Guidance for the Meter Locations

On ESP Electricity Networks

ESP Electricity Ltd

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Contents

1.0 Introduction 3

2.0 General 4

3.0 Developer and ICP Responsibilities 7

4.0 ESP Electricity's Responsibilities 8

5.0 Incident Reporting Procedures. 9

6.0 ESP Electricity Contact Details 10

1.0 Introduction

ESP Electricity operates Networks throughout the UK. The ESP Electricity Networks can be identified by the Meter Point Administration Number (MPAN). All ESP Electricity Networks have MPANs that commence with **25.**

Each Cut-Out will have a sticker applied, showing ESP Electricity ownership and a 24 hour emergency contact number.

These notes outline the standard procedures and requirements for the installation of ESP Electricity termination equipment to domestic and commercial properties e.g.. shops and offices.

By following these guidance notes, you are helping us to safely operate and maintain our equipment in a secure area.

It should be noted that the Supplier / Meter Operator may also have requirements that will need to be considered prior to finalising the meter locations.

2.0 General

ESP Electricity's preferred position for domestic service terminations should be encased in outdoor meter boxes. Outdoor boxes must be mounted into or onto an external wall, located at the front or side elevation of the property. Boxes must not be positioned behind a fence or gate as this could restrict access for our employees or data collectors.

The cable route for the service cable should avoid passing through the rear gardens of properties. Installations of conservatories, out buildings, and landscaping, make access restrictive. ESP Electricity will not accept cable routes through rear gardens.

Outdoor boxes should be installed at a:

- Maximum height of 1,800mm from ground level to the top of the box – to enable access without ladders or steps.
- Minimum height of 450mm from ground level to the bottom of the box – to reduce the risk of water entering the box in the event of flooding or fire-fighting activities.

Outdoor boxes must not be installed:

- Inside a property
- At the rear of a property
- At the side of the property behind a fence or gate
- Inside a dustbin, coal or refuse store
- Inside a garage or porch
- Underneath a window unless the minimum installation height of 450mm is achievable.

The customer's consumer unit must be located so that the conductors from the electricity cut-out comply with the BS7671 regulations. If the unit exceeds this requirement then suitable switch fused protection must be installed. This protective device must still be installed within the limits of BS7671.

The Meter Operator may elect to install a 100A isolator, which will be fitted inside the meter box to allow isolation of the customer's equipment. This does not provide over-current protection for the customer's wiring – private switch gear must not be installed inside the meter box.

Single-phase service cables must run vertically into the meter box, and must be installed within a service duct. This duct may be surface mounted or installed within the wall cavity, to suit the type of meter box, provided that it is secured in position.

Installation of a meter inside a property will only be permitted if the proposed site is a listed building or conservation area, or the Developer can demonstrate that the Local Planning Authority will not allow an outdoor installation. These installations will be reviewed and agreed on a site-specific basis only at the design stage of the Network.

ESP Electricity's acceptance of any such proposal will be subject to the following conditions:

- The design of the indoor position does not put tradesmen or occupiers at risk of coming into contact with live equipment during installation and subsequent building work and occupiers at risk thereafter.
- The service cable must be ducted and routed inside the building by the shortest and most direct route possible. The cable route must not pass through the rear garden of the property. The internal end of the duct must be sealed immediately after the cable has been installed.
- The service equipment must be installed on a brick or block-work wall. This should always be an external wall, or immediately adjacent to an external wall.
- In timber-framed buildings a suitable brick or block-work wall may not be available. In these circumstances, a steel sheet, at least 1mm thick and earthed, should be fixed behind the service cable, cut-out and meter. This is to protect persons drilling through the wall from electric shock.
- The cable, cut-out and meter must be housed in a suitable meter cabinet extending from ground level. The service cable must not be hidden by panelling of any type or routed behind cupboards or fittings. The service duct must rise through the floor and into the approved meter cabinet.
- Standard fibre glass outdoor meter boxes are not suitable for use indoors as they do not comply with the appropriate British Standards for Fire Resistance and Fume Emissions. You must ensure meter boxes comply fully with fire regulations and any local bylaws.

