

Registered Office: Newington House 237 Southwark Bridge Road London SE1 6NP

Registered in England and Wales No: 3870728

Company: UK Power Networks (Operations) Limited

Name	
Address 1	
Address 2	
Address 3	
Address 4	

Date

Our Ref: Your Ref:

Address 5

Dear [Name]

#### **Site Address:**

Thank you for your recent enquiry regarding the above site.

I am writing to you on behalf of Eastern Power Networks PLC the licensed distributor of electricity for the above address trading as and referred to in this Notice as UK Power Networks.

I am pleased to be able to provide you with a Flexible Plug and Play connection offer with a Maximum Export Capacity of xxxxx kVA (xx MVA) with a provisional price.

The application that you have made is for UK Power Networks to carry out both the contestable and non-contestable works. If you do not wish for UK Power Networks to carry out the contestable works please do not accept this Notice. Instead, you should apply for a Competition in Connections offer. For more information about Competition in Connections please visit our website at **www.ukpowernetworks.co.uk** navigating to 'Connection Services' then 'Competition in Connections'.

**Summary of what's included:** All of the paperwork included in this quote is important, so please take the time to read it. Here is an overview of what's included:

- Summary of the work
- A connection offer with <u>provisional</u> price
- Works to be completed by UK Power Networks
- Works which you (the customer) need to complete
- Land rights
- Drawings schedule
- · Variations to the Terms and Conditions
- Additional information

- Acceptance of Notice Form
- Terms and conditions booklet
- Factsheet entitled "Our Connections Standards of Performance"
- Appendix A Connection Agreement

This letter and attachments constitute the Notice for the purposes of Section 16A(5) of the Electricity Act 1989.

May I draw to your attention to the provisional nature of the price, the detail of which is set out in this document under the heading "The price".

At the date of issue of this Notice to you UK Power Networks had not finished its detailed design or the procurement of the Works. Accordingly the location of the Electric Lines (as defined in the Terms and Conditions) and the electrical plant, the design, the delivery dates and the Price are provisional only.

When UK Power Networks has completed its detailed design and procurement process it will notify you in writing of the adjustment (if any) to the Price, delivery dates, Works and Your Works (as defined in the Terms and Conditions). Subject to the Terms and Conditions the Price so adjusted shall become the Price payable by You and the stage payments (if any) thereof shall be adjusted pro-rata or otherwise as UK Power Networks reasonably requires and the delivery dates so adjusted shall be those (subject to the Terms and Conditions) pursuant to which UK Power Networks shall carry out the Works, and the Works and Your Works shall be so adjusted.

If the adjusted price is more than the provisional price you will be asked to pay the difference between the provisional price and the adjusted price.

Similarly, if the adjusted price is less than the provisional price UK Power Networks will refund to you the difference between the adjusted price and the provisional price.

#### **Interruptible Connection**

The site for which you have requested a connection is subject to constraints on the Distribution System. This Flexible Plug and Play connection offer enables you to connect to the Distribution System subject to UK Power Networks being entitled to curtail your export of electricity on a pro-rata basis.

This interruptible connection offer is to provide you with an Import Capacity of xxx kVA and a Maximum Export Capacity of xxxxx kVA subject to UK Power Networks' entitlement to curtail the export of electricity to the Distribution System in accordance with the Connection Agreement in Appendix A to this Notice ("Connection Agreement").

For the purposes of this Notice and the Connection Agreement the export capacity available and subject to curtailment (known as the Planned Interruptible Export Capacity) is equal to the Maximum Export Capacity of xxxxx kVA.

By accepting this Notice you acknowledge that:

 the Non- Contestable Works provide a connection that will be enable UK Power Networks to curtail the Interruptible Export Capacity in accordance with the Connection Agreement in Appendix A;

- The terms of the Connection Agreement (to the extent it is relevant) will apply to you from the date of acceptance of this Notice;
- The owner of the Generating Equipment and Customer's Installations must enter into the Connection Agreement in the form attached in Appendix A prior to Energisation;
- UK Power Networks will not be liable to you for any compensation or loss as a result of curtailment being undertaken except as set out in the Connection Agreement.

#### Additional conditions:

Please note that in accordance with Energy Networks Association Engineering Recommendation G59/3, permanent normal operation of the generation scheme in parallel with the Distribution System is not permitted until a relay test has been conducted.

Only when the relay test sheet has been signed off by UK Power Networks' nominated witness, will we deem the generation to be commissioned.

It shall be a condition of the Connection Agreement that you must operate the generation equipment at Unity Power Factor.

What you should do next: If you wish to proceed you will need to ensure that by 5pm on [date]

- We have received from you a signed and dated Acceptance of Notice Form (section 9 of the Notice). You should sign and date the other copy of the Acceptance of Notice Form and keep it safely with your other records; and
- We have received from you the first stage payment into our bank account in cleared funds the sum stated in paragraph 6 of the Acceptance of Notice Form. Payment can be made by cheque, BACS payment or credit / debit card. All payment details are on the Acceptance of Notice Form (section seven of the Notice). Please make sure that you allow sufficient time for payment to clear.

#### **Interactive Process**

Please be aware that if UK Power Networks receives another application for a connection to the same part of its distribution system and there is insufficient capacity upon its distribution system, or if there are other constraints upon it that will prevent both connections being made, UK Power Networks will apply its interactive connection application process. In these circumstances the period within which you must return payment and the signed Acceptance of Notice form as set out above will be reduced. You will be contacted if this occurs.

If you have any questions about your application or need more information, the best time to call is between the hours of 9:00 am and 4:00 pm, Monday to Friday. If the person you need to speak to is unavailable or engaged on another call when you ring, you may like to leave a message or call back later.

