

**To: National Grid Electricity Transmission plc**

**Electricity Act 1989  
Section 11A(1)(a)**

**Modification of the special conditions of the electricity transmission licence held  
by National Grid Electricity Transmission plc**

1. National Grid Electricity Transmission plc (NGET) is the holder of an electricity transmission licence ('the Licence') granted or treated as granted under section 6(b) of the Electricity Act 1989 ('the Act').
2. Under section 11A(2) of the Act, the Gas and Electricity Markets Authority ('the Authority')<sup>1</sup> gave notice on 1 March 2017 ('the Notice') that we propose to modify the following conditions of the Licence:
  - a. amending special condition 1A (Definitions and Interpretation);
  - b. amending special condition 4C (Balancing Services Activity Revenue Restriction on External Costs);
  - c. amending special condition 4D (Restriction on contracting with BSC parties);
  - d. amending special condition 4E (Requirement to conduct a Review and Continue to Develop Enduring Models for Forecasting the Costs of Procuring and Using Balancing Services);
  - e. amending special condition 4F (Requirement to Develop Enduring Methodologies for the purpose of Identifying a Target for the Costs of Procuring and Using Balancing Services);
  - f. removing old special condition 4G (Black Start Cost Incentive)
  - g. inserting new special condition 4G (Black Start Allowed Revenue);
  - h. removing old special condition 4J (The System Operator Innovation Roll-out Mechanism);
  - i. inserting new special condition 4J (SO-TO mechanism); and
  - j. amending special condition 4H (Forecasting Incentive),

in the manner set out in the Schedule to this Notice.

3. We stated that any representations to the modification proposal must be made on or before 29 March 2017.
4. A copy of the Notice was sent to the Secretary of State in accordance with section 11A(4)(b) of the Act, and we have not received a direction that the change should not be made.
5. We received four responses to the Notice, which we carefully considered. We have placed them on our website. Our response to these comments is set out in the accompanying decision letter.
6. It is necessary to make a number of minor alterations to the modifications set out in the Notice. These alterations are shown in yellow highlight in the attached Schedule 1. The reasons for any differences between the modifications set out in

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<sup>1</sup> The terms "the Authority", "we" and "us" are used interchangeably in this document.

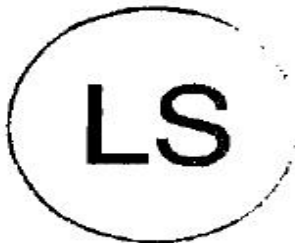
the Notice and the modifications reflected in Schedule 1 are to correct minor typographical errors and address minor issues raised in consultation responses.

7. We are proposing this modification to ensure that NGET, in its role as system operator, is better incentivised to:
  - a. minimise the cost of resolving imbalances and coordinating the flow of electricity on the electricity transmissions system;
  - b. increase transparency, providing the market with clear analysis and rationale for system operator actions;
  - c. increase transparency and confidence on the costs incurred by NGET for the provision of Black Start; and
  - d. improve the accuracy of wind generation and demand forecasts.
8. The effect of the proposed modification is to update the existing system operator incentive schemes, ensuring that they continue to encourage NGET to minimise the costs of operating the system for market participants and deliver value for money for consumers.
9. Where an application for permission to appeal our decision is made to the Competition and Markets Authority (CMA) under section 11C of the Act, Rule 5.7 of the CMA's Energy Licence Modification Appeals Rules<sup>2</sup> requires that the appellant must send to any relevant licence holders who are not parties to the appeal a non-confidential notice setting out the matters required in Rule 5.2. NGET is the relevant licence holder in relation to this modification. Section 11A(10) of the Act sets out the meaning of 'relevant licence holder'.

Under the powers set out in section 11A(1)(a) of the Act, we hereby modify the special conditions of NGET's electricity transmission licence in the manner specified in attached Schedule 1. This decision will take effect from 1 June 2017.

This document is notice of the reasons for the decision to modify the electricity transmission licence held by NGET as required by section 49A(2) of the Act.

**The Official Seal of the Gas and Electricity Markets Authority  
here affixed is authenticated by the signature of**



.....  
**Emma Kelso**  
**Duly authorised on behalf of the**

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<sup>2</sup> The rules were published by the Competition Commission in September 2012. On 1 April 2014, the Competition Commission was abolished and its functions transferred to the CMA.



## Schedule 1: Changes proposed to the Special Electricity Transmission Licence

### Special Condition 1A

Remove the following definitions from Special Condition 1A

<del>Active Power</del>	<del>shall have the same meaning as is given to that term in the Grid Code</del>
<del>Operational Metering</del>	<del>means metering systems used for the measurement of Active Power to the relevant distribution system or transmission system.</del>
<del>SO Innovation</del>	<del>for the purposes of Special Condition 4J (The System Operator Innovation Roll-out Mechanism) means any or all of the following: (a) a specific piece of New Network Equipment; (b) a novel arrangement or application of new Network Equipment or existing Network Equipment; (c) a novel operational practice; or (d) a novel commercial arrangement, that is not, or is not within the scope of, an Ordinary SO Business Arrangement.</del>
<del>SO Innovation Roll-out Costs</del>	<del>for the purposes of Special Condition 4J (The System Operator Innovation Roll-out Mechanism) means the proposed cost of SO Roll-out of a Proven SO Innovation.</del>
<del>Wind Generation Capacity</del>	<del>means the Registered Capacity of each Wind Generator in respect of which Operational Metering is installed.</del>
<del>Wind Generation Forecasting Error</del>	<del>means the difference between the licensee's Day Ahead Forecast and the actual Wind Generation Output in respect of each hour.</del>
<del>Wind Generation Output</del>	<del>means the Active Power output in MW from each Wind Generator in respect of which Operational Metering is installed.</del>
<del>Wind Generator</del>	<del>means a Power Station comprising wind turbines.</del>

Amend the following definitions from Special Condition 1A

SO Methodologies	means the documented explanation of the methods, principles and assumptions that the licensee will apply for the purposes of using the SO Models to determine the value of the term
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“Modelled Target Costs<sub>tm</sub>” in Special Condition 4C (Balancing Services Activity Revenue Restriction on External Costs).

SO Models

means the tools used by the licensee to forecast costs incurred by the licensee in carrying out the Balancing Services Activity and to determine the value of the term “Modelled Target Costs<sub>tm</sub>” in Special Condition 4C (Balancing Services Activity Revenue Restriction on External Costs).

## Special Condition 4C

### Special Condition 4C: Balancing Services Activity Revenue Restriction on External Costs

#### Part A: Balancing services activity revenue restriction on external costs

4C.1 The licensee shall use its best endeavours to ensure that in respect of Relevant Year t the revenue derived from and associated with procuring and using balancing services (being the external costs of the Balancing Services Activity) shall not exceed an amount calculated in accordance with the following formula:

$$BXext_t = CSOBM_t + BSCC_t + TotAdj_t - OM_t + IncPayExt_t + BSC_t + FIIR_t + SOTOC_t + LBS_t$$

[Adjusted to rename NC<sub>t</sub> to SOTOC<sub>t</sub>, RFIIR<sub>t</sub> to FIIR<sub>t</sub>, BSFS<sub>t</sub> to BSC<sub>t</sub>, remove ROV<sub>t</sub> and IONT<sub>t</sub> terms.]

where:

- BXext<sub>t</sub>** represents the maximum allowed revenue derived in Relevant Year t from and associated with procuring and using balancing services;
- CSOBM<sub>t</sub>** which represents the cost to the licensee of bids and offers in the Balancing Mechanism (excluding those relating to Supplemental Balancing Reserve and Demand Side Balancing Reserve) accepted by the licensee in Relevant Year t less the total non-delivery charge for that Relevant Year, is the sum across Relevant Year t of the values of CSOBM<sub>j</sub> (being the daily System Operator BM cashflow for each settlement period j as defined in Table X-2 of Section X of the BSC in force immediately prior to 1 April 2001) less any costs incurred within these values of CSOBM<sub>j</sub> relating to Supplemental Balancing Reserve and Demand Side Balancing Reserve;
- BSCC<sub>t</sub>** means the costs to the licensee of contracts for the availability or use of balancing services during the Relevant Year t, excluding costs within CSOBM<sub>t</sub> and LBS<sub>t</sub> and BSC<sub>t</sub> but including charges made by the licensee for the provision of balancing services to itself in the Relevant Year t;
- TotAdj<sub>t</sub>** means the amount of any adjustment to be made during the Relevant Year t as provided in paragraph 4C.2;
- OM<sub>t</sub>** means an amount representing the revenue from the provision of balancing services to others during the Relevant Year t, calculated in accordance with paragraph 4C.10;

- IncPayExt<sub>t</sub> means an incentive payment for Relevant Year t calculated in accordance with paragraph 4C.11;
- NC SOTOC<sub>t</sub> means the SO-TO cost allowance term Mechanism ~~Outage Change cost allowance~~ in each Relevant Year t calculated in accordance with ~~4C.29~~ Special Condition 4J (SO-TO Mechanism);
- ~~IONT<sub>t</sub> means the amount of any allowed outage cost adjustments in each Relevant Year t in accordance with paragraph 4C.39;~~
- ~~BSFS<sub>t</sub>,BSC<sub>t</sub> means the allowed revenue derived in Relevant Year t from and associated with means the amount which the licensee may recover in respect of the costs of Feasibility Studies for the provision of Black Start services in accordance with paragraph 4G.5 of Special Condition 4G (Black Start Allowed Revenue-Cost Incentive);~~
- RFIIR<sub>t</sub> means the incentive payment which the licensee may derive from the forecasting incentive for Wind Generation Output and National Demand ~~Wind Generation Forecasting Incentive~~ in Relevant Year t in accordance with Special Condition 4H (~~Wind Generation Forecasting Incentive~~); and
- ~~ROV<sub>t</sub> means the Roll-out Value which the licensee may derive from the System Operator Innovation Roll-out Mechanism in Relevant Year t in accordance with Special Condition 4J (System Operator Innovation Roll-out Mechanism); and~~
- LBS<sub>t</sub> means the allowed revenue derived in Relevant Year t from and associated with procuring and using Demand Side Balancing Reserve and Supplemental Balancing Reserve services in accordance with Special Condition 4K (Demand Side Balancing Reserve and Supplemental Balancing Reserve Revenue Restriction on External Costs); and
- j shall mean a settlement period (being half an hour) as defined in the BSC.

### **Part B: Balancing Services Activity adjustments**

4C.2 For the purposes of paragraph 4C.1, the term TotAdj<sub>t</sub> shall be derived from the following formula:

$$\text{TotAdj}_t = \text{ET}_t + \text{IncAdj}_t$$

where:

$ET_t$  means the amount of any adjustment to be made during the Relevant Year  $t$  in respect of any Relevant Year prior to Relevant Year  $t$  as provided in paragraph 4C.3.

