Distribution Business

Information

For

Meter Operators

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1.0 Introduction

This document constitutes the Distribution Business Information for Harlaxton Energy Networks, in accordance with Clause 2.1 of Appendix 2 of the Meter Operator Code of Practice Agreement (MOCOPA). This document must be read in conj unction with the MOCOPA.

2.0 Requirements

The following general requirements are for Meter Operators wishing to work within Harlaxton Energy Network's area.

- All Meter Operators must be a signatory to, and comply with, the Meter Operator Code of Practice Agreement (MOCOPA). They must be accredited within the areas in which they operate.

- A safety statement shall be submitted by the Meter Operator detailing how the MOCOPA requirements on authorisation, clothing, training, tools and instruments are achieved.

- The Meter Operator shall be deemed to have agreed to work to this document if they undertake work within Harlaxton Energy Networks area.They are responsible for its application for any contractors they employ, and both they and their contractors must comply with the Health and Safety at Work etc Act 1974 and all subordinate and associated legislation. Harlaxton Energy Networks does not undertake to provide any information to contractors.

- The customer has a duty of care for Harlaxton Energy Network's equipment and Harlaxton Energy Networks shall take direct action via the customer if the Company considers it necessary under the Electricity, Safety, Quality and Continuity Regulations.

3.0 Operational / Safety

The Meter Operator shall comply with the General Operational and safety considerations as detailed in Appendix 6 of the MOCOPA. Specific items relating to Harlaxton Energy Networks are as follows:

Communication

All contact numbers for Harlaxton Energy Networks are listed in Appendix 1 of this document. Accidents that happen whilst working on Harlaxton Energy Networks equipment must be reported as soon as possible and without delay. This requirement is extended to the reporting of incidents, dangerous occurrences and defective equipment.

Examples of defective equipment include:

- Cut-out smoking / sparking
- Cut-out hot (not warm)
- Cable / equipment lying unsecured on the floor
- Exposed contacts
- Fresh compound leaking
- Rotten meter board
- Phase barriers missing
- Meter box door requires replacing

Risk assessment

A risk assessment must be carried out by every Meter Operative before commencing / resuming work. If the equipment is unfamiliar to the Meter Operative or appears to be unsafe, then no work shall be carried out. Harlaxton Energy Networks must be informed immediately of any unsafe plant or equipment.

Removal of covers

Where necessary the Meter Operative shall shroud any exposed terminals during work to prevent accidental contact. Also the Meter Operative must ensure that all exposed live terminals are in a safe condition should they leave the work position unattended, and all permanent covers replaced and seals applied on completion of work.

Reporting of incidents

When Meter Operators work on or near Harlaxton Energy Networks equipment all incidents, dangerous occurrences, damaged equipment, suspect and faulty equipment, and unsafe conditions shall be reported immediately to Harlaxton Energy Networks on telephone number 0844 800 1813.

There may be a need to vacate the worksite to protect the Meter Operator and the public. In these instances all personnel should be kept clear of the danger area. Work shall only be resumed when a Harlaxton Energy Networks Authorised Person has agreed with the Meter Operator that it is safe to do so.

The Meter Operator shall provide the Network Management Centre (see Appendix 1) with a contact name, address and telephone number. This will enable Harlaxton Energy Networks to contact, at all reasonable times, a responsible person to notify them of accidents, incidents or dangerous occurrences involving their staff in the vicinity of Harlaxton Energy Networks' Distribution System. Similar information shall also be provided on the person with whom Harlaxton Energy Networks can discuss and resolve other safety matters.

Reverse polarity

Instances of reverse polarity shall be reported immediately to the Network Management Centre. The Meter Operator will not proceed with work until instructed to do so by the Network Management Centre; Harlaxton Energy Networks has a formal procedure that must be followed.

Withdrawing distribution fuses

Any person, who needs to withdraw a main supply fuse i.e. a cut out fuse, must have the relevant authorisation in line with Appendix 2 of this document. If the supply is to be de-energised for a long period of time (i.e. for a purpose other than for normal maintenance and meter change) the appropriate message to other parties should be given using the procedures defined by nationally agreed trading arrangements.

When re-energising a supply the Meter Operator must ensure that Harlaxton Energy Networks' obligations under the Electricity, Safety, Quality and Continuity Regulations are not compromised. Therefore checks, as detailed in the MOCOPA, must be carried out to ensure integrity of the supply.