Yours sincerely

## 1. Summary of the connection

Please note this is an interruptible connection offer with a provisional price.

This offer is to provide a connection with a Maximum Export Capacity of xxxxx kVA and a Maximum Import Capacity of xxx kVA to the [insert generation type ie solar PV/wind/CHP/Anaerobic Digestion etc] development at [insert name of project].

The Planned Interruptible Export Capacity for this connection shall be xxxxx kVA.

For Guaranteed Standards of Performance purposes, this quotation covers 1 phase of work which is subject to the post acceptance standards as detailed in the enclosed 'Our Connections Standards of Performance' leaflet.

This notice includes costs for the installation of xx metres (route length) of xxx mm [insert cable type]. The cable will be laid in unmade ground/footpath/carriageway. Joints are included.

## 2. The price

The Provisional price for this work, including the charges for connection to the existing distribution system is: £X plus VAT at an appropriate rate as per the table below. The outstanding balance to pay is £X inclusive of VAT as appropriate.

No Provisional Sum or allowance has been included within the Price for lane rental charges.

Connection Charg	ge			
Charge Type	Net	Vat Rate %	VAT charged	Gross
Non-domestic	£x	20	£x	£x
Domestic	£0.00	0	£0.00	£0.00
Total	£x		£x	£x
<b>Advanced Payme</b>	nts Received			
Charge Type	Net	Vat Rate %	VAT charged	Gross
Non-domestic	£0.00	20	£0.00	£0.00
Domestic	£0.00	0	£0.00	£0.00
Total	£0.00		£0.00	£0.00
<b>Outstanding Bala</b>	nce			
Charge Type	Net		VAT charged	Gross
Non-domestic	£1,734,876.61		£346,975.32	£2,081,851.93
Domestic	£0.00		£0.00	£0.00
Total	£x		£x	£x

Payment should be made in accordance with the stage payments listed below:

#### Stage 1 payment

The first stage payment is due on signature of the Acceptance of Notice Form.

The first stage payment is £ x pounds sterling plus VAT.

#### Stage 2 payment

The second stage payment is due x weeks after the date this Notice was issued.

The second stage payment is £ x pounds sterling plus VAT.

#### Stage 3 payment

The third stage payment is due x weeks after the date this Notice was issued.

The third stage payment is £ x pounds sterling plus VAT.

### Stage 4 payment

The fourth stage payment is due x weeks after the date this Notice was issued.

The fourth stage payment is £ x pounds sterling plus VAT.

#### Stage 5 payment

The fifth stage payment is due x weeks after the date this Notice was issued.

The fifth stage payment is £ x pounds sterling plus VAT.

#### Cost breakdown

Please see below for a breakdown of costs for this quotation:

CONTESTABLE CHARGES (charges that relate to the work which can be completed by either an Independent								
Connections Provider (ICP) or UK Power Networks	5) 		<b>I</b>	NA:II				
	LV Work	HV Work	EHV Work	Miscellaneous Work	Total			
Jointer & Mate	£0.00	£0.00	£0.00	£0.00	£0.00			
Fitter & Mate	£0.00	£0.00	£0.00	£0.00	£0.00			
Linesman & Mate	£0.00	£0.00	£0.00	£0.00	£0.00			
AP / SAP	£0.00	£0.00	£0.00	£0.00	£0.00			
Other	£0.00	£0.00	£169,117.13	£0.00	£169,117.13			
Labour Total	£0.00	£0.00	£	£0.00	£			
Cable HV, EHV & Pilot	£0.00	£0.00	£0.00	£0.00	£0.00			
Cable LV & Earth	£0.00	£0.00	£0.00	£0.00	£0.00			
Jointing Kits & Accessories	£0.00	£0.00	£0.00	£0.00	£0.00			
Termination Equipment	£0.00	£0.00	£0.00	£0.00	£0.00			
Other	£0.00	£0.00	£	£0.00	£			
Material Total	£0.00	£0.00	£	£0.00	£			
Ground. Mounted Transformers & ACBs	£0.00	£0.00	£0.00	£0.00	£0.00			
Pole Mounted Transformers & Overhead Plant	£0.00	£0.00	£0.00	£0.00	£0.00			
RMU, Switchgear & LV Cabinets	£0.00	£0.00	£0.00	£0.00	£0.00			
GRP, Pre-Fab Substations & Accessories	£0.00	£0.00	£0.00	£0.00	£0.00			
Other	£0.00	£0.00	£	£0.00	£			
Plant Total	£0.00	£0.00	£	£0.00	£			
Civils Groundworks	£0.00	£0.00	£0.00	£0.00	£0.00			
Specialist Overhead Line Works	£0.00	£0.00	£0.00	£0.00	£0.00			
Off-loading & Traffic Management	£0.00	£0.00	£0.00	£0.00	£0.00			
Other Contractor Cost	£0.00	£0.00	£0.00	£0.00	£0.00			
Misc Items	£0.00	£0.00	£	£0.00	£			
Other Total	£0.00	£0.00	£	£0.00	£			
Less Total Contestable Credits					£0.00			
Total Contestable Works (Exc VAT)	£0.00	£0.00	£	£0.00	£			

NON - CONTESTABLE CHARGES (charges that relate to the work that has to be completed by UK Power Networks)							
	LV Work	HV Work	EHV Work	Miscellaneous Work			
Jointer & Mate	£0.00	£0.00	£0.00	£0.00	£0.00		

