

#### **CUSTOMER INFORMATION SHEET**

# IMPORTANT - DO NOT DATE STAMP THIS DOCUMENT COMPLETION OF YOUR CONNECTION AGREEMENT (PLEASE READ THE INFORMATION CONTAINED ON THIS SHEET CAREFULLY)

# <u>Please read the below before you sign the Connection Agreement, failure to do so may result in a delay in providing your new connection.</u>

- Your Connection Agreement must be signed by an authorised signatory of the company or the person
  who will actually be receiving the electricity supply (authorised signatory means a director, partner or other
  such authorised employee);
- The details of the company receiving the electricity supply **must** be correct, i.e. its full name, registered address and company registration number;
- The Agreements must not be amended in any way or contain any additional features such as company date stamps etc as this could render it invalid;

#### Please either:

- 1. Print and sign one copy of the Connection Agreement and return to us in the post or;
- 2. Print, sign and scan the signature page and attach it to an email together with a full copy of the Connection Agreement (either scanned by you or the original attachment if sent to you via email). Send the email with the document attached (the signed signature page and the full copy of the Connection Agreement) to the person at WPD who issued the Connection Agreement.
- Connection Agreements returned via post or email must be signed and undated.
- Your supply will not be energised unless these documents are returned signed and, if appropriate, payment for work received.

On receipt of the Connection Agreements WPD will date, counter sign and return one full copy to you.

# FAILURE TO COMPLETE AND RETURN THE AGREEMENTS, AS SPECIFIED ABOVE, COULD RESULT IN A DELAY IN PROVIDING YOUR NEW CONNECTION

If you need any further information on the completion of your Connection Agreement please contact:-

For connections in South Wales telephone: 0117 933 2029

For connections in South West England telephone: 0117 933 2158

For Connections in the Midlands telephone 01332 827505

If you need any further information concerning payment or dates for connection please contact the local Network Services Team referred to in the Offer letter.







Western Power Distribution (South Wales) plc

**Enquiry Reference:** 

# **Connection Agreement**

THI	S AGREEMENT is made the	day of			2021	
Bet	ween					
(1)	Western Power Distribution (Sou plc Registered in England and W 2366985 whose REGISTERED OF Avonbank Feeder Road Bristol BS2 0TB	/ales No.	and	(2)	XXXXXXXX (cor whose REGISTER XXXXXX XXXXXX XXXXXX XXXXXX XXXXXX XXXX	 ,
	Concerning the Customer's prer XXXXXX XXXXXX XXXXXX XXXXXX	mises known	as			

This agreement and the schedules to it shall be referred to as the "Agreement" and the "Schedules" respectively. The Agreement, the Schedules, and the National Terms of Connection shall together be referred to as the "Connection Agreement". The Company and the Customer shall together be referred to as the "Parties", and each a "Party".

Avonbank

**Bristol** 

BS2 0TB

Feeder Road

The National Terms of Connection are available to view on the website: <a href="www.connectionterms.org.uk">www.connectionterms.org.uk</a>. Alternatively the Customer may request a copy from the Company by written request to the address for notices given above. The Customer confirms that they have read, fully understand and accept the terms of the National Terms of Connection.

Subject to the express provisions of this Agreement, Section 1 and either Section 2 (if the Customer uses whole current metering), or Section 3 (if the Customer uses C.T. metering) of the National Terms of Connection will apply as if set out in this Agreement and references in the National Terms of Connection to "this agreement" or to "this Agreement" shall be interpreted as if references to this Connection Agreement. Expressions used in this Agreement and the Schedules shall have the same meanings as given to them in the National Terms of Connection

To the extent that there is any conflict between this Agreement and the provisions of the Schedules or the National Terms of Connection, the order of precedence shall be as follows:

- (a) this Agreement;
- (b) the schedules; and

**Address for** 

**Notices** 

(c) the National Terms of Connection

The Company agrees to the Connection of the Customer's Installation to the Company's Distribution System on the terms and conditions of this Connection Agreement and in consideration of the Company's agreement to do so the Customer agrees to be bound contractually by the terms and conditions of this Connection Agreement. Details of the Premises, the Connection Points, the technical characteristics of the Connection Points and other matters are set out in the Schedules.

