

Appendix A – Connection Agreement

AGREEMENT FOR CONNECTION TO EASTERN POWER NETWORKS PLC'S DISTRIBUTION SYSTEM

BETWEEN

- (1) Eastern Power Networks plc
Company Number 02366906

Newington House
237 Southwark Bridge Road
London
SE1 6NP

("the **Company**")

AND

- (2) **[An Other Ltd]**
Company Number **[Number]**

[Any Number]
[Any Street]
[Any Town]
[Any County]

("the **Customer**")

In consideration of the payment of its charges the Company agrees to the Connection of the Customer's Installation to its Distribution System on the terms of this Agreement for Connection to Eastern Power Networks plc's Distribution System including all appendices ("the Agreement") and as set out in the **National Terms of Connection** (available by internet at www.connectionterms.co.uk or on request in writing to Energy Networks Association, 6th Floor, Dean Bradley House, 52 Horseferry Road, London SW1P 2AF) ("**National Terms**") which may be varied from time to time (this Agreement and the National Terms collectively being the "**Terms and Conditions**").

The Customer confirms that he has read and fully understands all of the **Terms and Conditions**. **Where the Customer's Maximum Import Capacity or Maximum Export Capacity is subject to Curtailment, the extent of such Curtailment shall be specified in the Appendices to this Agreement.**

In entering into this Agreement the Customer understands that he shall be bound contractually by the **Terms and Conditions** on and from the Commencement Date.

Subject to the **Terms and Conditions**, the Agreement shall remain in full force and effect on and from the Commencement Date until terminated in accordance with the Terms and Conditions. Subject to clause 1.1 of the Agreement, expressions used in this Agreement have the same meaning as in the **Terms and Conditions**.

NOW IT IS HEREBY AGREED as follows:

1 DEFINITIONS, INTERPRETATION AND CONSTRUCTION

- 1.1 In the event of any conflict between the terms of this Agreement and the National Terms of Connection, the terms of this Agreement shall have priority. In the event of a conflict between the

provision of the terms and conditions of this Agreement and any of the Schedules to this Agreement or between the Schedules the documents shall have the following order of priority (in descending order):

- 1.1.1 the terms of the Agreement;
- 1.1.2 the Appendices to the Agreement;
- 1.1.3 National Terms of Connection;
- 1.2 The Terms and Conditions constitute the entire Agreement between the Parties. Any variation to this Agreement shall be in writing and signed by authorised signatories for the Parties.
- 1.3 Each Party acknowledges and agrees that it has not entered into this Agreement on the basis of, and has not relied on, any statement made or agreed to by any party, (whether a party to this Agreement or not) except those statements expressly written out in full in this Agreement.
- 1.4 This clause does not apply to any statement made fraudulently or to any provision of the Agreement which was induced by fraud.
- 1.5 The following terms and expressions shall have the meaning set out below:-

“Adjusted Export Capacity”	Has the meaning ascribed to it in Clause 3.2.2;
“Adjusted Import Capacity”	Has the meaning ascribed to it in Clause 3.2.1;
“Ancillary Capacity Services Agreement”	means a services agreement between the Company and the Customer which sets out the basis on which the Customer voluntarily agrees to make all or part of its Protected Import Capacity or make all or part of its Protected Export Capacity available to be interrupted from time to time by the Company for active network management purposes.
“ANM Scheme”	means the overall active network management scheme including but without limitation the Company Control Equipment. The ANM Scheme is further detailed in Part 1 of Schedule 2 of Appendix 2.
“Company Control Equipment”	means the equipment and technical specification set out in Schedule 2 of Appendix 2.
“Curtail”	means either: <ul style="list-style-type: none"> (a) to limit from time to time the maximum amount of electricity that may flow from the Distribution System through the Connection Point (b) to limit from time to time the maximum amount of electricity that may flow into the Distribution System from the Connection Point for the purpose of active network management and “Curtailed” and “Curtailed” shall be construed accordingly.
“Customer”	Means the Customer and includes all permitted successors and assignees of the rights, obligations and interests under these Terms and Conditions.

“DGNU Payment”	means the ‘Distributed Generation Network Unavailability Payment’ compensation mechanism created by the Authority to make compensation payments for network outages experienced by customers with Distributed Generation and implemented according to the arrangements set out in the Company’s published ‘Statement of the Use of System Charging Methodology for the Company’s Electricity Distribution Systems’
“Instruction”	means an instruction given by the Company to the Customer via the Company Control Equipment or verbally or in written form in accordance with the technical specifications set out in Schedule 2 of Appendix 2 in order to undertake Curtailment.
“Interruptible Import Capacity” (IIC)	means the sum of the Planned Interruptible Import Capacity and the Voluntary Import Capacity.
“Interruptible Export Capacity” (IEC)	means the sum of the Planned Interruptible Export Capacity and the Voluntary Export Capacity.
“kVA”	means Kilovolt Amperes;
“Maximum Export Capacity”	As that term is defined in the National Terms of Connection. The value of the Maximum Export Capacity for the Customer is described in Appendix 1 to this Agreement.
“Maximum Import Capacity”	As that term is defined in the National Terms of Connection. The value of the Maximum Import Capacity for the Customer is described in Appendix 1 to this Agreement.
“Planned Interruptible Import Capacity” (PIIC)	means the import capacity that may be intentionally Curtailed by the Company for active network management purposes as a condition of the connection the Customer has received from the Company. The value of the Planned Interruptible Import Capacity for the Customer is described in Appendix 1 to this Agreement.
“Planned Interruptible Export Capacity” (PIEC)	means the export capacity that may be intentionally Curtailed by the Company for active network management purposes as a condition of the connection the Customer has received from the Company. The value of the Planned Interruptible Export Capacity for the Customer is described in Appendix 1 to this Agreement.
“Protected Import Capacity” (PIC)	means in respect of a Connection Point (or the Connection Points collectively), an amount of electricity (expressed in kW or kVA) which may be less than or equal to but shall not exceed the Maximum Import Capacity that the Customer is entitled to take from the Distribution System through the Connection Point (or the Connection Points collectively) subject to the National Terms of Connection or the terms of an Ancillary Capacity Services Agreement between the Company and the Customer which shall be protected from intentional interruption for active network management purposes unless all or part of the Protected Import Capacity is subject to an Ancillary Capacity Services Agreement. The value of the Protected Import Capacity for the Customer is described in Appendix 1 to this Agreement. For the avoidance of doubt, the use of the term “Protected” in this Agreement does not mean the provision of capacity is resilient to a loss of one or more Connection Points.

