AGGREGATION VERSION

DATED __________________________ 201[ ]

NATIONAL GRID ELECTRICITY TRANSMISSION PLC (1)

AND

____________________
____________________
____________________

FIRM FREQUENCY RESPONSE AGREEMENT
(NON-BALANCING MECHANISM PARTICIPANT (DYNAMIC))
RELATING TO SITE(S) AT [ ]

____________________
[ TENDER RULES AND STANDARD CONTRACT TERMS SECTION 4A ]

CONTRACT LOG NO: [ ]

SUBJECT TO CONTRACT

DRAFT [ ]

[DATE]

REF: [ ]

© National Grid Electricity Transmission plc
THIS FIRM FREQUENCY RESPONSE AGREEMENT is made on the [ ] day of [ ] 201[ ]

BETWEEN

(1) NATIONAL GRID ELECTRICITY TRANSMISSION PLC a company registered in England with number 2366977 whose registered office is at 1-3 Strand, London, WC2N 5EH (“NGET”, which expression shall include its successors and/or permitted assigns); and

(2) [ ] a company registered in [ ] with number [ ] whose registered office is at [ ] (“Provider”, which expression shall include its successors and/or permitted assigns).

WHEREAS

(A) This Firm Frequency Response Agreement is entered into in respect of one or more FFR Units each comprising one or more Sites in anticipation of the submission by the Provider of FFR Tenders in respect of such FFR Units in accordance with the Tender Rules and Standard Contract Terms.

(B) Accordingly, the applicable provisions of this Firm Frequency Response Agreement shall apply with respect to each FFR Tender submitted by the Provider, and with respect to each relevant FFR Unit shall form part of each and any FFR Contract formed in relation thereto.

(C) None of the FFR Units are established and registered as a BM Unit or a collection or BM Units in accordance with the Balancing and Settlement Code in respect of which the Provider is the Lead Party.

NOW IT IS HEREBY AGREED as follows:

1. DEFINITIONS, INTERPRETATION AND CONSTRUCTION

Unless the subject matter or context otherwise requires or is inconsistent therewith, and unless defined herein, terms and expressions defined and rules of construction set out in Section 6 of the Tender Rules and Standard Contract Terms have the same meanings, interpretations or constructions in this Firm Frequency Response Agreement. Unless the subject matter or context otherwise requires or is inconsistent therewith, in this Firm Frequency Response Agreement the terms set out in Appendix 1 shall have the meanings set out respectively therein.

2. TENDER RULES AND STANDARD CONTRACT TERMS

2.1 Subject to Sub-Clause 2.2, the Parties hereby agree to be bound by, and to comply with, the applicable provisions of the Tender Rules and Standard Contract Terms with respect to the submission of FFR Tenders and any FFR Contract formed pursuant thereto, in each case insofar as relating to the provision of Dynamic Firm Frequency Response as described in Section 4A of the Tender Rules and Standard Contract Terms (and for the purpose of this Firm Frequency Response Agreement “FFR Contract” shall be construed accordingly).

2.2 The Tender Rules and Standard Contract Terms shall be read and construed subject to the special conditions (if any) set out in Appendix 2.
2.3 The Provider agrees that the relevant provisions as to determination of the payments to be made between NGET and the Provider in consequence of events of default set out in Section 4A of the Tender Rules and Standard Contract Terms reflect the legitimate interest of NGET as Great Britain System Operator in ensuring compliance by the Provider with the Tender Rules and Standard Contract Terms, and furthermore are reasonable in light of NGET's roles and responsibilities in such capacity and the anticipated harm and the difficulty of estimating or calculating actual damages. The Provider accordingly waives the right to contest those provisions as an unreasonable penalty or otherwise.

3. COMMENCEMENT AND TERM

3.1 This Firm Frequency Response Agreement shall come into force on the date hereof and shall continue in force and effect until terminated by either Party by not less than two months notice in writing to the other (but not so as to expire during the subsistence of any FFR Contract in respect of any FFR Unit) or until earlier termination in accordance with the Tender Rules and Standard Contract Terms.

3.2 In accordance with the Tender Rules and Standard Contract Terms, this Firm Frequency Response Agreement may terminate in respect of one or more of the FFR Units, and such termination shall be without prejudice to the continuing effect of the Firm Frequency Response Agreement in relation to any other FFR Units.

4. PROVISION OF FIRM FREQUENCY RESPONSE

Without limiting the generality of Sub-Clause 2.1, upon the formation of each FFR Contract pursuant to and in accordance with the Tender Rules and Standard Contract Terms, the Provider hereby agrees to provide Firm Frequency Response to NGET from the relevant FFR Unit(s) upon and subject to the provisions of this Clause 4, Section 4A and the other applicable terms and conditions set out in the Tender Rules and Standard Contract Terms and by reference to Clause 5.

5. DATA TABLES

5.1 For the purposes of each and every FFR Tender in respect of any FFR Unit, the Parties hereby agree that for any FFR Confirmed Part Load Point the Frequency Response to be provided from that FFR Unit, and (where applicable) the payments to be made by National Grid in respect thereof, shall be ascertained by reference to the applicable FFR Capability Data Tables and FFR Power Delivery Data Tables set out and described as such in Appendix 4.

5.2 For the purposes of Sub-Clause 5.1, the Parties hereby agree that:-

(a) the figures set out in such FFR Capability Data Tables represent, for each applicable aggregated Genset De-Load, the amount of Rapid Response, Primary Response, Secondary Response and High Frequency Response referred to therein;

(b) such FFR Capability Data Tables include a summary response table whose figures represent, for each applicable aggregated Genset De-Load, the capabilities in respect of Rapid Response, Primary Response, Secondary Response and High Frequency Response at given levels of aggregated De-Load referred to therein; and
the figures set out in such FFR Power Delivery Data Tables represent, for each aggregated Genset De-Load, the Frequency Response that is deemed to be delivered in respect of Rapid Response, Primary Response, Secondary Response and High Frequency Response.

