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Date: 15 May 2024

DIRECTION ON AN EXCEPTIONAL EVENT CLAIM SUBMITTED BY GWYNT Y MôR OFTO UNDER AMENDED STANDARD CONDITION E12-J4 OF THE OFFSHORE TRANSMISSION LICENCE

Whereas:-

- 1. Gwynt-y-Môr OFTO plc (the **Licensee**) is the holder of an offshore transmission licence granted under section 6(1)(b) of the Electricity Act 1989 (the **Act**). Unless otherwise defined, capitalised terms in this direction and its annex shall have the same meaning given to them in the Licence.
- 2. In accordance with Paragraph 9 of Amended Standard Condition E12-J4 (the **Condition**):
- a) the Licensee considers that the transmission service reduction on the Licensee's transmission system commencing on 10 June 2023 and ending on 12 June 2023 was caused by an exceptional event;
- b) the Licensee notified the Gas and Electricity Markets Authority (the **Authority**) of the event within 14 days of its occurrence;
- c) the Licensee has provided details of the reduction in system availability that the Licensee considers resulted from the exceptional event; and
- d) the Authority considers, for the reasons specified in the Annex to this direction, that the event notified under sub-paragraph (b) above does not constitute an exceptional event as defined in Amended Standard Condition E12-J1 of the Licence. Accordingly, the Authority is not satisfied for the purposes of paragraph 9(d) of the Condition that the Event was an exceptional event.
- 3. The Authority gave the required notice in accordance with Paragraph 11 of the Condition to the Licensee on 7 March 2024 (the **Notice**).
- 4. The Licensee submitted representations on 9 April 2024.
- 5. For the reasons set out below, the Authority directs that there will be no adjustment in respect of the Events for the purposes of paragraph 9(d) of the Condition. The details of the Events and reasons for the Authority's decision are set out in the Annex to this Direction.
- 6. This direction constitutes notice pursuant to section 49A(1)(c) of the Act.



Yvonne Naughton Head of OFTO Licence and Compliance

Duly authorised by the Authority

ANNEX

REASONS FOR REJECTION OF AN EXCEPTIONAL EVENT CLAIM SUBMITTED BY GWYNT-Y-MÔR OFTO PLC UNDER PARAGRAPH 9 OF AMENDED STANDARD CONDITION E12-J4

1 Notification

- 1.1 Gwynt-y-Môr OFTO plc (the **Licensee**) notified the Authority on 12 June 2023 regarding a Transmission Service Reduction on its four subsea export cables. The transmission service reduction ran from 10 to 12 June 2023. The Licensee submitted an exceptional event claim to the Authority on 11 August 2023.
- 1.2 The Licensee states: "The initial trigger for the event was a lightning strike that hit the National Grid 400kV overhead line circuit. The lightning strike caused a fault on the overhead line which resulted in the circuit being tripped at 18:30 on 10 June 2023. Before the circuit tripped the fault caused the voltage level on the local 400kV network to be significantly reduced, described as a 'voltage dip'. The voltage dip lasted for circa 60ms."
- 1.3 The Licensee further states: "The voltage dip caused the output from the low voltage (400/230V) automatic voltage regulators (AVRs) that supply the OFTO's onshore substation at St Asaph to fall to a low enough level to initiate an autochangeover of the low voltage supply from the in service AVR to the standby AVR." Furthermore, the Licensee adds: "The under-voltage relay on the AVRs is set to 100ms, this should have been enough time to 'ride through' the voltage dip which lasted for c.60ms".
- 1.4 Furthermore, the Licensee adds: "The post incident investigation conducted by the O&M Operator has determined that the only explanation for the AVR under-voltage protection operating after the voltage dip has been cleared is that the AVR must have an inherent time lag when recovering from a voltage dip, this fact has only been discovered during the post incident investigation. Until this incident there was nothing to suggest that the AVRs have an inherent time lag when recovering from a voltage dip."
- 1.5 The Licensee considers that: "The lightning strike that triggered the outages was beyond the control of the OFTO." The Licensee also considers that the circumstances that led to the voltage level at the offshore substation being elevated to a point where it exceeded the threshold of the over-voltage protection setting was beyond its control.