This Connection Agreement may be executed in any number of counterparts and by the Parties on separate counterparts, but shall not be effective until each Party has executed at least one counterpart. Each counterpart, when executed, shall be an original of this Connection Agreement and all counterparts shall together constitute one instrument.

The Company takes data protection very seriously – details of:

Document Version 4 - January 2019

**XXXXXXX** 

XXXXXXX

XXXXXX

**XXXXXXX** 

**XXXXXXX** 

- how the Company collects, stores and uses information that identifies individuals ("Personal Information") in connection with its business activities;
- the Company's legal basis is for processing that Personal Information; and
   an individual's rights in relation to their Personal Information,
- can be found on the Company's privacy policy, which can be viewed here <a href="https://www.westernpower.co.uk/Privacy-Policy.aspx">https://www.westernpower.co.uk/Privacy-Policy.aspx</a> or which is available on request.

Signed for	or xxxxxxxxxx		Signed for Western Power Distribution (South Wales) plc		
Signature	e		Signature		
Print Name			Print name		
Designation			For and on behalf of Connection Policy Manager		
Scale: A	DUoS LLF Code: XXXX	MPAN(S): Import 2XXXXXXXXXX			

#### SCHEDULE 1 - SPECIFIC TERMS FOR CONNECTION

Characteristics of the Supply of Ele	haracteristics of the Supply of Electricity				
Maximum Import Capacity:	xxxxkVA				
Maximum Export Capacity:	xxxxkVA				
Voltage:	xxxxx Volts				
Phase:	Three Phase				
Frequency:	50 Hertz				
Current:	Alternating				
Acceptable Power Factor for Import Capacity:	0.95 lag to unity with a reactive power tolerance of xxxkVAr				
Acceptable Power Factor for Export Capacity:	0.xx lead with a reactive power tolerance of xxxkVAr				

The Customer shall ensure that the import of electricity from, and/or the export of electricity to, the Distribution System through the Connection Point does not (at any time) exceed the Maximum Import Capacity and/or the Maximum Export Capacity (respectively).

The Customer shall at all times and at its own expense take all reasonable precautions to ensure that the Customer's site import/export otherwise operates as near as practicable to the values set out above. Notwithstanding this requirement, the export or import of reactive power to the Distribution System shall be permitted under transient conditions provided that the power factor of the export is no less than 0.9 leading and unity.

#### General

The Maximum Import Capacity stated in this Schedule 1 has been requested by the Customer and agreed by the Company. The Maximum Import Capacity will be fixed for 12 months from the date that this Agreement takes effect unless increased by agreement between the Customer and the Company, in which case the increased Maximum Import Capacity will be fixed for a further 12 months from the date of increase.

The Maximum Export Capacity stated in this Schedule 1 has been requested by the Customer and agreed by the Company. The Maximum Export Capacity will be fixed for 12 months from the date that this Agreement takes effect unless increased by agreement between the Customer and the Company, in which case the increased Maximum Export Capacity will be fixed for a further 12 months from the date of increase.

#### **Enduring Terms**

The Customer agrees that the Company shall, on the application of any person purporting to be an owner and/or occupier (or prospective owner and/or occupier) of the Premises, be entitled to disclose to such person the fact that this Connection Agreement contains terms which differ from the terms set out in the National Terms of Connection (www.connectionterms.org.uk).

The Customer shall, prior to selling or leasing its interest in the Premises (or otherwise permitting a third party to occupy the Premises), ensure that the existence and provisions of this Connection Agreement are brought to the attention of such third party. For information, any such third party should note that it may automatically be bound by the provisions of this Connection Agreement in accordance with the National Terms of Connection (www.connectionterms.org.uk).