6. AGGREGATION AND SUBSTITUTION OF FFR UNITS

For the purposes of the Tender Rules and Standard Contract Terms and the provisions of this FFR Agreement, the Parties hereby agree that:

(a) the term “Aggregated Facility” shall mean any of the notional facilities specified in Part 2 of Appendix 3 to which one or more FFR Units may from time to time be allocated or re-allocated by the Provider in accordance with the provisions of Appendix 7 for the purposes of enabling Firm Frequency Response to be made available and despatched from such FFR Units on an aggregated basis via such Aggregated Facility and which together shall (if the subject of a FFR Contract) comprise the Contracted FFR Unit for the purpose of the Tender Rules and Standard Contract Terms;

(b) the Provider may from time to time nominate a new FFR Unit (“New FFR Unit”) for the purposes of allocation to an Aggregated Facility following NGET's acceptance of such New FFR Unit pursuant to and in accordance with the provisions set out in Appendix 7; and

(c) the FFR Units (if any) shown in Appendix 5 shall be suitable for nomination by the Provider as Substitute FFR Units under and in accordance with the provisions of the Tender Rules and Standard Contract Terms, although such inclusion in Appendix 5 shall not prejudice the discretion of NGET to accept or decline any nomination made by the Provider.

7. PROVIDER’S AGENT

In accordance with paragraph 5.16 of the Tender Rules and Standard Contract Terms, and unless and until otherwise notified by the Provider pursuant thereto, the details (if any) set out in Appendix 6 designate an FFR Provider's Agent for the purposes of all FFR Contracts, and where so designated the provisions of Appendix 6 shall apply.

8. VARIATIONS

No variation to this Firm Frequency Response Agreement shall be effective unless made in writing and signed by or on behalf of both NGET and the Provider.

9. NOTICES

For the purposes of this Firm Frequency Response Agreement, unless and until otherwise notified by the relevant Party to the other in accordance with paragraph 5.8 of the Tender Rules and Standard Contract Terms, any notice or other communication to be given in writing by NGET or the Provider to the other under, or in connection with matters contemplated by, this Firm Frequency Response Agreement shall be sent to the following address and/or facsimile number and marked for the attention of the person named below:
NGET: Contract Services
National Grid Electricity Transmission plc
National Grid House
Warwick Technology Park
Gallows Hill
Warwick CV34 6DA
Facsimile number:
For the attention of: The Company Secretary
Copy to: The Contract Services Manager
Facsimile number:

Provider: Address:
Facsimile number:
For the attention of:

10. COUNTERPARTS
This Firm Frequency Response Agreement may be signed in any number of counterparts and by the Parties on separate counterparts, each of which when signed shall constitute an original but all the counterparts shall together constitute but one and the same instrument. For the purposes of this Clause 10, the delivery of a facsimile copy of a signed counterpart of this Firm Frequency Response Agreement shall be deemed to be a valid signature thereof provided that the Party so delivering a facsimile hereby undertakes to deliver an original copy of this Firm Frequency Response Agreement forthwith following such facsimile transmission.
IN WITNESS WHEREOF the hands of the duly authorised representatives of the parties hereto at the date first above written

SIGNED on behalf of )
NATIONAL GRID )
ELECTRICITY TRANSMISSION plc )

SIGNED on behalf of )
[ ] )
APPENDIX 1 – FURTHER DEFINITIONS

“Aggregated Facility” has the meaning given in Clause 6(a);

“Allocated” means, in relation to an FFR Unit, allocated at the relevant time to an Aggregated Facility in accordance with the provisions of Appendix 7 and “Unallocated” shall be construed accordingly;

“Allocation Notification” has the meaning given in Paragraph 2.2 of Appendix 7;

“Commencement Date” the date being the Service Day from which this Firm Frequency Response Agreement shall apply as specified in Clause 3;

“Tender Rules and Standard Contract Terms” the document entitled “Firm Frequency Response Tender Rules and Standard Contract Terms” published by NGET and as revised from time to time in accordance with its terms; and

“New FFR Unit” has the meaning given in Clause 6(b).
PART 1 – VARIATION TO TENDER RULES AND STANDARD CONTRACT TERMS

The Parties acknowledge and agree that it is necessary to modify, disapply and/or supplement the provisions of Section 4A of the Tender Rules and Standard Contract Terms to accommodate unit specific or Site specific technical requirements of the FFR Units.

The Parties acknowledge and agree that, as between The Company and the Provider and for the purposes of this Firm Frequency Response Agreement, the Tender Rules and Standard Contract Terms shall be and are hereby modified, disapplied and supplemented as follows:

**Paragraph 4A.1   INTRODUCTION**

1. Sub-paragraphs 4A.1.1 and 4A.1.2 shall be modified to read as follows:

   “4A.1.1 This Section 4A sets out the terms for provision of Firm Frequency Response where the FFR Provider provides Firm Frequency Response from Dynamic Demand and/or from Generating Units and/or other Plant and Apparatus as a Non-Balancing Mechanism Participant.

   4A.1.2 The provisions of this Section 4A shall apply with respect to an FFR Provider who has submitted an FFR Tender which has been accepted in respect of such Dynamic Demand and/or Generating Units and/or other Plant and Apparatus by National Grid pursuant to sub-paragraph 2.5.1 so as to form an FFR Contract or where the context otherwise requires.”.

