

# Electricity Policy Document 201

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## Installation, Removal and Identification of Idle Assets



## Amendment Summary

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## 1 Introduction

It is the responsibility of Electricity North West Limited, to ensure that, so far as is reasonably practicable, all redundant and idle assets, which are no longer required for use or not yet put to use, are not connected to the Network and are removed or clearly identified.

This policy document details what action shall be taken to minimise the risks to both staff and third parties from the dangers associated with redundant and idle assets.

## 2 Scope

This policy applies to all electrical assets, at all voltages, which are the property of Electricity North West Limited, or which are constructed and are to be adopted by Electricity North West Limited, whether or not connected to the Network, which, temporarily or permanently, are not affording operative connections for customers or otherwise contributing to the operation of the Network. This policy is not intended to be retrospective (with the exception of [sub-section 6.4](#)), but, where work is being done on the Network, the opportunity shall be taken to make modifications that ensure compliance with this policy.

## 3 Definitions

<b>Consumer</b>	A customer of any electricity supplier, having a connection from the Network. This includes a customer with (an) un-metered connection(s) (e.g. street lighting).
<b>DADS</b>	DUoS and Associated Distribution System, a system that holds customer metering information
<b>Distribution Substation</b>	11/6.6kV to low voltage substation
<b>High Voltage (HV)</b>	A voltage exceeding 1000V
<b>Idle</b>	Not affording operative connection for any consumer nor providing any interconnection or load transfer facility
<b>Low Voltage (LV)</b>	A voltage not exceeding 1000V
<b>Out-of-Commission</b>	Permanently disconnected from the Network
<b>Redundant</b>	Idle or able to be made idle without significant detriment to the operation of the Network

## 4 General

There shall be no deviation from this policy unless agreed, in writing, with the Policy and Implementation Manager, Electricity North West Limited.

The details of all assets, including idle and out-of-commission assets, shall be recorded in the appropriate record system within five working days of construction or disconnection from the Network. In the case of cables and overhead lines this shall be in accordance with CP012 - Electricity Geographical Information System

- and in the case of switchgear the Master Asset Management System shall be updated in accordance with CP304 - Management of Plant Refurbishment, Disposal and Transfer of Ownership.

The removal of any assets which become idle as part of a capital scheme shall be carried out as part of that scheme.

The decommissioning and disposal of assets shall be in accordance with the Electricity North West Limited Internal Control Manual, Section 5 part 2.6.

## 5 Mains Cables

- 5.1 All existing mains cables affected by Network or consumer changes, such that they become idle, shall be taken out-of-commission. At each point of disconnection, cables shall have their cores shorted together and capped using the procedure detailed in CP411 - Mains Practice up to and including 132kV, which requires, for identification purposes, the capped end to be sleeved in green heatshrink material. (Note: the purpose of the green sleeving is to identify that, within the capped end, the cores of the cable have been shorted.)
- 5.2 All newly-laid cables shall similarly have the cores shorted and be capped at all ends, using the procedure detailed in CP411. High voltage cables installed by third parties providing new connections to the Network, shall have their cores shorted and be capped in accordance with CP411, at least at all ends where they are to be jointed to cables already in commission. It is equally important that the cores of low voltage cables are shorted, in order to prevent capped ends, which have been overlooked, being energised inadvertently. All cable ends shall be capped, and, where cores have been shorted, green sleeving shall be applied.
- 5.3 Wherever reasonably practicable, the disconnection of idle cables (with the exception of LV service cables) shall be done without leaving a live bottle end at the point of disconnection, e.g. a breeches joint is to be replaced with a length of cable and two straight joints. Where this is impracticable, (e.g. taking into account the need to maintain consumers' connections), the length of cable between the breeches joint and the live bottle end shall be kept to an absolute minimum, such that the bottle end lies immediately adjacent to the live cable from which it branches. Unless the out-of-commission cable is removed, it shall be terminated and identified as described in [clause 5.1](#).
- 5.4 In designing and constructing LV distributing mains for new developments, care shall be taken to ensure that the most remote service joint will be either at, or close to, the terminating bottle end. The bottle end shall be no more than 5m beyond the designed or actual position of the last service joint, and preferably no more than 2m beyond (measured along the main).
- 5.5 In the case of LV distributing mains on new developments, it is normal practice to energise a length of cable terminated with a bottle end and then pick up services, as they are required. Phasing of new construction work shall take account of this policy by not energising more of the final mains than is reasonably required for the phasing of the development. This phasing shall balance the need to energise sections of mains only when required against creating too many small sections with consequential high numbers of joints.

