



**MARINE AND COASTAL ACCESS ACT 2009
SECTION 72**

DEEMED MARINE LICENCE - NOTICE OF VARIATION

The Triton Knoll Offshore Wind Farm Order 2013, SCHEDULE 2

VARIATION NUMBER:

1

AUTHORISED DEVELOPMENT:

Triton Knoll Offshore Wind Farm

LICENCE HOLDER:

Triton Knoll Offshore Wind Farm Ltd
2 Eastbourne Terrance
London
W2 6LG

DATE:

13 December 2018

COMPANY REGISTRATION NUMBER:

PREVIOUS VARIATIONS:


N/A

The Marine Management Organisation (“MMO”) received a request on 29 October 2018 from Triton Knoll Offshore Wind Farm Ltd for a variation to the deemed marine licence (“DML”) contained within Schedule 2 of the Triton Knoll Offshore Wind Farm Order 2013 (“the Order”).

NOTICE IS HEREBY GIVEN that the MMO varies the DML in relation to each of the provisions of the DML specified in the first column of the table in the Annex to this notice, by replacing the words set out in the second column of that table with the words set out in the third column of that table, in accordance with section 72(3)(d) of the Marine and Coastal Access Act 2009.

This variation has immediate effect from the date of this notice.

In accordance with regulation 3 of The Marine Licensing (Notices Appeals) Regulations 2011, you may appeal the notice of variation to the First-tier Tribunal. If you wish to appeal then in accordance with Rule 22(1)(b) of the Tribunal Procedure (First-tier Tribunal)(General Regulatory Chamber) Rules 2009 (SI 2009/1976) you have 28 days from the date of the sending of this notice to send or deliver a notice of appeal to the First-tier Tribunal.



Signed:

Name and Position: Rebecca Reed, Marine Licensing Case Officer

Date: 13 December 2018

Annex 1

<i>Provision</i>	<i>Previous text</i>	<i>Replacement text</i>
Schedule 2, Part 1, 1	“authorised scheme” means Work Nos. 1 and 2 and any associated development described in paragraph 2 of this licence or any part of those works but does not include works (c) or (d) in sub-paragraph (2) of paragraph 2 of this licence;...	“authorised scheme” means Work No. 1 and any associated development described in paragraph 2 of this licence or any part of those works but does not include works (c) or (d) in sub-paragraph (2) of paragraph 2 of this licence;...
Schedule 2, Part 1, 1	“collector substation” means a platform (either singly or as part of a combined substation) with one or more decks housing or incorporating high voltage alternating current electrical switchgear and/or electrical transformers and other equipment to enable power from multiple WTGs to be collected and electronically converted for transmission including permanent accommodation for operations and maintenance staff, helicopter landing facilities, craneage, access equipment, J-tubes, marking and lighting, and other associated equipment and facilities;	“collector substation” means a platform with one or more decks housing or incorporating high voltage alternating current electrical switchgear and/or electrical transformers and other equipment to enable power from multiple WTGs to be collected and electronically converted for transmission including permanent accommodation for operations and maintenance staff, helicopter landing facilities, craneage, access equipment, J-tubes, marking and lighting, and other associated equipment and facilities;...

Schedule 2, Part 1, 1	<p>“combined substation” means a single platform comprising a collector substation combined with either an HVDC substation or with a large HVDC substation;</p>	This section has been removed
Schedule 2, Part 1, 1	<p>“HVDC substation” means a platform (either singly or as part of a combined substation or linked by bridge to a collector substation) with one or more decks housing or incorporating high voltage direct current electrical switchgear and/or electrical transformers and other equipment to enable HVDC transmission to be used to convey the power output of the multiple WTGs to shore including permanent accommodation for operations and maintenance staff, helicopter landing facilities, craneage, access equipment, J-tubes, marking and lighting and other associated equipment and facilities;</p>	This section has been removed
Schedule 2, Part 1, 1	<p>“large HVDC substation” means an HVDC substation (either singly or as part of a combined substation) whose maximum dimensions exceed those of an HVDC substation as set out in condition 3(3) in Part 2 of this licence;</p>	This section has been removed
Schedule 2, Part 1, 1	<p>“meteorological station” means a lattice tower housing or incorporating equipment to measure</p>	This section has been removed

	wind speed and other wind characteristics, including a service platform housing electrical switchgear and communication equipment and associated equipment, oceanographic equipment and connecting cable to be sited within 300 metres of the mast, and marking and lighting;	
Schedule 2, Part 1, 1	“offshore substation” means either a collector substation or HVDC substation;	This section has been removed
Schedule 2, Part 1, 2 (2)	(2) 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 further comprising (a) to (c) below—	(2) Work No. 1 — an offshore wind turbine generating station with a gross electrical output capacity of up to 900 MW comprising up to 90 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 further comprising (a) to (b) below—
Schedule 2, Part 1, 2 (2a)	(a) up to 4 collector substations fixed to the seabed by jacket or monopile foundations within the Order limits;	(a) up to 2 collector substations fixed to the seabed by jacket or monopile foundations within the Order limits;
Schedule 2, Part 1, 2 (2b)	(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;	This section has been removed