## **SCHEDULE 2 – CONNECTION POINTS & ASSET USE**

**Connection Point:** 

xxxxxxxxxxx

**Connection Extension Assets** 

xxxxxxxxxx

**Shared Use Reinforcement Assets** 



#### **SCHEDULE 3 – GENERATING EQUIPMENT**

1. The Company consents to the following generators being directly connected to the Company's Distribution System:

Type of Generation	Generation Unit Identification Name and/or Nomenclature	Generation Unit Manufacturer, Make & Type	Installed Size of Generation (kW/per Unit)	No. of Units	No. of Phases	Commissioning Date	Long / Short Term Parallel or Stand-by Generation
xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx

#### 2. Site Specific Generation Conditions

- 2.1 The specification of the Customer's Generating Plant is in accordance with Table 1.
  Under the terms of this Agreement the Customer's Generating Plant may Operate in Parallel Mode.
- 2.2 The means of connecting and disconnecting the Customer's Generating Plant is shown on drawing number xxxx
- 2.3 The Company's High Voltage Earthing System is provided for the Company's sole use. The Customer shall not connect the Customer's Apparatus to the Company's High Voltage Earthing System
- 2.4 The design and installation of the Protection for the Customer's Generating Plant is the Customer's responsibility. The Customer warrants to the Company that the Customer has taken all reasonable measures and in any event acted in accordance with Good Industry Practice to design and install Protection systems which adequately protect the Customer's Plant and Apparatus and the Company's Distribution System.
- 2.5 The Customer's Protection and control systems shall be designed, operated and maintained so as to safely Connect, operate and disconnect the Customer's Generating Plant in accordance with Energy Networks Association Engineering Recommendation G99 as may be amended from time to time.
- 2.6 Protection settings on the Customer's Plant and Apparatus at the ownership boundary and on the Interface Protection shall be agreed with the Company. The agreed Protection and settings are specified in Table 2.
- 2.7 The Customer shall allow the Company all reasonable access to witness the commissioning of the Customer's Interface Protection equipment when it is initially installed and following any future modifications to the arrangement and Operation of the Generating Plant, or Protection equipment.
- 2.8 The Customer shall re-test the Interface Protection at intervals not exceeding 3 years. When requested by the Company the Customer shall provide the Company, within ten (10) working days of the request, with records of the Customer's protection settings and test results.

#### **Table 1: Generator Details**

## **Maximum Fault Contribution From All Generating Units (kA)**

Peak asymmetrical short circuit current at 10ms (ip) for a 3phase short circuit fault at the Connection Point	RMS value of the initial symmetrical short circuit current (lk) for a 3phase short circuit fault at the Connection Point	RMS value of the symmetrical short circuit current at 100ms (lk(100)) for a 3phase short circuit fault at the Connection Point	
xxx	xxx	xxx	

Table 2 : Interface Protection Generator connected at xx

Protection Function	CT VT Ratio	Protection Setting	Circuit Breaker Tripped		
Over Current Protection	xxx	xxx	xxx		
Earth Fault Protection	xxx	xxx	xxx		
Under Voltage	xxx	xxx	XXX		
Over Voltage Stage 1	xxx	ххх	xxx		
Over Voltage Stage 2	xxx	xxx	XXX		
Under Frequency Stage 1	xxx	xxx	XXX		
Under Frequency Stage 2	xxx	xxx	XXX		
Over Frequency	xxx	xxx	XXX		
Neutral Voltage Displacement	xxx	xxx	XXX		
Loss of Mains (RoCoF)	xxx	XXX	XXX		
Vector Shift	xxx	xxx	XXX		

Vn = nominal voltage

#### SCHEDULE 4 - SITE RESPONSIBILITY SCHEDULE

#### 1. System Responsibilities

- 1.1 The person responsible for coordination of operational safety on the Company's behalf is either:-
  - (a) a central Control Person, or
  - (b) a field Control Person who has been delegated control of part of the Company's Distribution System by the Company's central Control Person.