Fitter & Mate	£0.00	£0.00	£0.00	£0.00	£0.00
Linesman & Mate	£0.00	£0.00	£0.00	£0.00	£0.00
AP / SAP	£0.00	£0.00	£0.00	£0.00	£0.00
Other	£0.00	£0.00	£	£0.00	£
Labour Total	£0.00	£0.00	£	£0.00	£
Cable HV, EHV & Pilot	£0.00	£0.00	£0.00	£0.00	£0.00
Cable LV & Earth	£0.00	£0.00	£0.00	£0.00	£0.00
Jointing Kits & Accessories	£0.00	£0.00	£0.00	£0.00	£0.00
Termination Equipment	£0.00	£0.00	£0.00	£0.00	£0.00
Other	£0.00	£0.00	£	£0.00	£
Material Total	£0.00	£0.00	£	£0.00	£
Ground. Mounted Transformers & ACBs	£0.00	£0.00	£0.00	£0.00	£0.00
Pole Mounted Transformers & Overhead Plant	£0.00	£0.00	£0.00	£0.00	£0.00
RMU, Switchgear & LV Cabinets	£0.00	£0.00	£0.00	£0.00	£0.00
GRP, Pre-Fab Substations & Accessories	£0.00	£0.00	£0.00	£0.00	£0.00
Other	£0.00	£0.00	£	£0.00	£
Plant Total	£0.00	£0.00	£	£0.00	£
Civils Groundworks	£0.00	£0.00	£0.00	£0.00	£0.00
Specialist Overhead Line Works	£0.00	£0.00	£0.00	£0.00	£0.00
Off-loading & Traffic Management	£0.00	£0.00	£0.00	£0.00	£0.00
Other Contractor Cost	£0.00	£0.00	£0.00	£0.00	£0.00
Misc Items	£0.00	£0.00	£	£0.00	£
Other Total	£0.00	£0.00	£	£0.00	£
Less Non Contestable Credits					£0.00
Total Non-Contestable Works	£0.00	£0.00	£	£0.00	£

CUSTOMER FUNDED ELEMENT OF COST SHARED WORK								
	LV Work	HV Work	EHV Work	Miscellaneous Work	Total			
Jointer & Mate	£0.00	£0.00	£0.00	£0.00	£0.00			
Fitter & Mate	£0.00	£0.00	£0.00	£0.00	£0.00			
Linesman & Mate	£0.00	£0.00	£0.00	£0.00	£0.00			
AP/SAP	£0.00	£0.00	£0.00	£0.00	£0.00			
Other	£0.00	£0.00	£0.00	£0.00	£0.00			
Labour Total	£0.00	£0.00	£0.00	£0.00	£0.00			
Cable HV, EHV & Pilot	£0.00	£0.00	£0.00	£0.00	£0.00			
Cable LV & Earth	£0.00	£0.00	£0.00	£0.00	£0.00			
Jointing Kits & Accessories	£0.00	£0.00	£0.00	£0.00	£0.00			
Termination Equipment	£0.00	£0.00	£0.00	£0.00	£0.00			
Other	£0.00	£0.00	£0.00	£0.00	£0.00			
Material Total	£0.00	£0.00	£0.00	£0.00	£0.00			
Ground. Mounted Transformers & ACBs	£0.00	£0.00	£0.00	£0.00	£0.00			
Pole Mounted Transformers & Overhead Plant	£0.00	£0.00	£0.00	£0.00	£0.00			
RMU, Switchgear & LV Cabinets	£0.00	£0.00	£0.00	£0.00	£0.00			
GRP, Pre-Fab Substations & Accessories	£0.00	£0.00	£0.00	£0.00	£0.00			
Other	£0.00	£0.00	£0.00	£0.00	£0.00			
Plant Total	£0.00	£0.00	£0.00	£0.00	£0.00			
Civils Groundworks	£0.00	£0.00	£0.00	£0.00	£0.00			
Specialist Overhead Line Works	£0.00	£0.00	£0.00	£0.00	£0.00			
Off-loading & Traffic Management	£0.00	£0.00	£0.00	£0.00	£0.00			
Other Contractor Cost	£0.00	£0.00	£0.00	£0.00	£0.00			
Misc Items	£0.00	£0.00	£0.00	£0.00	£0.00			
Other Total	£0.00	£0.00	£0.00	£0.00	£0.00			
Total Customer Funded Cost Shared Works	£0.00	£0.00	£0.00	£0.00	£0.00			

OTHER CHARGES	
Assessment/Design Charges	£
Assessment Only Charges	0.00£
Design Approval Charges	0.00£
Testing & Monitoring Charges	0.00
Operation & Maintenance Charges	£0.00

Funded by or for Others	£0.00
Total Other Charges (Exc VAT)	£
Total Quotation excluding VAT	£

Any contractor employed by you to carry out the contestable parts of the work must have the prior approval of UK Power Networks. Further details can be made available on request.

This Notice assumes that UK Power Networks will be carrying out both the contestable and non-contestable works. If you do not wish for UK Power Networks to carry out the contestable works please do not accept this Notice.

Please note that where UK Power Networks does not undertake all the contestable work there will be additional charges to cover the cost of inspecting and testing the electricity assets installed by a third party for adoption by UK Power Networks. For more information about Competition in Connections, please visit our website at **www.ukpowernetworks.co.uk** navigating to 'Connection Services' then 'Competition in Connections'

# 3. Works to be completed by UK Power Networks

#### **Contestable Works**

[add description]

#### **Non-Contestable Work**

[add description]

Please note that we will not be able to programme any work until:

- payment and signed Acceptance of Notice forms are received.
- all necessary legal consents have been obtained successfully.
- a site meeting has taken place with our Delivery Team to determine the scale and complexity of the Works.

The Works referred to in this quotation will be completed by the end of [date]. This date is subject to:

- the date of your acceptance of this quotation.
- any further discussions we may have with you regarding the programming of the Works.
- the completion of Works by others, as stated in the quotation, that are prerequisite to the completion of our Works but are not our responsibility to complete.
- the Terms and Conditions of this quotation.