**Paragraph 4A.4   PROVISION OF FIRM FREQUENCY RESPONSE**

2. Paragraph 4A.4 shall be modified and supplemented by the addition of the words "and/or Generating Units and/or other Plant and Apparatus" after the words "Dynamic Demand" in line 3 of sub-paragraph 4A.4.5.
3. Sub-paragraphs 4A.14.1 and 4A.14.2 shall be modified to read as follows:

"4A.14.1 The availability of Firm Frequency Response and the amount of Response delivered shall be monitored by National Grid from time to time.

4A.14.2 Without prejudice to the generality of sub-paragraph 4A.14.1, and in accordance with the methodology set out below, National Grid reserves the right to assess the delivery of Response by a Contracted FFR Unit in respect of any period during which National Grid instructs (or is deemed to have instructed) the FFR Provider to operate the Contracted FFR Unit in Firm Frequency Sensitive Mode pursuant to sub-paragraph 4A.4.2 ("the Sample Period") in accordance with this sub-paragraph 4A.14.

(a) the volume of Response actually delivered from the Contracted FFR Unit during the Sample Period shall be ascertained by reference to an operating profile derived from second by second output data derived (inter alia) from Agreed Operational Metering Equipment, and that assumed operating profile shall be used to determine assumed second by second spot values of Response delivered and for the avoidance of doubt the Response considered to have been delivered is capped by the Response required at any second;

(b) the volume of Response required to be delivered during the Sample Period shall be ascertained by reference to an operating profile derived by linear interpolation from the applicable FFR Capability Data Tables, and that operating profile shall be used to determine second by second spot values of Response required to be delivered;

(c) National Grid shall derive a percentage performance measure (PPM), where:-
PPM = \frac{A}{B} \times 100

and where:

A is the aggregate of each second by second spot value of Response assumed to be delivered over the Sample Period as determined pursuant to sub-paragraph 4A.14.2(a), and

B is the aggregate of each second by second spot value of Response required to be delivered over the Sample Period as determined pursuant to sub-paragraph 4A.14.2(b);”

Section 4A  GENERAL

4.1 For the purposes of Section 4A generally, the definitions of “Response”, “Primary Response” and “Secondary Response” provided in Section 6 of the Tender Rules and Standard Contract Terms shall be modified and supplemented by including output from Generating Units and/or other Plant and Apparatus.

4.2 All references to a “Frequency Sensitive Load Device” shall be modified and construed as references to a Contracted FFR Unit.
Part 2 – MANDATORY WORKS PROVISIONS

Target Completion Date

1. The Provider shall use its reasonable endeavours to procure that each of the FFR Unit(s) satisfies the Mandatory Works Provisions by the conduct of a successful End-to-End Test in accordance with paragraph 13 by no later than the applicable Target Completion Date (or any applicable Revised Target Completion Date).

2. The Parties agree that the Mandatory Works Provisions represent an indicative schedule of progress of the Works and indicative date(s) upon which an End-to-End Test(s) (referred to as ‘National Grid testing’ in Part 3 of Appendix 2) shall be carried out for the purposes of ascertaining whether the Mandatory Works Provisions have been satisfied in respect of each of the FFR Unit(s).

3. The Provider shall provide to NGET on a monthly basis (or at such lesser frequency as NGET may agree in writing) reports of how the Works are progressing which shall, inter alia, identify any delay or anticipated delay in completing the Works and the Provider shall, if so requested by NGET, give to NGET such evidence as it shall reasonably require and, if necessary, allow NGET's representatives all reasonable access to each of the FFR Unit(s), to enable NGET to ascertain how the Works are progressing.

Delays

4. If at any time after acceptance by NGET of the relevant FFR Tender for dynamic Firm Frequency Response either Party has reason to believe that the Mandatory Works Provisions in respect of a relevant FFR Unit(s) will not be satisfied in accordance with paragraph 13 by the applicable Target Completion Date (or, where applicable, by any Revised Target Completion Date agreed by the Parties or determined as reasonable by Expert Determination), then that Party shall promptly so notify the other in writing giving reasons for its belief to a reasonable level of detail.

5. Where either Party has served notice on the other pursuant to paragraph 4, the Provider shall as soon as reasonably practicable after such notice but in any event
(where such notice is served no later than 40 Business Days prior to the Target Completion Date) no later than 30 Business Days prior to the Target Completion Date, prepare at its own cost and submit to NGET a plan (a “Cure Plan”, the form of which shall be approved by NGET prior to submission) the steps it proposes to take to either:

5.1 remedy any delay(s) in any aspect of the Mandatory Works Provisions; or, where this is not reasonably practicable;

5.2 procure that the Mandatory Works Provisions are satisfied in accordance with paragraph 13 as soon as reasonably practicable after the applicable Target Completion Date

and in the case of paragraph 5.2 the Provider shall specify in the Cure Plan a reasonable extension to such Target Completion Date (or, as the case may be, to any existing Revised Target Completion Date agreed by the Parties or determined as reasonable by Expert Determination pursuant to paragraph 7.3) (“the Revised Target Completion Date”).

6. No later than 20 Business Days following receipt of a Cure Plan from the Provider, NGET shall notify the Provider in writing either:

6.1 of its rejection of the Cure Plan on grounds that it does not believe the Cure Plan is reasonable in all circumstances, and shall give reasons for its belief to a reasonable level of detail, whereupon paragraph 7 shall apply; or

6.2 of its acceptance of the Cure Plan whereupon, where pursuant thereto the Mandatory Works Provisions are to be satisfied after the Target Completion Date, paragraph 8 shall apply.

If NGET shall fail to make any such notification by such dates then it shall be deemed to have accepted the Cure Plan, and where pursuant thereto the Mandatory Works Provisions are to be satisfied after the Target Completion Date, paragraph 8 shall apply.