$IncAdj_t$  means the amount of any adjustment to be made during the Relevant Year  $t$  in respect of any of the six Relevant Years prior to Relevant Year  $t$  as provided in paragraph 4C.4,

4C.3 For the purposes of paragraph 4C.2, the term  $ET_t$  which relates to prior period adjustments in respect of the Relevant Year  $t$  shall mean:

(a) the costs, whether positive or negative, to the licensee of:

(i) bids and offers in the Balancing Mechanism (excluding those relating to Supplemental Balancing Reserve and Demand Side Balancing Reserve) accepted by the licensee in any period before Relevant Year  $t$  less the total non-delivery charge for that period; and

(ii) contracts for the availability or use of balancing services during any period before Relevant Year  $t$ , excluding costs within  $CSOBM_t$  and  $LBS_t$  for that period, but including charges made by the licensee for the provision of balancing services to itself in that period;

in each case after deducting such costs to the extent that they have been taken into account in any Relevant Year in computing the terms  $CSOBM_t$  or  $BSCC_t$ ; and

(b) any amount within the term  $ET_t$  as defined in this licence in the form it was in on 1 April 2000 whether as then defined or as now defined.

4C.4 For the purposes of paragraph 4C.2, the term  $IncAdj_t$  shall mean incentive adjustments in respect of Relevant Year  $t$  where all of the following criteria have been fulfilled:

(a) where there has been one or more related errors for the same event (for the purposes of this Part B the "error") in the calculation of the term  $IncPayExt_t$  in one of the six Relevant Years prior to Relevant Year  $t$  where one of the following criteria have been fulfilled:

(i) the error in the calculation of the term  $IncPayExt_t$  was caused by or occurred as a result of an action or inaction of the licensee (including any employees, agents, contractors or advisers of the licensee), Affiliate or Related Undertaking which, if corrected, results in a negative adjustment to the term  $IncAdj_t$ ; or



- (ii) the error in the calculation of the term  $\text{IncPayExt}_t$  was caused by or occurred as a result of an action or inaction of a person other than the licensee (including any employees, agents, contractors or advisers of such person), which, if corrected, results in a positive or negative adjustment to the term  $\text{IncAdj}_t$ ;
  - (b) the absolute value of the adjustment for each error in sub-paragraph 4C.4(a) (whether positive negative) is greater than the value of one percent of the upper limit of the term  $\text{IncPayExt}_t$  in the Relevant Year in which the error occurred; and
  - (c) the cumulative adjustment for the errors in sub-paragraph 4C.4(a) in a Relevant Year do not lead to payments to or from the licensee outside of the scheme cap and scheme collar as set out in Table 3 in paragraph 4C.~~29~~~~46~~ of this condition, for the Relevant Year in which the error occurred.
- 4C.5 The licensee shall give notice to the Authority as soon as reasonably practicable and in any event no later than 10 working days after becoming aware of any error that meets the criteria laid out in paragraph 4C.4 in the calculation of the term  $\text{IncPayExt}_t$  in any of the six Relevant Years prior to Relevant Year  $t$ .
- 4C.6 Unless the Authority directs otherwise, where the licensee gives notice to the Authority pursuant to paragraph 4C.5, the licensee shall provide the Authority with a written report on any proposed error within two months of such notice, containing the following:
- (a) evidence of how an error identified by the licensee meets the criteria set out in paragraph 4C.4;
  - (b) the proposed value of the term  $\text{IncAdj}_t$  and evidence of how a proposed correction is consistent with this licence condition and the SO Methodologies established under paragraph 4C.~~42~~~~26~~ (and in the case of the SO Methodologies, those in effect at the time when the error was made); or
  - (c) any other information that is relevant for calculating the value of the term  $\text{IncAdj}_t$ .
- 4C.7 On receiving a report pursuant paragraph 4C.6, the Authority will have three months to direct that the term  $\text{IncAdj}_t$  shall not take the value proposed by the licensee pursuant to sub-paragraph 4C.6(b) but shall take an alternative value.
- 4C.8 If the Authority has not made a direction under paragraph 4C.7 within three months of the date on which the report was provided to the Authority pursuant to paragraph 4C.6, then the term  $\text{IncAdj}_t$  shall take the value proposed by the licensee in the report provided to the Authority.
- 4C.9 If the Authority requests any further information from the licensee during the three month period under paragraph 4C.7, the period will stop while the licensee compiles

that information and will not commence again until the Authority receives the information requested.

### **Part C: Provision of balancing services to others**

4C.10 For the purposes of paragraph 4C.1,  $OM_t$  (the amount representing the revenue from the provision of balancing services to others) shall be the sum of:

- (a) the total amount (exclusive of interest and value added tax attributable thereto) recovered by the licensee in respect of Relevant Year  $t$  under any agreements entered into between an electricity supplier (being the holder of a supply licence granted or treated as granted under Section 6(1)(d) of the Act) or network operator (as defined in the Grid Code) and the licensee pursuant to which the costs of operation or non-operation of generation sets which are required to support the stability of a user system (as defined in the Grid Code) are charged to that electricity supplier or network operator (as defined in the Grid Code); and
- (b) the total costs (exclusive of interest and value added tax attributable thereto) incurred by the licensee in respect of Relevant Year  $t$  which arise by reason of the operation or non-operation of generation sets and which result directly or indirectly from works associated with the National Electricity Transmission System or works thereon being carried out, rescheduled or cancelled by reason of any agreement with, or request of, any third party other than an electricity supplier (as defined in paragraph 4C.10(a) of this Special Condition) or network operator (as defined in the Grid Code).

### **Part D: Determination of incentive payments on external costs**

4C.11 For the purposes of paragraph 4C.1, the term  $IncPayExt_t$  shall be derived from the following formula:

$$IncPayExt_t = [SF_t (MT_t - IBC_t) + CB_t]$$

where:

$SF_t$  which is a Balancing Services Activity sharing factor in respect of Relevant Year  $t$ , has the value specified against the relevant value of  $IBC_t$  for the Relevant Year  $t$  in the column headed  $SF_t$  in Table 3 in paragraph 4C.4629.

$MT_t$  which is a target for Balancing Services Activity incentivised external costs in respect of Relevant Year  $t$ , has the value specified against the relevant value of  $IBC_t$  for the Relevant Year  $t$  in the column headed  $MT_t$  in Table 3 in paragraph 4C.4629.

$IBC_t$  which is the cost of balancing services on which the licensee is incentivised during Relevant Year t, which is calculated in accordance with the formula given in paragraph 4C.12.

$CB_t$  which is a balancing services sharing factor offset in respect of Relevant Year t, has the value specified against the relevant value of  $IBC_t$  for the Relevant Year t in the column headed  $CB_t$  in Table 3 in paragraph 4C.2946.

4C.12 For the purposes of paragraph 4C.11, the term  $IBC_t$  in respect of Relevant Year t shall be calculated in accordance with the following formula:

$$IBC_t = CSOBM_t + BSCC_t - RT_t - OM_t$$

[Formula amended to remove BSFS<sub>t</sub> term]

where:

$RT_t$  means the amount of any allowed income adjustments given by paragraph 4C.23

~~$BSFS_t$  means any costs recovered via the term  $BSCC_t$  in respect of Feasibility Studies for Black Start in accordance with Special Condition 4G.~~

#### **Part E: Income adjusting events under the Balancing Services Activity revenue restriction on external costs**

4C.13 In Relevant Year t, an income adjusting event is any of the following:

- (a) an event or circumstance constituting force majeure under the BSC;
- (b) an event or circumstance constituting force majeure under the CUSC;
- (c) a Security Period;
- (d) (where the event or circumstance takes place in Relevant Year t or Relevant Year t-1) an unforeseen event or circumstance other than those listed above which leads to consequences beyond the reasonable control of the licensee which is, in the opinion of the Authority, an income adjusting event and is approved by it as such in accordance with Part E2 of this condition; and
- (e) (where the event or circumstance takes place in Period p) an event or circumstance other than those listed above which is, in the opinion of the Authority, an income adjusting event and is approved by it as such in accordance with Part E2 of this condition.

where the income adjusting event or circumstance has:

- (a) increased or decreased the value of  $IBC_t$  by more than £10,000,000 (the “threshold amount”). This threshold amount does not apply in respect of sub-paragraph 4C.13(c) above; or
- (b) in the Period  $p$ , in which the income adjusting event had occurred, increased or decreased the value of  $IBC_p$  (bearing the meaning of that term in this licence as at 31 March 2013) by more than £2,000,000.

4C.14 For the purposes of the period 1 April 2015 to 31 March 2017, events or circumstances arising directly from the implementation or otherwise of the following proposed modifications (both the original and any alternative unless otherwise specified) listed in Tables 1 and 2 below shall not qualify as an income adjusting event for the purpose of paragraph 4C.13 above:

Table 1:

<b>BSC Modification Proposal</b>	<b>BSC Modification Title (as entitled by the proposer of the modification)</b>
None applicable	

Table 2:

<b>CUSC Modification Proposal</b>	<b>CUSC Modification Title (as entitled by the proposer of the modification)</b>
None applicable	

### **Part E1: Notice of proposed income adjusting event**

4C.15 Where the licensee considers, and can provide supporting evidence that, in respect of the Relevant Year in which the event or circumstance occurred or Period  $p$ , there have been costs and/or expenses that have been incurred or saved by an income adjusting event, then the licensee shall give notice of this event to the Authority.

4C.16 Where any other Party (as defined in the BSC) considers, and can provide supporting evidence that, in respect of the Relevant Year in which the event or circumstance occurred or Period  $p$ , there have been costs and/or expenses that have been incurred or saved by an income adjusting event, then that Party may give notice of this event to the Authority.

4C.17 A notice provided to the Authority under paragraphs 4C.15 or 4C.16 must, in the case of the licensee, and should, in so far as is practicable in the case of any other Party, give particulars of:

- (a) the event to which the notice relates and the reason(s) why the person giving the notice considers this event to be an income adjusting event;

- (b) the amount of any change in costs and/or expenses that can be demonstrated by the person giving the notice to have been caused or saved by the event and how the amount of these costs and/or expenses has been calculated;
- (c) the amount of any allowed income adjustment proposed as a consequence of that event and how this allowed income adjustment has been calculated; and
- (d) any other analysis or information which the person submitting the notice considers to be sufficient to enable the Authority and the relevant parties to fully assess the event to which the notice relates.

4C.18 If the Authority considers that the analysis or information provided in sub-paragraphs 4C.17(a) to 4C.17(d) above is insufficient to enable both the Authority and the relevant parties to assess whether an income adjusting event has occurred and/or the amount of any allowed income adjustment that should be approved, the Authority can request that the supporting evidence be supplemented with additional information that it considers appropriate.

4C.19 A notice of an income adjusting event shall be given as soon as is reasonably practicable after the occurrence of the income adjusting event, and, in any event, not later than three months after the end of the Period p or the Relevant Year t in which the income adjusting event occurred.

4C.20 The Authority will make public, excluding any confidential information, any notice of an income adjusting event following its receipt.

4C.21 Any notice submitted to the Authority under either paragraphs 4C.15 or 4C.16 above should clearly identify whether any of the information contained in the notice is of a confidential nature. The Authority shall make the final determination as to confidentiality having regard to:

- (a) the need to exclude from disclosure, so far as is reasonably practicable, information whose disclosure the Authority considers would or might seriously prejudicially affect the interests of a person to which it relates; and
- (b) the extent to which the disclosure of the information mentioned in sub-paragraph 4C.21(a) is necessary for the purposes of enabling the relevant parties to fully assess the event to which the notice relates.