Access to Substations

All Meter Operatives must notify the Network Management Centre (see Appendix 1) giving 5 working days notice, before entering any substation to carry out work on any equipment, so that they can be informed of any operational restrictions applicable to Harlaxton Energy Networks equipment in that substation.

At locations where the substation is owned by the customer, or is one with joint access between Harlaxton Energy Networks and the customer, the customer will provide access to that substation for the Meter Operative.

If the customer is unable to provide access, and Harlaxton Energy Networks has to provide it, a charge will be made.

Accepted working practices

a) Connection of metering equipment

A Meter Operator's meter shall be fitted as closely as possible to the existing meter position and, if instructed to retain Harlaxton Energy Networks meters, the new meters shall be connected in circuit after any existing Harlaxton Energy Networks metering equipment. The test facility of the test block must not be used.

b) Harlaxton Energy Networks equipment

The Meter Operators meter shall not obstruct or restrict access to Harlaxton Energy Networks equipment. If Harlaxton Energy Networks modifies a connection the Meter Operator shall bear the cost of modifying their installation even if permission has been given to use Harlaxton Energy Networks equipment.

When a customer requests Harlaxton Energy Networks Distribution Business to change or modify a system 15 working days should be given, in accordance with the

appropriate BSCP, of any work to the metering system. Harlaxton Energy Networks Distribution Business will inform the appropriate Meter Operator of the changes. However, it is the responsibility of the customer to liaise with their Meter Operator to ensure that the metering equipment is suitable.

If, after alterations to the system, the metering does not match the CT / VT ratio then the supply shall not be made live.

Under NO circumstances should Harlaxton Energy Networks equipment be disconnected without permission.

c) CT and VT connections

The Meter Operator shall ensure that current transformers are shorted and voltages are isolated on the meter panel before any work is commenced.

Connections shall normally be made in the rear of the test terminal block or onto 'Klippon' connection blocks fitted on new or refurbished sites. Standard numbering for small wiring shall be used at all times.

d) Whole current sites

The Meter Operator shall not re-energise the customer's installation until they are satisfied that Harlaxton Energy Networks duties under the Electricity, Safety, Quality and Continuity Regulations have been complied with. The Meter Operator shall certify that they undertaken necessary checks before re-energisation.

If a Meter Operator removes his meter, leaving the incoming service cable live with no meter, then for safety reasons the Meter Operator MUST inform the Networks Management Centre (see Appendix 1).

d) Typical wiring diagrams

Our typical wiring diagrams for low and high voltage installations are provided at the end of this document. They only show Harlaxton Energy Networks normal meter connections. Care must be taken by the meter operative to trace and identify all wiring before work is carried out.

Harlaxton Energy Networks cannot and does not warrant that any particular site shall conform to this pattern. The Meter Operator shall be responsible for satisfying himself of the arrangements at all sites and the nature of the connections at that site, and shall act accordingly.

Harlaxton Energy Networks does not accept any liability whatsoever for a Meter Operator's action on any site and the Meter Operator shall bare entire responsibility in all respects in regard to incorrectly connected metering.

<u>Security practices</u>

a) Sealing of equipment

Non-Certification seals may be removed from Harlaxton Energy Networks equipment by

the Meter Operator to allow metering equipment to be changed. The seals shall be replaced by the Meter Operator. All removed seals shall be disposed of safely, off site and with due regard to security.

If Harlaxton Energy Networks finds that a Meter Operator is consistently failing to seal equipment which subsequently has to be sealed by Harlaxton Energy Networks, then a charge shall be made for such resealing and any investigation into any theft or safety reasons.

b) Meter readings

Readings on all measuring equipment to be disconnected shall be taken by the Meter Operator BEFORE DISCONNECTION AND/OR REMOVAL OF THE EQUIPMENT. These shall be returned to Harlaxton Energy Networks Distribution Business using the appropriate message format.

The Meter Operator shall maintain a copy of all removed meter readings, their multiplication factor where appropriate and be able to identify the operative who took the readings.

For existing Harlaxton Energy Networks meters the Meter Operator shall record the readings on each register on the commissioning report. These readings shall be taken before work starts on the installation of the Meter Operators meters.

c) Tampering

Any indication of tampering with the supply shall immediately be reported to the appropriate Revenue Protection Service as shown in Appendix 1.

Any recycled meters that are installed by the Meter Operator must not show signs of external damage or distress from previous use.

Site specific information

The Meter Operator shall submit a form acceptable to Harlaxton Energy Networks with the information required under the appropriate BSC Agreed Procedure.