#### Safety

If this project is notifiable under the Construction (Design and Management) (CDM 2007), UK Power Networks will not commence on-site works until you have provided information of your appointed CDM Coordinator and Principal Contractor.

#### **Services**

UK Power Networks will:

#### **Cable Route**

UK Power Networks will:

#### **Substations**

UK Power Networks will:

Please note that 24 hour unimpeded access will be required for UK Power Networks staff and contractors to the substation.

#### **Other Works**

**UK Power Networks will:** 

# 4. Works which you (the customer) need to complete

#### Safety

You are responsible for identifying whether the site is notifiable under the Construction (Design and Management) regulations. Upon acceptance of the Notice, you need to advise who are the appointed CDM Coordinator and Principal Contractor for the on-site works. You can do this by completing the enclosed application form. Please provide these details on the Acceptance of Notice form if you did not previously include them in your application form. Please note that the Principal Contractor must hold a site safety induction meeting for all contractors prior to any works starting on-site. The objective of the meeting is to contribute directly to the Site Health and Safety Plan.

Please note that under these regulations we will not commence our on-site works until you provide us this information.

#### Appoint an electricity supplier

You are responsible for appointing an electricity supplier.

An electricity supplier will arrange the installation of any electricity meters. To make sure the process runs smoothly, please read the following points which explain what you need to do:

#### 1. Obtain a Meter Point Administration Number (MPAN)

To arrange the metering you will need a Meter Point Administration Number also known as an MPAN or a supply number. This is a 13 digit reference, used in the United Kingdom to uniquely identify every electricity supply point. We will send you the MPAN(s) once you have paid the connection charge and accepted the quote. Please note that we can only create MPANs if you have provided us with the full postal address (these need to be agreed by Royal Mail if it is a new development).

#### 2. Choose an electricity supplier

Once you have the MPAN, you need to choose an electricity supplier. The opening up of the electricity market has increased competition. This means that you have the freedom to appoint any electricity supplier of your choice.

Once you have chosen your electricity supplier please get in touch with them to register as soon as possible. This registration normally takes at least 28 days.

#### 3. Arrange the meter installation

Once you have a confirmed date from UK Power Networks for the work to go ahead you should let your electricity supplier know so they can arrange the metering on the same day. They are likely to need at least ten working days notice so please allow plenty of time to ensure your project runs smoothly.

#### **Substations**

You are responsible for:

- installing the Earthing Nest.
- You are also responsible for the installation of the earthing associated with this plinth
  and it will be necessary for you to test the installation on completion and provide a test
  certificate.
- testing the installation on completion and providing a test certificate to the UK Power Networks Field Engineer or Building Officer dealing with the site.
- the accommodation is to be available to UK Power Networks with adequate access at least 15 weeks prior to commencement of supplies.

You must install lighting in the substation to an intensity of illumination of 100 lux. (In accordance with 'Recommendations for Lighting Building Interiors').

Plant will only be delivered to site when suitable hard standing is available from the public highway to the front of the substation. This should be adequate to support a 32 tonne road vehicle (crane lorry), unless stated otherwise. Due to Health and Safety reasons the substation cannot be energised until all substation civil works are complete.

#### **Other Works**

You must:

- test any earthing installation or cables installed by you and provide a test certificate to UK Power Networks prior to connection to our system.
- appoint Authorised Persons to take control and responsibility for the supply in order to avoid danger. To enable procedures for the safe operation or work on UK Power Network's and the Customer's high voltage equipment to be formally established, Provide the name and designation of the person who is to take charge of the supply and the means of contact.
- complete the Site Responsibility Schedules (SRS) as requested by the UK Power Networks Project Designer or Project Manager.

An earth terminal will not be provided with High voltage service terminations. You will need to install your own earthing system. In addition you will need to install a single earthing conductor between your installation and UK Power Networks' earthing system. This must come direct from your main earth bar (fitted with a removable link) and be clearly labelled. The sizing of the conductor will be the responsibility of the customer.

# Active Network Management (ANM) Local Control Requirements for the Flexible Distributed Generation connection offer

You are responsible for providing:

#### **Physical Requirements**

- Location: Provide a secure indoor substation to house the Active Network Management equipment. The customer must provide UK Power Networks with 24 hours unimpeded access to the substation.
- Space: Provide wall mounted Cubicle space of 800 mm x 600 mm
- External fixture: Provide wall space or ground space for external pole mounted 1.2m satellite dish
- External fixture: Provide wall space for external pole mounted GSM di-pole aerial (if required)
- Earthing: Provide a bonding point for the cubicle to the substation main earth bar

#### **Power Requirements**

- Provide 24 volts or 48 DC volts 2.5A rated power supply on site
- Provide battery backup for the DC supply to increase resilience of ANM system

#### **Communications Requirements**

- Provide wired communications link from the Generator control system to the ANM equipment
- Accept a control signal (hard wired or data communications protocol) which controls the real power output of the generator over its full rated range (i.e. control between 0-100% and not simply on/off)
- Where a UKPN circuit breaker will not be installed, provide a signal to open and close the circuit breaker of the generator and also provide the status indication for the circuit breaker position.

- Provide measurement of exported power to ANM equipment (hard wired or data communications protocol)
- Support functionality to monitor watchdog signal from ANM and reduce export power to a pre-defined fail safe level in the abnormal event of ANM failure

The above requirements are subject to UK Power Networks carrying out the final design of the Flexible Distributed Generation connection and notifying you of any changes to the above ANM Local Control equipment.

# 5. Land Rights

#### Land rights required from the customer within its occupation, ownership or control

Please note that the completion of the legal work between your solicitors and ours associated with acquiring substation sites and easements can take in the order of six months to complete.