## **Part E2: The Authority's determination**

4C.22 Following consultation with relevant parties, including the licensee, BSC Parties and CUSC Parties, the Authority shall determine:

- (a) whether any or all of the costs and/or expenses given in a notice pursuant to paragraphs 4C.15 or 4C.16 were caused or saved by an income adjusting event; and

- (b) whether the event or circumstance has increased or decreased the value of  $IBC_t$  by more than the threshold amount, save in the case of sub-paragraph 4C.13(c) where the threshold amount shall not apply; or
- (c) in respect of an event occurring in Period  $p$ , whether the event or circumstance has increased or decreased the value of  $IBC_p$  (bearing the meaning of that term in this licence as at 31 March 2013) by more than £2,000,000; and
- (d) if so, whether the amount of the proposed income adjustment ensures that the financial position and performance of the licensee are, insofar as is reasonably practicable, the same as if that income adjusting event had not taken place, and if not, what allowed value of income adjustment would secure that effect.

4C.23 In relation to the Relevant Year  $t$  or Period  $p$ , the allowed income adjustment shall be:

- (a) the value determined by the Authority under paragraph 4C.22 above; or
- (b) if the Authority has not made a determination under 4C.22 above within three months of the date on which notice of an income adjusting event was provided to the Authority, the amount of the allowed income adjustment proposed as a consequence of the event in the notice given to the Authority under sub-paragraph 4C.17(c); or
- (c) in all other cases zero, including situations where the Authority has not made a determination under 4C.22 above within three months of the date on which notice of an income adjusting event was provided to the Authority and the Authority has, before the end of that three month period, informed the relevant parties that the Authority considers that the analysis or information provided in accordance with paragraphs 4C.17 and 4C.18 is insufficient to enable the Authority and relevant parties to assess whether an income adjusting event has occurred and/or the amount of any allowed income adjustment.

4C.24 The Authority's decision in relation to any notice given under paragraphs 4C.15 or 4C.16 shall be in writing, shall be copied to the licensee and shall be in the public domain.

4C.25 The Authority may revoke an approval of an income adjusting event and allowed income adjustment with the consent of the licensee, following consultation with the licensee and relevant parties. Revocation of any income adjusting event and allowed income adjustment shall be in writing, shall be copied to the licensee and shall be in the public domain.

[Part F, Part F1 and Part F2 deleted from condition]

**Part ~~K~~F: SO Methodologies ~~and update provisions~~**

4C.26 The licensee shall, in respect of Relevant Year t, establish, and publish the following SO Methodologies as approved by the Authority for determining Modelled Target Costs<sub>m</sub> (as defined in paragraph 4C.3147):

- (a) a methodology for determining the ex-ante or ex-post treatment of modelling inputs;
- (b) a methodology for modelling the costs of managing Transmission Constraints; ~~This methodology should also include those ex-ante inputs which may be updated on 1 April 2016 for the Relevant Year 2016/17; and~~
- (c) a methodology for the modelling of energy costs. ~~This methodology should also include those ex-ante inputs which may be updated on 1 April 2016 for the Relevant Year 2016/17.~~

~~4C.43 The licensee may prepare and submit proposals for revised SO Methodologies in respect of the Relevant Year 2016/17 to the Authority by 31 December 2015 for approval by the Authority by 31 March 2016 and for implementation at the commencement of the Relevant Year 2016/17. The licensee shall:~~

- ~~(a) send a copy of the proposed revised SO Methodologies to the Authority and to any person who requests a copy; and~~
- ~~(b) not revise any SO Methodologies referred to in 4C.42 until the Authority directs the licensee to make the revisions.~~

4C.27 The licensee shall, unless the Authority otherwise directs:

- (a) submit by the next working day following this modified condition coming into effect, the SO Methodologies, the SO Models and the Ex-Ante Data to the Authority for approval; and
- (b) publish the SO Methodologies as soon as practicably possible after such approval by the Authority under paragraph 4C. 27(a).

4C. 28 The licensee shall, at the same time as it submits the SO Methodologies, SO Models and the Ex-Ante Data in accordance sub paragraph 4C.27(a) (or such later date as the Authority may direct), submit to the Authority a report prepared by an appropriate third-party independent expert setting out whether, in the view of that independent third-party, the:

- (a) SO Methodologies provide an accurate representation of the expected economic and efficient incentivised balancing services costs;
- (b) calculations in the SO Methodologies are accurate;
- (c) the SO Models are an accurate representation of the SO Methodologies; and
- (d) the Ex-Ante Data in the SO Models provide an accurate representation of those attributes expected by an economic and efficient SO.

~~4C.29 4C.44 If the Authority approves and directs the changes to the SO Methodologies, the licensee shall revise the SO Methodologies and shall publish the revised SO Methodologies on its website.~~

~~4C.45 If the licensee considers that an error or errors have arisen which prevent the SO Models from appropriately reflecting the SO Methodologies referred to in 4C.42, or if the licensee considers that an input error or errors into the SO Models have arisen as a result of information provided by any third party, the licensee shall notify the Authority of the error or errors and the materiality of the error or errors and will promptly seek to correct the error or errors. The Authority will have until three months after any notice has been submitted to direct the licensee to remove the correction to the error or errors.~~

**Part GL: Terms used in the Balancing Services Activity revenue restriction**

4C.29 For the purpose of 4C.11 of Part D of this condition, the terms  $MT_t$ ,  $SF_t$  and  $CB_t$  shall be selected against the appropriate value of  $IBC_t$  (which shall be determined in accordance with paragraph 4C.12 of Part D of this condition) from Table 3 below:

Table 3:

<b><math>IBC_t</math> (£million)</b>	<b><math>MT_t</math> (£million)</b>	<b><math>SF_t</math></b>	<b><math>CB_t</math> (£million)</b>
$IBC_t <$ (Incentive Target Cost <sub>t</sub> – 100)	0	0	<u>3010</u>
$(Incentive Target Cost_t - 100) \leq IBC_t <$ (Incentive Target Cost <sub>t</sub> )	Incentive Target Cost <sub>t</sub>	<u>3010</u> %	0
$(Incentive Target Cost_t) = IBC_t$	$IBC_t$	0	0
$(Incentive Target Cost_t) \leq IBC_t <$ (Incentive Target Cost <sub>t</sub> + 100)	Incentive Target Cost <sub>t</sub>	<u>3010</u> %	0
$IBC_t \geq (Incentive Target Cost_t + 100)$	0	0	<u>- 3010</u>

4C.30 For the purposes of paragraph ~~4C.46~~29, Incentive Target Cost (in £ million) in respect of Relevant Year t shall be calculated in accordance with the following formula:

$$\underline{\underline{Incentive Target cost_t = \sum_{m=1}^m Incentive Target cost_t}}$$

4C.31 For the purpose of paragraph ~~4C.30~~46 of this condition, the terms Incentive Target Cost<sub>m</sub> in respect of Relevant Year t shall be calculated in accordance with the following



formula must be selected against the appropriate value of Modelled Target Cost<sub>m</sub> from Table 4 below, unless otherwise directed by the Authority under paragraph 4C.32:

Incentive Target Cost<sub>t</sub> = Modelled Target Costs<sub>t</sub> + BSTC<sub>t</sub> Table 4:

<u>Modelled Target Cost<sub>m</sub></u> <u>(£million)</u>	<u>Incentive Target Cost<sub>m</sub></u>
<u>Modelled Target Cost<sub>m</sub> ≥</u> <u>2σ<sub>cost</sub> + Historical Balancing</u> <u>Cost<sub>m</sub></u>	<u>IBC<sub>m</sub></u>
<u>(Historical Balancing Cost<sub>m</sub> -</u> <u>2σ<sub>cost</sub></u> <u>≤ Modelled Target Cost<sub>m</sub> ≤</u> <u>(2σ<sub>cost</sub> + Historical Balancing</u> <u>Cost<sub>m</sub>)</u>	<u>Modelled Target Cost<sub>m</sub></u>
<u>Modelled Target Cost<sub>m</sub> &lt;</u> <u>(Historical Balancing Cost<sub>m</sub> -</u> <u>2σ<sub>cost</sub>)</u>	<u>IBC<sub>m</sub> - 0.833</u>

where:

Modelled Target Costs<sub>m</sub> means the target cost (in £ million) to the licensee of procuring and using balancing services (being the external costs of the Balancing Services Activity) derived in accordance with the SO Methodologies referred to in paragraph 4C.2642 in respect of month m. ~~The SO Models and data used by the licensee to determine Modelled Target Costs shall be as agreed between the Authority and the licensee in respect of Relevant Year t; and~~

Historical Balancing Costs<sub>m</sub> + 2σ<sub>cost</sub> means two standard deviations above the outturn costs for that month for the period Relevant Year t-6 to Relevant Year t-1

st

Historical Balancing Costs<sub>m</sub> - 2σ<sub>cost</sub> means two standard deviations below the outturn costs for that month for the period Relevant Year t-6 to Relevant Year t-1

mBSTC<sub>t</sub> means a calendar month in Relevant Year t according to the financial year (April equals 1 and March equals 12) ~~means the target cost for the licensee for Black Start in respect of Relevant Year t, which shall have the value as set out in Special Condition 4G.~~

4C.32 The Authority will direct for the Incentive Target Cost<sub>m</sub> to take the value of Modelled Target Cost<sub>m</sub> if the Authority considers that the licensee has provided sufficient evidence as to justify that the target deviation from the Historical Balancing Costs is not due to a Model Inaccuracy.

4C.33 In respect of any Relevant Year t commencing on or after 1 April ~~2017~~2018, the terms MTt, Sft and CBt shall be set to zero.

### **Part L: Scheme Governance**

4C.34 The licensee shall submit to the Authority, at the same time as the SO Methodologies, the SO Models and the Ex-Ante Data in accordance with paragraph 4C.27 a template for the information and data submitted to the Authority in accordance with paragraph 4C.36, the form of such template to be approved by the Authority.

4C.35 The licensee shall, at the end of the month after the month the SO Methodologies, SO Models and Ex-Ante data have been approved by the Authority, and each subsequent month, submit to the Authority:

- (a) the costs associated with balancing services;
- (b) information on the key drivers of the costs referred to in 4C.35(a);
- (c) a summary of relevant events ~~in~~ on the National Electricity Transmission System resulting in the costs referred to in 4C.35(a); and
- (d) the ex-post data required to operate the SO Models.

4C.36 The Authority may direct, following consultation with the licensee, that the form of the template approved by the Authority in accordance with paragraph 4C.34 and the information and data provided in accordance with paragraph 4C.35 be changed.

4C.37 The licensee shall by 1 July 2018 submit to the Authority a report prepared by an independent third party setting out whether, in the view of that independent third party:

- (a) the calculations of the Incentive ~~used~~ Target Cost are in accordance with the SO Methodologies and SO Models;
- (b) the costs of balancing services on which the licensee is incentivised as defined in paragraph 4C.12 have been correctly calculated; and
- (c) the incentive payment for Relevant Year t has been calculated in accordance with paragraph 4C.11.