<p>“Protected Export Capacity” (PEC)</p>	<p>means in respect of a Connection Point (or the Connection Points collectively), an amount of electricity (expressed in kW or kVA), which may be less than or equal to but shall not exceed the Maximum Export Capacity that the Customer is entitled to pass into the Distribution System through the Connection Point (or the Connection Points collectively) subject to the National Terms of Connection or the terms of an Ancillary Capacity Services Agreement between the Company and the Customer which the Company shall not intentionally interrupt for active network management purposes unless all or part of the Protected Export Capacity is subject to an Ancillary Capacity Services Agreement. The value of the Protected Export Capacity for the Customer is described in Appendix 1 to this Agreement. For the avoidance of doubt, the use of the term “Protected” in this Agreement does not mean the provision of capacity is resilient to a loss of one or more Connection Points.</p>
<p>“Voluntary Interruptible Import Capacity” (VIEC)</p>	<p>means that part of the Protected Import Capacity that is voluntarily made available to be Curtailed pursuant to an Ancillary Capacity Services Agreement The Ancillary Capacity Services Agreement shall define the amount of customer specific compensation to be paid for calling upon interruption of the Voluntary Interruptible Import Capacity.</p>
<p>“Voluntary Interruptible Export Capacity”(VIEC)</p>	<p>means that part of the Protected Import Capacity that is voluntarily made available to be Curtailed pursuant to an Ancillary Capacity Services Agreement. The Ancillary Capacity Services Agreement shall define the amount of customer specific compensation to be paid for calling upon interruption of the Voluntary Interruptible Export Capacity.</p>

2 COMPLIANCE WITH SITE SPECIFIC CONDITIONS AND OPERATIONAL ARRANGEMENTS

The site specific conditions and operational arrangements applicable to the Connection Points, the Customer’s Installation and the details of Curtailment are specified in Appendix 2.

3 MAXIMUM CAPACITY AND DEFINED INTERRUPTIBILITY

3.1 In addition to the Company’s rights of Curtailment under the Terms and Conditions, and notwithstanding clause 12 of the National Terms of Connection, the Company shall be entitled (at no cost to the Company) to instruct the Curtailment of the flow of electricity through the Connection Point in accordance with Clause 3.2 in the event that:

3.1.1 the Protected Import Capacity is less than the Maximum Import Capacity; and/or

3.1.2 the Protected Export Capacity is less than the Maximum Export Capacity.

3.2 Subject to Clause 3 of Schedule 2, the Company shall be entitled to issue an Instruction to:

3.2.1 specify a level of import capacity expressed in kVA (“**Adjusted Import Capacity**”) which may be less but not greater than the Maximum Import Capacity provided that the Adjusted Import Capacity shall not be less than the level of the Protected Import Capacity unless all or part of the Protected Import Capacity is offered as voluntarily interruptible through an Ancillary Capacity Services Agreement; and

3.2.2 specify a level of export capacity expressed in kVA (“**Adjusted Export Capacity**”) which may be less but not greater than the Maximum Export Capacity provided that the Adjusted Export Capacity shall not be less than the level of the Protected Export Capacity unless all or part of the Protected Export Capacity is offered as voluntarily interruptible through an Ancillary Capacity Services Agreement.

- 3.3 Upon receipt from the Company of an Instruction in accordance with Clause 3.2 above and for so long as this Instruction remains in force, the Customer shall not whether by act or omission:
- 3.3.1 cause or permit the flow of electricity from the Company's Distribution System to the Customer's Installation to exceed the Adjusted Import Capacity; or
- 3.3.2 cause or permit the flow of electricity from the Customer's Installation to the Company's Distribution System to exceed the Adjusted Export Capacity.
- 3.4 If the Customer fails to comply with Clause 3.3 above, the Company shall be entitled to De-energise the Connection Points or isolate the Customer's Installation as is appropriate.
- 3.5 Without prejudice to the Company's rights under the National Terms to De-energise the Connection Point, the magnitude and/or duration of Curtailment in accordance with Clause 3.1 and 3.2 shall be no longer than, in the reasonable opinion of the Company, is appropriate in the circumstances and the Company shall cease Curtailment as soon as reasonably practicable after the circumstances leading to the Curtailment have ceased to exist.
- 3.6 Subject to the Terms and Conditions, the Company shall use reasonable endeavours to:
- 3.6.1 ensure that the Maximum Import Capacity and the Maximum Export Capacity is available at the Connection Point during the period of this Agreement subject to the Curtailment of any Interruptible Import Capacity and/or Interruptible Export Capacity in accordance with this clause 3.1 or as agreed with the Customer; and
- 3.6.2 maintain the connection characteristics at the Connection Point.
- 3.7 The Customer's entitlement to a Maximum Import Capacity and/or Maximum Export Capacity is conditional upon:
- 3.7.1 the installation by the Company (at the Customer's sole cost) of the Company Control Equipment and the connection of the Customer's equipment to the Company Control Equipment; and
- 3.7.2 the Customer maintaining the Customer Installation and its equipment and its connections to the Company Control Equipment in accordance with Clause 7 at the Customer's sole cost;
- to enable monitoring and carrying out of Curtailment as set out in Schedule 2 of Appendix 2.

