

# Electrolink N<sup>o</sup> 8



January 2011

## **TEMPORARY ELECTRICITY CONNECTIONS FOR CONSTRUCTION SITES 60kVA TO 300kVA**

A Construction Site is an area where a building operation or work of engineering construction is being undertaken. Such a site often requires a connection to the electricity network for a short period on a temporary basis while the permanent electrical installation is being installed or refurbished. Because of its temporary nature, the site electrical installation may be inherently less well protected and more exposed to damage during building operations. This leaflet outlines Electricity North West's conditions for temporary connections with capacities in excess of 60kVA and up to 300kVA. Electricity North West's conditions for temporary connections with capacities up to 60kVA are described in Electrolink No.3. Details of Electricity North West's requirements are shown below.

### **EARLY NOTIFICATION OF REQUIREMENTS**

Should you require a mains electricity connection for building purposes, it is essential that you contact Electricity North West's Connections office as soon as a future building development is considered and certainly not later than the planning application stage. We require to know precisely when and where the connection will be required, the maximum demand in (and the nature of the load) which will be required for building construction and the installed load which is expected to be needed when the site is ultimately developed.

Another object of the discussions is to identify any existing electricity network on site so that the Site Operator may take all necessary precautions to avoid damage or accidental contact with existing overhead lines, underground cables and other equipment. Refer to Health and Safety Executive publications HSG141 "Electrical Safety on Construction Sites", HSG47 "Avoiding Danger from Underground Services" and GS6 "Avoidance of Danger from Overhead Electrical Lines".

### **SITE ACCOMMODATION**

It is the Site Operator's responsibility to provide a substantial, secure, weatherproof cubicle to accommodate Electricity North West's service equipment. Full details of the required cubicle and its method of construction are shown on Electricity North West Drawing UU-A2-027/02B, a copy of which accompanies this Electrolink.

It should be noted that the preferred cubicle is divided into two compartments; one compartment for Electricity North West's equipment and one compartment for the customer's electrical switchgear. Apart from the main tails, the electrical installation including the customer's earth terminal must be kept separate from Electricity North West's metering equipment.

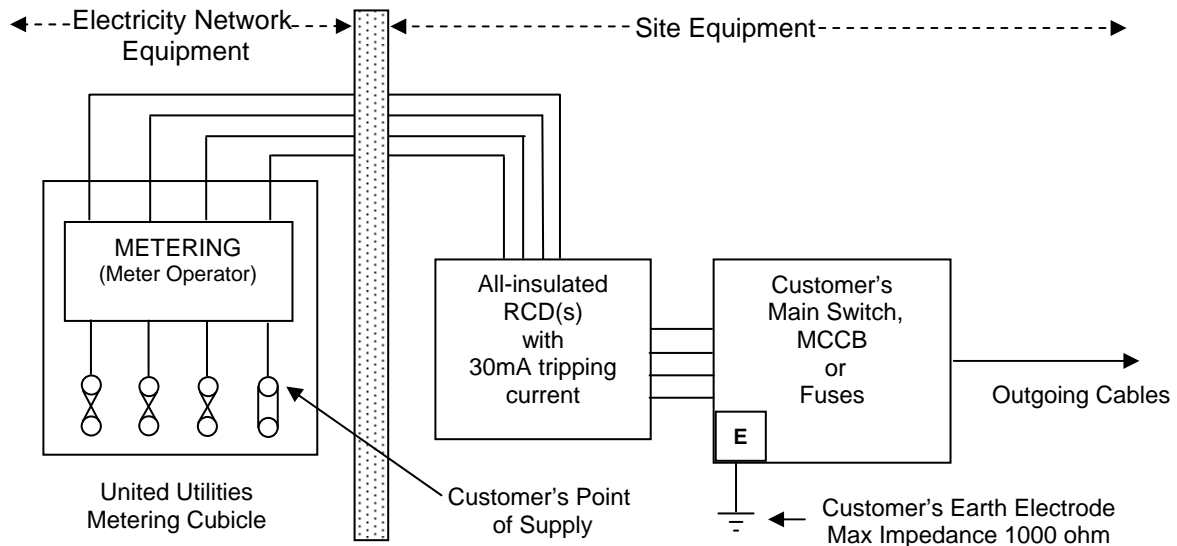
### **INDEMNITY FORM**

The connection will be installed only after receipt of a completed Indemnity Form from the Site Operator's Electrical Contractor, confirming that the electrical installation will comply with the Electricity Safety, Quality and Continuity Regulations 2002. Copies of the Indemnity Form can be obtained from any Electricity North West office on request. Where this form is used, a Wiring Completion Certificate is not required.

### **ELECTRICAL SAFETY**

It is the Site Operator's responsibility to ensure that the electrical installation on site complies with BS7671: 2008 - Requirements for Electrical Installations (IEE Wiring Regulations) and to provide an independent means of earthing since a Electricity North West earth will not be provided. To protect site personnel, the installation must be fitted with Insulated Residual Current Device(s) (RCD) to disconnect the supply in the event of leakage to earth. The required wiring arrangements are shown on the back page of this leaflet.

## WIRING ARRANGEMENTS



- Notes:**
1. The customer shall appoint a Supplier, who shall arrange for a Meter Operator to install appropriate metering.
  2. Interconnecting cables (Main tails) linking Electricity North West's equipment to the customer's switchgear shall be provided by the Site Operator. They should be as short as practicable and shall have stranded copper conductors of cross section in accordance with the table below. The cables will be identified as follows: phase conductors to be Brown, Black and Grey, neutral conductor to be Blue.

Authorised Supply Capacity (kVA)	Electricity North West's Fuse (Amp)	Meter Tails (mm <sup>2</sup> )
60 - 80	100	35
81 - 120	160	70
121 - 150	200	95
151 - 190	250	150
191 - 230	315	185
231 - 260	355	240
261 - 300	400	300

3. Only one cable shall be provided for connection to each Electricity North West supply terminal within the metering module.
4. The RCD(s) shall be all-insulated and have an operating current of not more than 30mA. The RCD(s) shall be installed immediately after the metering cubicle to protect the complete installation.
5. For an RCD with an operating current of 30mA, the customer's earth electrode shall have a maximum impedance of 1000 ohm.

## ELECTRICITY NORTH WEST'S RESPONSIBILITY

The advice contained within this Electrolink is given in good faith based on information available. No guarantee can be given, however, that the information will not change in the future. Electricity North West cannot be held responsible for costs incurred due to inaccuracies or subsequent changes.

### Other publications in the Electrolink series:

- Electrolink N<sup>o</sup> 1 - The Application of Protective Multiple Earthing to Customers Electrical Installations.
- Electrolink N<sup>o</sup> 2 - Estimation of Prospective Short Circuit Current (PSCC)
- Electrolink N<sup>o</sup> 3 - Temporary Supplies to Construction Sites - up to 20/60 kVA.
- Electrolink N<sup>o</sup> 4 - Meter Board Arrangements for New Single-Phase Domestic Supply up to 20kVA.
- Electrolink N<sup>o</sup> 5 - Outdoor Meter Reading Facilities.
- Electrolink N<sup>o</sup> 6 - Interference with Supply to other Customers.
- Electrolink N<sup>o</sup> 7 - Computers and Mains Electricity Supply.

### For further information on our temporary connections policy contact:

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