#### To:

Blue Transmission London Array Limited The American Barns Banbury Road Lighthorne Warwickshire CV35 OAE

# DIRECTION UNDER PARAGRAPH 9 OF AMENDED STANDARD CONDITION E12-J4 OF THE OFFSHORE TRANSMISSION LICENCE

#### Whereas:-

- 1. Blue Transmission London Array Limited (the "Licensee") is the holder of an offshore transmission licence (the "Licence") granted under section 6(1)(b) of the Electricity Act 1989 (the "Act").
- 2. In accordance with Paragraph 10 of Amended Standard Condition E12-J4:
- a) the Licensee considers that the transmission service reduction that occurred on the Licensee's transmission system on 17 June 2017 were 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 constitutes an Exceptional Event as defined in Amended Standard Condition E12-J1. Accordingly, the Authority is satisfied for the purposes of paragraph 9(d) of the Condition that the Failure Event was an Exceptional Event.
- 3. The Authority gave notice in accordance with Paragraph 11 of Amended Standard Condition E12-J4 of the Licence to the Licensee on 15 February 2018 (the "Notice").
- 4. The Licensee submitted representations to the Authority on 22 February 2018. We have considered these carefully, and our views are set out in the Annex to this direction.

This direction constitutes notice pursuant to section 49A(1)(c) of the Act.

Dated: 23 February 2018

Akshay Kaul, Partner, Commercial Networks Duly authorised by the Authority

#### ANNEX

# REASONS FOR ACCEPTANCE OF AN EXCEPTIONAL EVENT CLAIM SUBMITTED BY TC ROBIN RIGG OFTO LIMITED UNDER PARAGRAPH 9 OF AMENDED STANDARD CONDITION E12-J4

#### 1 Notification

- 1.1 On 28 June 2017, Blue Transmission London Array Limited (the **Licensee**) notified the Authority under paragraph 9 of Amended Standard Condition E12-J4 (the **Condition**), regarding a transmission service reduction on the Blue Transmission London Array transmission system that began on 17 June 2017 (the **Failure Event**), which it considers was caused by an Exceptional Event.
- 1.2 On 13 June 2017, an alarm was activated on circuit breaker X290, at the point of connection between the Blue Transmission London Array transmission system onshore substation at Cleve Hill. The alarm indicated excessive running of the blue phase pump, which maintains the hydraulic oil pressure necessary to operate the circuit breaker. Investigations indicated a defect with the hydraulic drive mechanism. At that time, the ABB recommended that the drive was swapped as soon as possible.
- 1.3 The Licensee took a transmission service reduction on 17 June 2017 to replace the hydraulic drive mechanism on circuit breaker X290 (the **Failure Event**)<sup>1</sup>.
- 1.4 The Licensee provided further details regarding the cause of the transmission service reduction in a letter dated 21 December 2017, including a technical report produced by the manufacturer of the relevant equipment ABB (the **ABB Report**). The letter provided by the Licensee and the ABB Report concluded that the cause of the transmission service reduction was a crack occurring between the main and tank bores within the circuit breaker drive mechanism, caused by a manufacturing defect (the **Trigger Event**).
- 1.5 The ABB Report concluded that the root cause was the occurrence of recrystallization and stress corrosion cracking in some material batches<sup>2</sup> that resulted in a crack in the housing of the drive mechanism.
- 1.6 The ABB Report noted that the mean time between failures (MTBF) is drastically reduced in the batch of cylinders used at Cleve Hill; from 2463 years to 46 years<sup>3</sup>.

## 2 Exceptional Event requirements

- 2.1. Paragraph 9 of the Condition provides that the Authority shall adjust the value of the monthly capacity weighted unavailability to offset the impact of an Exceptional Event where:
  - a) the licensee considers that any 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

<sup>&</sup>lt;sup>1</sup> The Licensee's letter dated 21 December and the ABB Report explain these events in detail.

<sup>&</sup>lt;sup>2</sup> Page 4 & 5 of ABB Report refers

<sup>&</sup>lt;sup>3</sup> Page 4 of ABB Report refers.

occurred, within 14 days of each outage;

- 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 the European Commission or any other body having jurisdiction over the activities of the licensee provide 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 circumstances are not considered to be beyond the reasonable control of the licensee."

#### 3 Decision

3.1 The licensee has acted in accordance with the requirements of subparagraphs 9(a) to (c) of the Condition. Pursuant to subparagraph 9(d) of the Condition, the Authority is satisfied that the Failure Event is an Exceptional Event, for the reasons set out below.