4 LIABILITY FOR CURTAILMENT

- 4.1 In the event that the Company has undertaken Curtailment otherwise than in accordance with Clause 3, the Company shall be liable under these Terms and Conditions to the Customer to pay the DGNU Payment (Distributed Generation Network Unavailability Payment).
- 4.2 Notwithstanding Clause 15 of the National Terms and save for any liability under Clause 4.1 above or that cannot be excluded or limited by law, the Company shall have no liability under these Terms and Conditions or for any tortious (including negligent) act or omission to the Customer or any person for any physical damage, costs, losses, expenses, claims or compensation arising from any Curtailment of the Generating Equipment by the Company.

5 VARIATIONS TO PLANNED INTERRUPTIBLE CAPACITY

- 5.1 The Parties shall not vary the Planned Interruptible Import Capacity or the Planned Interruptible Export Capacity unless the Customer:
- 5.1.1 Applies for a modification of its terms of connection under section 16 of the Electricity Act 1989 to (as the case maybe):
- (a) increase the Protected Export Capacity element of the Maximum Export Capacity;
or
- (b) increase the Protected Import Capacity element of the Maximum Import Capacity;
or

5.1.2 Agrees in writing with the Company to:

- (a) reduce the Maximum Import Capacity to a level that reduces or eliminates the need for Planned Interruptible Import Capacity; or
- (b) reduce the Maximum Export Capacity to a level that reduces or eliminates the need for Planned Interruptible Export Capacity.

5.2 A rebate on use of system charges to reflect avoided network reinforcement may be payable in accordance with the Use of System Charging Methodology published in accordance with the Company's DCUSA obligations.

6 MATERIAL BREACH

6.1 Any persistent breaches by the Customer of the obligations contained in Clause 3 of this Agreement or any deliberate or negligent breaches of the Terms and Conditions will be deemed to be a material breach of the Terms and Conditions in terms of clause 19.3.2 of the National Terms of Connection and the Company shall be entitled at its sole discretion to either;

6.1.1 terminate this Agreement in accordance with clause 19.3 of the National Terms of Connection; or

6.1.2 if the breach is in relation to the Customer failing to Curtail import capacity, require a variation to these Terms and Conditions in order that the Maximum Import Capacity to be equal to the Protected Import Capacity; and/or

6.1.3 if the breach is in relation to the Customer failing to Curtail export capacity, require a variation to these Terms and Conditions in order that the Maximum Export Capacity to be equal to the Protected Export Capacity.

7 CUSTOMER'S OBLIGATIONS

7.1 The Customer shall maintain the connection of the Customer's Installation to the Company Control Equipment and such parts of the ANM Scheme that the Customer is responsible for, as identified in Schedule 2 of Appendix 2 so that it is reasonably fit for the purpose for which it is used, and so that neither it nor its operation or use shall be liable to cause damage to, or interference with, the Distribution System or the National Electricity Transmission System (or their operation or use or the flow of electricity through them) nor affect the sustained operation of the ANM Scheme.

7.2 The Customer shall not change any of those parts of the ANM Scheme that are the Customer's responsibility without obtaining the prior written approval of the Company.

7.3 The Customer shall notify the Company in writing prior to undertaking any maintenance of those parts of the ANM Scheme that the Customer is responsible for maintaining and the Customer acknowledges that it shall not be entitled to import electricity from or export electricity to the Distribution System in excess of the Protected Import Capacity or Protected Export Capacity while it is undertaking maintenance that affects or prevents the operation of the ANM Scheme.

8 SUBSEQUENT OWNERS

8.1 Notwithstanding Clause 18 of the National Terms the Customer covenants that the Customer shall not dispose of any interest in the Premises, the Customer's Installations or the Customer's Generating Equipment unless the Customer has obtained from the proposed transferee of such interest a Deed of Covenant in a form acceptable to the Company in its sole discretion binding the proposed transferee to the Terms and Conditions and provided such deed to the Company. The Customer shall register the following restriction in the proprietorship register of its title to the Premises within 14 days of the date of this agreement and provide an official copy of the title to the Company within 14 days of the registration having been completed:

"No disposition of the registered estate by the proprietor of the registered estate, or by the proprietor of any registered charge not being a charge registered before the entry of this restriction is to be registered without a certificate signed by a conveyancer that the provisions of clause 8.1 of an agreement dated [] made between [] and [] have been complied with or that they do not apply to the disposition".

9 TERMINATION

9.1 This Agreement may be terminated by:

9.1.1 Either Party in accordance with clause 19.2 of the National Terms; or

9.1.2 The Company in accordance with clause 19.3 of the National Terms

9.2 In the event that Agreement is terminated pursuant to this clause 9 the Customer acknowledges and agrees that:

9.2.1 it may enter into a replacement connection agreement for curtailment of its Planned Interruptible Import Capacity or Planned Interruptible Export Capacity (as the case may be) on the Company's then current terms for curtailed connections in order to maintain the Connection; or

9.2.2 Clause 19.4 and 19.5 of the National Terms shall apply and the Company shall be entitled to Disconnect the Connection Point.

10 RESTRICTIONS ON VARIATIONS TO THE CUSTOMER'S INSTALLATIONS AND/OR THE CUSTOMER'S GENERATING EQUIPMENT

10.1 Where the Customer intends to vary in any way, for the avoidance of doubt including inter alia any replacements, substitutions, alterations, additions, removals, enhancements or reductions, to the Customer's Installations or its Generating Equipment or equipment controlling its Generating Equipment and such intended changes may alter the characteristics of or the type of or the form or the means of control of the Customer's Generating Equipment the Customer shall submit an Application for a Modification to the Company in accordance with this Agreement.

10.2 The Customer shall not change its Generating Equipment and/or equipment controlling its Generating Equipment in any way without prior written agreement from the Company to a Modification and without first entering into a variation of this Agreement to reflect the changes agreed.