7. If NGET rejects the Cure Plan in accordance with paragraph 6.1, then:-
7.1 no later than 5 Business Days after receipt of such notice of rejection the Provider may dispute the same and notify NGET in writing of its intention to refer the matter to Expert Determination;

7.2 the Parties shall thereupon endeavour to resolve their disagreement but the Provider may refer the matter to Expert Determination at any time before expiry of the period of 15 Business Days after the Provider’s notice pursuant to this paragraph 7 whereupon, where the Mandatory Works Provisions are to be satisfied after the Target Completion Date pursuant to the Cure Plan, paragraph 8 shall apply; and

7.3 for the purposes of this paragraph 7, the Expert shall be requested to consider the reasonableness of the Provider’s Cure Plan (including any Revised Target Completion Date stated therein) having regard to (inter alia):

7.3.1 NGET’s stated objections thereto;

7.3.2 the Provider’s obligation pursuant to paragraph 5 to procure that the Mandatory Works Provisions are satisfied as soon as reasonably practicable;

7.3.3 the circumstances giving rise to the anticipated delay in the Works; and

7.3.4 the steps and time reasonably necessary for the Provider to procure satisfaction of the Mandatory Works Provisions,

and where the Expert considers such proposed Revised Target Completion Date to be unreasonable in any respect then he shall be requested to specify an alternative Cure Plan (including where applicable an alternative Revised Target Completion Date) that he considers to be reasonable in all the circumstances.
8. Where this paragraph 8 applies, with effect from the applicable **Target Completion Date** and until the first to occur of:

8.1 the date on which the **Mandatory Works Provisions** with respect to the relevant **FFR Unit(s)** are satisfied in accordance with paragraph 13;

8.2 the date on which **NGET** serves notice on the **Provider** pursuant to paragraph 10;

8.3 the **Revised Target Completion Date** agreed by the **Parties** or determined as reasonable by **Expert Determination**;

8.4 the date being either:-

8.4.1 unless paragraph 8.4.2 applies, six (6) months after the applicable **Target Completion Date**; or

8.4.2 where delay is due to an event or circumstance of **Force Majeure**, twelve (12) months after such **Target Completion Date**;

or, in each case, if later, the **Revised Target Completion Date** agreed by the **Parties** or determined as reasonable by **Expert Determination** pursuant to paragraph 7.3, the **Parties’** respective rights and obligations under the **FFR Contract** (including as to payment) shall be suspended as more particularly provided in paragraph 9 provided always that paragraph 8.4 shall not apply where any delays in the **Works** is wholly or mainly caused by a **National Grid Default**.

9. In respect of the period of suspension of a **FFR Contract** pursuant to paragraph 8 and with respect to the **FFR Contract** in question, dynamic **Firm Frequency Response** shall be deemed unavailable from the relevant **FRR Unit(s)**, and no **Availability Fees** shall accrue due to the **Provider**; and

10 If at any time during the suspension of a **FFR Contract** pursuant to paragraph 8, **NGET** is of the reasonable option that the **Provider** is failing to diligently carry out
the relevant Cure Plan and is consequently not going to be able to fully implement such Cure Plan in all material respects within the timetable set out in such Cure Plan and/or satisfy the Mandatory Works Provisions with respect to the relevant FFR Unit(s) in accordance with paragraph 13 by the Revised Target Completion Date (agreed by the Parties or determined as reasonable by Expert Determination), then it may so notify the Provider in writing giving reasons for its view together with any supporting evidence whereupon such FFR Contract shall cease to be suspended as provided for in paragraph 8.

11. if either:-

11.1 the Provider fails to prepare and submit to NGET a Cure Plan by the date specified in paragraph 5; or

11.2 NGET rejects the Provider's Cure Plan pursuant to paragraph 6.1 and the Provider fails to refer the dispute to Expert Determination by the date specified in paragraph 7; or

11.3 a FFR Contract ceases to be suspended otherwise than by reason of satisfaction of the Mandatory Works Provisions in accordance with paragraph 13;

then, with effect from such applicable date (being either the date specified in paragraphs 5 or 7 or the date on which the relevant FFR Contract ceases to be suspended) and for so long as the Mandatory Works Provisions remain to be satisfied in accordance with paragraph 13, NGET may terminate the relevant FFR Contract forthwith by notice in writing to the Provider.

12. Where paragraph 11 applies and until the earlier of:-

12.1 termination of a FFR Contract pursuant thereto; and

12.2 satisfaction of the Mandatory Works Provisions with respect to the relevant FFR Unit(s) in accordance with paragraph 13,
dynamic **Firm Frequency Response** shall be deemed to be unavailable from the relevant **FFR Unit(s)** for the purposes of the **Tender Rules and Standard Contract Terms**, and NGET’s rights and remedies with respect thereto shall be preserved.

**Completion of Works**

13. When the **Works** with respect to a **FFR Unit(s)** are completed, the **Provider** shall so notify **NGET** in writing whereupon the **Provider** shall demonstrate to NGET’s reasonable satisfaction that the **Mandatory Works Provisions** with respect to the relevant **FFR Unit(s)** have been satisfied, by means of the performance of an End-to-End Test. The **Provider** shall also (on request) provide to **NGET** any such additional evidence as NGET may reasonably require for the purposes of verifying that such **Mandatory Works Provisions** have been so satisfied.

14. Both **Parties** agree that the intention is to carry out an **End-to-End Test(s)** on those dates specified in **Part 3** of **Appendix 2** in relation to the relevant **FFR Unit(s)**, but in any event no later than the **Target Completion Date** (or, where applicable, any **Revised Target Completion Date** agreed by the **Parties** or determined as reasonable by **Expert Determination**). Each **Party** reserves the right by notice in writing to the other **Party** to cancel any **End-to-End Test** on such date(s), in which case the **Parties** shall agree an alternative time and date when the **End-to-End Test** shall be carried out which shall be as soon as possible thereafter, and the **Party** cancelling the original **End-to-End Test** shall reimburse to the other **Party** that other **Party’s** reasonable costs (if any) incurred in preparing for the **End-to-End Test** on that date.

