has been established.

Offshore safety management

6.—(1) The authorised scheme shall not commence until the MMO, in consultation with the MCA, has confirmed in writing that the undertaker has taken into account and adequately addressed all MCA recommendations contained within MGN 371 “Offshore Renewable Energy Installations (OREIs) – Guidance on UK Navigational Practice, Safety and Emergency Response Issues” and its annexes including full details of the Emergency Co-operation Plans (ERCoP) for the construction, operation and decommissioning as appropriate to the authorised scheme.

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

Aids to navigation

7.—(1) The undertaker must at or near the authorised scheme during the whole period of the construction, operation, alteration, replacement or decommissioning of the authorised scheme exhibit such lights, marks, sounds, signals and other aids to navigation and take such other steps for the prevention of danger to navigation as Trinity House may from time to time direct.

(2) The undertaker must ensure that timely and efficient notices to mariners and other navigational warnings of the position and nature of the authorised scheme seaward of MHWS, are issued during and after the period of construction, alteration, replacement or decommissioning of the authorised scheme, such information to be

promulgated to mariners in the shipping and fishing industry as well as to recreational mariners, in accordance with condition 6(8) and (9).

(3) The undertaker must notify Trinity House as soon as reasonably practicable of both the progress and completion of the authorised scheme seaward of MHWS and any aids for navigation established from time to time.

(4) The undertaker must provide reports on the availability of aids to navigation periodically as requested by Trinity House.

(5) The undertaker must colour all structures yellow from at least highest astronomical tide to a height directed by Trinity House, or must colour the structure as directed by Trinity House from time to time.

(6) In case of injury to, or destruction or decay of, the authorised scheme or any part thereof the undertaker must as soon as reasonably practicable notify Trinity House and must lay down such buoys, exhibit such lights and take such other steps for preventing danger to navigation as Trinity House may from time to time direct.

Chemicals, drilling and debris

8.—(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 (as amended).

(2) All protective coatings and paints must be suitable for use in the marine environment and, where necessary, approved by the Health and Safety Executive. The use of such coatings must accord with best environmental practice.

(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) Where foundation drilling works are proposed, in the event that any system other than water-based mud is proposed the MMO's written approval in relation to the proposed disposal of any arisings must be obtained before the drilling commences, which may also require a marine licence.

(5) 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.

(6) The undertaker must ensure that any oil, fuel or chemical spill within the marine environment is reported to the MMO, Marine Pollution Response Team.

(7) The undertaker must ensure that any waste and/or debris arising from the construction of the authorised scheme or from equipment or temporary works placed below MHWS are removed on completion of the authorised scheme.

(8) At least 10 days prior to the commencement of the licensed activities the undertaker must submit and obtain the MMO's approval of an audit sheet covering all aspects of the construction of the authorised scheme. The audit sheet must include details of—

- (a) loading facilities;
- (b) vessels;
- (c) equipment;
- (d) shipment routes;
- (e) working schedules; and
- (f) all components and materials to be used in the construction of the authorised scheme.

(9) The audit sheet must be maintained throughout the construction of the authorised scheme and any changes notified immediately in writing to the MMO.

(10) In the event that the MMO becomes aware that any of the materials on the audit sheet cannot be accounted for it shall require the undertaker to carry out a side scan sonar survey to plot all obstructions across the relevant area(s) within the offshore Order limits where construction works and related activities have been carried out. In the event that the missing material is not located, the survey area may be extended at the

discretion of the MMO. Local fishermen shall be invited to send a representative to be present during the survey. Any new obstructions that the MMO believes to be associated with the authorised scheme must be removed at the undertaker's expense.

(11) The undertaker must inform the MMO of the location and quantities of inert material disposed of each month under this licence, by submission of a disposal return by 31 January each year for the months August to January inclusive, and by 31 July each year for the months February to July inclusive.

(12) The undertaker must ensure that only inert material of natural origin, produced during construction drilling and seabed preparation for foundation works and cable sandwave preparation works shall be disposed of within the offshore Order limits (disposal site reference TH23 East Anglia ONE).

(13) 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.

(14) 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 shall reasonably consider 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.

(15) The undertaker must undertake the survey agreed under condition 11(g)(iii) following the high resolution swath bathymetric survey referred to in condition 19(2)(d). Should any such obstructions be identified which may reasonably be considered to interfere with fishing the undertaker must take reasonable steps to remove them.

Force majeure

9. If, due to stress of weather or any other cause the master of a vessel determines that it is necessary to deposit the authorised deposits outside of the Order limits because the safety of human life and/or of the vessel is threatened, within 48 hours full details of the circumstances of the deposit must be notified to the MMO.