Schedule 2, Part 1, 2 (2c)	(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;	(b) a network of cables laid underground within the Order limits between the wind turbine generators and any collector substation for the transmission of electricity and electronic communications between these different structures, including one or more cable crossings;
Schedule 2, Part 1, 2 (2)	<p>and associated development within the meaning of section 115(2) of the 2008 Act comprising—</p> <p>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;</p> <p>and in connection with such Work Nos. 1 to 2, to the extent that they do not otherwise form part of any such work—</p> <p>(a) 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 scheme within the scope of the work assessed by the environmental statement;</p>	<p>and in connection with such Work No. 1, to the extent that they do not otherwise form part of any such work—</p> <p>(a) 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 scheme within the scope of the work assessed by the environmental statement;</p>
Schedule 2, Part 2, Licence condition 2	2. No wind turbine generator, HVDC substation, large HVDC substation, collector substation, combined substation or meteorological station forming part of the authorised development	2. No wind turbine generator or collector substation forming part of the authorised development shall be erected within the areas hatched black on the Works plan, whose coordinates are specified

	shall be erected within the areas hatched black on the Works plan, whose coordinates are specified below—	below—
Schedule 2, Part 2, Licence condition 3 (1)	<p>3.—(1) The total number of offshore substations forming part of the authorised development shall not exceed eight, comprising either—</p> <p>(a) up to four collector stations and up to four HVDC substations, or</p> <p>(b) up to four collector stations and up to two large HVDC substations, or</p> <p>(c) up to four combined substations.</p>	3.—(1) The total number of offshore collector substations forming part of the authorised development shall not exceed two
Schedule 2, Part 2, Licence condition 3 (3-5)	<p>3.—(3) The dimensions of any HVDC substation forming part of the authorised scheme (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.</p> <p>(4) The dimensions of any large HVDC substation forming part of the authorised scheme (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.</p> <p>(5) The dimensions of any combined substation forming part of the authorised scheme (excluding towers, helipads, masts and</p>	These sections have been removed

	<p>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.</p>	
Schedule 2, Part 2, Licence condition 3 (6)	(6) Each offshore substation, combined substation or large HVDC substation shall have no more than one supporting foundation.	(3) Each collector substation shall have no more than one supporting foundation.
Schedule 2, Part 2, Licence condition 3 (7-8)	<p>(7) No lattice tower forming part of a meteorological station shall exceed a height of 200 metres above LAT.</p> <p>(8) No meteorological station shall have more than one supporting foundation.</p>	These sections have been removed
Schedule 2, Part 2, Licence condition 4	<p>4.—(1) The total length of the cables comprising Work No. 1(c) shall not exceed 475 kilometres. (2) The total length of cables comprising Work No. 1(c) which may be armoured with rock or stone shall not exceed 4,750 metres and such armouring shall not exceed 10,000 metres³</p>	<p>(1) 4.—(1) The total length of the cables comprising Work No. 1(b) shall not exceed 475 kilometres. (2) The total length of cables comprising Work No. 1(b) which may be armoured with rock or stone shall not exceed 4,750 metres and such armouring shall not exceed 10,000 metres³</p>
Schedule 2, Part 2, Licence condition 5 (1)	<p>5.—(1) No steel monopile foundation forming part of the authorised scheme shall—</p> <p>(a) in the case of a steel monopile foundation have a diameter of more than 7 metres for use with</p>	<p>5.—(1) No steel monopile foundation forming part of the authorised scheme shall—</p> <p>(a) in the case of a steel monopile foundation have a diameter of more than 8.5 metres; and</p>

	<p>meteorological stations and for use in all other instances a diameter of more than 8.5 metres; and</p> <p>(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 a diameter of more than 10.5 metres.</p>	<p>(b) in the case of a concrete monopile foundation have a diameter of more than 10.5 metres.</p>
<p>Schedule 2, Part 2, Licence condition 5 (2a)</p>	<p>5.—(2) No gravity base foundation forming part of the authorised scheme shall have—</p> <p>(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;</p>	<p>5.—(2) No gravity base foundation forming part of the authorised scheme shall have—</p> <p>(a) a diameter at the level of the seabed of more than 45 metres;</p>
<p>Schedule 2, Part 2, Licence condition 5 (3)</p>	<p>5.—(3) No jacket foundation forming part of the authorised scheme shall have—</p> <p>(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;</p> <p>(b) a pile diameter of more than 3 metres;</p> <p>(c) more than one pile per leg or more than one suction can per leg;</p> <p>(d) for use with offshore substations, combined substations or large HVDC substations more than 8 legs; and for use with combined substations</p>	<p>5.—(3) No jacket foundation forming part of the authorised scheme shall have—</p> <p>(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;</p> <p>(b) a pile diameter of more than 3 metres;</p> <p>(c) more than one pile per leg or more than one suction can per leg;</p> <p>(d) for use with collector substations more than 8 legs;</p> <p>(e) a suction can which is more than 14 metres in diameter.</p>

