This legal text is for CMP446 all solutions

Anything highlighted in yellow is introduced via CMP434 WACM7

Anything highlighted in blue is introduced via CMP446

SCHEDULE 2 – EXHIBIT1A

DATED [ ]

**NATIONAL ENERGY SYSTEM OPERATOR LIMITED (1)**

**and**

**[ ] (2)**

**AGREEMENT TO VARY THE**

**BILATERAL CONNECTION AGREEMENT**

**FOR [ ] SUBSTATION**

**REF: [ ]**

**THIS AGREEMENT** **TO VARY** is made on the [ ] day of [ ] 20[ ]

**BETWEEN**

(1) **The** Company registered in England with number 11014226 (**“The Company”)**,, which expression shall include its successors and/or permitted assigns); and

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

**WHEREAS**

(A) Pursuant to the **ESO Licence**, **The Company** has prepared a **Connection and Use of System Code** ("**CUSC**") setting out the terms of the arrangements for connection to and use of the **National Electricity Transmission System** and the provision of certain **Balancing Services**.

(B) **The Company** and the **User** are parties to the **CUSC Framework Agreement** being an agreement by which the **CUSC** is made contractually binding between parties.

(C) In accordance with the **CUSC The Company** and the **User** entered into a **Bilateral Connection Agreement** (the "**Bilateral Connection Agreement**”) reference no **[ ]** brought into effect on the [ ] in respect of its connection to the **National Electricity Transmission System**.

(D) in accordance with **CUSC** Paragraph 6.5.1 (Evaluation of Transmission Impact) the **User** has notified **The Company** of the **Relevant Embedded Power** **Stations** (as defined below) which are intending to connect to its **Distribution System**.

(E) Recognising the volume and volatility of requests for connection to the **Distribution System** and the resulting need for **The Company** to consider the effect of this on the **National Electricity Transmission System**, **The Company** and the **User** have agreed a process to better manage this as between themselves (the “**Transmission Impact Assessment Process**”).

(F) This **Transmission Impact Assessment Process** is used by **The Company** to identify the **Relevant** **Embedded Power Stations** where the effect on the **National Electricity Transmission System** of the **Energisation** of such **Relevant Embedded Power Stations** to the **Distribution System** can be (a) accommodated subject to **Site Specific Requirements** and/or (b) accommodated with **Construction Works** on the **National Electricity Transmission** **System** but whichcan be **Energised** prior to completion of such works in accordance with the general principles of a **Design Variation** or (c) cannot be accommodated until the completion of works on the **National Electricity Transmission** **System**.

(G) **The Company** and the **User** have now agreed to enter into this Agreement in order to amend the terms of the **Bilateral Connection Agreement** to reflect the **Transmission Impact Assessment Process** and provide for the **Energisation** of the **Relevant Embedded Power Stations**.

**NOW IT IS HEREBY AGREED** as follows:-

1. Unless the subject matter or context requires or is inconsistent therewith terms and expressions defined in Section 11 of the **CUSC** and in the **Bilateral Connection Agreement** have the same meanings, interpretations or constructions in this Agreement.

**2** The **Bilateral Connection Agreement** shall be varied with effect from thedate hereof as follows:-

2.1 Appendix G (Developers and Relevant Embedded Power Stations) attached to this Agreement shall be annexed to the **Bilateral Connection Agreement** and the Contents Page amended accordingly.

2.2 The following definitions shall be added at Clause 1 of the **Bilateral Connection Agreement**.

|  |  |
| --- | --- |
| **Developer Capacity** | in the context of this **Bilateral Connection Agreement** shall mean the MW figure for each **Relevant Embedded Power Station** asidentified in Appendix G Schedule 1. |
| **Developers** | in the context of this **Bilateral Connection Agreement** shall mean the developers of the **Relevant Embedded Power Stations** asidentified in Appendix G Schedule 1. |
| **Relevant Embedded Power Stations** | in the context of this **Bilateral Connection Agreement** shall mean those **Relevant Embedded Power Stations** identified as such in Appendix G Schedule 1. |
| **Technical Limitations** | any technical limitations at the **Connection Site** as specified in Appendix G Schedule 1 Part 2. |
| **Total MWs** | means the figure specified as such in Appendix G Schedule 1 Part 2. |

2.5 The following shall be added as Clause [ ] of the Bilateral Connection Agreement and the Contents Page amended accordingly

**[ ]** **Transmission Impact Assessment Process**

[ ].1 **The** **Company** and the **User** have agreed a process utilising **Transmission Impact Assessment** (as detailed in Appendix G to this **Bilateral Connection Agreement**)to manage the **Relevant Embedded Power Stations** which require an **Evaluation of Transmission Impact** assessment by **The Company** under **CUSC** Paragraph 6.5.1.