15. As soon as possible after the date on which the **End-to-End Test** has been completed, **NGET** shall notify the **Provider** whether it reasonably considers that the relevant **FFR Unit** has or has not satisfied the **Mandatory Works Provisions**. Subject to the provisions of paragraph 16, in the event that **NGET** notifies the **Provider** that in **NGET’s** reasonable opinion (and giving reasons for that opinion) the **Mandatory Works Provisions** have not been satisfied in respect of such **FFR Unit**, the **Provider** shall as soon as possible respond to **NGET**. The **Provider** shall address the reason for the non-compliance and shall subsequently notify **NGET** when the non-compliance has been addressed, whereupon the provisions of paragraphs 13 and 14 shall apply.

16. Save as otherwise provided in paragraph 14, each **Party** shall bear its own costs in relation to the first **End-to-End Test** in relation to any **FFR Contract**. In relation to the second and each subsequent **End-to-End Test** in relation to that **FFR Contract**
the Provider shall be responsible not only for its own costs but also shall reimburse NGET all NGET’s reasonable costs reasonably incurred as a direct result of the second and each subsequent End-to-End Test (not to exceed in relation to all tests the sum of £50,000 in aggregate). For the avoidance of doubt, each Party shall bear the risk of, and the other Party shall have no liability to the Party in respect of, loss and damage to that Party’s Plant or Apparatus caused during or as a result of any End-to-End Test (save to the extent that such loss or damage is caused by that other Party’s breach of its obligations under this Firm Frequency Response Agreement or the Tender Rules and Standard Contract Terms, and in such case subject always to paragraph 5.3 of the Tender Rules and Standard Contract Terms).

17. Where the Provider fails to pass a second successive End-to-End Test or any subsequent End-to-End Test in relation to any FFR Contract then unless NGET otherwise elects to waive such requirement by notice in writing to the Provider, NGET may terminate the FFR Contract by notice in writing to the Provider.

18. For the avoidance of doubt:-

18.1 any period of suspension of a FFR Contract pursuant to this Appendix 2 Part 2 shall not have the effect of extending the FFR Contracted Service Term with respect to the FFR Contract; and

18.2 sub-paragraph 5.12 of the Tender Rules and Standard Contract Terms shall not apply with respect to any event or circumstances of Force Majeure which delays or prevents the progress of the Works.

Replacement of FFR Unit(s)

19. The Provider may request, by notice in writing to NGET, that any FFR Unit(s) be replaced for the remainder of the FFR Contract by another unit(s) (the “Replacement FFR Unit(s)”) owned or operated by the Provider. NGET may (acting reasonably) either accede to or decline such request, and in reaching its decision shall have regard to the proximity and similarity of the Replacement FFR Unit(s) to the relevant FFR Unit(s). If NGET accepts such request, the replacement of the relevant FFR Unit(s) by the relevant Replacement FFR Unit(s) shall not become effective until such time as the FFR Contract is duly amended by agreement in writing signed by or on behalf of NGET and the Provider to reflect such replacement.
20. Subject always to the provision of paragraph 19, the effect of replacement in accordance with the provision thereof shall be to treat the Replacement FFR Unit(s) as the FFR Unit(s) for all purposes of Section 4 of the Tender Rules and Standard Contract Terms and this FFR Contract, and for the duration of such replacement Section 4 of the Tender Rules and Standard Contract Terms and this FFR Agreement shall be read and construed accordingly.

21. In this Appendix 2 Part 2, the following terms shall have the meanings set opposite each:

“Cure Plan” shall mean the plan defined as such in paragraph 5 or any alternative plan specified by Expert Determination in the circumstances described in paragraph 7;

“End-to-End Test” means the test(s) specified by National Grid for the purposes of ascertaining whether the Mandatory Works Provisions have been satisfied in respect of the relevant FFR Unit(s);

“Mandatory Works Provisions” means, in respect of the relevant FFR Unit(s), the provision and programme for completion of the Works to ensure that:

(i) the relevant FFR Unit(s) is capable of providing dynamic Firm Frequency Response in accordance with the FFR Contract; and

(ii) the necessary communications and metering is installed and commissioned to provide metering data in accordance with paragraph 4.14 of the Tender Rules and Standard Contract Terms in the case of the relevant FFR Unit(s);
“National Grid Default” means a breach by NGET of any of any of its obligations to the Provider under any contract (including pursuant to this FFR Contract and the Tender Rules and Standard Contract Terms) or any negligent act or omission by NGET;

“Replacement FFR Unit(s)” shall have the meaning ascribed to it in paragraph 19;

“Revised Target Completion Date” means has the meaning given to that term in paragraph 5;

“Target Completion Date” means with respect to any FFR Unit(s), the date specified as being ‘Available for FFR Service’ in Part 3 of Appendix 2;

“Works” means all those works relating to the relevant FFR Unit(s) more particularly set out in Schedule 6.
### Part 3 – MANDATORY WORKS PROVISIONS TABLE

**FFR Unit:** [ ]

<table>
<thead>
<tr>
<th>Work Action</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outline planning</td>
<td></td>
</tr>
<tr>
<td>Connection agreed</td>
<td></td>
</tr>
<tr>
<td>Gensets ordered</td>
<td></td>
</tr>
<tr>
<td>Full planning</td>
<td></td>
</tr>
<tr>
<td>Switchgear ordered</td>
<td></td>
</tr>
<tr>
<td>Batteries ordered</td>
<td></td>
</tr>
<tr>
<td>Site works commence</td>
<td></td>
</tr>
<tr>
<td>Commissioned and testing</td>
<td></td>
</tr>
<tr>
<td>National Grid testing</td>
<td></td>
</tr>
<tr>
<td>Available for FFR service</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX 3 – FFR UNITS AND AGGREGATED FACILITY