The name of the Company's Control Person at any particular time can be obtained from the Operations Support Engineer (South West or South Wales call 02920 332887, or for the Midlands area please call 01332 827093) or other revised telephone number advised by the Company in writing.

Alternatively the Customer can write to:

#### South West / South Wales

The Operations Support Engineer Western Power Distribution Control Centre Mardy Industrial Estate Lamby Way Rumney Cardiff CF3 2EQ

- 1.2 The Customer shall nominate personnel who will have Authorisation in writing to control, operate, work or test Equipment forming part of, or connected to, the Customer's Installation.
- 1.3 The person responsible for the coordination of safety on the Customer's behalf ("the Customer's Safety Coordinator") is:-

xxxxxx Safety Co-ordinator xxxxxx xxxxxx xxxxxx

1.4 Operational Liaison shall be between the Company's Control Person and the Customer's Safety Coordinator.

#### 2. Ownership Boundary

- 2.1 The Company's responsibility for the Connection ends at the Connection Point. The Customer is responsible for providing the installation beyond this point in conformity with the appropriate Regulations and the terms of this Agreement.
- 2.2 Where the Company agree to provide Protection for the Customer's Installation it shall remain the Customer's responsibility to ensure that the Protection the Company provide is adequate. The Company will provide details of the Protection utilised upon written request.
- 2.3 Ownership responsibilities are in accordance with Table A and drawing number xxxxxx
- 2.4 Each Party shall allow the other Party's representatives reasonable access to its Equipment for testing of Protection, Metering and Metering Equipment.

#### 3. Safety Management System

- 3.1 The Company's Control Person and the Customer's Authorised Person shall agree who is to carry out the Operations and the Safety Management System to be used, which shall as a minimum default to the Company's Distribution Safety Rules and to the Company's standard technique, ST:OC20A (as amended) entitled "Safety Coordination on the Premises of Customers Receiving a High Voltage Supply".
- 3.2 The Company's Control Person and the Customer's Authorised Person shall agree the switching Operations to be undertaken in accordance with the Switching Schedule.

## Table A - Responsibility Schedule

Substation Name: xxxxxx

Substation xxxxxx

Number:

Equipment	Responsible Party						
Number and/or	Ownership	Control	Operation	Maintenance			
nomenclature							
XXXX	[COMPANY] / [CUSTOMER]	[COMPANY] / [CUSTOMER]	[COMPANY] / [CUSTOMER]	[COMPANY] / [CUSTOMER]			
XXXX	[COMPANY] / [CUSTOMER]	[COMPANY] / [CUSTOMER]	[COMPANY] / [CUSTOMER]	[COMPANY] / [CUSTOMER]			
XXXX	[COMPANY] / [CUSTOMER]	[COMPANY] / [CUSTOMER]	[COMPANY] / [CUSTOMER]	[COMPANY] / [CUSTOMER]			
XXXX	[COMPANY] / [CUSTOMER]	[COMPANY] / [CUSTOMER]	[COMPANY] / [CUSTOMER]	[COMPANY] / [CUSTOMER]			
XXXX	[COMPANY] / [CUSTOMER]	[COMPANY] / [CUSTOMER]	[COMPANY] / [CUSTOMER]	[COMPANY] / [CUSTOMER]			
XXXX	[COMPANY] / [CUSTOMER]	[COMPANY] / [CUSTOMER]	[COMPANY] / [CUSTOMER]	[COMPANY] / [CUSTOMER]			
XXXX	[COMPANY] / [CUSTOMER]	[COMPANY] / [CUSTOMER]	[COMPANY] / [CUSTOMER]	[COMPANY] / [CUSTOMER]			
XXXX	[COMPANY] / [CUSTOMER]	[COMPANY] / [CUSTOMER]	[COMPANY] / [CUSTOMER]	[COMPANY] / [CUSTOMER]			
XXXX	[COMPANY] / [CUSTOMER]	[COMPANY] / [CUSTOMER]	[COMPANY] / [CUSTOMER]	[COMPANY] / [CUSTOMER]			