In order to minimise this time you need to carry out the following in a timely manner:

- Notify your UK Power Networks project manager of the details of your appointed solicitor.
- Confirm your agreement to the substation site/s and other rights as indicated on the enclosed plans.
- Provide all other information requested.
- The location of the substation and the position of the easements must be agreed at the
  earliest opportunity to enable the legal process to commence. You must provide UK
  Power Networks with the name and address of the owner of any affected land and the
  name and address of any solicitor acting on such owner's behalf.

The work requires the freehold/leasehold of the substation site as indicated on the enclosed plan UKPN/2000-4586issue 'J' access and cable rights and easements to be transferred to UK Power Networks for the nominal sum of £1.00, with each party bearing its own legal costs.

If the method of supply requires a UK Power Networks Supply substation, you will need to ensure that UK Power Networks is at all times provided with, at no cost to UK Power Networks, suitable accommodation on the relevant premises for UK Power Networks electric lines and apparatus to provide, control and meter the supply.

Access to the UK Power Networks substation is required at all times and maintenance to the UK Power Networks equipment may necessitate an interruption of the supply.

UK Power Networks will require easements, in perpetuity, for the underground cables along the routes marked in red on the accompanying plan UKPN attached drawing subject to obtaining the Landlord's consent.

These cable easements will require a restriction upon the planting of trees and erection of structures, other than such as already exist or are shown proposed on the said plan, on or within 2.0 metres of the land shown coloured yellow. This should be taken into account when carrying out your landscaping proposal, subject to obtaining the Landlord's consent.

You are advised against disposing of your interest in any part of the development which might be subject to the easement before the same has been noted at Land Registry, as UK Power Networks will not bear any additional legal costs which might arise should this requirement be disregarded.

UK Power Networks will not make final connection on-site until all the legal consents and conveyances are complete.

#### Land rights required from others for land in its ownership occupation or control

There are no land rights required for land outside your ownership, occupation or control.

# 6. Drawing schedule

Below is a summary of the standard drawings that are referenced within this agreement

Drawing number	Description
UKPN/	Site location & cable route plan
UKPN/2000-4586issue'J'	33kV Substation

### 7. Variations to the Terms and Conditions

This Notice incorporates UK Power Networks' Standard Terms and Conditions for Connection and Diversionary Works (version 3), as varied or amended below. Where there is any inconsistency between the Terms and Conditions and the remaining terms of this Notice, the remaining terms of this Notice shall prevail.

- The definition of "Connection Agreement" in clause 1.1.6 of the Terms and Conditions is deleted and replaced with the following definition:
  - "Connection Agreement" means the connection agreement in the form attached in Appendix A to this Notice"
- A new clause 1.1.58 shall be included in the Terms and Conditions as follows:
  - "Forecast" means any information, projections, data, estimations or forecasts as to future levels of Curtailment provided by or on behalf of the DNO to You in relation to the Notice."
- Clause 2.6.1 of the Terms and Conditions is deleted and replaced with the following:
  - "Energisation will not take place until You have entered into the Connection Agreement with the DNO"
- Clause 3.3.3 of the Terms and Conditions is deleted and replaced with the following:
  - "If the DNO does not within 6 months of your acceptance of the Notice acquire the Land Rights or the Consents under paragraph 2.2.4 or paragraph 3.3.1, or it is not given a copy of the planning permission or confirmation that planning permission is not required under paragraph 2.2.3 or it is not given access by You as required by paragraph 2.1.2, the DNO's obligations under the Notice may be terminated by it. You may make another request to the DNO to make a connection to its distribution system.
- A new clause 2.8 shall be included in the Terms and Conditions as follows:
  - 2.8 The Exit Point to be provided to You under this Notice and your entitlement to a Maximum Import Capacity and/or Maximum Export Capacity is subject to and conditional upon:
    - 2.8.1 you entering into the Connection Agreement;
    - 2.8.2 the installation of an active network management scheme on your premises to enable the DNO to issue instructions to your generating equipment to curtail your export of electricity to the Distribution System; and
    - 2.8.3 the Company curtailing your export of electricity to the distribution system in accordance with this Notice and the Connection Agreement.
- A new clause 3.4 shall be included in the Terms and Conditions as follows:
  - 3.4 Upon satisfaction of all conditions to the Notice the DNO will include Your Installation in a register of generation plants subject to the constraint in accordance with the Connection Agreement.
- A new clause 19 shall be included in the Terms and Conditions as follows:

#### 19. NO LIABILITY FOR FORECASTS

- a. The provider of the Forecast aims to ensure that the Forecast is accurate and consistent with our 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 whatsoever may be relied upon. Subject to Paragraph 10, the provider of the Forecast and any party on behalf of whom the Forecast is 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.
- b. Your use of Forecasts provided by or on behalf of the DNO is entirely at Your own risk. The DNO makes no warranty, representation or guarantee that the Forecast is error free or fit for Your intended use.

#### 8. Additional Information

#### About our network

The following information relates to each of the services and is supplied to meet the requirements of Regulation 27 of the Electricity Safety, Quality and Continuity Regulations 2002 and Regulation 312-03 and 313-01 of the Institution of Electrical Engineers Wiring Regulations 17th edition 1991 and should therefore be passed to the designer of the electrical installation.

#### Supply characteristics at the Point of Supply

The Frequency: 50Hz ± 1%

Nominal voltage: 33,000volts ±6%

**The Point of Supply** - is at the Customers Supply Terminals normally at the load side of the metering current transformers or of the meter for whole current metering as appropriate.

**PSCC** – Prospective Short Circuit Current - is the current that would flow in a circuit, in the event of a short circuit of negligible impedance, if the over current protective device were replaced by a conductor of negligible impedance; it is measured as the RMS (root mean square) value of the ac component. The actual fault current will therefore be less if the protective device has a current limiting feature or appreciable impedance.