[ ].2

[ ].3 The intent and structure of Appendix G Schedule 1, which identifies the **Relevant Embedded Power Stations** which have contracts with the **User** to connect to the **Distribution System** and the specific terms that apply to such **Relevant Embedded Power Stations** (including whether it is the subject of a **Construction Agreement**), is explained in Appendix G Schedule 2.

[ ].4 The provisions in Appendix G Schedule 2 set out the process through which the **User** can add **Relevant Embedded Power Stations** to Appendix G Schedule 1.

[ ].5 The **Transmission Impact Assessment Process** envisages and is designed such that Appendix G Schedule 1 is revised and updated and this **Bilateral Connection Agreement** shall be read and construed by reference to the relevant revision of Schedule 1.

[ ].6 The **User** will provide **The Company** with regular updates (as agreed by both parties but no fewer than one every 6 months) to the **Relevant Embedded Power Stations** set out in Schedule 1 of Appendix G in accordance with the requirements set out in Schedule 2 of Appendix G.

[ ].7 **The Company** shall review the updates provided by the **User** under paragraph [ ].6 in accordance with the requirements of Schedule 2 of Appendix G and notify **The User** within [5] business days of receipt of the outcome of the review. Should this notification from **The Company** confirm acceptance or not be provided, the update from the **User** will be deemed approved and form part of the **Bilateral Connection Agreement.** Should the update from the **User** not meet the requirements of Schedule 2 of Appendix G, **The Company** shall confirm this via the notification to **The User.**

[ ]. 8 Should **The Company** provide a notification to the **User** under paragraph [ ].7 that the requirements of Schedule 2 of Appendix G have not being met, **The Company** and the **User** shall meet within [5] **Business Days** to discuss resolution.Should no resolution be agreed between **The Company** and the **User** (both acting reasonably), the update will not be incorporated into the **Bilateral Connection Agreement** until an agreement is reached or the **Dispute Resolution Procedure** is concluded.

[ ].9 **The Company** shall be entitled to revise Appendix G Schedule 1 as provided for in the **Transmission Impact Assessment Process**

2.6 At Clause 8 (Compliance with Site Specific Technical Conditions) of the **Bilateral Connection Agreement** the following shall be introduced as Clause 8.2 and the previous Clause renumbered as Clause 8.1.

8.2 In the context of connection of **Generation** to the **Distribution System**, unless otherwise agreed with **The Company** (and recognising that this may require a **Modification** at the **Connection Site**), the **User** shall not exceed the **Technical Limitations** at the **Connection Site**.

2.7 The following shall be added as Clause 8.3 of the **Bilateral Connection Agreement**.

8.3 In respect of each **Relevant Embedded Power Station** and in each case prior to **Energising** the connection of that **Relevant** **Embedded Power Station** to the **Distribution System** the **User** shall ensure that the Site Specific Requirements set out in Appendix F5 (Part 11) identified as applicable to that **Relevant** **Embedded Power** are in place.

**3 CONTRACTS (RIGHTS OF THIRD PARTIES) ACT 1999**

The parties hereto hereby acknowledge and agree for the purposes of the Contracts (Rights of Third Parties) Act 1999 that no rights, powers or benefits are or shall be conferred on any person pursuant to this Agreement except for such rights, powers or benefits as are expressly conferred on the parties hereto in accordance with, and subject to, its terms.