#### SCHEDULE 5 – GENERAL OPERATING CONDITIONS

#### 1. Occupiers

- 1.1 Where the Customer gives its written consent for a third party to connect Generating Plant to the Customer's Premises or otherwise for one or more third parties to occupy all or any part of the Customer's Premises, whether by granting a lease or a licence (the "Occupier") the Customer shall:
  - (a) procure that the Occupier is subject to and complies in all respects with the obligations set out in this Connection Agreement as though it were party to it;
  - (b) procure that the Company shall have such rights and powers in respect of the Occupier, including over the Premises and any part of the Customer's Installation occupied by the Occupier and, as relevant, any Plant, Generating Plant, Generating Unit, Interface Protection, Protection and Apparatus therein as it would have if the Occupier was a party to this Connection Agreement; and
  - (c) ensure that the Occupier does not amend, alter, renew or replace any Plant, Generating Plant, Generating Unit, Apparatus, Interface Protection and/or or Protection without the Company's prior written consent.
- 1.2 Without prejudice to paragraph 1.1 above, the presence of the Occupier shall not relieve the Customer of any obligations under this Connection Agreement, and the acts or omissions of the Occupier shall, for the purposes of this Connection Agreement, be deemed to be acts or omissions of the Customer.
- 1.3 In addition to the termination rights set out in Clause 13 of Section 2, Clause 19.3 of Section 3 or Clause 20.3 of Section 4 (as appropriate) of the National Terms of Connection, the Parties agree that the Company may terminate the Connection Agreement by giving notice of such termination to the Customer in the event that:
  - (a) the Customer breaches its obligations in clause 1.1 (a) to (c) (inclusive) above;
  - (b) the acts or omissions of the Occupier would otherwise constitute a breach if such acts were done or omissions made by the Customer; or
  - (c) any of the events set out in Clause 19.3.3 of Section 3 or Clause 20.3.3 of Section 4 (as appropriate) of the National Terms of Connection occurs in respect of the Occupier.
- 1.4 If an Occupier breaches any contract or arrangement it has entered into with an electricity supplier for the supply of electricity to the Premises, which breach permits the electricity supplier to De-Energise and/or Disconnect the Connection Point, or if there exist other circumstances pursuant to which the Company is required, instructed or entitled to De-Energise and/or Disconnect the Connection Point in respect of the Occupier, the Company shall not be deemed to be in breach of this Connection Agreement and shall not be liable in any way whatsoever to the Customer as regards any such De-Energisation and/or Disconnection.
- 1.5 The Customer shall indemnify and keep indemnified the Company against all costs, losses, claims, expenses and/or liabilities that the Company may suffer or incur arising out of or in relation to the Occupier (including any breach by the Customer of paragraph 1.1 above and/or the acts or omissions of the Occupier), provided that the Customer's liability under this indemnity shall be limited to £1,000,000 per incident or series of related incidents.

#### 2. Curtailment and De-Energisation

- 2.1 Notwithstanding any other provision of this Connection Agreement, the Company may instruct the Customer to (at the Customer's own expense) immediately De-energise or implement an immediate reduction to the Maximum Import Capacity and/or the Maximum Export Capacity (including to zero), or the Connection Point may otherwise be deenergised (whether De-energised as defined or otherwise), or a Customer's Maximum Import Capacity and/or the Maximum Export Capacity reduced (including to zero) (any such reduced capacity under this paragraph being the "Revised Maximum Export Capacity" or the "Revised Maximum Import Capacity"), in the following scenarios:
  - (a) for the reasons set out in Section 3 or 4 (as appropriate), including Clause 5 of the same, of the National Terms of Connection (as amended from time to time) where such section is incorporated into this Connection Agreement including, but not limited to:
    - (i) where it is necessary or reasonable for the Company to do so as part of a System Outage, including for planned maintenance of the Distribution System;
    - (ii) in order to permit other persons to connect to the Distribution System;
    - (iii) where the Company reasonably considers it necessary to do so for safety reasons or for the security of the Distribution System or any other electrical system (including in order to avoid interference with the regularity or efficiency of the Distribution System);