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

Signed _____ for
and on behalf of the **Customer** by: Signature:

Designation:

Date:

Signed for
and on behalf of the **Company** by: Signature:

Designation:

Date:

APPENDIX 1- GENERAL PARTICULARS OF THE CONNECTIONS

1. Address for notices

- (i) The Company : Eastern Power Networks plc c/o Agreements Manager,
UK Power Networks (Operations) Ltd, Energy House, Carrier Business
Park, Hazelwick Avenue, Three Bridges, Crawley,
West Sussex, RH10 1EX
Telephone: 0808 1014131
Fax: 01293 577777
- (ii) Customer : at the Customer's address shown in the Agreement
Telephone: [•]
Fax: [•]

2. Except as set out in paragraph 3 below the characteristics of the connection(s) shall be as follows:

(a) Characteristics of supply:

- (i) Number of Phases: Three phase
(ii) Current: Alternating current
(iii) Voltage: **[Enter Statutory Voltage V ± 6% / +10%/-6%]**
(iv) Frequency: 50 Hertz ± 1%

(b) Connection Point(s) (supply terminals): Either

- (i) where the Company's service cable terminates in a cut-out fuse, the supply terminals are the outgoing terminals of the cut-out; or
(ii) where the connection is provided direct into a Customer's intake switch, the supply terminals are the incoming terminals of the Customer's intake switch; or
(iii) where the connection is provided from a Company switch fuse or circuit breaker, the supply terminals are the outgoing terminals of that Company's switch fuse or circuit breaker.

(c) Use of system tariff type: PUBLISHED RATES

3. Site details:

(a) Site address: **[HERE]**

- (i) Import MPAN(s) : [•]
(ii) Export MPAN(s) : [•]

(b) Commencement Date : **[HERE]**

(c) Subject to Schedule 2 of Appendix 2:

- (i) Maximum Import Capacity (kVA)⁺ : [•] kVA
(ii) Protected Import Capacity (kVA) : [•] kVA
(iii) Interruptible Import Capacity (kVA) : [•] kVA
(iv) First date for Reduction of Maximum Import Capacity: Commencement Date+12months
(v) Maximum Export Capacity (kVA)⁺ : [•] kVA
(vi) Protected Export Capacity (kVA) : [•] kVA
(vii) Interruptible Export Capacity (kVA) : [•] kVA **[Note: This will equal the Maximum Export Capacity.]**
(viii) First date for Reduction of Maximum Export Capacity: Commencement Date+12months

⁺ The Maximum Import Capacity and Maximum Export Capacity may be subject to operational and technical restrictions and these are set out in Appendix 2 - Schedule 4 "OPERATING ARRANGEMENTS APPLICABLE TO SPECIFIC CONNECTION POINTS" and Appendix 2 - Schedule 5 "TECHNICAL CONDITIONS APPLICABLE TO SPECIFIC CONNECTION POINTS"

APPENDIX 2
TECHNICAL CONDITIONS

Where technical conditions specified in this Appendix conflict with the body of this Agreement then to the extent that conflict exists the relevant technical condition or part of the relevant technical condition shall take precedence.

CONTENTS OF APPENDIX 2

- SCHEDULE 1 - CONNECTION POINT DETAILS
- SCHEDULE 2 - TECHNICAL SUPPLY CAPACITIES AND SOLE USE ASSETS
- SCHEDULE 3 - SITE RESPONSIBILITY SCHEDULES
- SCHEDULE 4 - SITE SPECIFIC OPERATING ARRANGEMENTS
- SCHEDULE 5 - SITE SPECIFIC TECHNICAL CONDITIONS
- SCHEDULE 6 - SITE GEOGRAPHIC PLANS
- SCHEDULE 7 - SITE OPERATIONAL DIAGRAMS
- SCHEDULE 8 - THE CUSTOMER'S GENERATING EQUIPMENT
- SCHEDULE 9 - TECHNICAL DEROGATIONS
- SCHEDULE 10 - GENERATING EQUIPMENT CONNECTED TO THE CUSTOMER'S INSTALLATION
- SCHEDULE 11 - EXCLUSION AND LIMITATIONS OF LIABILITY FOR DISTRIBUTED GENERATION
UNAVAILABILITY PAYMENT
- SCHEDULE 12 - PROPERTY DOCUMENTS

SCHEDULE 1
CONNECTION POINT DETAILS

An additional part to this Schedule will be required for each additional premises to be supplied

PREMISE	PREMISE NAME	
CONNECTION POINT	NAME OF CONNECTION POINT (repeat for premise with multiple Connection Points)	
	Commencement Date at which this specific Connection Point is included in this Agreement	DD/MM/YYYY
	Grid Reference of Connection Point	[HERE]
	Name of Feeding Company Substation	[HERE]
	Current	Alternating
	Frequency:	50Hz
	Voltage:	## V
	Number of Phases:	3 phase
	Maximum Permitted Import Capacity	###,### kVA limited to ###,### kW ###,### kVAr import (lagging p.f.) ###,### kVAr export (leading p.f.)
	Maximum Permitted Export Capacity	###,### kVA
		limited to
		###,### kW
		###,### kVAr import (leading p.f.) ###,### kVAr export (lagging p.f.)
Default Power Factor at the Connection Point * * The nominal operating power factor shall be as prescribed in the National Terms Of Connection unless otherwise stated in writing in this Agreement	###leading or ###lagging	

**SCHEDULE 2
CAPACITY INTERRUPTIBILITY ARRANGEMENTS**

The following terms and conditions in this Schedule 2 apply to the management of the Customer's export capacity under the Flexible Distributed Generation Active Network Management scheme and sets out in particular the basis of constraint of the Planned Interruptible Export Capacity and the reduction in the Customer's proportion of Maximum Export Capacity that is Planned Interruptible Export Capacity.