4C.38 If the licensee considers that there is a Model Inaccuracy in the SO Models it shall notify the Authority within 28 days of it becoming aware of such an inaccuracy of:

- (a) the date it became aware of the Model Inaccuracy;

- (b) the materiality of the Model Inaccuracy in £m; and
- (c) the timetable for correcting the Model Inaccuracy, such timetable to be approved by the Authority.

4C.39 The Authority may direct that the approved timetable for correcting the Model Inaccuracy in accordance with paragraph 4C.38(c) be changed.

4C.40 The Authority may direct the licensee to investigate the existence of a Model Inaccuracy in the SO Models and provide a report on the findings of that investigation.

4C.41 If the Authority is not satisfied with the quality of the information or data in the SO Models or any report under this condition it may direct the licensee to instruct an independent third party to review that information or data and send a report on its findings to the Authority.

4C.42 The Authority may, after receiving a report in accordance with 4C.38 or 4C.41, direct any changes to the SO Models and the Ex-Ante Data so as to correct the Model Inaccuracy.

**Part M: Definitions**

<u>Model Inaccuracy</u>	<u>means any input (of information or data of the licensee or that of a third party), assumption, calculation or modelling structure that prevents the SO Models from producing a target that reflects the cost baseline expected from the economic and efficient incentivised balancing services costs to be incurred by the licensee.</u>
<u>Ex-Ante Data</u>	<u>means the set of modelling inputs for the SO Model defined under the SO Methodologies in accordance with paragraph 4C.26(a) as which are to be fixed for the duration of Relevant Year t (except under a Model Inaccuracy modification).</u>

## **Special Condition 4D**

Amend paragraph 4D.2 in the following manner:

4D.2 This prohibition shall continue in force until 31 March 2018~~2017~~ unless the Authority gives notice to the licensee that it shall end on an earlier date.

## **Special Condition 4E**

Amend paragraph 4E.2 in the following manner:

4E.2 The licensee shall review the ability of the SO Models to achieve the Objectives set out in paragraph 4E.3 of this Special Condition and shall develop enduring models accordingly which seek to achieve the Objectives to be implemented on ~~1 April 2017~~ 1 April 2018.

## **Special Condition 4F**

Amend paragraph 4F.3 in the following manner:

4F.3 In developing the enduring methodologies, the licensee shall:

- (a) consult with interested parties on the enduring methodologies for not less than 28 days (the consultation period);
- (b) submit to the Authority after the close of the consultation period any proposed revisions to the SO Methodologies (the revisions) which would be needed to introduce the enduring methodologies no later than ~~31 December 2016~~ 31 December 2017; and
- (c) implement the revisions to take effect from 1 April ~~2017~~ 2018 unless prior to that date the licensee is directed not to implement the revisions by the Authority.

## Special Condition 4G

### Special Condition 4G: Black Start ~~Cost Incentives~~ Allowed Revenue

[Remove all of the current text on Special Condition 4G]

4G.1 The purpose of this condition is to establish arrangements to determine the allowed revenue derived from Black Start that the licensee may recover costs service provision (BSTC<sub>t</sub>) in each Relevant Year t through the term BSC<sub>t</sub> in paragraph 4C.1 of Special Condition 4C (Balancing Services Activity Revenue Restriction on External Costs).

4G.2 The term BSC<sub>t</sub> shall be calculated in accordance with the following formula:

$$\underline{BSC_t = BSTC_t - BSTA_t}$$

where:

BSC<sub>t</sub> means the allowed revenue derived in Relevant Year t from the Total Costs associated with Black Start;

BSTC<sub>t</sub> means the Total Costs to the licensee incurred in Relevant Year t;

BSTA<sub>t</sub> means the amount of any adjustments to BSTC<sub>t</sub> as may be directed by the Authority in accordance with Part F of this condition where such adjustment shall not exceed 10% of the Total Costs for Relevant Year t.

#### **Part A: Black Start Strategy**

4G.3 Further to the statement prepared pursuant to paragraph 3 of Standard Condition C16 (Procurement and use of balancing services) the licensee must, by the next working day following this condition coming into effect and thereafter at 12 monthly intervals (unless otherwise directed by the Authority), submit to the Authority for approval, a methodology (the "Black Start Strategy") setting out how the licensee will approach the delivery of Black Start onto the National Electricity Transmission System. The Black Start Strategy must include, but need not be limited to:

- (a) The strategy for Black Start provision which is to be applied for the duration of the Black Start Strategy including an appropriate Restoration Approach, the Minimum Service Level required and appropriate Restoration Time;
- (b) The strategy for Black Start provision between one and three years including an appropriate Restoration Approach, the Minimum Service Level required, appropriate Restoration Time and identification of new technologies and approaches for the provision of Black Start; and
- (c) The strategy for Black Start provision beyond three years including an appropriate Restoration Approach, the Minimum Service Level required, appropriate Restoration Time and identification of new technologies and approaches for the provision of Black Start.

## **Part B: Black Start Procurement Methodology**

4G.4 The licensee must, by the next working day following this condition coming into effect and thereafter at 12 monthly intervals (unless otherwise directed by the Authority), submit to the Authority for approval, a methodology (the “Black Start Procurement Methodology”) for the purposes of determining that any procurement of Black Start during Relevant Year t is economic and efficient, including that it provides value for money for current and future electricity consumers in Great Britain. The Black Start Procurement Methodology must include, but need not be limited to:

- (a) the methodology for determining the value to current and future electricity consumers in Great Britain of Black Start provision;
- (b) the methodology for determining how each Black Start service contracted provides value to current and future electricity consumers in Great Britain and how consumer value is assessed across all Black Start services contracted cumulatively;
- (c) the process by which the licensee will seek to procure new Black Start services and assess tenders to determine that:
  - (i) the Minimum Service Level required is met in Great Britain;
  - (ii) any tenders accepted by the licensee are demonstrably economic and efficient, including by providing value for money for current and future electricity consumers in Great Britain; and
  - (iii) the Black Start procurement process is economic, efficient and competitive; and
- (d) the process by which the licensee will assess whether it is economic and efficient to incur Feasibility Studies cost to test new providers.

## **Part C: Authority Approval of Methodologies**

4G.5 The Authority shall determine, following receipt of any of the methodologies referred to in Parts A and B above (“the Methodologies”) whether to approve or reject those Methodologies.

4G.6 If the Authority rejects any of the Methodologies in accordance with paragraph 4G.5 it may direct the licensee to resubmit a revised methodology to the Authority for approval, within the time specified in that direction.

4G.7 If the Authority approves any of the Methodologies in accordance with paragraph 4G.5, the licensee must publish the approved Methodologies (the “Approved Methodologies” and each an “Approved Methodology”) on its website as soon as practicable following approval.



4G.8 Where the licensee considers that there are legitimate reasons for not publishing certain information or data in the Approved Methodologies on its website the Authority may approve the publication of the Approved Methodologies without such information or data.

#### **Part D: Revision to Methodologies**

4G.9 During the 12 month period to which the Approved Methodologies apply the licensee may submit to the Authority for approval notification of proposals for the revision of any of the relevant Approved Methodologies. Where the licensee submits revisions for approval the licensee must send a copy of the proposed revisions to the Authority and, unless in the licensee's view it would not be appropriate to do so, to any person who requests a copy.

4G.10 Following receipt of a notification under paragraph 4G.9 the Authority may direct the licensee to revise the relevant Approved Methodology to reflect the proposed revision, where the Authority is satisfied that the revisions are economic and efficient and will provide value for money for electricity consumers in Great Britain. Unless the Authority, within three months of their submission under paragraph 4G.9, issues such a direction, the proposed revisions shall be deemed not to be approved.

4G.11 If the Authority directs revisions to any of the relevant Approved Methodologies in accordance with paragraph 4G.10, the licensee must revise the relevant Approved Methodology. The licensee must also publish the revised Approved Methodology on its website within 7 days of receipt of that direction.

4G.12 Where the licensee considers that there are legitimate reasons for not publishing certain information or data in the revised Approved Methodologies on its website the Authority may approve the publication of the Approved Methodologies without such information or data.

#### **Part E: Publication of annual report**

4G.13 Within one month after the end of each Relevant Year date on which each Approved Methodology (other than the first one) pursuant to Part A and B relates, the licensee shall prepare a report in a form approved by the Authority in respect of the Total Costs the licensee has incurred in that Relevant Year-1.

4G.14 The report provided to the Authority under paragraph 4G.13 must give particulars of:

- (a) the Total Costs incurred for that Relevant Year-1, and how the Total Costs have been calculated;
- (b) how the Total Costs have been incurred in accordance with the relevant Approved Methodologies; and
- (c) any other analysis or information which the licensee considers to be relevant to enable the Authority to fully assess the particulars to which the report relates.

4G.15 The report prepared pursuant to paragraph 4G.13 must be accompanied by a statement from an independent auditor of internationally recognised standing appointed by the licensee:

- (a) confirming that the report is accurate; and
- (b) detailing the auditor's independent assessment of the extent to which the licensee has complied with the relevant Approved Methodologies;

4G.16 The licensee must make public its annual report produced under this part. Where the licensee considers that there are legitimate reasons for not publishing certain information or data in its annual report on its website it may submit these reasons to the Authority, which may approve the publication of the report without such information or data.

### **Part F: Authority Determination of Adjustment**

4G.17 If the Authority considers that the analysis or information provided in accordance with Part E is insufficient to enable it to assess whether it should direct an adjustment to BSTC<sub>t</sub>, the Authority may direct that it be provided within a reasonable period with such additional information as it considers appropriate in order to enable it to make such an assessment.

4G.18 Where the licensee fails to comply with a direction given under paragraph 4G.17 in accordance with the timescale set out in such direction the Authority may extend the deadline for determination provided for in paragraph 4G.21.

4G.19 If the Authority considers that, taking account of:

- (a) the nature and extent of the information and analysis provided to it by the licensee in accordance with Part E;
- (b) the nature and extent of any further information and analysis provided to it in response to a direction under paragraph 4G.17; and
- (c) the materiality of the costs incurred,

it requires an extension of time to reach a determination, it may by way of a direction extend the deadline for determination provided for in paragraph 4G.21.

4G.20 The Authority shall determine, following receipt of an annual report notice in accordance with Part E, whether the Total Costs in that Relevant Year t-1 associated with Black Start were incurred in accordance with the relevant Approved Methodologies.

4G.21 Where the Authority determines that the Total Costs in that Relevant Year-t-1 were not incurred in accordance with the relevant Approved Methodologies, it shall, within 3 months of receipt of an annual report in accordance with Part E, direct a value for the term BSTA<sub>t</sub> where such value shall not exceed 10% of the Total Costs for that Relevant Year t-1.