Part 1 – FFR Units

<table>
<thead>
<tr>
<th>FFR Unit</th>
<th>Site</th>
<th>Address</th>
<th>MW</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Part 2 – Aggregated Facility

<table>
<thead>
<tr>
<th>Aggregated Facility ID</th>
<th>Allocated FFR Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aggregated Facility</td>
<td></td>
</tr>
<tr>
<td>[ ]</td>
<td></td>
</tr>
<tr>
<td>[ ]</td>
<td></td>
</tr>
<tr>
<td>[ ]</td>
<td></td>
</tr>
<tr>
<td>[ ]</td>
<td></td>
</tr>
<tr>
<td>[ ]</td>
<td></td>
</tr>
<tr>
<td>[ ]</td>
<td></td>
</tr>
<tr>
<td>[ ]</td>
<td></td>
</tr>
<tr>
<td>[ ]</td>
<td></td>
</tr>
<tr>
<td>[ ]</td>
<td></td>
</tr>
<tr>
<td>[ ]</td>
<td></td>
</tr>
<tr>
<td>[ ]</td>
<td></td>
</tr>
</tbody>
</table>
### APPENDIX 4 – DATA TABLES

#### SECTION A

**FFR POWER CAPABILITY DATA TABLES**

<table>
<thead>
<tr>
<th>Station:</th>
<th>Site(s):</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Low Frequency Response - Mode D</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Aggregated De-Load (MW)</strong></td>
<td><strong>δf_{p} (Hz)</strong></td>
</tr>
<tr>
<td>---------</td>
<td>----------------</td>
</tr>
<tr>
<td></td>
<td>δf_{p} = -0.1Hz</td>
</tr>
<tr>
<td>-0.1</td>
<td></td>
</tr>
<tr>
<td>-0.2</td>
<td></td>
</tr>
<tr>
<td>-0.3</td>
<td></td>
</tr>
<tr>
<td>-0.4</td>
<td></td>
</tr>
<tr>
<td>-0.5</td>
<td></td>
</tr>
<tr>
<td>-0.6</td>
<td></td>
</tr>
<tr>
<td>-0.7</td>
<td></td>
</tr>
<tr>
<td>-0.8</td>
<td></td>
</tr>
<tr>
<td>-0.9</td>
<td></td>
</tr>
</tbody>
</table>

-0.1  0.2  0.3  0.4  0.5  0.6  0.7  0.8  0.9
Station:
Site(s):

<table>
<thead>
<tr>
<th>Aggregated De-Load (MW)</th>
<th>$\delta f_p$ (Hz)</th>
<th>Rapid Response (MW)</th>
<th>Frequency Deviation from Target Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>$\delta f_h = +0.1 \text{ Hz}$</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$\delta f_h = +0.2 \text{ Hz}$</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$\delta f_h = +0.3 \text{ Hz}$</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$\delta f_h = +0.4 \text{ Hz}$</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$\delta f_h = +0.5 \text{ Hz}$</td>
</tr>
<tr>
<td>-0.5</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-0.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-0.7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-0.8</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

[In relation to the levels of Response capability pursuant to Section 3 of the Tender Rules and Standard Contract Terms and Table 2 above it is agreed that for low operating outputs, the High Frequency Response capability will be limited such that the general level will under normal operating conditions not be caused to drop below [ ] MW.]

[For the purpose of sub-paragraph 3.6.1(a) of the Tender Rules and Standard Contract Terms the level of Response capability for a Frequency Deviation of 0.0 Hz shall be 0.0 MW.]
### SECTION B
#### FFR POWER DELIVERY DATA TABLES

Station:

Site(s):

<table>
<thead>
<tr>
<th>Rapid Response Power Delivery - Mode D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency Deviation (Hz)</td>
</tr>
<tr>
<td>-0.1</td>
</tr>
<tr>
<td>-0.2</td>
</tr>
<tr>
<td>-0.3</td>
</tr>
<tr>
<td>-0.4</td>
</tr>
<tr>
<td>-0.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Primary Response Power Delivery - Mode D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency Deviation (Hz)</td>
</tr>
<tr>
<td>-0.1</td>
</tr>
<tr>
<td>-0.2</td>
</tr>
<tr>
<td>-0.3</td>
</tr>
<tr>
<td>-0.4</td>
</tr>
<tr>
<td>-0.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Primary &amp; Secondary Response Power Delivery - Mode D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency Deviation (Hz)</td>
</tr>
<tr>
<td>-0.1</td>
</tr>
<tr>
<td>-0.2</td>
</tr>
<tr>
<td>-0.3</td>
</tr>
<tr>
<td>-0.4</td>
</tr>
<tr>
<td>-0.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>High Frequency Response Power Delivery - Mode D</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequency Deviation (Hz)</td>
</tr>
<tr>
<td>+0.1</td>
</tr>
<tr>
<td>+0.2</td>
</tr>
<tr>
<td>+0.3</td>
</tr>
<tr>
<td>+0.4</td>
</tr>
<tr>
<td>+0.5</td>
</tr>
</tbody>
</table>

The figures for aggregated **Genset De-Load** in the tables shall be taken from the figures for aggregated **Genset De-Load** shown in Table 1 of this Section A.
APPENDIX 5 - SUBSTITUTE FFR UNITS

<table>
<thead>
<tr>
<th>FFR UNIT</th>
<th>SUITABLE SUBSTITUTE FFR UNIT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX 6 – PROVIDER’S AGENT