Harlaxton Energy Networks shall provide site specific information by endorsing this form.

For sites registered in SMRS this information should be sent using data flows defined in the DTC. This can be sent via e-mail or the data transfer network (DTN). The preferred method for returning a data flow will be through the DTN.

The Meter Operator will provide commissioning data, to meet the requirements of COP 4, to the Networks Customer Service Technical Engineer (See Appendix 1) by e-mail with 5 working days of the meter being installed.

Communications link

Any equipment which is required to be installed by the Meter Operator for communications must be installed in a proper manner and not obstruct or restrict access to Harlaxton Energy Networks' equipment or the customers installation.

The new Meter Operator is responsible for making arrangements with the existing Meter Operator to use any previously installed communications link.

Under no circumstances should Harlaxton Energy Networks'equipment or communications link be disconnected without permission. Any resulting costs incurred by Harlaxton Energy Networks from such unauthorised disconnection are liable to be charged to the party responsible for the disconnection.

Where a Paknet aerial needs to be fitted to a substation the position is to be agreed with the owner of the substation prior to installation. The fitting of the aerial and associated cabling must be carried out with care so that it does not impair the building structure or weatherproofing in any way whatsoever. When fitted inside the building the aerial shall be fitted so that it does not impede any normal operations and must not be fixed to any Harlaxton Energy Networks equipment. Additional care shall be taken when fitting aerials on the outside of substations in regard to the safety of the public and the possibility of vandal damage.

The meter Operator must ensure that his communications links do not interfere with Harlaxton Energy Networks' equipment or telemetry system.

Charges

a) Test blocks

On their initial inspection visit the Meter Operator shall check that there is a meter terminal block available. If there is not the Meter Operator shall report this to the Network Management Centre listed in Appendix 1.

In some circumstances Harlaxton Energy Networks shall modify the connection in order to provide the block. For example if the termination arrangement is no longer appropriate to the customer's agreed capacity. In these circumstances the cost of the modification to Harlaxton Energy Networks' system shall be borne by Harlaxton Energy Networks unless it is reasonable, in accordance with the Statement of Charges for the connection to Harlaxton Energy Networks' Electricity Distribution System to require the customer to pay a connection charge. The cost of modifying the customer's equipment shall always be borne by the customer.

b) Defects

When a Meter Operator reports a defect to Harlaxton Energy Networks' equipment The Company shall normally repair this free of charge. However, Harlaxton Energy Networks may charge the customer it the defects could have been prevented under the customer's duty of care for Harlaxton Energy Networks' equipment. The customer will have the right to dispute any costs with the Office of Gas and Electricity Markets (OFGEM).

If defects are discovered by Harlaxton Energy Networks following the installation of metering by a Meter Operator and defects have not been reported it is reasonable to assume that the defects were caused as a result of that installation and Harlaxton Energy Networks shall seek to recover costs via the Registration Authority.

Action if Meter Operator Installation is found to be faulty

Harlaxton Energy Networks shall initially report any fault or poor workmanship as required in the MOCOPA. If faults, which require action by Harlaxton Energy Networks under the Electricity, Safety, Quality and Continuity Regulations, are not cleared in a time that Harlaxton Energy Networks declares as reasonable, then it will contact the customer and confirm the course of action. If a Meter Operator persistently has installation problems then Harlaxton Energy Networks will be prepared to discuss preferred working methods.

Change of Meter Operator

If a Meter Operator ceases to be the operator at a site the meters must be retained until another Meter Operator has installed their meters or the site is de-energised by Harlaxton Energy Networks.

4.0 Technical

For typical HV and LV metering practices please see diagrams in Appendix 3a and 3b. In each case the interface point is the meter test block and fuses. It is important to be aware that some installations may have live conductors exposed to contact.

Approved Meter Operatives may remove seals from Harlaxton Energy Networks Distributions equipment to facilitate the changing of meters. All equipment is to be re-sealed on completion of the work and all seals disposed of adequately and in such a way as to prevent reuse. Tampering, suspected interference or missing seals should be reported to the Revenue Protection Unit immediately.

5.0 Commercial

All Harlaxton Energy Networks' meters and timing devices that have been removed should be returned within 15 days or as otherwise agreed between the Supplier and Harlaxton Energy Networks Distribution.

Meters that are at the end of their statutory life need not be returned.

Where a Harlaxton Energy Networks Distribution meter is being replaced by another any associated timing device should be removed and returned.