- (iv) where, in the Company's reasonable opinion, the condition or manner of operation of the Customer's Installation and/or the condition or manner of operation of the Distribution System, poses a threat of injury or material damage to any person or property (including the Distribution System, the National Electricity Transmission System and/or any electrical systems and installations connected thereto); or
- (v) where the Customer is in breach of this Connection Agreement (which includes a failure to comply with any instruction given by the Company pursuant to this paragraph);
- (b) for the reasons set out in paragraph 7 of Section 2 of the National Terms of Connection (as amended from time to time) where such section is incorporated into this Connection Agreement;
- (c) without prejudice to any other provision in this clause, in the event of abnormal network running conditions, including as a result of any unplanned Distribution System, or planned or unplanned transmission system, network outages (whether at transmission system or distribution system level), including in respect of any resulting repair required;
- (d) notwithstanding any consent that may be granted for any equipment (including any as set in this Connection Agreement below), and without prejudice to any other provision of this Connection Agreement, where the Customer's Installation and/or any other electrical equipment which the Customer connects adversely affects any other customer connected to the Distribution System and/or causes disturbance outside of acceptable limits to the Distribution System.
- (e) (in respect of any embedded generation connected to the Company's Distribution System) where an instruction has been received by the Company from National Grid Electricity System Operator (NGESO) to De-energise or curtail embedded generation in accordance with the requirements of BC2.9.1.4 of the Grid Code and using the principles set out in OC6.7.1 of the Grid Code under emergency conditions on the National Electricity Transmission System, which will typically occur when a number of generators' output is high and, at the same time, distribution demand is low, leading to either voltage, thermal or protection issues on the Distribution System or National Electricity Transmission System.
- 2.2 The Company shall use its reasonable endeavours to provide as long a period of notice as is practicable of any requirement to De-energise or reduce a Customer's Maximum Import Capacity and/or Maximum Export Capacity (including to zero), including such notice period as is set out in the National Terms of Connection, however the Company reserves the right to De-energise or reduce a Customer's Maximum Import Capacity and/or Maximum Export Capacity without notice where it reasonably considers it necessary based on the system conditions prevailing on the Distribution System and/or the National Electricity Transmission System, or where the Customer has failed to comply with any instruction from the Company to De-energise or reduce its Maximum Import Capacity and/or Maximum Export Capacity.
- 2.3 Subject to Clause 9 of Section 2, Clause 15.3 of Section 3 or Clause 16.3 of Section 4 (as appropriate) of the National Terms of Connection, the Company shall under no circumstances be liable to the Customer for any costs, damages, expenses or losses (including, without limitation third party losses or loss or profit) suffered or incurred by the Customer or arising out of or in connection with any De-energisation or reduction of its Maximum Export Capacity as set out above other than as set out in this Connection Agreement.
- 2.4 The Customer shall indemnify the Company and keep it indemnified fully on demand against all liabilities, losses, damages, costs (including all reasonable legal costs), expenses and fines attributable to the Customer's failure to comply, or any delay in complying, with any instruction given by the Company under this paragraph.
- 2.5 The Revised Maximum Export Capacity and/or Revised Maximum Import Capacity shall apply until the Company notifies the Customer otherwise.