2 Exceptional event requirements

- 2.1 Paragraph 9 of the Condition provides that the Authority shall adjust the value of the reported system incentive performance to offset the impact of an exceptional event where:
 - a) the licensee considers that an event on its transmission system that causes a transmission service reduction has been wholly or partially caused by an exceptional event;
 - b) the licensee has notified the Authority that a possible exceptional event had occurred, within 14 days of its occurrence;
 - c) the licensee has provided such information as the Authority may require in relation to the event; and
 - d) the Authority is satisfied that the notified event is an exceptional event.

2.2 An exceptional event is defined in Amended Standard Condition E12-J1 of the offshore transmission licence as follows:

"...an Event or circumstance that is beyond the reasonable control of the licensee and which results in or causes a Transmission Service Reduction and includes (without limitation) an act of God, an act of the public enemy, war declared or undeclared, threat of war, terrorist act, blockade, revolution, riot, insurrection, civil commotion, public demonstration, sabotage, act of vandalism, fire (not related to weather), governmental restraint, Act of Parliament, other legislation, bye law or directive (not being any order, regulation or direction under section 32, 33, 34 and 35 of the Act) or decision of a Court of competent authority or any other body having jurisdiction over the activities of the licensee provided that lack of funds shall not be interpreted as a cause beyond the reasonable control of the licensee. For the avoidance of doubt, weather conditions which are reasonably expected to occur at the location of the event or circumstance are not considered to be beyond the reasonable control of the licensee."

3 Reasons for decision

- 3.1 The Authority has considered the information provided by the Licensee against the conditions of the Licence and having regard to the open letter dated 22 October 2014 (the **Open Letter**) as updated on 4 January 2024¹.
- 3.2 Pursuant to subparagraph 9(d) of the Condition, the Authority is not satisfied that the Transmission Service Reduction was caused by an exceptional event, for the reasons set out below.
 - 1) STC and Grid Code requirements in case of a 'voltage dip'
- 3.3 Section K of the System Operator Transmission Owner Code (**STC**), amongst other things, obliges OFTOs to comply with sections of the Grid Code with that set out the time limits for Offshore Transmission Owners to restore transmission services following a 'voltage dip', and fault ride through requirements that require licensees to have capability of being able to remain connected to the system and operate through periods of low voltage.² If the Licensee's system had been set up in line with STC Code and Grid Code fault ride through requirements there should not have been the 'time lag' as described by the Licensee, therefore there should not have been any transmission service reduction as a result of this lightning strike.
- 3.4 We consider the trigger event, being the failure of the Licensee's system to withstand the lightning strike on National Grid Electricity Transmission's (**NGET**) system and the resulting 'voltage dip' was not beyond the Licensee's reasonable control. We expect Licensees to undertake due diligence prior to purchasing the offshore transmission assets and that both the process and calculations used in protection settings will be checked through routine asset testing and maintenance reviews and to comply with obligations in the STC. Any issues with the protection settings could and should have been identified as part of any due diligence and/or maintenance review.
- 3.5 Lightning is considered an expected event on the transmission network. Barring the cases where lightning events exceed weather conditions 'reasonably expected to occur at the location', protection systems should work and protect equipment and

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¹ <u>Update to open letter on the Authority's approach towards Exceptional Events (ofgem.gov.uk)</u>

² A copy of the STC can be found at <u>ESO | ESO (nationalgrideso.com)</u>.

the network. The Licensee has not claimed that the events on the NGETs system exceeded expected levels that would justify the failure of its system to meet STC/Grid Code requirements.

- 2) OFTO representations
- 3.6 We have considered the Licensee's representations, received on 9 April 2024. They do not change our minded-to-decision as outlined in the Notice shared with the Licensee.
- 3.7 In its representations, the Licensee expressed the view: "It is our view that it would be impractical and uneconomic to replicate the full range of design/commissioning procedures as part of a due diligence process (...).' It is thus the view of the Licensee 'that it was Prudent Operating Practice not to undertake a comprehensive review of all protection and control settings as part of the due diligence.'
- 3.8 The Authority maintains the view that the AVR and changeover settings are very basic parameters. Therefore, it is reasonable to expect that these will be verified as part of due diligence and subsequent testing & assurance regimes over the course of asset ownership.

Conclusion

- 3.8 Accordingly, and for the reasons set out above, the Authority is not satisfied for the purposes of paragraph 9(d) of the Condition that the resulting effects on the Licensee's system constitute an exceptional event.
- 3.9 Where there is no exceptional event, we have no discretion to make any adjustment to the monthly capacity weighted unavailability pursuant to the Licence.