SCHEDULE 1 Article 2

Authorised Project

PART 1

Authorised Development

A nationally significant infrastructure project as defined in sections 14 and 15 of the 2008 Act on the bed of the North Sea approximately 33 kilometres off the coast of Lincolnshire and 46 kilometres off the coast of North Norfolk within the Renewable Energy Zone, comprising—

Work No. 1 — an offshore wind turbine generating station with a gross electrical output capacity of up to 1200 MW comprising up to 288 wind turbine generators each fixed to the seabed by one of five foundation types (namely, monopile, jacket, tripod, suction bucket monopod or gravity base foundation), fitted with rotating blades and situated within the coordinates for the Order limits shown on the Works plan and specified below, and including the further works comprising (a) to (c) below;

Coordinates for the Order limits (Datum: WGS 84)

Point	*Latitude (DMS)*	*Longitude (DMS)*	*Point*	*Latitude (DMS)*	*Longitude (DMS)*
1	53° 29′ 12.732″ N	0° 41′ 28.839″ E	2	53° 31′ 42.626″ N	0° 42′ 58.367″ E
3	53° 32′ 16.234″ N	0° 51′ 40.692″ E	4	53° 24′ 31.248″ N	0° 59′ 39.385″ E
5	53° 24′ 31.234″ N	0° 56′ 1.766″ E			

(a) up to 4 collector substations fixed to the seabed by jacket or monopile foundations within the Order limits;

(b) up to 4 meteorological stations fixed to the seabed by monopile, jacket, tripod, suction bucket monopod or gravity base foundations within the Order limits;

(c) a network of cables laid underground within the Order limits between the wind turbine generators, the meteorological stations, any collector substation and Work No. 2, for the transmission of electricity and electronic communications between these different structures, including one or more cable crossings;

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

Work No. 2 — up to 4 HVDC substations or up to 2 large HVDC substations fixed to the seabed by gravity, jacket or monopile foundations, within the Order limits;

and in connection with such Work Nos. 1 and 2, and to the extent that they do not otherwise form part of any such work, further associated development within the Order limits comprising such other works as may be necessary or expedient for the purposes of or in connection with the relevant part of the authorised project and which fall within the scope of the work assessed by the environmental statement.

PART 2

Ancillary Works

Works within the Order limits which have been subject to an environmental impact assessment recorded in the environmental statement comprising—

(a) temporary landing places, or other means of accommodating vessels in the construction and/or maintenance of the authorised development; and

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

PART 3

Requirements

Interpretation

1. In this Part of this Schedule—

"the CAA" means the Civil Aviation Authority constituted by the Civil Aviation Act 1982(**1**);

"commence" means beginning to carry out any material operation (as defined in section 155 of the Planning Act 2008) forming part of the authorised project other than operations consisting of site clearance, archaeological investigations, environmental surveys, investigations for the purpose of assessing ground conditions, remedial work in respect of any contamination or other adverse ground conditions and "commencement" shall be construed accordingly;

"HAT" means highest astronomical tide;

"LAT" means lowest astronomical tide;

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

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

"the UK Hydrographic Office" means the UK Hydrographic Office of Admiralty Way, Taunton, Somerset, TA1 2DN or any replacement body or successor to its functions.

Time limits

2. The authorised development shall commence no later than the expiration of seven years beginning with the date this Order comes into force or such longer period as the Secretary of State may hereafter direct in writing.

Detailed design parameters

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

(a) exceed a height of 220 metres when measured from LAT to the tip of the vertical blade;

(b) exceed a height of 140 metres when measured from LAT to the height of the centreline of the generator shaft forming part of the hub;

(c) exceed a rotor diameter of 180 metres;

(**1**) 1982 c. 16.

(d) be less than a multiple of 4 times the rotor diameter from the nearest WTG in either direction perpendicular to the approximate prevailing wind direction (cross-wind) or be less than a multiple of 7 times the rotor diameter 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 or less than 27.4 metres between the lowest point of the rotating blade of the wind turbine and LAT.

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

Further offshore design requirements

4. No wind turbine generator, HVDC substation, large HVDC substation, collector substation, combined substation or meteorological station forming part of the authorised development shall be erected within the areas hatched black on the Works plan, whose coordinates are specified below—

Point	*Latitude (DMS)*	*Longitude (DMS)*	*Point*	*Latitude (DMS)*	*Longitude (DMS)*
1	53° 26′ 33.465″ N	0° 49′ 43.804″ E	2	53° 26′ 50.747″ N	0° 48′ 50.232″ E
3	53° 29′ 53.970″ N	0° 54′ 07.524″ E	4	53° 29′ 24.316″ N	0° 54′ 38.088″ E

5.—(1) The total number of offshore substations forming part of the authorised development shall not exceed eight, comprising either—

(a) up to four collector stations and up to four HVDC substations, or

(b) up to four collector stations and up to two large HVDC substations, or

(c) up to four combined substations.