**IN WITNESS WHEREOF** the hands of the duly authorised representatives of the parties hereto at the date first above written

**NATIONAL ENERGY SYSTEM OPERATOR LIMITED** )

By )

)

**[ ]** )

By )

)

**APPENDIX A**

**TRANSMISSION CONNECTION ASSET/CONNECTION SITE**

Company: [ ]

Connection Site: [ ]

Type: [ ]

Part 1 - Pre-Vesting Assets

**Allocation Description Age Year**

(As at [ ])

Part 2 - Post-Vesting Assets

**Allocation Description Age Year**

(As at [ ])

Part 3 - Energy Metering Systems (\*)

**Allocation Description Age Year**

(As at [ ])

(\*) FMS, Energy Metering Systems - The Electronics components have a 15 year replacement period. The Non-Electronics components have a 40 year replacement period.

All the above are inclusive of civil engineering works. At double busbar type substations, ownership of main and reserve busbars follows ownership of section switches.

Diagram Reference: [ ]

Appendix Reference: [ ]

Agreement Reference: [ ]

**APPENDIX B**

**CONNECTION CHARGES/PAYMENT**

Company: [ ]

Connection Site: [ ]

Type: [ ]

(1) Connection Charges

The Connection Charges set out below may be revised in accordance with the terms of this Bilateral Connection Agreement and/or the Construction Agreement and/or the CUSC and/or the Charging Statements

**Part 1 - Pre-Vesting Assets**

The Connection Charge for those assets extant at 31st March 1990 and specified in Appendix A Part 1 will be at an annual rate for the period [ ] to [ ] of £[ ] where

*Rate of Return* = [ ]%

*Transmission Costs*

Part A Site specific maintenance element = £[ ]

Part B Other transmission costs element = £[ ]

**Part 2 - Post-Vesting Assets**

The Connection Charge for those assets installed for this agreement after 31st March 1990 and specified in Appendix A Part 2 will be at an annual rate for the period [ ] to [ ] of £[ ] where

*Rate of Return* = [ ]%

*Transmission Costs*

Part A Site specific maintenance element = £[ ]

Part B Other transmission costs element = £[ ]

**Part 3 - Energy Metering Systems**

For FMS, Energy Metering Systems assets, installed for this agreement as specified in Appendix A Part 3 the Connection Charge will be at an annual rate for the period from [ ] to [ ] of £[ ]

**Part 4 - Miscellaneous Charges**

The miscellaneous charge shall be £[ ] in respect of the period from [ ] to [ ] payable as an estimated indexed charge in twelve monthly instalments subject to adjustment in accordance with the terms of this Bilateral Connection Agreement and/or the CUSC and/or the Charging Statements

**Part 5 - One-off / Transmission Charges**

The transmission charge shall be £[ ] in respect of the period from [ ] to [ ] payable as an estimated indexed charge in twelve monthly instalments subject to adjustment in accordance with the terms of this Bilateral Connection Agreement and/or the CUSC and/or the Charging Statements

(2) Payment

The Connection Charges for Parts 1 to 6 shall be payable in equal monthly instalments as specified in Paragraph 6.6 of the CUSC

Appendix Reference: [ ]

**APPENDIX F2**

**[NOT USED]**

**APPENDIX F3**

**SITE SPECIFIC TECHNICAL CONDITIONS:**

**SPECIAL AUTOMATIC FACILITIES**

**APPENDIX F4**

**SITE SPECIFIC TECHNICAL CONDITIONS:**

**PROTECTION AND CONTROL RELAY SETTINGS**

**FAULT CLEARANCE TIMES**

**APPENDIX F5**

**SITE SPECIFIC TECHNICAL CONDITIONS:**

**LOAD SHEDDING FREQUENCY SENSITIVE RELAYS**

**APPENDIX G – Schedule 1**

**DEVELOPERS, RELEVANT EMBEDDED POWER STATIONS and TECHNICAL LIMITATIONS**

User: [ ]

Connection Site: [ ] Substation

Date: [Month] [Year]