Harlaxton Energy Networks Distribution provides a range of meter cubicles. The appropriate unit is selected according to the site conditions, the voltage of the supply, and the size of cut-out if LV whether Harlaxton Energy Networks Distribution are the meter operator or an independent operator has provided the metering equipment. In principle Harlaxton Energy Networks Distribution have no objection to an

independent meter operator fixing their meter to the cabinet, or taking a pilot cable to their own cabinet, providing that MOCOPA is complied with in all respects.

Appendix 1

Contact information for Meter Operators working in the Harlaxton Energy Networks area.

1. General Liaison (Dataflow / Administration enquiries)

Services Team
Customer & Network Operations
Harlaxton Energy Networks Limited
Toll Bar Road
Marston
Grantham
Lincolnshire
NG32 2HT
Via DTN (data transfer network) or if unavailable
E-Mail: info@harlaxtonenergynetworks.com

2. Emergency contact

Harlaxton Energy Networks Limited
Toll Bar Road
Marston
Grantham
Lincolnshire
NG32 2HT
Tel: 0844 800 1813

3. Authorisation of Operatives

Harlaxton Energy Networks Limited
Toll Bar Road
Marston
Grantham
Lincolnshire
NG32 2HT
Tel: 0844 800 1813
Fax: 01476 585169
E-Mail: info@harlaxtonenergynetworks.com

4. Technical Advice

Distribution Business Manager
Harlaxton Energy Networks Limited
Toll Bar Road
Marston
Grantham
Lincolnshire
NG32 2HT
Tel: 0844 800 1813
Fax:
E-Mail: info@harlaxtonenergynetworks.com

5. Request for Site Information

Harlaxton Energy Networks Limited
Toll Bar Road
Marston
Grantham
Lincolnshire
NG32 2HT
Via DTN (data transfer network) or if unavailable
Fax: 01476 585169
E-Mail: info@harlaxtonenergynetworks.com

6. Site Access

Harlaxton Energy Networks Limited
Toll Bar Road
Marston
Grantham
Lincolnshire
NG32 2HT
Tel: 0844 800 1813

7. Tampering and Missing Seals

Revenue Protection Service
Harlaxton Energy Networks Limited
Toll Bar Road
Marston
Grantham
Lincolnshire
NG32 2HT
Tel: 0844 800 1813 (8am – 5pm) and outside these hours 0800 055 6288
Fax: 01476 585169

8. Operational and Safety Issues

Distribution safety
Harlaxton Energy Networks
Toll Bar Road
Marston
Grantham
Lincolnshire
NG32 2HT
Tel: 0844 800 1813
Fax: 01476 585169
E-Mail info@harlaxtonenergynetworks.com

8. Defective equipment

Dangerous equipment

Network Management Centre
Harlaxton Energy Networks
Toll Bar Road
Marston
Grantham
Lincolnshire
NG32 2HT
Tel: 0844 800 1813
Fax: 01476 585169

Non – Dangerous equipment

Meter owner as identified by the "Property of …" label on each meter.
For the Harlaxton Energy Networks areas the contact details are shown in this appendix.
For other owners the Meter Operator should contact that owner.

11. Publication & issue of "Distribution Business Information for Meter Operators."

Hayley Connors
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Appendix 2

Access and Authorisation Policy for Meter Operators

Harlaxton Energy Networks' Responsibilities

Harlaxton Energy Networks must satisfy itself that any Meter Operator wanting to work in its area is signed up to the Meter Operators Code of Practice Agreement (MOCOPA) and has passed a MOCOPA annual audit. Under MOCOPA Harlaxton Energy Networks has the right to request Part 1 of the MOCOPA audit for reference.

Harlaxton Energy Networks as the owner of the electrical distribution network, have responsibility to ensure that is designed, maintained and managed in such a way to minimise the hazards to anyone who may have a need to work on or near it.

Harlaxton Energy Networks has a duty to refuse access to its equipment if it has evidence that, in Harlaxton Energy Networks opinion, a Meter Operator does not operate in a professional and legally acceptable manner.

Meter Operatives Responsibilities

1. Safety Management Systems

Meter Operators must have a robust Safety Management System, Harlaxton Energy Networks cannot approve (or disapprove) Method Statements and Safety Procedures produced by external organisations. All that it can do is scrutinise a third party's submissions and either accept, or reject them, as being suitable and sufficient for work to be done on its network (with reference to applicable legislation).