[NOT USED]

[FFR Provider’s Agent]

Name:

Address:

Contact Details:

In connection with each and every FFR Contract, the Provider’s Agent is hereby authorised by the Provider to:

i. make and receive on behalf of the Provider all notifications with respect to window nominations and revisions, pursuant to paragraphs 4A.2 and 4A.3;

ii. specify on behalf of the Provider the FFR Confirmed Part Load Point pursuant to paragraph 4A.4;

iii. notify NGET on behalf of the Provider of any inability (and resumption of ability) to provide Firm Frequency Response pursuant to paragraph 4A.4;

iv. receive on behalf of the Provider the following payments pursuant to paragraph 4A.5:
   - the Availability Payment;
   - the Window Initiation Payment;
   - the Nomination Payment;
   - the Window Revision Payment; and
   - the Response Energy Payment.

v. make on behalf of the Provider all notifications with respect to substitution of Contracted FFR Units pursuant to paragraph 4A.8;

vi. notify NGET on behalf of the Provider of the Provider’s intention to enter into an arrangement which could impair the Provider’s ability to provide Firm Frequency Response pursuant to paragraph 4A.12; and

vii. provide to NGET on behalf of the Provider all information and reasonable assistance necessary for NGET to derive required output data; and

viii. enter into discussion with NGET on behalf of the Provider regarding circumstances giving rise to default.

All references above to paragraphs shall be to paragraphs in the Tender Rules and Standard Contract Terms.]
APPENDIX 7 – NEW FFR UNITS, ALLOCATION AND RE-ALLOCATION OF FFR UNITS TO AN AGGREGATED FACILITY

Introduction of New FFR Units

1. The Provider may, with NGET’s written consent, propose a New FFR Unit in accordance with the following provisions:
   
1.1 each New FFR Unit proposed by the Provider shall be detailed in the form specified in Appendix 8 and submitted by the Provider to NGET by facsimile;
   
1.2 each notice shall be signed by the Provider and counter-signed by or on behalf of the owner or operator of the proposed New FFR Unit;
   
1.3 the proposed New FFR Unit shall then be subject to approval by NGET (at its sole discretion) and subject to passing a FFR Pre-Qualification Assessment and, to the extent required by NGET, Reproving Test in accordance with the provisions of Section 7 of the Tender Rules and Standard Contract Terms and, for the avoidance of doubt, Section 7 shall apply in respect of such New FFR Unit. If so approved, the notice form shall be counter-signed by or on behalf of NGET and returned to the Provider by facsimile; and
   
1.4 the proposed New FFR Unit shall be eligible for the purposes of allocation to an Aggregated Facility in accordance with this Appendix 7 from the date such notice referred to in Paragraph 1.3 above is countersigned and returned by NGET to the Provider.

Allocation and re-allocation

2.1 It is agreed by the Parties that for the purposes of each and any FFR Tender or FFR Contract with respect to an Aggregated Facility, the Provider may:

2.1.1 allocate to that Aggregated Facility one or more FFR Units which are at that time Unallocated; or

2.1.2 re-allocate to that Aggregated Facility any FFR Unit that at that time is already allocated to another Aggregated Facility, and in each case in accordance with the procedure set out in Paragraph 2.2.

2.2 Any such allocation or re-allocation of an FFR Unit to an Aggregated Facility shall be notified by the Provider in the form specified in Appendix 9 (an “Allocation Notification”) in accordance with Paragraph 2.3.

2.3 An Allocation Notification shall only be valid if:

2.3.1 received by NGET not later than 14.00 hours on the Wednesday immediately preceding commencement of the Tendered Service Week or Tendered Service Month in which the allocation or reallocation is expressed to take effect;
2.3.2 **NGET** is satisfied that appropriate communications and metering equipment have been installed at the **FFR Unit** to be allocated to the **Aggregated Facility** to enable the instruction and monitoring of the delivery of **Firm Frequency Response** from the **Aggregated Facility**; and

2.3.3 an aggregation methodology (approved by **NGET**) has been developed by the **Provider** to determine the provision of **Firm Frequency Response** from the **Aggregated Facility**.

2.4 With respect to each valid **Allocation Notification**, **NGET** shall confirm the same by counter-signing the **Allocation Notification** and returning it to the **Provider** by facsimile no later than 09.00 hours on the Friday immediately preceding the relevant **Tendered Service Week** or **Tendered Service Month** in which the allocation or re-allocation is expressed to take effect.

2.5 The **Provider** may not make in excess of twenty-five (25) **Allocation Notifications** during any period of twelve (12) calendar months provided always that any confirmation by **NGET** of a valid **Allocation Notification** pursuant to Paragraph 2.3 shall be effective and conclusive in confirming the same notwithstanding that such limit is thereby exceeded.

2.6 If an **Allocation Notification** does not meet the requirements of Paragraph 2.3, then it shall be invalid and treated as if it were never submitted.

**Removal of Unallocated FFR Units**

3.1 The **Parties** may agree in writing from time to time that an **Unallocated FFR Unit** shall be removed from this **Firm Frequency Response Agreement** and cease to be eligible for the purposes of allocation or reallocation in accordance with this Appendix 7. Any such notice shall be notified in the form specified in Appendix 10 and submitted by the **Provider** to **NGET** by facsimile.