**Part 1 – Developer Capacity** for Relevant Embedded Power Stations connected and Developer Capacity for Relevant Embedded Power Stations in respect of which there are **Gate 2 Agreements** which are to be connected to the Distribution System. Site Specific Requirements (as specified in Clause 11 of the Bilateral Connection Agreement) and Interim Restrictions on Availability (as specified in Clause 12 of the Bilateral Connection Agreement) shall apply where indicated.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Relevant Embedded Power Station** | **Developer Capacity in MW** | **Date of Connection** | **Technology** | **Site Specific Conditions#** | **Interim Restrictions on Availability ^** | **Access ahead of completion of all Construction Works Schedule Y/N** | **Construction Works Schedule \*** | **User Commitment Trigger Date** | **Consented** |
| Example 1 | 10 | [Date 1] | Wind | 1 only | None | N | A | [Date 2] | Yes |
| Example 2 | 17 | [Date 3] | Solar | 1, 2 | 1A | Y | B | [Date 4] | No |

\*[Construction Agreement Reference]

Construction Agreement A

Construction Agreement B

# [Captured in Appendix F]

^ [Captured in Appendix D/F]

**Part 2 - Capacity & Technical Conditions Summary**

The following table sets out Capacity and the technical limitations which are based on the capability of the

National Electricity Transmission System.

|  |  |  |
| --- | --- | --- |
| **Capacity Limit Summary** | | |
| **Total MWs** Table 1 | **[ ]MW** | Additional new generation can be added and will be subject to the applicable works schedule, interim restrictions of availability and site specific conditions as detailed in the final row of table in part 1. Generation should be added in queue order. |
| **Total Developer Capacity** | **[ ]MW** | Subject to Cancellation Charge in accordance with CUSC Section 15 User Commitment Methodology |
| **Technical Condition Summary** | | |

|  |  |  |
| --- | --- | --- |
| **Connection Asset Reverse Power Limits**  (Usually the SGT at the site, where that SGT is classified as connection) | [ ] MVA | Where facilities exist, such as an ANM scheme, or other suitable control scheme to curtail generation in the event of a SGT circuit fault this limit can be raised. Detail of the raised limit and associated requirements are contained in technical appendix F3. |
| **Fault Level headroom** | **[ ] kA** | [Fault level notes] |
| ***Voltage*** | See Note | Voltages conditions in BCA / Appendix F apply to new generation projects*.* |
| **Generator Technology** | See Note | There is/is not (delete as appropriate) limit on technology change within this GSP. |
| **Comments/Constraints or Additional Restrictions**: | | |
| **Transferable Capacity (see**  **note below)** | **[ ] MW** | **GSP’s: [ ]** |
|  | | |

**Audit & Change Control**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Date of Base BCA agreement | | |  | |
| **Date Change Submitted** | **Name & Position** | **Changes/Comments:** | **Approved Date** | **The Company Approved By** |
|  |  |  |  |  |

**APPENDIX G – Schedule 2**

**Scope and Use of Appendix G Schedule 1**

User: [ ]

Connection Site: [ ] Substation

In accordance with Clause [ ] of this **Bilateral Connection Agreement** the **User** must comply with the requirements set out below in order to manage the **Relevant Embedded Power Stations** and **Developer Capacity** set out in Schedule 1 to this Appendix G. Appendix G Schedule 1 will only include **Relevant Embedded Power Stations** with a signed **Connection Agreement** with the **User** and is structured as follows;