4G.22 The definitions in this condition will have the following meaning:

<u>Black Start Capability</u>		<u>shall have the meaning given in the Grid Code.</u>
<u>Minimum Service Level</u>		<u>means the minimum service level required to provide an appropriate Black Start Capability for Great Britain.</u>
<u>Restoration Approach</u>		<u>means the method by which the licensee would Black Start the National Electricity Transmission System.</u>
<u>Restoration Time</u>		<u>means the time the licensee expects it would take to energise a part or parts of the National Electricity Transmission System following a Total Shutdown or Partial Shutdown (each as defined in the Grid Code).</u>
<u>Total Costs</u>		<u>means the total costs associated with the provision of Black Start, including procuring, testing, warming, utilising, capital contributions and payments for Feasibility Studies costs.</u>

## Special Condition 4H

### Special Condition 4H: Forecasting incentive

4H.1 The purpose of this condition is to establish arrangements to determine the incentive payment that the licensee shall derive by means of the term  $\mathbb{R}FIIR_t$  under the term  $BXext_t$  in paragraph 4C.1 of Special Condition 4C (Balancing Services Activity Revenue Restriction on External Costs) as a result of the financial incentive placed upon the licensee to improve the accuracy of its forecast **in respect** of the amount of Wind Generation Output and National Demand in the period from ~~1 April 2015 to 31 March 2017~~ 1 April 2017 to 31 March 2018.

4H.2 The incentive payment (in £ million) which the licensee shall derive from the ~~Wind Generation Forecasting Incentive~~ forecasting incentive term  $\mathbb{R}FIIR_t$ , in respect of Relevant Year t, shall be derived from the following formula:

$$FIIR_t = \sum_{m=1}^{12} MFI_m$$

[Formula amended to rename  $\mathbb{R}FIIR_t$  to  $FIIR_t$  and  $MRFI_m$  to  $MFI_m$ ]

where:

~~$MRFI_m$~~   $MFI_m$  means the monthly ~~wind generation~~ forecasting incentive revenue in respect of the relevant month m and shall be derived from the following formula:

$$\underline{\underline{MFI_m = WFI_m + WUI_m + D1FI_m + D1UI_m + D2FI_m + D2UI_m + D7FI_m + D7UI_m}}$$

where:

$WFI_m$  means the monthly forecasting incentive revenue in respect of the relevant month m for the Day Ahead Wind Generation Forecast for Wind Generation Output as derived in Part A of this condition

$WUI_m$  means the monthly forecasting incentive revenue in respect of the relevant month m for the unbiased Day Ahead Wind Generation Forecast for Wind Generation Output as derived in Part B of this condition

$D1FI_m$  means the monthly forecasting incentive revenue in respect of the relevant month m for the Day Ahead National Demand Forecast as derived in Part A of this condition

$D1UI_m$  means the monthly forecasting incentive revenue in respect of the relevant month m for the unbiased Day Ahead National Demand Forecast as derived in Part B of this condition

$D2FI_m$  means the monthly forecasting incentive revenue in respect of the relevant month m for the Two-day Ahead National Demand Forecast as derived in Part A of this condition

D2UI<sub>m</sub> means the monthly forecasting incentive revenue in respect of the relevant month m for the unbiased Two-day Ahead National Demand Forecast as derived in Part B of this condition

D7FI<sub>m</sub> means the monthly forecasting incentive revenue in respect of the relevant month m for the Week-ahead National Demand Forecast as derived in Part A of this condition

D7UI<sub>m</sub> means the monthly forecasting incentive revenue in respect of the relevant month m for the unbiased Week-ahead National Demand Forecast as derived in Part B of this condition

m means calendar months for the Relevant Year t (with the month April = 1)

### **Part A: Forecast accuracy incentive**

4H.3 The terms WFI<sub>m</sub>, D1FI<sub>m</sub>, D2FI<sub>m</sub>, D7FI<sub>m</sub> (in £ million) shall be derived from the following formulae:

$$\sum_{d=1}^n FID_d \geq 0$$

If ;

$$FI_m = \min\left(\sum_{d=1}^n FID_d, FICAP_m\right)$$

$$\text{If } \sum_{d=1}^n FID_d < 0$$

$$FI_m = \max\left(\sum_{d=1}^n FID_d, FIFLO_m\right)$$

where:

FI<sub>m</sub> means the incentive revenue for WFI<sub>m</sub>, D1FI<sub>m</sub>, D2FI<sub>m</sub>, D7FI<sub>m</sub> as defined in this condition;

FICAP<sub>m</sub> means the forecasting incentive cap for the relevant month m in respect of Relevant Year t and shall take the value £0.0625 million in the relevant months in the period 1 April 2017 to 31 March 2018;

FIFLO<sub>m</sub> means the forecasting incentive floor for the relevant month m in respect of Relevant Year t and shall take the value (minus) -£0.0313 million in the relevant months in the period 1 April 2017 to 31 March 2018; and

FID<sub>d</sub> means the daily forecasting incentive for the Day Ahead Wind Generation Forecast, Day Ahead National Demand Forecast, Two-day Ahead National Demand Forecast and Week-ahead National Demand Forecast as derived from the appropriate formula below:

For WFI<sub>m</sub>:

$$FID_d = \max \left[ DFICAP_d \left( 1 - \frac{WFIO_d}{WFIIF_d} \right), DFIFLO_d \right]$$

[Formula for calculation of previous incentive revenue removed]

where:

~~RFIF~~ WFIIF<sub>d</sub> means the forecasting incentive target factor and take for the relevant day d in respect of Relevant Year t and takes the value specified in Table 1:

Table 1:

Period	m value	<del>RFIF</del> WFIIF <sub>m</sub> value
<del>1 April 2015 to 30 September 2015</del> <u>1 April 2017 to 30 September 2017</u>	m=1,2,3,4,5,6	0.0325
<del>1 October 2015 to 31 March 2016</del> <u>1 October 2017 to 31 March 2018</u>	m=7,8,9,10,11,12	0.0475
<del>1 April 2016 to 30 September 2016</del>	m=1,2,3,4,5,6	0.0325
<del>1 October 2016 to 31 March 2017</del>	m=7,8,9,10,11,12	0.0475

DFICAP<sub>d</sub> means the daily forecasting incentive cap for the relevant day d in respect of Relevant Year t and shall take the value £0.0025 million;

RFICAP<sub>m</sub> means the Wind Generation Forecasting Incentive cap for the relevant month m in respect of each Relevant Year t and shall take the value £0.20 million in the periods 1 April 2015 to 30 September 2015 and 1 April 2016 to 30 September 2016 and shall take the value £0.30 million in the periods 1 October 2015 to 31 March 2016 and 1 October 2016 to 31 March 2017;

RFIFLO<sub>m</sub> means the Wind Generation Forecasting Incentive floor for the relevant month m in respect of each Relevant Year t and shall take

~~the value £0.20 million in the periods 1 April 2015 to 30 September 2015 and 1 April 2016 to 30 September 2016 and shall take the value £0.30 million in the periods 1 October 2015 to 31 March 2016 and 1 October 2016 to 31 March 2017; and~~

DFIFLO<sub>d</sub> means the daily forecasting incentive floor for the relevant day d in respect of Relevant Year t and shall take the value (minus) -£0.0025 million; and

~~RFIO<sub>m</sub>~~ ~~WFIO<sub>d</sub>~~ means the average of the half-hourly Wind Generation Forecasting Error achieved by the licensee in each relevant ~~month m~~ day d in respect of each Relevant Year t and is derived from the following formula:

$$WFIO_d = \frac{1}{N} \sum_{n=1}^N WFIO_n$$

[Formula amended to rename RFIO<sub>m</sub> to WFIO<sub>d</sub> and to change the calculation to daily performance]

where:

N is the total number of half hours within the relevant calendar day d ~~month m~~; and

~~RFIO<sub>n</sub>~~ ~~WFIO<sub>n</sub>~~ is the percentage ~~mean~~ absolute error between the licensee's Day Ahead Wind Generation Forecast and Wind Generation Output within calendar day d ~~for the relevant calendar month m~~ and is

derived from the following formula:

$$WFIO_n = \frac{|WFIT_n - WFIP_n|}{WFIB_n}$$

[Formula amended to rename RFIO<sub>m</sub> to WFIO<sub>d</sub>, RFIT<sub>n</sub> to WFIT<sub>n</sub>, RFIP<sub>n</sub> to WFIP<sub>n</sub> and RFIC<sub>n</sub> to WFIB<sub>n</sub>]

where:

~~RFIT<sub>n</sub>~~ ~~WFIT<sub>n</sub>~~ means ~~the total~~ Day Ahead Wind Generation Forecast (~~excluding that relating to Wind Generators accepted as bids and offers in the Balancing Mechanism~~) produced by the licensee in respect of half hour n for the relevant day d ~~month m~~.

~~RFIP<sub>n</sub>~~ ~~WFIP<sub>n</sub>~~ means the Wind Generation Output (~~excluding that relating to Wind Generators accepted as bids and offers in the Balancing Mechanism~~) in respect of half hour n for the relevant day d ~~month m~~.

~~RFIC<sub>n</sub>~~ ~~WFIB<sub>n</sub>~~ means the total Wind Generation Capacity (~~excluding that relating to Wind Generators accepted as bids and offers in the Balancing Mechanism~~) in respect of half hour n in the relevant day d ~~month m~~.

For D1FI<sub>m</sub>, D2FI<sub>m</sub>, D7FI<sub>m</sub>:

$$FIDd = \sum_{n=1}^N FIO_n$$

where:

FIO<sub>n</sub> is the revenue incentive on the absolute relevant forecast error for the individual forecasts achieved by the licensee in each relevant day d in respect of each Relevant Year t and is derived from the

$$FIO_n = \text{MAX} \left( \frac{DFICAP_d}{Q_d} \left( 1 - \frac{FIP_n}{FIIF_n} \right), \frac{DFIFLO_d}{Q_d} \right)$$

where:

FIT<sub>n</sub> means the individual forecast for D1FI<sub>m</sub>, D2FI<sub>m</sub>, D7FI<sub>m</sub> produced by the licensee in respect of half hour n for the relevant day d as derived from the Table1 below:

Table 1:

<u>National Demand Forecasting incentive</u>	
<u>D1FI<sub>m</sub></u>	<u>means the individual Day Ahead National Demand Forecast produced by the licensee for the relevant half-hour n in relevant day d</u>
<u>D2FI<sub>m</sub></u>	<u>means the individual Two-Day Ahead National Demand Forecast produced by the licensee for the relevant half-hour n in relevant day d</u>
<u>D7FI<sub>m</sub></u>	<u>means the individual Week Ahead National Demand Forecast produced by the licensee for the relevant half-hour n in relevant day d</u>

FIP<sub>n</sub> means the National Demand in the relevant half-hour for relevant day d; and

FIIF<sub>nd</sub> means the forecasting incentive target for D1FI<sub>m</sub>, D2FI<sub>m</sub>, D7FI<sub>m</sub> in respect of relevant cardinal point for the relevant day d as derived from the table below and takes the value specified in Table 2 to 4 below:

Table 2 D1FI<sub>m</sub>:

<u>Cardinal point</u>	<u>1 April 2017 to 30 June 2017</u>	<u>1 July 2017 to 30</u>	<u>1 October 2017 to</u>	<u>1 January 2018 to</u>
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		<u>September 2017</u>	<u>31 December 2018</u>	<u>31 March 2018</u>
<u>m value</u>	<u>m= 1,2,3</u>	<u>m= 4,5,6</u>	<u>m= 7,8,9</u>	<u>m= 10,11,12</u>
<u>L03</u>	<u>b</u>	<u>b</u>	<u>551</u>	<u>473</u>
<u>1A</u>	<u>416</u>	<u>358</u>	<u>484</u>	<u>421</u>
<u>1B</u>	<u>415</u>	<u>349</u>	<u>430</u>	<u>437</u>
<u>1F</u>	<u>335</u>	<u>338</u>	<u>489</u>	<u>420</u>
<u>1S</u>	<u>355</u>	<u>324</u>	<u>362</u>	<u>b</u>
<u>2A</u>	<u>518</u>	<u>528</u>	<u>584</u>	<u>606</u>
<u>2B</u>	<u>630</u>	<u>615</u>	<u>634</u>	<u>728</u>
<u>2F</u>	<u>497</u>	<u>539</u>	<u>549</u>	<u>680</u>
<u>3B</u>	<u>742</u>	<u>661</u>	<u>692</u>	<u>759</u>
<u>3C</u>	<u>682</u>	<u>608</u>	<u>690</u>	<u>b</u>
<u>4A</u>	<u>640</u>	<u>606</u>	<u>b</u>	<u>b</u>
<u>4B</u>	<u>457</u>	<u>516</u>	<u>462</u>	<u>402</u>
<u>4C</u>	<u>344</u>	<u>351</u>	<u>402</u>	<u>396</u>
<u>DP</u>	<u>b</u>	<u>b</u>	<u>603</u>	<u>519</u>
<u>L04</u>	<u>b</u>	<u>b</u>	<u>b</u>	<u>b</u>

Table 3 D2FI<sub>m</sub>:

<u>Cardinal point</u>	<u>1 April 2017 to 30 June 2017</u>	<u>1 July 2017 to 30 September 2017</u>	<u>1 October 2017 to 31 December 2018</u>	<u>1 January 2018 to 31 March 2018</u>
<u>m value</u>	<u>m= 1,2,3</u>	<u>m= 4,5,6</u>	<u>m= 7,8,9</u>	<u>m= 10,11,12</u>
<u>L03</u>	<u>b</u>	<u>b</u>	<u>550</u>	<u>475</u>
<u>1A</u>	<u>453</u>	<u>363</u>	<u>532</u>	<u>455</u>
<u>1B</u>	<u>464</u>	<u>391</u>	<u>487</u>	<u>484</u>
<u>1F</u>	<u>342</u>	<u>350</u>	<u>523</u>	<u>463</u>
<u>1S</u>	<u>405</u>	<u>342</u>	<u>379</u>	<u>b</u>
<u>2A</u>	<u>634</u>	<u>606</u>	<u>653</u>	<u>732</u>
<u>2B</u>	<u>764</u>	<u>726</u>	<u>777</u>	<u>926</u>
<u>2F</u>	<u>558</u>	<u>613</u>	<u>582</u>	<u>756</u>
<u>3B</u>	<u>939</u>	<u>748</u>	<u>853</u>	<u>1000</u>
<u>3C</u>	<u>927</u>	<u>688</u>	<u>849</u>	<u>b</u>
<u>4A</u>	<u>747</u>	<u>711</u>	<u>b</u>	<u>b</u>
<u>4B</u>	<u>493</u>	<u>534</u>	<u>524</u>	<u>453</u>
<u>4C</u>	<u>342</u>	<u>359</u>	<u>437</u>	<u>413</u>
<u>DP</u>	<u>b</u>	<u>b</u>	<u>762</u>	<u>723</u>
<u>L04</u>	<u>b</u>	<u>b</u>	<u>b</u>	<u>b</u>

Table 4 D7FI<sub>m</sub>:

<u>Cardinal point</u>	<u>1 April 2017 to 30 June 2017</u>	<u>1 July 2017 to 30 September 2017</u>	<u>1 October 2017 to 31 December 2018</u>	<u>1 January 2018 to 31 March 2018</u>
<u>m value</u>	<u>m= 1,2,3</u>	<u>m= 4,5,6</u>	<u>m= 7,8,9</u>	<u>m= 10,11,12</u>
<u>L03</u>	<u>b</u>	<u>b</u>	<u>622</u>	<u>566</u>
<u>1A</u>	<u>589</u>	<u>496</u>	<u>848</u>	<u>783</u>
<u>1B</u>	<u>555</u>	<u>498</u>	<u>862</u>	<u>822</u>
<u>1F</u>	<u>485</u>	<u>486</u>	<u>823</u>	<u>795</u>
<u>1S</u>	<u>465</u>	<u>379</u>	<u>375</u>	<u>b</u>
<u>2A</u>	<u>1154</u>	<u>1030</u>	<u>983</u>	<u>1099</u>
<u>2B</u>	<u>1269</u>	<u>1139</u>	<u>1171</u>	<u>1286</u>
<u>2F</u>	<u>969</u>	<u>1088</u>	<u>979</u>	<u>1140</u>
<u>3B</u>	<u>1307</u>	<u>1108</u>	<u>1229</u>	<u>1394</u>
<u>3C</u>	<u>1163</u>	<u>881</u>	<u>1009</u>	<u>b</u>
<u>4A</u>	<u>833</u>	<u>767</u>	<u>b</u>	<u>b</u>
<u>4B</u>	<u>713</u>	<u>644</u>	<u>962</u>	<u>911</u>
<u>4C</u>	<u>566</u>	<u>516</u>	<u>770</u>	<u>764</u>
<u>DP</u>	<u>b</u>	<u>b</u>	<u>1262</u>	<u>1073</u>
<u>L04</u>	<u>b</u>	<u>b</u>	<u>b</u>	<u>b</u>

Q<sub>d</sub> is the total number of forecasts within the relevant calendar day d (except those forecasts where the target is b on the three tables above).

b takes the value of National Demand Forecasting Error for the relevant forecast n within the relevant calendar day d.

For the three Tables 2 to 4, the cardinal points are:

<u>Cardinal Point</u>	<u>Description</u>
<u>1F</u>	<u>means the settlement period between 00:00 and 00:30</u>
<u>1A</u>	<u>means a settlement period with the lowest National Demand between:</u> <ul style="list-style-type: none"> <li>•<u>01:30 and 2:30 for the period 1 April 2017 to 11 June 2017, 4 September 2017 to 29 October 2017, and 26 March 2018 to 31 March 2018;</u></li> <li>•<u>01:30 and 02:00 for the period 12 June 2017 to 3 September 2017; or</u></li> </ul>

	<ul style="list-style-type: none"> <li>• <u>00:30 and 2:30 for the period 30 October 2017 to 25 March 2018.</u></li> </ul>
<u>L03</u>	<u>means the settlement period between 02:30 and 03:00 for the period 30 October 2017 to 25 March 2018.</u>
<u>1B</u>	<u>means a settlement period between 04:00 and 07:30 with the lowest National Demand.</u>
<u>2A</u>	<u>means a settlement period between 09:00 and 10:30 with the highest National Demand.</u>
<u>2B</u>	<u>means a settlement period between 10:30 and 13:00 with the highest National Demand..</u>
<u>3B</u>	<u>means a settlement period between 13:00 and 16:30 with the lowest National Demand</u>
<u>DP</u>	<u>means a settlement period between 16:30 and 19:00 with the highest National Demand for the period 30 October 2017 to 25 March 2018.</u>
<u>4B</u>	<ul style="list-style-type: none"> <li>• <u>means a settlement period with the highest National Demand between:</u> <ul style="list-style-type: none"> <li>○ <u>19:30 and 21:00 for the period 1 April 2017 to 2 April 2017;</u></li> <li>○ <u>20:00 and 21:30 for the period 3 April 2017 to 16 April 2017;</u></li> <li>○ <u>20:30 and 22:00 for the period 16 April 2017 to 7 May 2017;</u></li> <li>○ <u>21:00 and 22:30 for the period 8 May 2017 to 13 August 2017;</u></li> <li>○ <u>22:30 and 22:00 for the period 14 August 2017 to 27 August 2017;</u></li> <li>○ <u>20:00 and 21:30 for the period 28 August 2017 to 10 September 2017;</u></li> <li>○ <u>19:30 and 21:00 for the period 11 September 2017 to 24 September 2017;</u></li> <li>○ <u>19:00 and 20:30 for the period 25 September 2017 to 8 October 2017;</u></li> <li>○ <u>18:30 and 20:00 for the period 9 October 2017 to 15 October 2017;</u></li> <li>○ <u>18:00 and 20:00 for the period 16 October 2017 to 22 October 2017;</u></li> <li>○ <u>18:00 and 19:30 for the period 26 March 2018 to 31 March 2018; and</u></li> </ul> </li> </ul>

	<ul style="list-style-type: none"> <li>• <u>means the settlement period between 20:30 and 21:00 for the period 30 October 2017 to 25 March 2017.</u></li> </ul>
<u>4C</u>	<u>means the settlement period between 23:30 and 24:00</u>
<u>L04</u>	<u>means the settlement period between 03:30 and 04:00</u>
<u>2F</u>	<u>means a settlement period between 07:30 and 09:00 with the highest National Demand</u>
<u>3C</u>	<u>means a settlement period with the highest National Demand between:</u> <ul style="list-style-type: none"> <li>• <u>16:30 and 18:00 for the period 1 April 2017 to 16 April 2017, 9 October 2017 to 29 October 2017, and 26 March 2018 to 31 March 2018;</u></li> <li>• <u>16:30 and 18:30 for the period 17 April 2017 to 7 May 2017 and 11 September 2017 to 8 October 2017;</u></li> <li>• <u>16:30 and 19:30 for the period 8 May 2017 to 27 August 2017;</u></li> <li>• <u>16:30 and 19:00 for the period 28 August 2017 to 10 September 2017.</u></li> </ul>
<u>4A</u>	<u>means a settlement period with the lowest National Demand between:</u> <ul style="list-style-type: none"> <li>• <u>18:00 and 19:30 for the period 1 April 2017 to 2 April 2017;</u></li> <li>• <u>18:00 and 20:00 for the period 3 April 2017 to 16 April 2017;</u></li> <li>• <u>18:30 and 20:30 for the period 17 April 2017 to 7 May 2017;</u></li> <li>• <u>19:30 and 21:00 for the period 8 May 2017 to 13 August 2017;</u></li> <li>• <u>19:30 and 20:30 for the period 14 August 2017 to 27 August 2017;</u></li> <li>• <u>19:00 and 20:00 for the period 28 August 2017 to 10 September 2017;</u></li> <li>• <u>18:30 and 19:30 for the period 11 September 2017 to 24 September 2017;</u></li> <li>• <u>18:00 and 19:30 for the period 26 March 2018 to 31 March 2018.</u></li> </ul>

<u>1S</u>	<u>means the settlement period between 00:30 and 01:00 for the periods 1 April 2017 to 11 June 2017, 4 September 2017 to 29 October 2017, and 26 March 2018 to 31 March 2018.</u>
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The Authority may direct changes to the definitions of the cardinal points above following consultation with the licensee.