#### 3. Disturbing Loads

- 3.1 The Customer shall not connect any electrical equipment that may adversely affect the supply of electricity to others and/or cause disturbances outside of acceptable limits to the Distribution System without the Company's previous written consent, which will not unreasonably be delayed or withheld. Such equipment includes motors, welders, furnaces, high power appliances, converters (e.g. rectifiers, switch mode power supplies, uninterruptible power supplies, battery chargers, high-frequency induction furnaces and variable speed drives), regulators (e.g. AC heating and lighting controls) and other equipment with non-linear voltage / current characteristics (e.g. arc welders and arc furnaces)). Any consent that is or may be granted is or will be based on estimated disturbance levels (which cannot be precisely determined in advance) and taking a risk-based approach to the likelihood of complaint, and is without prejudice to any other provision of this Connection Agreement.
  - 3.2 Notwithstanding any other provision of this Connection Agreement, the Customer shall be liable for the costs of any remedial action required (including to the Customer's Installation and/or the Distribution System) as a result of any adverse interference caused by the Customer's Installation and/or any other electrical equipment which the Customer connects with any other customer connected to the Distribution System.

#### 4. Compliance

- 4.1. The short-term flicker severity, Pst, as defined in Engineering Recommendation P28, caused by the Customer's Installation shall be limited to 0.5 at the point of common coupling.
- 4.2 . The Customer's Installation shall be designed such that it is possible, if so required, to introduce sequential switching to ensure a minimum period between each operation that causes voltage change consistent with the above flicker limit; examples include switching of each generator, switching of each transformer, switching of load etc. The magnitude of the voltage change caused by the operation of the Customer's Installation shall be limited to 3% for events no more frequent than once every 10 minutes; for infrequent events, no more frequent than once per three months, this value is increased to 6%; for very infrequent events, no more frequent than once per year, this value is increased to 10%. Where remedial action is required, whether it be to the Customer's Installation or the Company's Distribution System, the Customer shall be liable for all reasonable costs incurred.
- 4.3 . Generator plant and equipment shall comply with the requirements of the Energy Networks Association Engineering Recommendation G99 'Recommendations for the connection of generating plant to the distribution systems of licensed distribution network operators' or its replacement, or other reasonable provisions as may, from time to time, be required by the Company.
- 4.4. The Customer's Installation shall comply with the requirements of:
  - Energy Networks Association Engineering Recommendation G5/5 "Harmonic voltage distortion and the connection of harmonic sources and/or resonant plant to transmission systems and distribution networks in the United Kingdom" or its replacement.
  - Energy Networks Association Engineering Recommendation P28 "Planning Limits for Voltage Fluctuations caused by Industrial, Commercial and Domestic Equipment in the United Kingdom" or its replacement.
  - Energy Networks Association Engineering Recommendation P29 "Planning Limits for Voltage Unbalance in the United Kingdom" or its replacement

#### SCHEDULE 6 – SITE SPECIFIC OPERATING CONDITIONS

[When exporting energy onto the Company's Distribution System the Customer shall, at all times and at its own expense, take all reasonable precautions to ensure that the Customer's site export operates as near as practicable to unity power factor. Notwithstanding this requirement the export or import of reactive power to the Distribution System shall be permitted under transient conditions provided that the power factor of any export of power is between 0.95 leading and lagging.]

[When exporting energy onto the Company's Distribution System the Customer shall, at all times and at its own expense, take all reasonable precautions to ensure that the Customer's site export operates as near as practicable to 0.98 leading power factor. Notwithstanding this requirement the export or import of reactive power to the Distribution System shall be permitted under transient conditions provided that the power factor of any export of power is between 0.9 leading and unity.]

[When exporting energy onto the Company's Distribution System the Customer shall, at all times and at its own expense, take all reasonable precautions to ensure that the Customer's site export operates as near as practicable to 0.95 leading power factor. Notwithstanding this requirement the export or import of reactive power to the Distribution System shall be permitted under transient conditions provided that the power factor of any export of power is between 0.9 leading and unity.]