1 ADDITIONAL DEFINITIONS

<i>Term</i>	<i>Meaning</i>
"Constrained Location"	means those locations of constraint set out in Part 2 of this Schedule 2;
"Export Capacity"	Means an amount of electricity (expressed in kVA) which may be less than or equal to but shall not exceed the Maximum Export Capacity that the Customer is passing into the Distribution System through the Connection Point at any point in time;
"Forecast"	Means any information, projections, data, estimations or forecasts as to future levels of Curtailment provided by or on behalf of the Company to the Customer in relation to this Agreement.
"LIFO Register"	Has the meaning given to it in Paragraph 3.2;
"Operating Capacity"	means the electrical capacity in kVA available at the Constrained Location in near real time
"Priority Generation Plant"	Means in respect of the Constrained Location, Generating Equipment connected to the Company's Distribution System which either: <ol style="list-style-type: none"> a. has Interruptible Export Capacity not defined or a value of zero designated to it in the relevant customer's terms of connection with the Company; or b. has been entered on to the LIFO Register in priority to the Customer.
"Qualifying Generation Plant"	means Generating Equipment connected in a constrained area of the Distribution System that: <ol style="list-style-type: none"> a. Is not a Priority Generation Plant; and b. Has a Maximum Export Capacity greater than 50kW and is capable of having its electrical output governed so as to incrementally control its output;
"Subordinate Generation Plant"	means any Qualifying Generation Plant that connects to the Constrained Location after the Customer's Connection Point is Energised. <p>(a) <i>[Note: This concept relates to creating a secondary level of curtailment, where the capacity limit has been met, and reinforcement has not been undertaken, and more generators wish to connect under the same constraint. Consequently these later generators, or Subordinate Generation Plants will be curtailed first.]</i></p>

2 TECHNICAL REQUIREMENTS FOR CONTROLLING THE INTERRUPTABILITY

- 2.1 The Customer's Generating Equipment shall be paralleled to the Company's Distribution System.
- 2.2 Company Control Equipment shall be installed at the Connection Points to:
- 2.2.1 interface the Customer's Installation and/or equipment therein with the Company's Supervisory Control Alarm and Data Acquisition (SCADA) systems
 - 2.2.2 conduct measurement of current and voltage in real time
 - 2.2.3 convey an Instruction in digital format, to the Customer's control equipment to communicate the Adjusted Import Capacity and/or Adjusted Export Capacity that may be utilised. The specification for such Instructions is set out in Part 4 of this Schedule 2.
 - 2.2.4 provide volt free trip contacts, for operation upon failure of curtailment of interruptible import capacity, which shall be connected to the Company's Connection Point isolator or circuit breaker in respect of curtailment of import capacity.
 - 2.2.5 provide volt free trip contacts, for operation upon failure of curtailment of interruptible export capacity, which shall be connected to the Company's Connection Point isolator or circuit breaker or if appropriate to equipment under the control of the Customer that may isolate the Customer's generating equipment.

and the specific technical requirements will be set out in Part 3 of this Schedule 2.

3 CURTAILMENT

- 3.1 Subject to the Company's control engineer instructing any necessary limitations of usage in accordance with the Distribution Code the Customer agrees that in the event that the power flows and/or voltage levels in any Constrained Location equal or exceed the relevant Operating Capacity, the Company shall be entitled to give an Instruction in accordance with the technical requirements in Part 4 of this Schedule 2 to Curtail the flow of electricity through the Connection Point in an amount expressed in kVA to bring the power flows and/or voltage levels at the relevant Constrained Location below the relevant Operating Capacity PROVIDED THAT prior to issuing an Instruction to Curtail the Customer's flow of electricity through the Connection Point the Company has ensured that all flows of electricity onto the Distribution Network from Subordinate Generation Plants have been reduced to zero.
- 3.2 The Company shall ensure that all Subordinate Generation Plants shall have installed and be connected to Company Control Equipment and shall be subject to the ANM Scheme.
- 3.3 The Company shall be responsible for:
- 3.3.1 holding and maintaining a register of all Qualifying Generation Plants that connect to a Constrained Location (the "**LIFO Register**"). The Company shall hold a LIFO Register for each Constrained Location.
 - 3.3.2 ensuring that all Subordinate Generation Plants on the LIFO Register shall have at all times installed Company Control Equipment and shall be subject to the ANM Scheme.
- 3.4 Each Subordinate Generation Plant that connects to the Constrained Location shall be added to the LIFO Register.

4 NO LIABILITY FOR FORECASTS

- 4.1 The provider of any Forecast, aims to ensure that the Forecast is accurate and consistent with current knowledge and practice. However forecasting of a dynamic social, economic, climatic and electrical environment are inexact sciences which are constantly evolving and therefore no element of the Forecast may be relied upon. Subject to Clause 15 of the National Terms, the provider of any Forecast and any party on behalf of whom the Forecast has been provided excludes all liability in tort (including negligence), contract and under any statute for any loss or damage arising out of or in connection with any reliance on the Forecast. Subject to the foregoing, to the fullest extent permitted by applicable law, all warranties or representations (express or implied) in respect of the Forecasts are excluded.
- 4.2 The Customer's use of Forecasts provided by or on behalf of the Company is entirely at the Customer's own risk. The Company makes no warranty, representation or guarantee that the Forecast is error free or fit for your intended use.

SCHEDULE 2 PART 1 – ANM SCHEME

[Note: Technical description of the ANM Scheme and how it will operate (i.e. operating margins etc) to be provided.]

SCHEDULE 2 PART 2 – CONSTRAINED LOCATIONS

[Note: Constraints triggered or contributed to by each Generator shall be set out in the contract. This contract caters for a multiple constraint scenario, however for the first generators only one constraint will need to be specified.]

Constrained Location	Grid Reference or General Location of Constraint	Substation or Circuit references	Description of Constraint

SCHEDULE 2 PART 3 – SITE TECHNICAL REQUIREMENTS

[Note: To go in here a complete technical description of the equipment and signalling and controls provided by the Company and the corresponding requirements on the Customer to provide or receive or connect signalling and controls to its equipment to achieve the control required under the particular ANM scheme. This section will also identify the Communication protocols for example where digital or analogue signalling or required absolute levels of maximum import or export, rather than simple volt free contacts, are required to be conveyed.]