4H.4 For the purposes of the calculation of  $WFI_m$ , the terms  ~~$RFIT_n$ ,  $RFIP_n$  and  $RFIC_n$~~   $WFIT_n$ ,  $WFIP_n$  and  $WFIB_n$  above, each is the total (in MW) of all Wind Generators with installed Operational Metering for the half-hour n.

### **Part B: Unbiased Forecasting incentive**

4H.5 The term  $WUI_m$ ,  $D1UI_m$ ,  $D2UI_m$ ,  $D7UI_m$  (in £ million) shall be derived from the following formula:

If for any two individual forecasts n,  $UIT_n > 70\%$  or  $UIT_n < 30\%$ :

$$\underline{UI_m = FIUFLO_m}$$

If  $UIT_m \geq 50\%$  :

$$\underline{UI_m = MAX(-0.208UIT_m + 0.125, FIUFLO_m)}$$

If  $UIT_m < 50\%$  : [removed  $\Sigma$  given replication with definition below]

$$\underline{UI_m = MAX(-0.208(1 - UIT_m) + 0.125, FIUFLO_m)}$$

where:

$UI_m$  means the incentive revenue for  $WUI_m$ ,  $D1UI_m$ ,  $D2UI_m$ ,  $D7UI_m$  for calendar month m as defined in this condition;

$UIT_m$  is the total number of forecasts above or equal outturn ( $FIT_n - FIP_n$   $\geq 0$  or  $WFIT_n - WFIP_n > 0$ ) as a share of total number of forecasts within the relevant calendar month m; and

$FIUFLO_m$  means the unbiased forecasting incentive floor for the relevant month m in respect of Relevant Year t and shall take the value (minus) -£0.0208.

**Part C: Incentive reporting**

4H.6 No later than 15 working days after the end of each month m in Relevant Year t, the licensee shall notify the Authority of all the terms used to calculate incentive performance in respect of that month.

- (a) ~~the overall Wind Generation Forecasting Error achieved (RFIO<sub>m</sub>);~~
- (b) ~~the total Day Ahead Forecast (RFIT<sub>n</sub>) for each hour;~~
- (c) ~~the total actual Wind Generation Output (RFIP<sub>n</sub>) for each hour; and~~
- (d) ~~the total Wind Generation Capacity (RFIC<sub>n</sub>) for each hour.~~

~~4H.5 The licensee shall publish an additional forecast of Wind Generation output no later than 05:00 hours on the day before the day to which the forecast relates.~~

**Part D: Quarterly forecasting report**

4H.7 The licensee shall, unless otherwise directed by the Authority, prepare a report every three months (the “quarterly forecasting report”) on System Demand, wind and solar generation forecasts.

4H.8 The licensee shall publish on its website and provide a copy of the quarterly forecasting report to the Authority by 30 June+ July 2017, + 30 September 2017, 31 December 2017 and 31 March 2018 and every subsequent three months thereafter or such other dates as directed by the Authority.

4H.9 Where the licensee considers that there are legitimate reasons for not publishing certain information or data in the quarterly forecasting report on its website the licensee must inform the Authority of those reasons before publication.

4H.10 The quarterly forecasting report shall include, but not be limited to the following:

- (a) a description of System Demand, wind and solar generation forecasts on the system broken down into its components parts for the periods: within day, day ahead, 2 - 14 days ahead, 7 days ahead and 2 – 52 weeks ahead.
- (b) a description of actions taken by the licensee that have affected System Demand, wind, and solar generation Forecast Errors.
- (c) an analysis on the causes of Forecast Errors and actions taken by the licensee to minimise those errors in future forecasts.

**Part E: Definitions**

4H.11 The definitions in this condition will have the following meaning:

<u>Active Power</u>	<u>shall have the same meaning as is given to that term in the Grid Code.</u>
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<b><u>Day Ahead National Demand Forecast</u></b>	means the forecast of National Demand <b>in MW</b> published by the licensee no later than 9:00 hours on the day before the day to which the forecast relates <b>in MW</b> .
<b><u>Day Ahead Wind Generation Forecast</u></b>	means the forecast of Wind Generation Output published by the licensee no later than 5:00 hours on the day before the day to which the forecast relates (excluding that relating to Wind Generators accepted as bids and offers in the Balancing Mechanism).
<b><u>Forecast Errors</u></b>	means the difference between the relevant forecast and its outturn in respect of the relevant period.
<b><u>National Demand</u></b>	means the National Demand <b>in MW</b> as defined in the Grid Code <b>in MW</b> .
<b><u>National Demand Forecasting Error</u></b>	means the difference between the licensee's Day Ahead National Demand Forecast, Two-day Ahead National Demand Forecast, Week Ahead National Demand Forecast (as the case may be) and National Demand <b>in MW</b> in respect of each relevant half-hour <b>in MW</b> .
<b><u>Operational Metering</u></b>	means metering systems used for the measurement of Active Power to the relevant distribution system or transmission system.
<b><u>System Demand</u></b>	means measures of demand for electricity in Great Britain used by electricity market participants to inform their operational and investment decisions.
<b><u>Two-day Ahead National Demand Forecast</u></b>	means the forecast of National Demand <b>in MW</b> published by the licensee no later than 17:00 hours two days before the day to which the forecast relates <b>in MW</b> .
<b><u>Week Ahead National Demand Forecast</u></b>	means the forecast of National Demand <b>in MW</b> published by the licensee no later than 17:00 hours seven days before the day to which the forecast relates <b>in MW</b> .
<b><u>Wind Generation Capacity</u></b>	means the Registered Capacity of each Wind Generator in respect of which Operational Metering is installed (excluding that relating to Wind Generators accepted as bids and offers in the Balancing Mechanism).

<b><u>Wind Generation Forecasting Error</u></b>	means the difference between the licensee's <u>Day Ahead Forecast and Wind Generation Output in respect of each half-hour.</u>
<b><u>Wind Generation Output</u></b>	means the <u>Active Power output in MW from each Wind Generator in respect of which Operational Metering is installed (excluding that relating to Wind Generators accepted as bids and offers in the Balancing Mechanism).</u>
<b><u>Wind Generator</u></b>	means a <u>Power Station comprising wind turbines.</u>



## **Special Condition 4J. ~~The System Operator Innovation Roll-out Mechanism~~ SO-TO mechanism**

[Remove all of the current text on Special Condition 4J]

### **Part A: Purpose of licence conditions**

4J.1 The purpose of this condition is to:

- (a) establish the value of the SO-TO Cost allowance term (SOTOC<sub>t</sub>) in the formula in Special Condition 4C (Balancing Services Activity Revenue Restriction); and
- (b) place an obligation on the licensee in relation to the production of a quarterly report on the Commercial Operational Services and Joint Works Projects incurred or considered by the licensee.

4J.2 For the purposes of paragraph 4J.1, the term OC<sub>t</sub> shall be derived from the following formula:

$$\text{SOTOC}_t = (\text{OC}_t + \text{COS}_t + \text{OCTRU}_t + \text{ONTRU}_t) \times \text{RPIF}_t + \text{JW}_t + \text{OIPay}_t + \text{IONT}_t$$

where:

OC<sub>t</sub> means an allowance for payments by the licensee to SP Transmission Ltd, Scottish Hydro Electric Transmission Plc or any successor company to each in respect of Outage Changes and has the value £1,146,800 (in 2009/10 prices) for the Relevant Year t unless determined otherwise by the Authority in accordance with Part D of this condition;

COS<sub>t</sub> means an allowance for payments to SP Transmission Ltd, Scottish Hydro Electric Transmission Plc or any successor company by the licensee in respect of Commercial Operational Services and has the value £1,146,800 (in 2009/10 prices) for 2017/18 and zero for any other Relevant Year t unless determined otherwise by the Authority in accordance with Part D of this condition;

OCTRU<sub>t</sub> means the revenue adjustment made in Relevant Year t in respect of the actual value of the Retail Prices Index in Relevant Year t-2 minus the assumed value of the Retail Prices Index in Relevant Year t-2, as derived in accordance with paragraph 4J.3 of this condition;

ONTRU<sub>t</sub> means the revenue adjustment made in Relevant Year t in respect of the actual value of the Retail Prices Index in Relevant Year t-2 minus the assumed value of the Retail Prices Index in Relevant Year t-2, as derived in accordance with paragraph 4J.4 of this condition and has the value zero in Relevant Years 2018/19 and in each subsequent Relevant Year.

RPIF<sub>t</sub> has the value given to it by Special Condition 3A (Restriction of Transmission Network Revenue);

JW<sub>t</sub> means an allowance for payments to SP Transmission Ltd, Scottish Hydro Electric Transmission Plc or any successor company to each by the licensee in respect of a Joint Works Projects and has the value of zero unless determined otherwise by the Authority in accordance with Part D of this condition;

OIPay<sub>t</sub> means an incentive payment for Relevant Year t determined in accordance with Part F of this condition; and

IONT<sub>t</sub> means the amount of any allowed outage cost adjustments in each Relevant Year t determined in accordance with Part D of this condition;

4J.3 For the purposes of paragraph 4J.2, OCTRU<sub>t</sub> is derived in accordance with the following formula:

$$\underline{\underline{OCTRU_t = \left( \frac{RPIA_{t-2} - RPIF_{t-2}}{RPIA_{t-2}} \right) \times \frac{SOTOC_{t-2}}{RPIF_{t-2}} \times PVF_{t-2} \times PVF_{t-1}}}}$$

where:

RPIA<sub>t-2</sub> has the value given to it by Part C of Special Condition 3A;

RPIF<sub>t-2</sub> has the value given to it by Part C of Special Condition 3A;

SOTOC<sub>t-2</sub> means the SO-TO Cost allowance as derived in accordance with paragraph 4J.2 of this condition; and

PVF<sub>t</sub> has the value given to it by Part C of Special Condition 3A.

4J.4 For the purposes of paragraph 4J.2, ONTRU<sub>t</sub> is derived in accordance with the following formula:

$$\underline{\underline{ONTRU_t = \left( \frac{RPIA_{t-2} - RPIF_{t-2}}{RPIA_{t-2}} \right) \times \frac{NC_{t-2}}{RPIF_{t-2}} \times PVF_{t-2} \times PVF_{t-1}}}}$$

where:

RPIA<sub>t-2</sub> has the value given to it by Part C of Special Condition 3A;

RPIF<sub>t-2</sub> has the value given to it by Part C of Special Condition 3A;

NC<sub>t-2</sub> means the Outage Change cost allowance calculated in accordance with the licence in effect in Relevant Year 2016/17; and

PVF<sub>t</sub> has the value given to it by Part C of Special Condition 3A.

### **Part B: Outage cost adjusting event**

4J.5 This part sets out the procedure for the licensee notifying the Authority of an outage cost adjusting event for Outage Changes and Commercial Operational Services.