(2) The dimensions of any collector substation forming part of the authorised development (excluding towers, helipads, masts and cranes) shall not exceed 60 metres in height when measured from LAT and shall not exceed 45 metres in length and 45 metres in width.

(3) The dimensions of any HVDC substation forming part of the authorised development (excluding towers, helipads, masts and cranes) shall not exceed 60 metres in height when measured from LAT, and shall not exceed 77 metres in length and 65 metres in width.

(4) The dimensions of any large HVDC substation forming part of the authorised development (excluding towers, helipads masts and cranes) shall not exceed 60 metres in height when measured from LAT, and shall not exceed 100 metres in length and 75 metres in width.

(5) The dimensions of any combined substation forming part of the authorised development (excluding towers, helipads, masts and cranes) shall not exceed 60 metres in height when measured from LAT, and shall not exceed a footprint area which totals the combined maximum footprint area of the collector station (45 metres x 45 metres) and the HVDC substation (75 metres x 65 metres) or large HVDC substation (100 metres x 75 metres) which is comprised in the combined substation.

(6) Each offshore substation, combined substation or large HVDC substation shall have no more than one supporting foundation.

(7) No lattice tower forming part of a meteorological station shall exceed a height of 200 metres above LAT.

(8) No meteorological station shall have more than one supporting foundation.

6. The total length of the cables comprising Work No. 1(c) shall not exceed 475 kilometres.

7.—(1) No monopile foundation forming part of the authorised development shall—

(a) in the case of a steel monopile foundation have a diameter of more than 7 metres for use with meteorological stations and for use in all other instances a diameter of more than 8.5 metres; and

(b) in the case of a concrete monopile foundation have a diameter of more than 8.5 metres for use with meteorological stations and for use in all other instances of diameter of more than 10.5 metres.

(2) No gravity base foundation forming part of the authorised development shall have—

(a) for use with large HVDC substations or combined substations a length at the level of the seabed of more than 100 metres, a width of 15 metres or a height of more than 15 metres; or for use in all other instances, a diameter at the level of the seabed of more than 45 metres;

(b) a base height, where there is a flat base, of more than 7 metres above the level of the seabed;

(c) a cone/column intersect which is higher than 32 metres above the top of the base;

(d) a cone diameter of more than 45 metres at its base;

(e) a column diameter, where there is a flat or conical base, of more than 10 metres.

(3) No jacket foundation forming part of the authorised development shall have—

(a) for use with wind turbine generators a width spacing between each leg at the level of the seabed of more than 30 metres and more than 4 legs;

(b) a pile diameter of more than 3 metres;

(c) more than one pile per leg or more than one suction can per leg;

(d) for use with offshore substations, combined substations or large HVDC substations more than 8 legs; and for use with combined substations more than 16 legs;

(e) a suction can which is more than 14 metres in diameter.

(4) No suction bucket monopod foundation forming part of the authorised development shall have—

(a) a diameter at the level of the seabed of more than 25 metres;

(b) a column diameter of more than 10.5 metres.

(5) No tripod foundation forming part of the authorised development shall have—

(a) more than three legs;

(b) a brace diameter of more than 5.5 metres;

(c) a pile diameter of more than 3 metres;

(d) more than one pile per leg;

(e) a column diameter of more than 8 metres;

(f) a suction can which is more than 14 metres in diameter.

Offshore safety management

8.—(1) No authorised development shall commence until the Secretary of State, in consultation with the MCA, has confirmed in writing that the undertaker has taken into account and adequately addressed all MCA recommendations contained within MGN371 "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 development.

(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

9. The undertaker shall at or near the authorised development during the whole period of the construction, operation, alteration, replacement or decommissioning of the authorised development exhibit such lights, marks, sounds, signals and other aids to navigation as Trinity House may from time to time direct.

10. The undertaker shall ensure that timely and efficient notices to mariners and other navigational warnings of the position and nature of the authorised development, are issued during and after the period of construction, alteration, replacement or decommissioning of the authorised development, such information to be promulgated to mariners in the shipping and fishing industry as well as to recreational mariners.

11. The undertaker shall notify Trinity House as soon as reasonably practicable of both the progress and completion of the authorised development and any aids for navigation established from time to time.

12. The undertaker shall provide reports on the availability of aids to navigation periodically as requested by Trinity House.

13. The undertaker shall notify the UK Hydrographic Office of the progress and completion of the authorised development.

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

(2) Subject to sub-paragraph (1), unless the Secretary of State otherwise directs, the undertaker shall ensure that the wind turbine generators shall be painted submarine grey (colour code RAL 7035).