The design fault level is not expected to exceed 25kA at Point of Supply.

Please note that the values quoted above, are under normal conditions considered to be the maximum for UK Power Networks' network. However while they are given in good faith, UK Power Networks cannot guarantee the values quoted will continue for all time.

#### Safety

#### Plan Provision Department

Before any of your own excavation or building commences, a copy of our cable records should be obtained from our Plan Provision Department. You can contact them on 0800 056 5866.

#### **Important notes**

 Work must not be commenced on-site until UK Power Networks have attended and agreed the necessary precautions.

- In the interest of safety to personnel, equipment and UK Power Networks apparatus, it is imperative that the approximate position of underground cables is obtained by the use of electronic cable locators and this position confirmed by careful trial-holing, using hand held tools. UK Power Networks cannot undertake this work for you.
- All cables discovered must be considered LIVE and DANGEROUS at all times and
  must not be cut, re-sited, suspended or generally interfered with, unless specifically
  authorised on-site by an UK Power Networks Engineer. All the cables are UK Power
  Network's property and remain so even when made dead, and any such cable
  exposed should be reported to the UK Power Networks Project Manager for your
  Development, who will arrange for collection and authorised disposal.
- Any overhead equipment in the vicinity of your works should be considered live at all times. All work in the locality should be carried out in accordance with Document GS6, issued by the Health and Safety Executive, and the Electricity at Work Regulations 1989 must be observed.
- Please note that UK Power Networks plant, if damaged or interfered with, represents a
  serious hazard to life. You must ensure that any of your staff, agents or contractors
  who may work or survey in the vicinity are informed of and made fully aware of the
  possible dangers.
- The responsibility for site safety of your employees, your contractors and for other site
  visitors rests with your site manager. All works must be carried out in accordance with
  the Health & Safety at Works Act 1974 and its relevant Regulations, including the
  Electricity at Work Regulations 1989.
- It is recommended that you also obtain H.S.E. booklet HS(GS)47 which deals with safe digging practises.

#### **Supply Disturbances**

Distortion of the system voltage waveform caused by certain types of equipment may result in annoyance to users of the distribution system or damage to connected apparatus. UK Power Networks may suspend the supply in such an event.

In order to limit these affects the customers proposed load should comply with the following:

- Engineering Recommendation P28 is the national industry standard which applies for voltage fluctuations on the distribution network. This is generally caused by customer's equipment such as motors and welders.
- Engineering Recommendation G5/4 is the national industry standard which applies for waveform distortion and harmonics on the distribution network. This is generally caused by customer's equipment such as variable speed drives and thyristor controlled devices.

#### **Private Generation**

You are required by Regulation 26 of the Electricity Supply Regulations 1988 to comply with Schedule III of the Electricity Supply Regulations 1988. Your attention is drawn to the requirements of the Electricity Association Engineering Recommendation G59/2 "Recommendations for the Connection of Private Generating Plant to the Public Electricity Supplier's Distribution System".

#### **Post Acceptance Standards**

Our delivery team will contact you to discuss and agree delivery dates within the timescales stated in our Guaranteed Standards of Performance set out on the 'Our Connections Standards of Performance' leaflet enclosed.

#### Standard leaflets and fact sheets

Copies of our standard leaflets can be read and downloaded from our website at <a href="https://www.ukpowernetworks.co.uk">www.ukpowernetworks.co.uk</a> (navigate to Connection Services then forms and factsheets).

#### **Contact Us**

If you have reason to complain about your Connection please use our Complaints Procedure which can found at our website at:

http://www.ukpowernetworks.co.uk/products-services/networks/customer-services/contact-us.shtml

# 9. Acceptance of Notice Form Please complete and send this form back to:

CC Proj, UK Power Networks, Metropolitan House, Darkes Lane, Potters Bar, Herts, EN6 1AG billingteam-networks@ukpowernetworks.co.uk

Site address:			
Designer:		Tel:	Our reference:
Total price	of work :	£ (Plus VAT)	
Total outstanding	g balance:	£ (Incl VAT)	
First Instalment	t Payable:	£ (Plus VAT)	
1. Please state b	elow whe	re you would like	us to send a 'paid' invoice to:
Company name:			
Contact name:			
Address:			
Telephone:			
0 DI		1	
		wing details of the schedule the work	Land owner or occupier (For GSOP payments see the
			'Our Connections Standards of performance' leaflet)
Company name:			Company name:
Contact name:			Contact name:
Address:			Address:
Telephone:			Telephone:
Email			Email
Ziiidii			
3. Method of pay	yment (ple	ase tick your cho	sen method)
☐ Cheque	Please mak	e cheques payable to	'UK Power Networks'
<del>-</del>			will need to have your reference number to hand.
□ BACS/	Reference N	No above (first 9 digit	05 30, Account Number 02302934 and UK Power Network's is beginning with 401). Please send this form back to us at the er to ensure that payment gets processed correctly.