Pre-construction plans and documentation

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

- (a) a design plan at a scale of between 1:25,000 and 1:50,000, including detailed representation on the most suitably scaled admiralty chart, to be agreed in writing with the MMO in consultation with Trinity House and the MCA which shows—
 - (i) the proposed location and choice of foundation of all offshore substations;
 - (ii) the height, length and width of all offshore substations;
 - (iii) the length and arrangement of all cables comprising Work No. 3A;
 - (iv) the dimensions of all gravity base foundations;
 - (v) the dimensions of all jacket foundations;
 - (vi) the proposed layout of all offshore substations including any exclusion zones under condition 2 and/or identified under condition 11(h)(iv);
 - (vii) a plan showing the indicative layout of all offshore substations including all exclusion zones (insofar as not shown in paragraph (vi)) and showing the indicative programming of particular works as set out in the indicative programme to be provided under sub-paragraph (b)(iv); and
 - (viii) any exclusion zones/micrositing requirements identified in any mitigation scheme pursuant to condition 11(j);to ensure conformity with the description of Works No. 2 and 3A and compliance with conditions 1 to 5;
- (b) a construction programme and 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 monitoring and related reporting in accordance with conditions 11(h), 17, 18 and 19; and
- (iv) an indicative written construction programme for all offshore substations and cables comprised in the works at paragraph 2(2) of Part 1 (licensed marine activities) of this Schedule (insofar as not shown in paragraph (ii));

with details pursuant to paragraph (iii) to be submitted to the MMO as part of the monitoring plan in accordance with the following—

- (aa) at least four months prior to the first survey, detail of the pre-construction surveys and an outline of all proposed monitoring;
- (bb) at least four months prior to construction, detail on construction monitoring;
- (cc) at least four months prior to commissioning, detail of post-construction (and operational) monitoring;

unless otherwise agreed in writing with the MMO;

- (c) a construction method statement in accordance with the construction methods assessed in the environmental statement and including details of—
 - (i) drilling methods and disposal of drill arisings and material extracted during seabed preparation for foundation works and cable sandwave preparation works;
 - (ii) soft start procedures with specified duration periods;
 - (iii) offshore substation location and installation, including scour protection;
 - (iv) cable installation, including cable landfall and cable protection;
 - (v) contractors;
 - (vi) vessels and vessels transit corridors; and
 - (vii) associated and ancillary works;
- (d) a project environmental management plan to include details of—
 - (i) a marine pollution contingency plan to address the risks, methods and procedures to deal with any spills and collision incidents during construction and operation of the authorised scheme in relation to all activities carried out;
 - (ii) a chemical risk assessment to include information regarding how and when chemicals are to be used, stored and transported in accordance with recognised best practice guidance;
 - (iii) waste management and disposal arrangements;
 - (iv) the appointment and responsibilities of a fisheries liaison officer and an environmental liaison officer; and
 - (v) a fisheries liaison and coexistence plan to ensure relevant fishing fleets are notified of commencement of licensed activities pursuant to condition 6 and to address the interaction of the licensed activities with fishing activities;
- (e) a scour protection management and cable armouring plan providing details of the need, type, sources, quantity and installation methods for scour protection;
- (f) only when driven or part-driven pile foundations are proposed to be used as part of the foundation installation, a marine mammal mitigation protocol in line with JNCC guidelines for minimising acoustic disturbance to marine mammals;
- (g) a cable specification and installation plan, to include—
 - (i) technical specification of offshore cables below MHWS, including a desk-based assessment of attenuation of electro-magnetic field strengths, shielding and cable burial depth in accordance with industry good practice; and
 - (ii) a detailed cable laying plan for the Order limits, incorporating a burial risk assessment to ascertain suitable burial depths and cable laying techniques, including cable protection; and including contingency plans if burial is not achieved through preferred techniques;

- (iii) appropriate methods such as trawl or drift net to be deployed along the offshore subsea export cables between Work No. 1 in Schedule 10 (deemed licence under the Marine and Coastal Access Act 2009 – generation assets) and mean low water mark, following the survey referred to in condition 19(2)(d) to assess any seabed obstructions resulting from burial of the export cables;
- (h) a written scheme of archaeological investigation in relation to the offshore Order limits seaward of mean low water in accordance with the draft written scheme of investigation: archaeology and cultural heritage (offshore), industry good practice and in consultation with English Heritage (and, if relevant, Suffolk Coastal District Council) to include—
 - (i) details of responsibilities of the undertaker, archaeological consultant and contractor;
 - (ii) a methodology for any further site investigation including any specifications for geophysical, geotechnical and diver or remotely operated vehicle investigations;
 - (iii) archaeological analysis and reporting of survey data, and timetable, which is to be submitted to the MMO within four months of any survey being completed;
 - (iv) delivery of any mitigation including, where necessary, identification and modification of archaeological exclusion zones;
 - (v) monitoring during and post construction, including a conservation programme for finds;
 - (vi) archiving of archaeological material; and
 - (vii) a reporting and recording protocol, including reporting of any wreck or wreck material during construction, operation and decommissioning of the authorised scheme;
- (i) a bed level monitoring and remediation plan for that area of Work No. 3B below MHWS in accordance with the outline Bawdsey bed level monitoring and remediation strategy, to include—
 - (i) monitoring of bed levels of London clay for the operational lifetime of the authorised scheme; and
 - (ii) a methodology for any remedial works in that area identified as necessary by such monitoring;
- (j) a mitigation scheme for any Annex 1 features identified by the survey referred to in condition 17(2)(b);
- (k) an offshore operations and maintenance and monitoring plan, in accordance with the outline offshore operations and maintenance and monitoring 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.
- (l) a coexistence statement demonstrating how the scheme design and construction methods, including cable specification, installation and armouring, reasonably avoids or mitigates effects on other marine users, including fisheries.