SCHEDULE 2 PART 4 – TECHNICAL REQUIREMENTS FOR THE COMPANY TO GIVE AN INSTRUCTION TO THE CUSTOMER

Manual (verbal or written) Instructions will be given by	The Company shall through its control equipment in an autonomous, semi-autonomous or otherwise in a manual fashion including verbal or written instructions specify a level of import capacity which may be less but not greater than the Maximum Import Capacity and specify a level of export capacity which may be less but not greater than the Maximum Export Capacity.
	Upon receipt from the Company of the specified level of import capacity or export capacity the Customer shall reduce the flow of electricity from the Company's Distribution System to the Customer's Installation or the flow of electricity from the Customer's Installation to the Company's Distribution System in an autonomous, semi-autonomous or manual fashion to not exceed those specified levels and do so within the timescale specified by the Company.
	If the Customer fails to act within the period specified by the Company to achieve maximum flows of electricity below the specified levels the Company shall be entitled to De-energise the Connection Points or isolate the Customer's generating equipment as is appropriate.
	Until such time that the specified level of import capacity reverts to the Maximum Import Capacity or the specified level of export capacity reverts to the Maximum Export Capacity if the Customer fails to not exceed those specified values the Company shall be entitled to De-energise the Connection Points or isolate the Customer's generating equipment as is appropriate.
Automatic Instructions will be given by	[This section will specify the schematic circuitry and control system diagrams setting out the basis of connection of the Company Control Equipment to the Customer's control equipment. At the automatic control wiring level all inputs and outputs will be diagrammatically shown and in written form and the protocols and ranges of signal for each relevant digital or analogue input or output, whether as distinct control wires or logically implemented controls on a single digital databus, shall be set out in this block]

SCHEDULE 3 - TECHNICAL SUPPLY CAPACITIES AND SOLE USE ASSETS

Application Notes Where the registration sheets show maximum technical capacities these are based solely on the capacity of the sole use plant and negative phase sequence voltage at the point of common coupling (PCC). The actual maximum capacities negotiated with the Customer will additionally take account of other loads on shared use plant and the obligations placed upon the Customer by the entirety of this Agreement.

Supply Point and Sole Use Assets Registration Sheet

Circuit Name:				
Distributor		Eastern Power Networks plc		
Supply Voltage				
Normal NGC GSP:				
Point of Supply				
IMPORT Meter Point Association Numbers (MPANs)				
EXPORT Meter Point Association Numbers (MPANs)				
Capacity	Thermal			
Sole Use Cables	Voltage			
	Type & Length			
	Capacity (Rating)			
	Impedance			
	Date Commissioned			
Sole Use Switchgear	Make/Type			
	Capacity (Rating)			
	Date Commissioned			

SCHEDULE 4 - SITE RESPONSIBILITY SCHEDULES

The site responsibilities shall be detailed in separate documentation between the parties in the form of a separate Site Responsibility Schedule Document.

NOTES

- (1) **Unless otherwise stated, Responsibility follows ownership.**
- (2) Charges for renewal or maintenance of assets operated by the Company solely to enable a connection to the Customer or in the case of EHV connections the share of use of the Company's assets are subject to the Company's Methodology and Statement of Basis of Connection Charges.
- (3) Customer's equipment connected to the Company's Connection Points, whilst being the responsibility of the Customer to control, operate and maintain, are subject in the first instance to the Company's Safety Management System in the conducting of any activities upon such Customer equipment **within** substations under the site management of the Company, noting however the Customer's Safety Management System applies to the conducting of works upon the Customer's equipment itself.

According to the nature of the works upon the Customer's equipment outside of the substation or works upon the Company's connection equipment, both the Customer's and/or the Company's related Safety Rules and Safety Documentation **may be required** to apply and be issued according to the nature of the work to be undertaken by the Customer or the Company, the necessity to make dead or earth or further prevent other potential sources of voltage being presented upon either party's systems in the relevant work zone.

SCHEDULE 5 - SITE SPECIFIC OPERATING ARRANGEMENTS**GENERAL OPERATING ARRANGEMENTS FOR ALL SITES****1. DIVISION OF RESPONSIBILITY FOR CONTROL MAINTENANCE AND OPERATION**

- 1(a) Unless otherwise stated in this Agreement all apparatus on the Company's side of the Connection Point shall be controlled and operated by the Company.
- 1(b) Unless otherwise stated in this Agreement all apparatus on the Customer's side of the Connection Point shall be the responsibility of the Customer.
- Drawings contained within Appendix 2, Schedule 8 indicate the operational boundaries which shall apply.

2. SWITCHING OPERATIONS ON COMPANY CONTROLLED APPARATUS

To comply with Regulation 12 of the Electricity at Work Regulations 1989, the Customer may, in an emergency, trip the outgoing circuit breaker by remote emergency tripping facility provided by the Company but the Company's Control Engineer must be informed immediately afterwards.

Energisation (or any subsequent Re-Energisation) or any non-emergency De-energisation of the Connection Point shall only be performed by the Company's authorised staff to the direct instructions of the Company's Control Engineer

Isolating and earthing operations on all high voltage apparatus controlled by the Company shall only be performed by the Company's authorised staff to the direct instructions of the Company's Control Engineer.

3. WORK ON HIGH VOLTAGE EQUIPMENT

All work on high voltage apparatus controlled by the Company shall be carried out in accordance with the Company's Distribution Safety Rules and Operational Practice Manual utilising the Company's Safety Documents.