1. **Appendix G Schedule 1 Part 1** – Contains legacy **Relevant Embedded Power Stations** and all new **Relevant Embedded Power Stations**. Legacy **Relevant Embedded Power Stations** should be listed at the top of Part 1 and, unless otherwise specified in the **Bilateral Connection Agreement**, only pre-existing **Site Specific Technical Conditions** or restrictions shall apply. No new legacy **Relevant Embedded Power Stations** can be retrospectively added to Schedule 1.
2. New **Relevant Embedded Power Stations** should be added to Part 1 in contractual order.
3. Part 1 specifies the **Site Specific Requirements**, any **Interim Restrictions on Availability** as set out in the **Bilateral Connection Agreement** and any associated **Construction Works** against each individual **Relevant Embedded Power Station** listed.
4. For the avoidance of doubt **The Company** will provide details of the **Site Specific Requirements**, **Interim Restrictions on Availability** and applicable **Construction Works** that the **User** must apply to any future **Relevant Embedded Power Station** applications and this will be set out at the bottom of Part 1.
5. Where a **Relevant Embedded Power Station** is subsequently connected the **User** will confirm this by replacing the expected connection date with ‘connected’ when providing the next Appendix G update. The **User** will provide the expected connection dates for each **Relevant Embedded Power Station** and provide any updates ahead of connection, confirming either the revised date of connection or confirmation that they are now ‘connected’. Therefore, all dates populated in this section must be recorded as either a date in the future (in the format DD/MM/YYYY) or as ‘connected’.
6. Where a **Relevant Embedded Power Station** triggers **Construction Works** they will be unable to connect until these **Construction Works** have been completed unless indicated in Appendix G Schedule 1 Part 1 in which case any **Interim Restrictions on Availability** will apply. Any such **Interim Restrictions on Availability** will be specified in Appendix [ ] to the **Bilateral Connection Agreement** in which case such **Interim Restrictions on Availability** will be indicated in Appendix G Schedule 1 Part 1.
7. **Relevant Embedded Power Stations** that disconnect from the **Distribution System** should be removed from Schedule 1 Part 1 by strike through.
8. Where contracted **Relevant Embedded Power Stations** terminate their agreement or reduce **Developer Capacity** before connection the **User** should notify **The Company** within the timescale ([ ] business days) set out in Clause [ ] of the **Construction Agreement** and removed from Appendix G Schedule 1 Part 1 by striking through. For the avoidance of doubt any such termination will attract a **Cancellation Charge** in accordance with **CUSC** Section 15.
9. **Appendix G Schedule 1 Part 2 -** Provides the **User** with **Technical Limitations** that must be applied to all **Relevant Embedded Power Stations**

**Connection Asset Reverse Power Limit**

Where it is possible for the **Total MWs** Table 1 in Appendix G Schedule 1 minus the minimum GSP demand (as provided by the **User** to **The Company** in accordance with the **Data Registration Code**) to exceed the **Connection Asset Reverse Power Limit** the **Use**r will ensure operational facilities are in place to prevent the **Connection Asset Reverse Power Limit** being exceeded. Where this is managed with an **Automatic Network Management** scheme or other suitable control scheme, the requirements of this facility, including any short term overload capacity, will be defined in technical Appendix F3.

**Fault Level headroom**

The **User** will ensure that any changes in fault level caused by changes to the **Relevant Embedded Power Stations** as listed in Appendix G Schedule 1 or other changes to the **User’s** network remain below the site fault level limit. The fault level headroom is an indication on limitation of fault level on the **Company’s** and **Third Party** **Users’** equipment at or reflected to the **Connection Site**. **The Company** will recalculate the fault level headroom on receipt of technical data following breach of fault level headroom, or when conditions on the **National Electricity Transmission System** occur. **The Company** will indicate the date that the **User** submitted data in Appendix G Schedule 1 Part 2 was used for the fault level headroom assessment, the **User** will ensure that fault level assessments used for updates to Appendix G Schedule 1 are consistent with this submitted data.

**Generation Technology**

If there is a generator technology type limit on the **Grid Supply Point**, then the **User** will ensure any changes proposed to the Appendix G are consistent with that limit.

**Reassessment of Limits**

If not otherwise changed, there should be an annual reassessment of limits to avoid the risk of background network changes causing the network to become unsafe or out of standards.

Both **The Company** and the **User** agree to an annual (or as otherwise agreed between the parties) meeting to review the assessment methods to be applied in Appendix G Schedule 1 at the **Connection Site**.