[In order to allow the Company to contain voltage within acceptable limits at the National Electricity Transmission System and the Company's Distribution System interface, the Customer must ensure that the generators have the capability to operate between 0.95 leading and 0.95 lagging power factor, and shall operate at the power factor prescribed by the Company as set out above. In the event that, in the Company's reasonable opinion, the Company needs to contain voltage within acceptable limits it shall instruct the Customer in writing to operate thereafter at a different power factor, which shall be within the 0.95 leading and 0.95 lagging power factor range. The Customer shall at the Customer's own expense comply with the instruction within 28 days of the date of the notification.]

[Pursuant to the Power Factor running clause contained in this schedule 5, the Customer must ensure that the generators have the capability to operate between 0.95 leading and 0.95 lagging power factor and shall operate at the Power Factor prescribed by the Company. The Company recognize that presently the Customer does not have the full capability to operate over the Power Factor range, but will permit interim energisation under a temporary solution previously agreed on the understanding that this temporary solution will be replaced by a permanent solution within six months of energisation.

Failure to implement a permanent solution that has the capability to operate between 0.95 leading and 0.95 lagging power factors within the prescribed timeframe will result in de-energisation of the site.

The permanent solution must not be achieved by reducing the real power output.]



#### **SCHEDULE 7 – ACCOMMODATION**

The Customer will provide Accommodation to the Company's specification as referred to below, such Accommodation to be located on the land shown coloured pink on the attached Drawing Number Figure 2.

As the Customer's Connection is or will be at High Voltage (i.e. exceeding 1,000 volts AC), the Customer shall provide, without cost to the Company:-

- (a) Accommodation on the Premises (where appropriate, as specified in this Schedule) in accordance with the Company's requirements for the Company's Equipment, and (where appropriate) with separately located accommodation for the Metering Equipment, cable termination and ancillary equipment; and
- (b) where required a 30mA RCD protected dual switch socket outlet, a luminaire and space heating to a minimum standard so as to give frost protection together with a 230volt electricity supply; and the Customer will keep in good order repair and condition all parts of the Accommodation including the interior surfaces and any boundary fences and/or cladding which enclose the Accommodation.



#### **SCHEDULE 8 – DEFINITIONS**

In this Connection Agreement, except where the context requires otherwise, the following terms shall have the meanings given to them below or, where not defined below, as set out in the National Terms for Connection.

"Authorisation" the formal sanction given in writing to undertake specified tasks that has a specific meaning in Safety Management Systems.

"Authorised Person" a person who has received an Authorisation.

"Company's Distribution Safety Rules" the Company's rules and procedures that ensure the safe Operation of the Company's Distribution System.

"Control Person" a person who is responsible for controlling and coordinating Operations on an electrical network.

"Earthing System" the arrangement of earthing electrodes and conductors connecting an electrical network to earth.

"Equipment" Plant and/or Apparatus.

"Generating Plant" an installation comprising of one or more Generating Units.

"Generating Unit" any apparatus which produces electricity.

"Interface Protection" Protection equipment installed to meet the requirements of Energy Networks Association Engineering Recommendation G99 as may be amended from time to time.

"High Voltage" any alternating voltage exceeding 1000 volts.

"Island Mode" an operating mode of a Generating Plant, where the connection between the Company's Distribution System and the Generating Plant is disconnected while the Generator operates.

"Operation" a scheduled or planned action carried out on an electrical network and "Operate" shall be construed accordingly.

"Parallel Mode" an operating mode of a Generating Plant where the connection is maintained between the Company's Distribution System and the Generating Plant while the Generator operates.

"Protection" the provisions for detecting abnormal conditions in an electrical network and initiating fault clearance or actuating signals and indications.

"Safety Management System" the procedure adopted by the owner of an electrical network to ensure safe Operation of their electrical network and the safety of personnel required to work on that electrical network.

"Switching Schedule" a schedule which defines the agreed sequence of Operations. Provision is made on the Switching Schedule to allow the name of the operator and the time of Operation to be filled in as they are completed.

"System Control" the administrative and other arrangements established to maintain as far as possible the proper safety and security of the electrical network.