Where such apparatus is capable of being energised from switchgear under the control of the Customer, the Customer shall provide the Company with an Operation, Isolation and Earthing (OIE) Certificate* confirming actions taken to ensure safety and, where requested, demonstrate that the actions taken are appropriate in the circumstances. Unless otherwise agreed with the Company, where the Customer operates its own control room a Record of Inter-System Safety Precautions (RISSP) procedure shall be utilised to ensure safe coordinated interaction of the Customer's and the Company's control room activities and on site work activities.

All work on high voltage apparatus controlled by the Customer shall be carried out in accordance with the Customer's current arrangements OIE certificate(s) being provided by the Company when necessary. When requested, any work by the Company's staff shall be carried out under the Company's/Approved Customer's Safety Document procedures utilising, where necessary, OIE certificate(s) provided by the Customer or the Company.

* Form for OIE certificate can be provided.

GENERAL OPERATING ARRANGEMENTS FOR ALL SITES**4. LOCKING OF SWITCHGEAR**

On all the Company controlled switchgear, the Company's locks shall be used to secure:

- (a) all opening facilities apart from those specified in paragraph 2 above,
- (b) all closing facilities apart from those specified in paragraph 2 above,
- (c) all isolation and earthing facilities.

Responsibility for locking Customer controlled apparatus rests with the Customer.

5. IRREGULARITIES OF SUPPLY

All faults or irregularities on both the Company's and Customer's high voltage equipment shall be reported immediately to the Company's Control Engineer.

6. COMMUNICATION WITH THE CONTROL ENGINEER

The Company's staff are on are on duty at all times in the Company's Control Centre. When speaking to the Company's Control Centre the Customer's Representative should identify themselves and the substation they are calling about. Reports should be clear and concise.

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- The Company's Control Centre can be contacted on 0800 783 8866

7. COMMUNICATIONS WITH THE CUSTOMER'S ENGINEERS

Customer's engineers may be contacted as follows:

[TO BE COMPLETED FROM CUSTOMER INFORMATION]

An additional part to this Schedule will be required where the Site or constituent Connection Points require specific operating arrangements that are additional or in place of the General Operating Arrangements For All Sites or to explicitly confirm no site specific operating arrangements exist.

OPERATING ARRANGEMENTS APPLICABLE TO THE ENTIRE CUSTOMER SITE

Where Connection Points are sourced from a single tee point connection to the Company's Distribution System the Connection Point may be subject to long-term de-energisation during abnormal network conditions and/or during periods of network maintenance.

The normal operating regime will be for the Customer to operate at a power factor prescribed in the National Terms of Connection unless stated otherwise in Appendix 2 - Schedule 1. Due to conditions on the Distribution System and the Transmission System the Company *may* by instruction from the Company's control engineer or instruction from the Company's autonomous control systems require the Customer where it operates Generating Equipment to operate such Generating Equipment within the range of 0.95 leading and 0.95 lagging as instructed by the Company's Control Centre. If the Customer cannot operate its Generating Equipment at the required power factor the Customer may be instructed to reduce or disconnect their Generating Equipment from the Distribution System.

OPERATING ARRANGEMENTS APPLICABLE TO SPECIFIC CONNECTION POINTS	
CONNECTION POINT NAME	NAME OF CONNECTION POINT (repeat for premise with multiple Connection Points)
Operating Arrangements	None

SCHEDULE 6 - SITE SPECIFIC TECHNICAL CONDITIONS**GENERAL TECHNICAL CONDITIONS**

The Customer must inform the Company in writing of any intended or actual material changes to the magnitude or timing of the consumption of electricity (i.e. load) covered by this Agreement.

The Customer must inform the Company in writing of any connection of low voltage Generating Equipment up to 16 Ampere per phase in advance or up to 28 days following the date of installation.

The Customer must obtain prior consent in writing from the Company for any connection to the Customer's Installation of Generating Equipment at EHV, HV or at Low Voltage where the rating exceeds 16 Ampere per phase or where connection of multiple Low Voltage Generating Equipment units up to 16 Ampere per phase is planned.

Where the Customer intends to change in any way Generating Equipment or equipment controlling Generating Equipment that is connected to the Customer's Installation, for the avoidance of doubt including *inter alia* any replacements, substitutions, alterations, additions, removals, enhancements or reductions, and such intended changes may alter the characteristics of or the type of or the form of or the means of control of the Customer's Generating Equipment or the profile or timing of the production of electricity by its Generating Equipment or the profile or timing of export of electricity to the Distribution System, then the Customer shall submit an Application for a Modification to the Company in accordance with this Agreement and the Customer shall not change its Generating Equipment and/or equipment controlling its Generating Equipment in any way without prior written agreement from the Company to a Modification and without first entering into a variation of this Agreement to agree the required changes.

TECHNICAL CONDITIONS APPLICABLE TO THE ENTIRE CUSTOMER SITE**Generation Export and Operation Regime**

Unless otherwise specified in this Agreement the Customer's Generating Equipment on this site is permitted to operate and permitted to export up to the Maximum Export Capacity stated in Appendix 1 at any time of day on any day, subject to directions and instructions as may be given by the Company's Control Centre from time to time. Where time of day, week, month or year or operational or technical restrictions apply these shall be expressly stated in Schedule 4 "OPERATING ARRANGEMENTS APPLICABLE TO SPECIFIC CONNECTION POINTS" or Schedule 5 "TECHNICAL CONDITIONS APPLICABLE TO SPECIFIC CONNECTION POINTS".

Fault levels

The Customer's;

a) calculated maximum 3-phase fault level contribution at the point of connection without the Distribution System is **[FAULT LEVEL]** kA Sub-transient and **[FAULT LEVEL]** kA Transient, and

b) calculated maximum 1 phase fault level contribution at the point of connection without the Distribution System is **[FAULT LEVEL]** kA Sub-transient and **[FAULT LEVEL]** kA Transient,

and the Company's connections have been designed on the basis of this data which has not been checked by the Company.