## 4 Reasons for decision

- 4.1 The Authority has considered the information provided by the Licensee regarding the Failure Event against both the licence and the open letter dated 22 October 2014.
- 4.2 The ABB Report provides that the Failure Event occurred during the manufacturing process, so most likely occurred prior to the Licensee taking control of the assets. The Authority sought advice from its technical advisers, who were satisfied: firstly, that the ABB assessment as to the cause of the Trigger Event was a reasonable assessment; and secondly, that the Licensee could not have been reasonably expected to identify the Trigger Event before or following licence grant.
- 4.3 The risk of fault or failure of a circuit breaker falls within a category of risk that licensees assume at the point of asset transfer. The possibility of there being a fault or failure on the apparatus is a type of risk that is foreseeable, and in respect of which licensees are expected to plan and put in place contingency arrangements. Even if the specific fault is not foreseeable, the type of risk is foreseeable.
- 4.4 However, notwithstanding this reasoning, as set out in the in the London Array decision dated 30 October 2017, the Authority notes that licensees assume normal operational risk for the assets *only from the point of asset transfer*. Therefore, the Authority has previously recognised that, in respect of fault or failure of apparatus in circumstances where the causal trigger event leading to the transmission services reduction occurred *prior to* the licensee assuming normal operational risk

for the assets, it is appropriate to deem the event as being beyond the reasonable control of the licensee for the purposes of the definition of 'Exceptional Event'.

- 4.5 The same reasoning is applicable on the present facts. As outlined above, the technical evidence provided to the Authority demonstrates that the most likely causal trigger event for the Failure Event occurred prior to asset transfer, i.e. prior to the point at which the licensee assumed normal operational risk for the assets. It follows that the Authority is satisfied that the Failure Events are 'beyond the reasonable control of the licensee' for the purposes of the definition of 'Exceptional Event'.
- 4.6 For the above reasons, the Failure Events constitute an Exceptional Event as defined in Amended Standard Condition E12-J1. Accordingly, the Authority is satisfied for the purposes of paragraph 9(d) of the Condition that the Failure Event was an Exceptional Event.

# 5 Authority's adjustment to the reported system incentive performance under Paragraph 10 of Amended Standard Condition E12-J4

- 5.1 In accordance with Paragraph 10 of Amended Standard Condition E12-J4, the adjustment to reported system incentive performance shall be based on the extent to which the Authority is satisfied that the Licensee had taken steps, consistent with Good Industry Practice, to manage the impact of the events on the availability of services (both in anticipation of the event and after the event has occurred). The Authority has considered whether the Licensee has taken steps in accordance with Good Industry Practice to manage the impact of the events and obtained technical advice to inform its assessment. The Authority is satisfied that the Licensee took steps consistent with Good Industry Practice for the following reasons:-
  - After the occurrence of the Trigger Event, the Licensee took prudent and timely steps to identify the root cause of the fault and mobilised appropriate resources to repair the fault in a timely manner.
  - The Licensee has in place (and had in place prior to the Failure Events)
    operational and maintenance procedures which are consistent with Good
    Industry Practice. Specifically we note that the Licensee had purchased a
    spare mechanism that it was able to utilise, thus minimising the duration of
    the event
- 5.2 The Authority is thus satisfied that, the actions of the Licensee and those acting on its behalf in taking and managing the failure event were reasonable, proportionate and efficient.
- 5.3 Therefore, the Authority directs that the Licensee's reported system incentive performance be adjusted to offset the full duration of the transmission service reduction: 3,182 MWh reported system incentive performance for incentive year 5 (beginning 1 January 2017)

## 6. Link to previous claims and Licensees representations

- 6.1 The Licensee did not make any representations on this decision and is content for the decision to be published in full without any redactions.
- 6.2 We note that this is the second event on the Blue Transmission London Array transmission system due to the same cause. On 30 October 2017, we disallowed a claim for an exceptional event for a failure event that occurred in September 2016

(the **London Array x190 decision**). <sup>4</sup> The cause of that failure event was described as a sporadic failure. That opinion has been reconsidered by the manufacturer (ABB) and the cause of the event in 2016 is now considered to be the same as this event.

- 6.3 The Licensee requested that we reconsider our previous decision, the London Array x190 decision, "given the new evidence supplied by the manufacturer that there is a manufacturing defect which affects the batch of circuit breakers supplied to the Cleeve Hill substation". This evidence was not available when the Authority made the London Array x190 decision.
- 6.4 Paragraph 12 of the Condition provides that a Licensee can request that a direction issued by the Authority pursuant to paragraph 9 be modified, where the licensee considers that:
  - (a) there has been a material change to the information previously provided by the licensee in relation to the exceptional event specified in the previous direction; and
  - (b) it has notified the Authority of the material change, no later than 3 months after the end of the incentive period to which it relates.
- 6.5 To enable the Authority to modify its direction for the x190 decision, the Licensee was required to notify the Authority of the material change to the information previously provided by 31 March 2017. The Licensee did not notify the Authority of the change to the information until 18 December 2017. The Authority is therefore unable to review the London Array x190 decision.

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<sup>&</sup>lt;sup>4</sup> This decision can be found on our website.