<b>4. Construction (Design and Management) (CDM</b> Please provide these details if the site is notifiable.	2007)
CDM Coordinator	Principal Contractor
Contact name:	Contact name:
Telephone:	Telephone:
Email	Email
<b>5. Solicitors Information</b> Please provide/confirm these details if requested in	section 5.
Company name:	
Contact name:	
Address:	
Telephone:	
<b>6. Acceptance</b> I accept the Notice and the provisional price dated [above site for the Price of £[x] inclusive of VAT. I un subject to the Notice by which I agree I am bound. I price £[x] plus VAT must be paid in full before a sup VAT has been charged a Tax Invoice for the Price w receipt of payment.	derstand that the Works and the Price are understand that the first instalment of the ply is provided. I also understand that where
7. Expiry Date To accept this Notice, payment must reach us by date may be returned and you will need to request a	
Signed:	Date:
Print name:	
As a fully authorised agent acting on behalf of:	

# For Office Use Only:

Charge Ty	pe	Net		VA	T charged	•	Gross
Non-domes	stic		£			£	£
Domestic		£	0.00		£0.0	0	£0.00
Total						£	£
	LR DO	MESTIC			LR NON -	DOMESTIC	;
Net	Rate (%)	VAT	Gross	Net	Rate (%)	VAT	Gross
0	0 `	0	0	0	0 ` ´	0	0

UK Power Networks (Operations) Limited Registered in England and Wales. Registered No. 3870728. Registered Office: Newington House, 237 Southwark Bridge Road, London SE1 6NP

# **Acceptance of Notice Form (Customer Copy)**

Please complete and retain for your records:

CHAPS

CC Proj, UK Power Networks, Metropolitan House, Darkes Lane, Potters Bar, Herts, EN6 1AG billingteam-networks@ukpowernetworks.co.uk

Site address:		
Designer:	Tel:	Our reference:
Total prid	ce of work :	
Total outstanding	ng balance:	
First instalmer	nt payable :	
1. Please state	below where you w	ould like us to send a 'paid' invoice to:
Company name:		
Contact name:		
Address:		
Telephone:		
	ide the following de ild contact to schedul	
Company name:		Company name:
Contact name:		Contact name:
Address:		Address:
Telephone:		Telephone:
Email		Email
3. Method of pa	ayment (please tick	your chosen method)
☐ Cheque	Please make cheque	payable to 'UK Power Networks'
□ Card		1 199. You will need to have your reference number to hand.
□ BACS/		Code 40 05 30, Account Number 02302934 and UK Power Network's

time of the BACS/CHAPS transfer to ensure that payment gets processed correctly.

4. Construction (Design and Management) (CD Please provide these details if the site is notifiable	
CDM Coordinator	Principal Contractor
Contact name:	Contact name:
Telephone:	Telephone:
Email	Email
5. Solicitors Information Please provide/confirm these details if requested	in section 5.
Company name:	
Contact name:	
Address:	
Telephone:	
6. Acceptance I accept the Notice and the provisional price dated above site for the Price of £[x] inclusive of VAT. It subject to the Notice by which I agree I am bound price £[x] plus VAT must be paid in full before a st VAT has been charged a Tax Invoice for the Price receipt of payment.	understand that the Works and the Price are . I understand that the first instalment of the upply is provided. I also understand that where
7. Expiry Date  To accept this Notice, payment must reach us to date may be returned and you will need to request	· · · · · · · · · · · · · · · · · · ·
Signed:	Date:
Print name:	
As a fully authorised agent acting on behalf of:	
For Office Use Only:  Charge Type  Net	VAT charged Gross

Charge Type		Net		VAT	charged		Gross
Non-domestic			£			£	£
Domestic		£0.	.00		£0.0	00	£0.00
Total			£			£	£
	LR D	OMESTIC			LR NON -	– DOMESTIC	<b>;</b>
Net	Rate	VAT	Gross	Net	Rate	VAT	Gross
0	0	0	0	0	0	0	0

UK Power Networks (Operations) Limited Registered in England and Wales. Registered No. 3870728.

Registered Office: Newington House, 237 Southwark Bridge Road, London SE1 6NP

# 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 <a href="www.connectionterms.co.uk">www.connectionterms.co.uk</a> 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):

Source Reference: Flexible Plug and Play Connection Agreement – Capacity Quota Connection Agreement Page 21/53

- 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:			
	(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 "Curtailment" 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 Part 5 of 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

Source Reference: Flexible Plug and Play Connection Agreement – Capacity Quota Connection Agreement Page 23/53

	resilient to a loss of one or more Connection Points
"Protected Export Capacity" (PEC)	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.
Voluntary Interruptible Import Capacity (VIEC)	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.
Voluntary Interruptible Export Capacity (VIEC)	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.

#### 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 Paragraph 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 Deenergise 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 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:
  - (c) reduce the Maximum Import Capacity to a level that reduces or eliminates the need for Planned Interruptible Import Capacity; or
  - (d) 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

- 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.

#### 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

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

Signed and on behalf of the <b>Customer</b> by:	Signature:	 for
	Designation:	
	Date:	
Signed and on behalf of the <b>Company</b> by:	Signature:	 for
	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  $V \pm 6\% / +10\% / -6\%$ ]

(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.]

+

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"

(viii) First date for Reduction of Maximum Export Capacity: Commencement Date+12months

#### **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)				
		ment Date at which this specific Point is included in this Agreement	DD/MM/YYYY		
	Grid Refere	ence of Connection Point	[HERE]		
	Name of Fe	eeding Company Substation	[HERE]		
	Current		Alternating		
	Frequency:		50Hz		
	Voltage:		## V		
	Number of Phases:		3 phase		
		Permitted Import Capacity Permitted Export Capacity	###,### kVA  limited to  ###,### kW  ###,### kVAr import (lagging p.f.)  ###,### kVAr export (leading p.f.)  ###,### kVA  limited to  ###,### kW  ###,### kWAr import		
	* The nom as pres Connect	ower Factor at the Connection Point * ninal operating power factor shall be cribed in the National Terms Of ion unless otherwise stated in writing greement	###,### kVAr import (leading p.f.) ###,### kVAr export (lagging p.f.)  ###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 a "Flexible Plug and Play" 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