	<p>more than 16 legs;</p> <p>(e) a suction can which is more than 14 metres in diameter.</p>	
Schedule 2, Part 2, Licence condition 6 (8)	<p>(8) The undertaker shall ensure that a notice to mariners is issued at least 10 working days prior to the commencement of the licensed activities or any part of them advising of the commencement date of Work Nos. 1 and 2 (wind turbine generation station, offshore platforms or other offshore construction activities) and the expected vessel routes from the local construction ports to the relevant locations.</p>	<p>(8) The undertaker shall ensure that a notice to mariners is issued at least 10 working days prior to the commencement of the licensed activities or any part of them advising of the commencement date of Work No. 1 (wind turbine generation station, offshore platforms or other offshore construction activities) and the expected vessel routes from the local construction ports to the relevant locations.</p>
Schedule 2, Part 2, Licence condition 9 (1)	<p>9.—(1) The licensed activities shall not commence until the following have been submitted to and approved in writing by the MMO.</p>	<p>9.—(1) The licensed activities or any part of those activities shall not commence until the following (as far as relevant to that part) have been submitted to and approved in writing by the MMO.</p>
Schedule 2, Part 2, Licence condition 9 (2)	<p>9.—(2)...</p> <p>(a) the indicative proposed layout and location of all wind turbine generators, offshore substations and meteorological stations;</p> <p>(b) the choice of foundation of all wind turbine generators, offshore substations and meteorological stations;</p> <p>(c) the height to the tip of the vertical blade; height to the centreline of the generator shaft forming part of the hub; rotor diameter and spacing of all wind turbine generators;</p> <p>(d) the height length and width of all offshore</p>	<p>9.—(2)...</p> <p>(a) the indicative proposed layout and location of all wind turbine generators and collector substations;</p> <p>(b) the choice of foundation of all wind turbine generators and collector substations;</p> <p>(c) the height to the tip of the vertical blade; height to the centreline of the generator shaft forming part of the hub; rotor diameter and spacing of all wind turbine generators;</p> <p>(d) the height length and width of all collector substations;</p> <p>(e) the length and</p>

	<p>substations or combined substations;</p> <p>(e) the height of all lattice towers forming part of meteorological stations;</p> <p>(f) the length and arrangement of all cables comprising Work No. 1(c);</p> <p>(g) the dimensions of all steel monopile and concrete monopile foundations;</p> <p>(h) the dimensions of all gravity base foundations;</p> <p>(i) the dimensions of all jacket or tripod foundations;</p> <p>(j) the dimensions of all suction bucket monopod foundations;</p> <p>(k) all exclusion zones specified under subparagraph (9)(d) of this condition as are comprised in the works at paragraph 2(2) of Part 1 (Licensed Marine Activities) of this licence;</p> <p>(l) the exclusion zone specified in condition 2;</p> <p>(m) in plan form, the indicative programming of particular works as set out in the indicative written construction programme to be provided under subparagraph (3)(d);</p> <p>to ensure conformity with the description of Work Nos. 1 and 2 and compliance with conditions 1 to 5.</p>	<p>arrangement of all cables comprising Work No. 1(c);</p> <p>(f) the dimensions of all steel monopile and concrete monopile foundations;</p> <p>(g) the dimensions of all gravity base foundations;</p> <p>(h) the dimensions of all jacket or tripod foundations;</p> <p>(i) the dimensions of all suction bucket monopod foundations;</p> <p>(j) all exclusion zones specified under subparagraph (9)(d) of this condition as are comprised in the works at paragraph 2(2) of Part 1 (Licensed Marine Activities) of this licence;</p> <p>(k) the exclusion zone specified in condition 2;</p> <p>(l) in plan form, the indicative programming of particular works as set out in the indicative written construction programme to be provided under subparagraph (3)(d);</p> <p>to ensure conformity with the description of Work No. 1 and compliance with conditions 1 to 5.</p>
Schedule 2, Part 2, Licence condition 9 (3d)	<p>9.—(3)...</p> <p>(d) an indicative written construction programme for all wind turbine generators, offshore substations, meteorological substations</p>	<p>9.—(3)...</p> <p>(d) an indicative written construction programme for all wind turbine generators, collector substations and cables comprised in the licensed</p>

	and cables comprised in the licensed activities (insofar as not shown in paragraph (b)).	activities (insofar as not shown in paragraph (b)).
Schedule 2, Part 2, Licence condition 9 (4)	<p>(4) A construction method statement in accordance with the construction methods assessed in the environmental statement and including details of—</p> <p>(a) drilling methods and disposal of drill arisings;</p> <p>(b) turbine, meteorological mast and substation location and installation, including scour protection;</p> <p>(c) cable installation;</p> <p>(d) contractors;</p> <p>(e) vessels; and</p> <p>(f) associated works.</p>	<p>(4) A construction method statement in accordance with the construction methods assessed in the environmental statement and including details of—</p> <p>(a) drilling methods and disposal of drill arisings;</p> <p>(b) turbine and substation location and installation, including scour protection;</p> <p>(c) cable installation;</p> <p>(d) contractors;</p> <p>(e) vessels; and</p> <p>(f) associated works.</p>