The Distribution System is;

a) designed for a 3 phase symmetrical fault level of **[FAULT LEVEL]** kA, and

b) designed for a 1 phase to ground fault level of **[FAULT LEVEL]** kA, and

the Customer's Plant should be designed to take account of the fault level rising to that level.

TECHNICAL CONDITIONS APPLICABLE TO THE ENTIRE CUSTOMER SITE**Synchronisation**

The Customer must communicate with the Company's Operations Centre in respect of any operation or event, as follows:-

1. In accordance with the requirements set out in the Distribution Code DOC7:
2. Prior to first synchronisation of the first generating set following:
 - a) the conclusion of this Connection Agreement;
 - b) an unplanned outage of all of the generating sets; or
 - c) any planned outage of all of the generating sets of more than one day.
3. Unless specified otherwise in this Agreement, before reconnection of disconnected Generating Equipment following loss of the incoming supply or operation of transient protection, except in the following circumstances:-
 - (i) when the loss of incoming mains supply is for a period of less than 3 minutes, i.e. a transient interruption of supply; or
 - (ii) when some or all of the generating sets have tripped due to transient protection operation due to a fault on the Customer's network and the incoming supply has remained available.

These terms are without precedent and represent a temporary relaxation of the full requirements of DOC7 only in so far as the Company has power to grant such relaxation, and only for so long as the Company considers it reasonable to do so in all the circumstances. The Company reserves the right, without notice, to withdraw this relaxation at any time in the future and thereafter insist on compliance with the full requirements of DOC7.

Synchronisation of the customers Generating Equipment should be in accordance with the requirements of P28 as defined in the customers P28 assessment and as directed by the Company.

Protection Settings

As a minimum the Customer shall apply the Generating Equipment protection requirements set out in the Distribution Code or Engineering Recommendation G59/3 and/or its successor documents.

The exact test and protection settings will be notified to the Parties in writing at a future date to be agreed.

The protection tests should include the testing of vector shift relays response to the change of voltage vector by secondary injection or to rate of change of frequency relays response to the change of frequency by secondary injection as is relevant to the nature of the Customer Installation and Generating Equipment connected to it.

Earthing System Impedance

The Customer should endeavour to ensure that the rise of earth potential at the site under earth fault conditions remains below 430volts. If this is not achievable the Customer must comply with the conditions Imposed by BT for "hot" sites.

TECHNICAL CONDITIONS APPLICABLE TO THE ENTIRE CUSTOMER SITE

Operational Constraint

The Company reserves the right to reduce the Maximum Export Capacity due to unavailability of circuits elsewhere on the Distribution System and Transmission System.

Following notification by the Company’s control engineer or by the Company’s autonomous control systems of a reduction in the Maximum Export Capacity, the Customer shall not exceed that reduced output until permission has been received from the Company’s Operations Centre to resume normal output. Failure to comply with the Company’s notification may result in immediate disconnection of supply in order to protect the Distribution and Transmission Networks. The Company excludes liability for any constraint of output of the Customer’s export of electricity to the Company’s Distribution System arising from a failure of the Customer to comply with the instructions of the Company’s Operations Centre.

An additional part to this Schedule will be required for each Connection Point to be supplied where specific technical conditions apply to specific Connection Points.

CONNECTION POINT NAME	NAME OF CONNECTION POINT (repeat for premise with multiple Connection Points)
Technical Conditions	None

SCHEDULE 7 - SITE GEOGRAPHIC PLANS

Plans sufficient to detail all Connection Points included within this Agreement shall be appended to this Schedule.

[SITE GEOGRAPHIC PLAN TO GO HERE IF APPLICABLE]

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SCHEDULE 8 - SITE OPERATIONAL DIAGRAMS

Diagrams sufficient to detail all Connection Points included within this Agreement and their connection arrangements shall be appended to this Schedule.

[SITE OPERATIONAL DIAGRAM TO GO HERE IF APPLICABLE]

SCHEDULE 9 - THE CUSTOMER'S GENERATING EQUIPMENT

The Customer's Generating Equipment consists of:

- Connection control and protection equipment (including protection compliant with the Distribution Code and/or Engineering Recommendation G59/3 and/or its successor documents).
- **[DETAILED INVENTORY OF GENERATING EQUIPMENT TO GO HERE IF APPLICABLE]**

SCHEDULE 10 - TECHNICAL DEROGATIONS

NAME OF CUSTOMER'S SITE	NAME OF CUSTOMER SITE
No technical derogations apply.	

An additional part to this Schedule will be required for each Connection Point specific derogation that is applicable.

NAME OF SUBSIDIARY CONNECTION POINT	NAME OF CONNECTION POINT (repeat for premise with multiple connection points)
No technical derogations apply.	

**SCHEDULE 11 -
GENERATING EQUIPMENT CONNECTED TO THE CUSTOMER'S INSTALLATION**

The Customer shall notify the Company of Generating Equipment capability connected on the Customer's Installation. Details to be provided are:

Date of Installation being the later of Date of Commissioning or Date of Notification	Generating Equipment Type	Nature of Generating Equipment connection Long-term parallel / Infrequent short-term parallel / Switched alternative-only	Generating Equipment Capacity	Generating Equipment Fault Level Contribution			
			(kW) Alternating Current Root Mean Squared magnitude of power output into the Alternating Current part of the Customer's Installation)	Ik'' sub-transient		Ik' transient	
				1 phase	3 phase	1 phase	3 phase

SCHEDULE 12 -
EXCLUSION AND LIMITATIONS OF LIABILITY FOR DISTRIBUTED GENERATION
UNAVAILABILITY PAYMENT

Notwithstanding the provisions of Schedule 10 of this **Appendix 2** the Company shall not make any DGNU Payment for Distributed Generation connected at Low Voltage to the Company's Distribution Network.

**SCHEDULE 13 -
PROPERTY DOCUMENTS**

THIS SCHEDULE IS INTENTIONALLY BLANK UNLESS OTHERWISE POPULATED