Term	Meaning
"Capacity Limit"	means in relation to any Constrained Location the capacity expressed in megawatts ("MW") as set out in Part 3.
"Constrained Location"	means a point on the Distribution System which under certain operating conditions is unable to accept either fully or in part the consequences of the actual or likely concurrent connection or operation of equipment or the production or consumption of electricity by parties connected directly or indirectly to the Distribution System. Such locations of constraint are more particularly described in Part 2 of this Schedule 2.
"Equivalent Generation Plant"	Has the meaning given to it in Paragraph 3.2.
"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.
"Interruptible Connection Register"	Has the meaning given to it in Paragraph 3.1.1.
"Operating Capacity"	means the electrical capacity expressed in kVA available at the Constrained Location at any point in time.
"Priority Generation Plant"	means in respect of the Constrained Location, Generating Equipment connected to the Company's Distribution System for which Interruptible Export Capacity has not been defined or a value of zero has been designated to it in the relevant customer's terms of connection with the Company.
"Qualifying Generation Plant"	means Generating Equipment connected in a constrained area of the Distribution System that:  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 a Constrained Location after the relevant Capacity Limit has been reached.

[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.]

#### 2 TECHNICAL REQUIREMENTS FOR IMPLEMENTING CURTAILMENT

- 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 5 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 4 of this Schedule 2.

#### 3 CAPACITY LIMIT AND CURTAILMENT

- 3.1 The Company shall be responsible for:
  - 3.1.1 holding and maintaining a register of all Qualifying Generation Plants that connect to a Constrained Location (the "Interruptible Connection Register"). The Company shall hold an Interruptible Connection Register for each Constrained Location. Each Qualifying Generation Plant shall be entered onto the Interruptible Connection Register for the relevant Constrained Location in accordance with the date that the Company received an application for a connection to its Distribution System.
  - 3.1.2 ensuring that all Equivalent Generation Plants on the Interruptible Connection Register and all Subordinate Generation Plants shall have at all times installed Company Control Equipment and shall be subject to the ANM Scheme.
- 3.2 Each Qualifying Generation Plant that connects to the Constrained Location shall be added to the Interruptible Connection Register. Any Qualifying Generation Plant listed on the Interruptible Connection Register whose Maximum Export Capacity contributes to but does not cause the Capacity Limit to be exceeded shall be Curtailed in accordance with paragraph 3.3.2 (an "Equivalent Generation Plant"). Any Qualifying Generation Plant that connects to a Constrained Location after the Capacity Limit for that Constrained Location has been reached shall be a Subordinate Generation Plant.
- 3.3 Subject to Clause 3.2 and Clause 3.3 of the Agreement the Customer agrees that in the event that the power flows and/or voltage levels in the 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 5 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, at that point in time:

- 3.3.1 all flows of electricity onto the Distribution Network from Subordinate Power Plants on the relevant Interruptible Connection Register have been reduced to zero; and
- 3.3.2 the flows of electricity onto the Distribution Network from each Equivalent Generation Plant on the relevant on the relevant Interruptible Connection Register are Curtailed in an amount expressed in kVA which is in proportion to the extent to which each Equivalent Generation Plant's export capacity contributes to the Operating Capacity being exceeded at any point in time.
- 3.4 For the avoidance of doubt, the Company shall carry out Curtailment in the following order of priority:
  - 3.4.1 Sub-ordinate Generation Plants will be Curtailed first before Equivalent Generation Plants and Subordinate Generation Plants will be Curtailed on a last on first off (LIFO) basis in accordance with the position of each Subordinate Generation Plant on the Interruptible Connection Register;
  - 3.4.2 Provided that at any point in time all flows of electricity onto the Distribution System from Subordinate Generation Plants have been reduced to zero, the Equivalent Generation Plants shall be Curtailed second (in accordance with Paragraph 3.3)
  - 3.4.3 Priority Generation Plants shall not be subject to Curtailment in accordance with the terms of the Interruptible Connection 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.

#### PART 1 - ANM SCHEME

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

#### **PART 2 - CONSTRAINED LOCATIONS**

[Note: Constraints triggered or contributed to by each Generator shall be set out in the contract.]

Constrained Location Reference	Substation or Circuit references	Description of Constraint
[HERE]	[HERE]	[HERE]

#### **PART 3 – CAPACITY LIMIT**

Constrained Location Reference	Capacity Limit which is the total aggregate capacity of the Constrained Location
[HERE]	[HERE]

#### **PART 4 – 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.]

# PART 5 – 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** 

Total and Gold God Accele Registration Glock					
Circuit Name:					
Distributor		Eastern Power Networks plc			
Supply Voltage					
Normal NGC GSP:					
Point of Supply	Point of Supply				
IMPORT Meter Point A	ssociation Numbers (MPANs)				
EXPORT Meter Point A	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 <a href="within">within</a> 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.

### **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.

Eastern Power Networks plc - 'East of England Network' only

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.

# **SCHEDULE 5**

OPERATING ARRANGEMENTS APPLICABLE TO SPECIFIC CONNECTION POINTS					
CONNECTION POINT NAME	NAME (repeat for µ	NAME OF CONNECTION POIN (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**



## **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  (kA) Alternating Current contribution at the Connection Point			
			(kW) Alternating Current	lk" sub-transient		lk' transient	
	ma	Root Mean Squared magnitude of power output into the Alternating Current part of the Customer's Installation)	1 phase	3 phase	1 phase	3 phase	

Source Reference: Flexible Plug and Play Connection Agreement – Capacity Quota Connection Agreement Page 51/53

## 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 Generating Equipment connected at Low Voltage to the Company's Distribution Network.

## **SCHEDULE 13**

# SCHEDULE 13 - PROPERTY DOCUMENTS

THIS SCHEDULE IS INTENTIONALLY BLANK UNLESS OTHERWISE POPULATED