The elements Harlaxton Energy Networks will examine to determine if a Meter Operator has an effective Safety Management System shall include but not exclusively be:

- Training Programme.
- Assessment of understanding and application of training.
- Use and provision of correct equipment and Personal Protective Equipment (PPE).
- Staff knowledge in dealing with problems / queries / incidents.
- Monitoring / auditing compliance with Meter Operators own working practices.

2. Training and Authorisation of Staff

It is incumbent upon the organisation that authorises an individual to carry out specific duties to be confident that the individual has:

- Sufficient technical knowledge, training and competence.
- A suitable aptitude;

To carry out the work required work, as well as to recognise and report immediately to Harlaxton Energy Networks, any apparatus associated with metering equipment that is of an unsatisfactory condition, as required by MOCOPA appendix 6 (paragraphs 6 and 7).

This need is satisfied by a consistent and methodical training authorisation process.

Furthermore there is a duty to assess that:

- The level of authorisation continues to be appropriate to the work the individual carries out.
- The individual continues to be capable of undertaking the level of authorisation.
- The authorisation is recorded and available for inspection.

Effective monitoring and auditing is the appropriate way of achieving these goals.

The practical difficulties and the vicarious liabilities of achieving this with peripatetic staff belonging to independent organisations means that Harlaxton Energy Networks will not authorise any Meter Operators' staff; it is the duty and responsibility of the Meter Operator.

Harlaxton Energy Networks Assessment process

1. General

The following is guidance to Meter Operators requiring authorisation for their operatives to withdraw supply fuses and / or gain unsupervised access to Harlaxton Energy Networks operational premises.

Approval of Meter Operators will be carried out through the Registration Authority Audit procedure. Harlaxton Energy Networks will approve a Meter Operator once it has become a signatory to the Meter Operator Code of Practice Agreement, and has been audited by the Registration Authority.

Harlaxton Energy Networks will periodically carry out safety audits on Meter Operators safety management systems and Meter Operatives undertaking work in its area. If the Meter Operative is not deemed to be working safely, then the work will be stopped and permission to work on the network withdrawn.

It is the responsibility of the Meter Operator to ensure that any Meter Operative has adequate training, knowledge and experience to avoid danger to himself or the public.

Meter Operatives must be Authorised by the Meter Operator, and carry a certificate as proof (maximum validity 3 years), before working on Harlaxton Energy Networks network, and, subject to this the following process applies:-

2. Withdrawal / replacement of low voltage fuses & links.

Meter Operatives must carry, at all times, the following documentation when working on Harlaxton Energy Networks equipment,

- An identification card
- A valid authorisation certificate detailing training / competence levels issued by the Meter Operator

Should this documentation be requested by a Harlaxton Energy Networks employee for valid reasons it must be produced, failure to do so may result in work being denied / stopped.

Providing all other requirements detailed in the 'General' section a Meter Operative can work on Harlaxton Energy Networks equipment without reference to a Harlaxton Energy Networks Assessment Engineer i.e. no assessment will be done on the individual prior to them working and no assessment certificate issued

3. Entry / working in operational premises

Meter Operatives who need to enter operational premises must attend an assessment interview at Harlaxton Energy Networks. All requests for Meter Operative Assessments by Harlaxton Energy Networks must be submitted in writing, along with written evidence of training, experience, company authorisation and a valid first aid certificate at least 15 working days before entry to the operational premises is required. Certain information may be dispensed with by agreement with Harlaxton Energy Networks.

An assessment will be carried out by a Harlaxton Energy Networks Assessment Engineer and subject to successful completion the following will be issued on a sign for basis.

- A Harlaxton Energy Networks Assessment Certificate valid for 3 years.
- A copy of Harlaxton Energy Networks Distribution Safety Rules.
- Access key(s) as applicable.

This documentation must be carried by the Meter Operative at all times when working on Harlaxton Energy Networks premises, along with the following company issued documents,

- An identification card
- A valid authorisation certificate detailing training / competence levels issued by the Meter Operator

Should this documentation be requested by a Harlaxton Energy Networks employee for valid reasons it must be produced, failure to do so may result in work being denied / stopped.

Details of Meter Operatives issued with an Assessment Certificate will be held by Harlaxton Energy Networks on a database.