4J.6 An outage cost adjusting event in Relevant Year t may arise from any of the following:

(a) where the actual costs incurred by the licensee in making Outage Changes are, or where the licensee's reasonable expectation of the actual costs in making Outage Changes will be either less than or in excess of OC<sub>t</sub> in each case by more than £300,000 (the "outage threshold amount") or such other figure as the Authority has specified for the Relevant Year, where OC<sub>t</sub> has the value ascribed to it in paragraph 4J.2 above;

(b) where the actual costs incurred by the licensee in making Commercial Operational Services, or where the licensee's reasonable expectation of the actual costs in making Commercial Operational Services will be less than the value of COS<sub>t</sub> or such other figure as the Authority has determined for the Relevant Year where COS<sub>t</sub> has the value ascribed to it in paragraph 4J.2 above;

(c) an event or circumstance other than that in paragraph 4J.6(a) or 4J.6(b) above which is, in the opinion of the Authority, an outage cost adjusting event and is approved by it as such in accordance with Part D.

4J.7 Where the licensee considers, and can provide supporting evidence that, in respect of Relevant Year t, there have been costs and/or expenses that have been incurred or saved by an outage cost adjusting event, then the licensee shall give notice of this event to the Authority.

4J.8 A notice provided to the Authority under paragraph 4J.7 shall give particulars of:

(a) the event to which the notice relates and the reason(s) why the licensee considers this event to be an outage cost adjusting event;

(b) the amount of any change in costs and/or expenses that can be demonstrated by the licensee to have been caused or saved by the event and how the amount of these costs and/or expenses has been calculated;

(c) the amount of any allowed outage cost adjustment proposed as a consequence of that event and how this allowed outage cost adjustment has been calculated; and

- (d) any other analysis or information which the licensee considers to be sufficient to enable the Authority and the relevant parties referred to Part D of this condition to fully assess the event to which the notice relates.
- 4J.9 If the Authority considers that the analysis or information provided in sub-paragraphs 4J.8(a) to 4J.8(d) above is insufficient to enable both the Authority and the relevant parties referred to in Part D of this condition to assess whether an outage cost adjusting event has occurred and/or the amount of any allowed outage cost adjustment that should be approved, the Authority can direct that the supporting evidence be supplemented with additional information that it considers appropriate.
- 4J.10 A notice under paragraph 4J.7 shall be given as soon as is reasonably practicable after the occurrence of the outage cost adjusting event, and, in any event, not later than three months after the end of the Relevant Year in which it occurs.
- 4J.11 The Authority will make public, excluding any confidential information, any notice of an outage cost adjusting event and any supporting information following its receipt.
- 4J.12 Any notice submitted to the Authority under paragraph 4J.7 above must clearly identify whether any of the information contained in the approval notice and any supporting information is of a confidential nature.

### **Part C: Joint Works Projects**

- 4J.13 Where the licensee considers, and can provide supporting evidence that, in respect of a Joint Works Project, where the cost exceeds the COST value and the benefits of the Joint Works Project outweigh the associated costs, then the licensee shall give notice of this Joint Works Project to the Authority.
- 4J.14 To qualify as a Joint Works Project, a project must meet the following principles:
- (a) provide benefits to existing and future electricity consumers in Great Britain; and
  - (b) not be funded or not be capable of being funded elsewhere,
- and must be supported by an independent review by an appropriate third-party independent expert on the licensee's analysis and conclusions on 4J.14(a) and 4J.14(b).
- 4J.15 A notice provided to the Authority under paragraph 4J.13 must give particulars of:
- (a) the project to which the approval notice relates and the reason(s) why the licensee considers the project is a Joint Works Project;
  - (b) the anticipated level of cost savings that can be demonstrated by the licensee as likely to result from the project and how the level of these cost savings has been calculated;
  - (c) how the project satisfies the principles set out in paragraph 4J.14; and

- (d) any other analysis or information which the licensee considers to be relevant to enable the Authority and the relevant parties referred to in paragraph 4J.20 to fully assess the projects savings to which the notice relates.
- 4J.16 If the Authority considers that the analysis or information provided in sub-paragraphs 4J.15(a) to 4J.15(d) above is insufficient to enable the Authority to assess whether a project is a Joint Works Project, the Authority can either request that supporting evidence be supplemented with additional information that it considers appropriate or return the project to the licensee for resubmission.
- 4J.17 If the Authority considers that assessing the application at that time places a too high an administrative burden on the Authority, the Authority may decide not to assess the Joint Works Project or defer such assessment to such time as it considers to be appropriate.
- 4J.18 The Authority will publish, excluding any confidential information duly identified, any notice of a Joint Works Project as soon as reasonably practicable following its receipt.
- 4J.19 Any notice submitted to the Authority under paragraph 4J.13 above must clearly identify whether any of the information contained in the approval notice is of a confidential nature.

#### **Part D: Approval from Authority**

- 4J.20 The Authority shall determine (after consultation with the licensee and such other persons as it considers desirable):
- (d) (a) whether to approve or reject any notice including the value submitted by the licensee under Part B; and
  - (e) (b) whether to approve or reject the Joint Works Project submitted under Part C and the level of costs that the licensee can recover in Relevant Year t.
- 4J.21 In the event that the licensee does not incur those costs outlined in the Joint Works Project submission, it should notify the Authority.
- 4J.22 In relation to the Relevant Year t, the allowed outage cost adjustment (IONTt) for the purposes of paragraph 4J.2 shall be:
- (a) the value determined by the Authority under paragraph 4J.20(a) above; or
  - (b) if the Authority has not made a determination under paragraph 4J.20(a) above within three months of the date on which notice of an outage cost adjusting event was provided to the Authority, the amount of the allowed outage cost adjustment proposed as a consequence of the event in the notice given to the Authority under Part B of this condition; or
  - (c) in all other cases zero, including situations where the Authority has not made a determination under paragraph 4J.20 above within three months of the date on which notice of an outage cost adjusting event was provided to the Authority and the Authority has, before the end of that three month period, informed the licensee

that the Authority considers that the analysis or information provided in accordance with paragraphs 4J.8 and/or 4J.9 is insufficient to enable the Authority to assess whether an outage cost adjusting event has occurred and/or the amount of any allowed outage cost adjustment.

4J.23 The Authority may revoke an approval of an outage cost adjusting event and allowed outage cost adjustment by direction, following consultation with the licensee and relevant parties.

4J.24 In relation to the Relevant Year t, the Joint Works Project allowance (JWt) for the purposes of paragraph 4J.2 shall be:

- (a) the value determined by the Authority under paragraph 4J.20 (b) above minus any unspent costs notified to the Authority under paragraph 4J.21; or
- (b) In all other cases zero.

#### **Part E: Quarterly reporting**

4J.25 The licensee shall, unless otherwise directed by the Authority, publish an SO-TO report (“SO-TO report”) on all of the Commercial Operational Services and Joint Works Projects on its website and provide a copy of the report to the Authority by 1 July 2017, and at the end of every subsequent three month period or such other dates as directed by the Authority.

4J.26 Where the licensee considers that there are legitimate reasons for not publishing certain information or data in the SO-TO report on its website the Authority may approve the publication of the report without such information or data.

4J.27 The SO-TO report shall include at least:

- (a) the details on every project evaluated (above a de minimis threshold of £25,000), either as Commercial Operational Services or as a Joint Works Project including the costs and associated savings of those projects
- (b) the details of every Commercial Operational Services and Joint Works Project enacted under the mechanism set out in this condition, including the costs and associated savings of those projects; and
- (c) the methodology used by the licensee to derive its estimate of costs and associated savings.

#### **Part F: Incentive mechanism**

4J.28 The Authority will determine the value of OIPayt in the manner set out in this Part F.

4J.29 The licensee shall submit to the Authority by 1 July 2018, unless otherwise directed by the Authority, an annual Commercial Operational Services and Joint Works Project report containing the information set out in paragraph 4J.27 and any other information

that the licensee considers will be relevant to enable the Authority to make a determination under paragraph 4J.34.

4J.30 The report prepared pursuant to paragraph 4J.29 must be accompanied by a statement from an appropriate third-party independent expert:

(a) confirming that they have carried out an investigation on the projects specified in the report prepared pursuant to paragraph 4J.29 and costs incurred under the mechanism set out in this condition; and

(b) provide an opinion as to:

(i) the appropriateness of the original outage plan;

(ii) the level of costs incurred under the mechanism set out in this condition; and

(ii) whether costs incurred under the mechanism set out in this condition are compliant with the requirements of this licence condition.

4J.31 Before submitting the report to the Authority, the licensee must consult with industry on a draft report for at least 28 days.

4J.32 The consultation must:

(a) set out the methodology used by the licensee to calculate any savings or losses; and

(b) explain the actions the licensee considered and enacted.

4J.33 The licensee shall:

(a) take account of all the responses to the consultation and if appropriate amend the report before submitting it to the Authority; and

(b) include in the report all the responses to the consultation.

4J.34 The Authority shall consider the information provided to it under this Part and will then determine the level of savings or losses incurred as a consequence of the projects identified in the annual report submitted under this Part and assign the value of OIPayt for the purposes of paragraph 4J.2 as 10% of the deemed saving or loss subject to a cap and floor or +£1million.

## Part H Definitions

4J.35 The definitions in this condition will have the following meaning:

<u>Commercial Operational Services</u>	<u>means a service provided to the licensee by SP Transmission plc Ltd, Scottish Hydro Electric Transmission Plc or any successor company to each with the purpose of lowering the overall costs associated with the procurement and use of balancing services by the licensee system operation costs</u> above these parties
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		<u>obligations under the licence or the STC.</u>
<b><u>Joint Works Projects</u></b>		means where the licensee and <u>SP Transmission plc Ltd, Scottish Hydro Electric Transmission Plc or any successor company the Transmission Owner</u> agree to a Commercial Operational Services so as to minimise <u>the transmission constraints</u> costs on the national electricity transmission system when the costs are higher than £1,146,800 (in 2009/10 prices);
<b><u>Outage Change</u></b>		<p>means a change notified to a <u>SP Transmission plc Ltd, Scottish Hydro Electric Transmission Plc or any successor company Transmission Owner</u> by the licensee to the Outage Plan on or after Week 49, as updated from time to time in accordance with the STC, other than:</p> <p>(a) a change to the Outage Plan requested by <u>SP Transmission plc Ltd, Scottish Hydro Electric Transmission Plc or any successor company a Transmission Owner</u> (the “original change”); and</p> <p>(b) such changes notified to the <u>SP Transmission plc Ltd, Scottish Hydro Electric Transmission Plc or any successor company Transmission Owner</u> by the licensee which:</p> <p>(i) <u>the licensee and SP Transmission plc Ltd, Scottish Hydro Electric Transmission Plc or any successor company the Transmission Owner</u> agree are necessary in order to give effect to the original change; or</p> <p>(ii) <u>where there is a failure to agree, the Authority determines are necessary in order to give effect to the original change, and</u></p> <p>(c) <u>without prejudice to sub-paragraphs (a) and (b) above, any change to the Outage Plan notified to SP Transmission plc Ltd, Scottish Hydro Electric Transmission Plc or any successor company by the licensee which the licensee and the Transmission Owner agree is not an Outage Change under this licence condition (a “non-chargeable outage change”)</u></p>
<b><u>Outage Plan</u></b>		<u>has the meaning used or given in the STC;</u>



Week 49

has the meaning used or given in the STC;