1. **Administration of Appendix G Schedule 1**

1. All fields for new **Relevant Embedded Power Stations** in Part 1 of Schedule 1 must be populated. The column for **Consent** is required in accordance with **CUSC Section 15** **User Commitment Methodology**.
2. In accordance with Clause [] of this **Bilateral Connection Agreement** the **User** will provide **The Company** with regular updates to Appendix G Schedule 1, including confirmation if there are no changes. **The Company** requires such updates to be provided on a monthly basis, noting certain changes require notification sooner than 1 month\* or on a regular basis as agreed between **The Company** and the **User** (but no fewer than one per half calendar year in May and November). Updates must include details of **any Relevant Embedded Power Stations** that;
   * 1. have disconnected from the **Distribution System** since the last update and
     2. \*that have terminated their **Connection Agreement** with the **User**, the **CUSC** requirement for terminations is 5 business days.
     3. the **User** believes the current connection date is expected to be delayed. Advanced notification of the revised connection date is required imperative.
     4. other recorded information has changed or any that have subsequently energised. Where the **Relevant Embedded Power Station** has energised the connection date will be updated to ‘connected’.
     5. **new Relevant Embedded Power Station** added since the last update.
3. The submission of each update to Appendix G Schedule 1 from the **User** must clearly identify any changes.
4. Each update from the **User** should be submitted by email to **The Company** at the following address [transmissionconnections@nationalgrideso.com](mailto:transmissionconnections@nationalgrideso.com)
5. **The Company** will review the changes to Appendix G Schedule 1, in accordance with the requirements set out in this Schedule 2 and notify **The User** within [5] business days of receipt of the outcome of the review. In accordance with Clause [10.8] of this **Bilateral Connection Agreement** where no notification is provided by **The Company** or the notification confirms acceptance**,** the updated **Appendix G Schedule 1** will form part of the **Bilateral Connection Agreement**. Where the notification states there are outstanding concerns, **The Company** and the **User** will meet within [5] business daysto discuss further and a revised Appendix G Schedule 1 shall not be incorporated in to the **Bilateral Connection Agreement** until both the **User** and **The Company** agree on the required changes For the avoidance of doubt **The Company** will only not accept changes to Appendix G Schedule 1 if the changes do not comply with the requirements as set out in this Schedule 2 and may charge the **User** a cost-reflective re-work fee as per **The Company’s Statement of Use of System Charges**. Monthly changes to Appendix G will be recorded in the register of embedded generation.
6. [not used]
7. The **Bilateral Connection Agreement** will be deemed to be updated with the latest version of the Appendix G Schedule 1 once **The Company** and **User** agree to an updated Appendix G Schedule 1 in accordance with paragraph 6. The sole criteria used by **The Company** for successful or unsuccessful review will be following the requirements of this Schedule 2. For the avoidance of doubt, the requirement for an **Evaluation of Transmission Impact** (as per **CUSC** paragraph 6.5.1(c)) shall not be deemed as met until Appendix G Schedule 1 is updated.
8. Periodically, **The Company** will reconcile the Appendix G against the changes indicated in Schedule 1 and any changes in the transmission background. If any **Interim Restrictions on Availability** or **Construction Works** are deemed no longer applicable these will be removed and any update to the Securities, together with the invoice for any **Cancellation Charge** in accordance with **CUSC** Section 15 will be provided to the **User**.
9. Where the **User** breaches in whole or in part the provisions of this Appendix G Schedule 2, the **User** shall, if requested by **The Company**, explain to **The Company’s** satisfaction (acting reasonably) the reason for the breach and demonstrate to **The Company’s** satisfaction that appropriate steps have been taken (or will be taken) to ensure that such breach will not reoccur. If the **User** does not provide such explanation, or if **The Company** is not satisfied with the explanation provided, **The Company** may give written notice to the **User** reducing the **Total MWs** of the **Connection Site** to zero and update Appendix G Schedule 1 accordingly if there is;
   1. A single breach occurs which risks operation of the **National Electricity Transmission System** or creates a risk to life or property or,
   2. Three (3) consecutive material breaches, or
   3. Eight (8) breaches within a twelve (12) month period.

This shall apply until such time as the **User** has explained to **The Company’s** reasonable satisfaction the reason for the breach and has demonstrated that appropriate steps have been taken to ensure that such breach will not reoccur, at which point Appendix G Schedule 1 shall be unilaterally amended thereafter by **The Company** to reflect the reinstatement of the **Total MWs**.

1. If within 3 months of a written notice from **The Company** (reducing the **Total MWs** of the **Connection Site** to zero) under paragraph 10.10 above, the **User** has still failed to provide the explanation and\or demonstration required by **The Company** under paragraph 10 then **The Company** may treat such breach as an **Event of Default** for the purposes of Section 5 of the CUSC and following such breach may give notice of termination to the **User** whereupon this **Bilateral Connection Agreement** shall terminate and the provisions of **CUSC** Paragraph 5.4.7 shall apply.