Provision against danger to navigation

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

Air traffic

16.—(1) No construction of any wind turbine generator forming part of the authorised development shall commence until the Secretary of State having consulted with the Operator is satisfied that appropriate mitigation will be implemented and maintained for the life of the authorised development and that arrangements have been put in place with the Operator to ensure that such appropriate mitigation is implemented before the authorised development gives rise to any adverse impact on air traffic services.

(2) In this requirement—

"appropriate mitigation" means measures to prevent or remove any adverse impacts which the operation of the authorised development will have on the Operator's ability to provide safe and efficient air traffic services during the lifetime of the authorised development in respect of which all necessary stakeholder consultation has been completed by the Operator and all necessary approvals and regulatory consents have been obtained;

"Operator" means NATS (En Route) plc incorporated under the Companies Act (4129273) whose registered office is 5th Floor, Brettenden House South, Lancaster Place, London, WC2E 7EN or such other organisation as is licensed from time to time under sections 5 and 6 of

the Transport Act 2000 to provide air traffic services in an area which include the authorised development.

Lighting

17. The undertaker shall exhibit such lights, with such shape, colour and character as are required by Air Navigation Order 2009(**2**), or as directed by the CAA.

18.—(1) Each wind turbine generator forming part of the authorised development shall exhibit day and night a light with a luminous intensity of a maximum of 2000 candela and not less than 200 candela.

(2) The Requirement in sub-paragraph (1) shall not apply to the illumination of any wind turbine generator in respect of which the Secretary of State following consultation with the Ministry of Defence shall have dispensed with such requirement or shall have specified alternative lighting requirements in writing.

Onshore traffic management

19.—(1) No authorised development or part of the authorised development shall commence until a traffic management plan for the onshore port-related traffic to and from the selected port or ports for construction and/or operation of the authorised development, and relating to the authorised development, has been submitted to and approved in writing by the relevant planning authority in consultation with the relevant highway authority. The traffic management plans shall be implemented as approved at all times specified within the traffic management plan during the construction and/or operation of the authorised development, unless otherwise agreed by the relevant planning authority.

(2) For the purposes of this requirement, "relevant planning authority" and "relevant highway authority" mean the planning or highway authority or authorities in whose area the relevant port is located.

(3) For the purposes of this requirement "selected port" or "ports" means a port or ports situated in England and/or Wales.

Aggregates dredging

20.—(1) No part of the authorised development shall commence south of a line shown on the Works plan proceeding from point 1 to point 4 in sequence and lying 1,000 metres from the boundary of the active dredging area within the Humber Region Licensed Marine Aggregates Dredging Area 440 unless the Secretary of State has first approved a scheme of mitigation of impacts on aggregates dredging activity. Points 1 to 4 are specified below—

Point	*Latitude (DMS)*	*Longitude (DMS)*	*Point*	*Latitude (DMS)*	*Longitude (DMS)*
1	53° 25′ 14.64″ N	0° 53′ 51.36″ E	2	53° 25′ 3.42″ N	0° 54′ 33.96″ E
3	53° 25′ 2.46″ N	0° 56′ 41.88″ E	4	53° 24′ 31.26″ N	0° 58′ 33.9″ E

(2) The scheme of mitigation referred to in this requirement shall be implemented as approved.

(3) In this requirement—

"scheme of mitigation" means measures to maintain a construction restriction zone of 500 metres from the nearest wind farm structure where no aggregate dredging activity or aggregate

(**2**) S.I. 2009/3015, to which there are amendments not relevant to this Order.

dredging vessel manoeuvring will take place; and operational restriction zones extending 500 metres from the nearest wind farm structure where dredging vessel manoeuvring must not take place or extending 1,000 metres from the nearest wind farm structure where aggregate dredging activity may take place at some or all tidal states dependent on the aggregate dredging vessel hopper capacity;

"Wind farm structure" means any wind turbine generator, HVDC substation, collector substation, combined substation, meteorological station or cabling or other works comprised in the authorised development.

Pipeline or cable crossings

21.—(1) No part of the authorised development involving any pipeline and/or cable crossings shall commence unless and until the undertaker has ensured beforehand that the proposals and specifications for the pipeline and cable crossings meet the relevant statutory undertakers' safety standards in respect of that pipeline or cable crossing.

(2) On written request from the MMO the undertaker shall provide to the MMO copies of any documents and/or correspondence in relation to steps the undertaker has taken in compliance with sub-paragraph (1), subject to no more than four requests per calendar year.

Offshore decommissioning

22. No authorised development shall commence until a written decommissioning programme in compliance with any notice served upon the undertaker by the Secretary of State pursuant to section 105(2) of the 2004 Act has been submitted to the Secretary of State for approval.

Requirement for written approval

23. Where under any of the above Requirements the approval or agreement of the Secretary of State, the relevant planning authority or another person is required, that approval or agreement must be given in writing.