11.—(1) Any archaeological reports produced in accordance with condition 11(h)(iii) are to be agreed with English Heritage (and, if relevant, Suffolk Coastal District Council).

(2) The undertaker must ensure that a copy of any agreed archaeological report is deposited with the National Monuments Record, by submitting an English Heritage OASIS form with a digital copy of the report. If the report relates to the foreshore, the undertaker must notify Suffolk County Council that the OASIS report has been submitted to the National Monuments Record.

12.—(1) Each programme, statement, plan, protocol or scheme required to be approved under condition 11 must be submitted for approval at least four months prior to the intended start of construction, except where otherwise stated or unless otherwise agreed in writing by the MMO.

(2) No licensed activities shall commence until the MMO has approved in writing each programme, statement, plan, protocol or scheme required to be approved under condition 11 and the licensed activities must be carried out in accordance with the approved plans, protocols, statements, schemes and details approved under condition 11, unless otherwise agreed in writing by the MMO.

Foundation restrictions

13. No gravity base foundations may be installed in any area of the seabed with mobile sand waves of 5 metres or more, as identified by the swath-bathymetry survey carried out under condition 17(2)(c), unless otherwise agreed in writing by the MMO.

Reporting of engaged agents, contractors and vessels

14.—(1) The undertaker must provide the following information to the MMO as soon as is reasonably practicable prior to the agent, contractor or vessel engaging in the licensed activities—

- (a) the name and function of any agent or contractor appointed to engage in the licensed activities; 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.

Equipment and operation of vessels engaged in licensed activities

15.—(1) All vessels employed to perform the licensed activities must be constructed and equipped to be capable of the proper performance of such activities in accordance with the conditions of this licence and (save in the case of remotely operated vehicles or vessels) must comply with sub-paragraphs (2) to (7).

(2) All motor powered vessels must be fitted with—

- (a) electronic positioning aid to provide navigational data;
- (b) radar;
- (c) echo sounder; and
- (d) multi-channel VHF.

(3) No radio beacon or radar beacon operating on the marine frequency bands must be installed or used without the prior written approval of the Secretary of State.

(4) All vessels' names or identification must be clearly marked on the hull or superstructure.

(5) All vessels must exhibit signals in accordance with the requirements of the International Regulations for the Prevention of Collisions at Sea.

(6) All communication on VHF working frequencies must be in English.

(7) No vessel shall engage in the licensed activities until all the equipment specified in sub-paragraph (2) is fully operational.

Pre-construction monitoring and surveys

16.—(1) The undertaker must, in discharging condition 10(b)(iii), submit the monitoring plan for approval by the MMO, in consultation with the relevant statutory nature conservation bodies, containing details 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, extent and composition of any benthic habitats of conservation, ecological or economic importance;

- (b) appropriate surveys to determine the location and extent of any benthic communities/benthos constituting Annex 1 Habitat in whole or in part inside the area(s) within the Order limits in which it is proposed to carry out construction works;
- (c) high resolution swath-bathymetry survey(s), to include a 100% coverage 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

17.—(1) The undertaker must, in discharging condition 10(b)(iii), submit the monitoring plan for approval by the MMO, in consultation with the relevant statutory nature conservation bodies, containing details 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.

(2) The undertaker must carry out the surveys approved 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.

Post construction

18.—(1) The undertaker must, in discharging condition 10(b)(iii), submit the monitoring plan for approval by the MMO, in consultation with the relevant statutory nature conservation bodies, containing details of proposed post-construction surveys, including methodologies and timings, and a proposed format, content and timings for providing reports on the results. The survey proposals must specify each survey's objectives and explain how it will assist in either informing a useful and valid comparison with the pre-construction position and/or will enable the validation or otherwise of key predictions in the environmental statement.

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

- (a) appropriate surveys of any benthic communities/benthos constituting Annex 1 Habitat in whole or in part inside the area(s) within the Order limits in which construction works were carried out;
- (b) one high resolution swath bathymetric survey across the area(s) within the Order limits in which construction works were carried out to assess any changes in bedform topography and such further monitoring as may be agreed to ensure scour equilibrium has been reached and that the cables have been buried.

(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.