To:

The General Manager
TC Robin Rigg OFTO Limited
Two London Bridge
London
SE1 9RA

DIRECTION UNDER PARAGRAPH 10 OF AMENDED STANDARD CONDITION E12-J4 OF THE OFFSHORE TRANSMISSION LICENCE

Whereas:-

- 1. TC Robin Rigg OFTO 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 following transmission service reductions on the Licensee's transmission system were caused by exceptional events:
- 19 August to 23 August 2016: the Initial Failure Event
- 26 August 2016: to top up gas level
- 3 September 2016: to top up gas level
- 11 September 2016: to top up gas level
- 18 September 2016: to top up gas level
- 27 to 30 September 2016: final repair
- b) the Licensee notified the Gas and Electricity Markets Authority (the "Authority") each of the events 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 events and further information required by the Authority in relation to the events; and
- d) the Authority considers, for the reasons specified in the Annex to this direction, that the events notified under sub-paragraph (b) above constitute Exceptional Events as defined in Amended Standard Condition E12-J1. Accordingly, the Authority is satisfied for the purposes of paragraph 10(d) of the Condition that the Failure Events were Exceptional Events.
- 3. The Authority gave notice in accordance with Paragraph 12 of Amended Standard Condition E12-J4 of the Licence to the Licensee on 20 February 2018 (the "Notice").
- 4. No representations were made by the Licensee in response to the Notice.

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

Dated: 6 March 2018

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

ANNEX 1

REASONS FOR ACCEPTANCE OF AN EXCEPTIONAL EVENT CLAIM SUBMITTED BY TC ROBIN RIGG LIMITED UNDER PARAGRAPH 10 OF AMENDED STANDARD CONDITION E12-J4

1 Notification

- 1.1 On 25 August 2016, TC Robin Rigg Limited (the **Licensee**) notified the Authority under paragraph 10 of Amended Standard Condition E12-J4 (the **Condition**), regarding a transmission service reduction on the Robin Rigg transmission system that began on 19 August 2016 (the **Initial Failure Event**), which it considers was caused by an Exceptional Event.
- 1.2 On 19 August 2016, an SF6 gas leak occurred on circuit breaker (**CB 290**) located within the onshore substation compound; the SF6 pressure levels fell rapidly and reached the lockout alarm stage requiring the Licensee to de-energise the Robin Rigg West circuit at 18:47. Before this date, there had been no indication that any gas leakage had occurred since the CB 290 began operating in 2009. Following the mobilisation of contractors and the necessary SF6 gas handling equipment, CB 290 was topped up with SF6 gas on 22 August 2016 and following testing, the circuit was safely returned to service at 11:09 on 23 August 2016.
- 1.3 Following the initial failure event, the Licensee took a further four outages to top up the SF6 gas levels and a final outage to undertake the repair. In total six outages occurred, as follows:
 - 19 August to 23 August 2016: the initial event
 - 26 August 2016: to top up gas level
 - 3 September 2016: to top up gas level
 - 11 September 2016: to top up gas level
 - 18 September 2016: to top up gas level
 - 27 to 30 September 2016: repair

(collectively, the **Failure Events**).

- 1.4 Between 23 August 2016 and 27 September 2016, the CB290 continued to lose gas. The O&M provider continually monitored the gas levels. During this period, four further outages were required to top up the SF6 gas levels to enable the CB290 to continue operating safely until it could be repaired. Following necessary preparations, including circuit isolation, removal of all SF6 gas, provision of crane, MEWP and scaffolding for access and removal of the CB 290 bushing, the final outage for the permanent repair was undertaken between 27 and 30 September.
- 1.5 On 28 April 2017, the Licensee provided an update as to the cause of the transmission service reduction, supported by a technical report from Gutteridge Haskins and Davey (the **GHD Report**). GHD concluded that the root cause was "inadequate application of grease in the GE factory1" (the **Trigger Event**).
- 1.6 GHD noted that the "cause of the SF₆ gas leak was the ingress of water into the flange sealing arrangement, where the combination of moisture, salt laden environment and dissimilar materials [promoted] the corrosion of aluminium

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¹ Para 5.1 of GHD report refers.

surfaces to the point where the integrity of the O ring sealing face was breached leading to significant gas leak"².

1.7 GHD further concluded that the inadequate greasing of the flange fixings during factory assembly "could not reasonably have been expected to be determined by the [OFTO] during the acquisition or operation of the assets". GHD stated, "It is not a normal maintenance activity, nor is it included within the [manufacturers] O&M manual to remove flange fixings to check for signs of water ingress during service as a prescribed maintenance operation"³. GHD concluded that there was "no indication that the operation and maintenance activities performed by [the O&M contractor] were in any way a contributory factor to the Failure Events"⁴.

2 Exceptional Event requirements

- 2.1. Paragraph 10 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 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 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 10(a) to (c) of the Condition. Pursuant to subparagraph 10(d) of the Condition, the

² Para 5.1 of GHD report refers.

³ Page 1 of GHD report refers

⁴ Page 1 of the GHD Report refers.

Authority is satisfied that the Failure Events are Exceptional Events, 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 Events against both the licence and the open letter dated 22 October 2014.
- 4.2 As evidenced by the GHD Report, the Initial Failure Event was the product of the assets failing due to a fault which 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 GHD's assessment as to the cause of the Trigger Event was 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 Blue Transmission London Array Limited exceptional event decision dated 30 October 2017 (the **London Array decision**)⁵, 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 10(d) of the Condition that the Failure Events were an Exceptional Event.

5 Authority's adjustment to the reported system incentive performance under Paragraph 11 of Amended Standard Condition E12-J4

5.1 In accordance with Paragraph 11 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

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⁵ This decision can be found on our website.

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:-

- 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.
- After the occurrence of the Initial Failure Event, the Licensee took prudent and timely steps to identify the root cause of the fault, restore transmission services and mobilised appropriate resources to repair the fault in a timely manner.
- The Licensee followed Good Industry Practice in topping up the gas levels so as to keep the cable operational until such time as the repair could be effected.
- 5.2 The Authority is thus satisfied that, the actions of the Licensee and those acting on its behalf in restoring transmission services 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 six transmission service reductions: 15,385 MWh reported system incentive performance for incentive year 6 (beginning 1 January 2016), as follows:

19 August to 23 August 2016
26 August 2016
3 September 2016
11 September 2016
18 September 2016
27 to 30 September 2016
8,130 MWh
81 MWh
71 MWh
44 MWh
6,997 MWh