If an internal meter position has been agreed with ESP Electricity then the following space is required inside the dwelling:

1,250mm high x 550mm wide x 300mm deep.

The position must be a maximum height of 1800mm from ground floor level to the top of this meter board, and a minimum height of 450mm to the bottom.

Internal meters cannot be installed:

- Inside a dustbin, coal or refuse store
- Basement or cellar
- WC, kitchen or bathroom
- Above doorways
- On partition walls made of plasterboard, drywall or similar material
- Under stairs where headroom is less than 2m
- In any location which is in breach of the current edition of BS7671 'Requirements for Electrical Installations'.

Consideration should be given to the type of meter being installed, and the possible requirements of the property occupier. Many Suppliers / Meter Operators will refuse to install Pre-Payment Meters internal to the property. As previously noted, these discussions should be had with the Supplier prior to agreeing the meter locations.

3.0 Developer and ICP Responsibilities

Prior to the installation of any equipment, it is the responsibility of the Developer and ICP for ensuring that:

- ESP Electricity's service equipment is housed in accordance with these notes of guidance during the design and construction of the building, and that the meter locations have been agreed in advance to installation. The location of the Meter must allow access for the Customer.
- External meter boxes are fitted to enable ESP Electricity employees and the electricity Supplier / Meter Operator to read and maintain the service equipment without having to gain access to the individual customer's property.
- Ducts for the service cables are laid in accordance with the ESP Electricity G81 specification, which states that the duct must run from the meter box site to the plot boundary
- A minimum 38mm black duct, marked 'electric' is used for single-phase service cable and 100mm or 125mm black duct marked 'electric' is used for three-phase service cable.
- For HH metering connections, the manufacturers labels must be fitted.
- All Cut-Outs must have the ESP Electricity ownership label attached, showing emergency contact details.
- The Developer will co-ordinate with the Meter Operator and the ICP for the installation of the meters and the subsequent energisation. ESPE will not agree to Energise a supply until it is appropriately metered.
- All CT / VT installations must have a test block facility to allow the MOCOPA Operator to check and commission their installation
- All CT/VT installations must have permanent ferrule markings on the secondary wiring looms.
- Phase colouring must be compliant with international standard IEC-60446.

4.0 ESP Electricity's Responsibilities

ESP Electricity is responsible for the:

- Approval of the design and layout of the service equipment
- Ensure that the earth terminal is accessible for the Meter Operator / Customer
- Maintenance of the electricity supply up to and including the 100A cut-out.

5.0 Incident Reporting Procedures.

5.2 Any equipment that is owned by ESP Electricity which is found to be defective, such as to present the possibility of danger, should be immediately reported to ESP Electricity. Contact details are given in Section 5 of this document.

5.3 Any equipment that is owned by ESP Electricity which might reasonably be believed may become Hazardous should be immediately reported to ESP Electricity. Contact details are given in Section 5 of this document.

5.4 Any Accident, Incident or Dangerous Occurrence should be reported to the relevant reporting authority, as required under the relevant safety legislation for reporting of such events.

5.5 Any such Accidents and Dangerous Occurrences that relate to ESP Electricity Distribution Systems must also be reported to ESP Electricity at the earliest possible opportunity. Contact details are given in Section 5 of this document.

6.0 ESP Electricity Contact Details

Network Control and Management	
Reporting of Operational and Safety issues that require immediate rectification	
ESP Electricity Ltd Bluebird House Mole Business Park Leatherhead Surrey KT22 7BA	Emergency Number – 0800 731 6945
Reporting of Operational issues that are not inherently dangerous	
ESP Electricity Ltd Bluebird House Mole Business Park Leatherhead Surrey KT22 7BA	ESP Electricity Control Room: Telephone Number: 01372 587 500 Email: especontrol@espug.com
Contact for the provision of general Distribution Safety Advice	
ESP Electricity Ltd Bluebird House Mole Business Park Leatherhead Surrey KT22 7BA	Senior Safety Advisor Email: especontrol@espug.com