3.2 Such proposed removal shall then be subject to approval by **NGET** (at its sole discretion) within five (5) days of receiving the notice referred to in Paragraph 3.1 above, and duly counter-signed by or on behalf of **NGET** and returned to the **Provider** by facsimile.
APPENDIX 8 – INTRODUCTION OF NEW FFR UNIT

FORM OF REQUEST FOR NEW FFR UNIT

<table>
<thead>
<tr>
<th>From:</th>
<th>Fax:</th>
</tr>
</thead>
<tbody>
<tr>
<td>To:</td>
<td>National Grid, Contracts &amp; Settlements</td>
</tr>
<tr>
<td>Date:</td>
<td>Time:</td>
</tr>
</tbody>
</table>

In accordance with Appendix 7 of the Firm Frequency Response Agreement, this is a proposal to introduce the following new FFR Unit:

OPERATIONAL DETAILS FOR NEW FFR UNIT

<table>
<thead>
<tr>
<th>FFR Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>FFR Unit owner address and contact details</td>
</tr>
<tr>
<td>FFR Unit operator (if different) consenting to this request</td>
</tr>
<tr>
<td>Site address &amp; co-ordinates</td>
</tr>
<tr>
<td>Technical / site contact (contact name and telephone number of both duty and standby personnel)</td>
</tr>
<tr>
<td>Capacity (MW)</td>
</tr>
<tr>
<td>Make of Meter</td>
</tr>
<tr>
<td>Model of Meter</td>
</tr>
<tr>
<td>Serial Number of Meter</td>
</tr>
<tr>
<td>Accuracy Class of the Meter</td>
</tr>
</tbody>
</table>

CONFIRMATION BY PROVIDER:

Signed by: ...........................................(signature) ............................................
For and on behalf of [ ]
CONFIRMATION BY OWNER/OPERATOR:

We, the undersigned, hereby acknowledge and undertake to National Grid Electricity Transmission plc as follows:

(i) we are the owner and/or operator and/or site owner of the FFR Unit described above, and the information set out above is true and accurate;

(ii) we have agreed terms with the Provider referred to above in order to facilitate the availability and despatch of Firm Frequency Response from the FFR Unit described above;

(iii) we hereby grant to National Grid Electricity Transmission plc and its agents and contractors audit and inspection rights to the FFR Unit (upon not less than 5 Business Days notice) for the purposes of the provision of Firm Frequency Response; and

(iv) we hereby agree that we shall hold confidential and not disclose to any person, upon the terms of paragraph 5.6 of the Standard Contract Terms, all and any information disclosed to us by the Provider under the Firm Frequency Response Agreement.

Signed by: Name:
………………………..(signature) ...........................................................

For and on behalf of [           ]

(National Grid Only)

The above amendment(s) shall take effect on:- ................................................

(DD/MM/YY)

From: National Grid, Contracts & Settlements Fax: 01926 656612
To: [                  ] Fax: [ ]
Date: ....................... Time: ....................... 

We APPROVE/REJECT* (*deleted as appropriate) your proposed introduction of a new FFR Unit as set out above. [We further agree to comply with the owner/operator’s reasonable health, safety, environmental and security policies that we are made aware of in writing when we audit an FFR Unit provided that such policies do not affect our ability to carry out the audit.]

Signed  ...........................(signature) Name:  .................................
by:  

For and on behalf of National Grid Electricity Transmission plc
APPENDIX 9 – ALLOCATION OR RE-ALLOCATION OF AN FFR UNIT

From: [Name]
Fax: [Fax Number]

To: National Grid, Contracts & Settlements
Fax: 01926 656612

Date: …………………….. Time: ……………………..

In accordance with Appendix 7 of the Firm Frequency Response Agreement, the following FFR Unit shall be allocated or re-allocated to the below mentioned Aggregated Facility as follows:

<table>
<thead>
<tr>
<th>FFR UNIT FROM AGGREGATED FACILITY</th>
<th>TO AGGREGATED FACILITY</th>
<th>LOCATION</th>
<th>CAPACITY (MW)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The above amendment(s) shall take effect on: ………………………………..(DD/MM/YY)

Signed by: ………………………… Name: …………………………………………..
(signature)
In accordance with Paragraph 2.4 of Appendix 7 of the Firm Frequency Response Agreement, we ACKNOWLEDGE AS VALID/REJECT AS INVALID * (*delete as appropriate) your notice of allocation or re-allocation of the FFR Unit as set out in the above table.

Signed by: .................................. Name: ......................................................

(signature)

For and on behalf of National Grid Electricity Transmission plc
APPENDIX 10 – REQUEST TO REMOVE FFR UNIT

From: 
Fax: 

To: National Grid, Contracts & Fax: 01926 656612 
Settlements 

Date: …………………. Time: …………………….

In accordance with Appendix 7 of the Firm Frequency Response Agreement, this is a proposal to remove the following Unallocated FFR Unit from the Firm Frequency Response Agreement:

<table>
<thead>
<tr>
<th>FFR UNIT</th>
<th>LOCATION</th>
<th>CAPACITY (MW)</th>
<th>REASON FOR REMOVAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The above amendment(s) shall take effect on: ………………………………………..(DD/MM/YY)

Signed by: …………………………… Name: ………………………………………
(signature)

For and on behalf of: ………………………………………
CONFIRMATION BY OWNER/OPERATOR:

We, the undersigned, hereby acknowledge and undertake to National Grid Electricity Transmission plc that we are the owner and/or operator of the FFR Unit described above, and the information set out above is true and accurate;

Signed
by: ...........................................(signature) ..........................................................

Name:

For and on behalf of [ ]

(National Grid Only)

| The above amendment(s) shall take effect | ........................................ (DD/MM/YY) |
| on :- | |

From: National Grid, Contracts & Settlements Fax: 01926 656612
To: [ ] Fax: [ ]
Date: ....................... Time: ....................... 

In accordance with Paragraph 3.2 of Appendix 7 of the Firm Frequency Response Agreement, we APPROVE/REJECT* (*delete as appropriate) your proposal as set out above.

Signed ........................................ Name: ..........................................................
by: ........................................ (signature) ......

For and on behalf of National Grid Electricity Transmission plc