4. Meter Operatives who leave a Meter Operators employment

If a Meter Operative appearing on Harlaxton Energy Networks database leaves the employment of a Meter Operator notification must be given to Harlaxton Energy Networks in writing and the following documents / keys, if they have been issued, must be returned ;

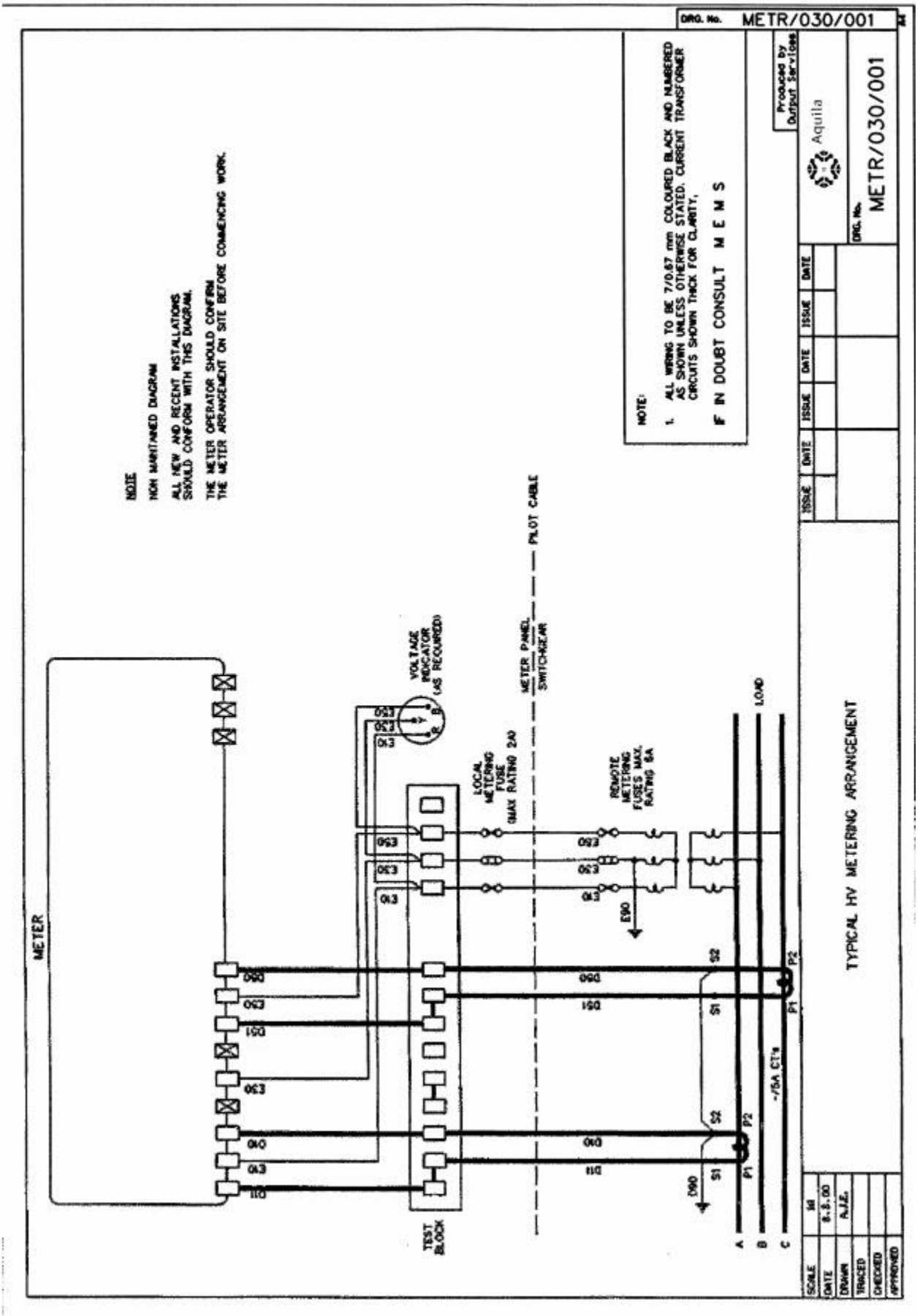
- A Harlaxton Energy Networks Assessment Certificate valid for 3 years.
- A copy of Harlaxton Energy Networks Distribution Safety Rules.
- Access key(s) as applicable.

Under the arrangements in this document this only applies to those new Meter Operatives entering operational premises, however, prior to the writing of this document all Meter Operatives were issued with the above mentioned document / keys (as applicable), and the requirement to return issued documents / keys applies.

5. Acceptance

It is necessary for the Meter Operator' representative to sign the acceptance form (page 2 of this document), and, in doing so accepts the process as per the detailed Appendix.

Appendix 3a - Typical hv metering arrangement



Appendix 3b - Typical lv metering arrangement