## 6 Overhead Mains

- 6.1 The construction of overhead lines shall be phased such that completion of the construction work coincides, as closely as possible, with the required commissioning date.
- 6.2 All overhead lines that are erected and are not to be put into immediate service to provide connections for consumers, or provide interconnection, shall remain dead.
- 6.3 Any overhead line that becomes idle shall be dismantled as soon as practicable, which shall be no later than three months from the date on which it was first known to be idle or from the receipt of any required consents. The request for such consents shall be initiated within two weeks of the date on which it was first known that the overhead line was idle.
- 6.4 It is not permissible to keep an idle line erected simply to maintain wayleaves or easements. Any exception to this paragraph shall be agreed, in writing, with the, Policy and Implementation Manager.

## 7 Low Voltage Services

- 7.1 Newly laid LV service cables (single phase and three phase of 35mm<sup>2</sup> cross section or less) do not need to be shorted (cables shall, of course, be capped, where this is necessary to prevent the ingress of moisture).
- 7.2 The identification and removal of idle services shall be in accordance with CP492 - The Making Safe & Removal of Idle Services – Guidelines on Procedures.
- 7.3 When an underground service is being permanently removed, the service cable shall be bottle-ended as close to the main as possible and not more than 1m from the main (measured along the service cable). It is generally not desirable to incur the risk of additional live jointing required to remove a service breeches joint. In the case of temporary works, when it is known that a service cable is to be re-used within six weeks, e.g. for the transfer of a street lighting cable, the cable may be bottle-ended leaving sufficient length of cable for subsequent jointing work. The length of the service cable to a temporary bottle end shall not exceed 2m.
- 7.4 The only exception to clause 7.3 is where a service has to be removed in an emergency and is to be replaced. The service may be domestic or to street furniture. In this case the disconnection may be close to the service termination. This temporary arrangement is acceptable only for a period of less than six weeks. After this time the arrangement shall be as described in Clause 7.3.
- 7.5 After checking that an out-of-commission service within a property has been made 'dead', using approved procedures, the service cable shall be cut at ground level and all Electricity North West Limited equipment removed. LV service cables taken out-of-commission (single phase and three phase of 35mm<sup>2</sup> cross section or less) do not need to be capped.
- 7.6 Any idle overhead service shall be dismantled from its point of origin to the termination. A pole mounted transformer shall be considered, for the purposes of this policy, as part of the service. If a transformer is no longer providing any connection, it shall be removed from the pole and any idle HV line disconnected and dismantled.

## 8 Ground Mounted Distribution Substations

8.1 Any member of staff, engaged in the planning or operation of the Network, whether acting on behalf of Electricity North West Limited or the competitive connections business, who identifies a potentially redundant substation, has two immediate responsibilities:

- Ensure the substation is made safe and secure. Depending on circumstances and their level of authorisation, this may require the member of staff who identifies the situation to remain on site until assistance arrives. If there is any evidence of vandalism or illegal entry, staff shall comply with CP606/610 S50. It is imperative that where danger or potential danger is identified, urgent action shall be taken to remove the danger. Where local evidence indicates the substation is redundant (for example where the customer's switchgear has been isolated or removed, or demolition is in progress) or where the substation cannot be made safe and secure by other means the substation shall be either isolated remotely or jointed out in fault timescales. If an emergency disconnection is made, checks shall be made in DUoS and Associated Distribution System (DADS) and the connection set to De-energised.
- Submit a Network Referral for to the Strategic Planning Manager. The Network Referral shall contain sufficient information as detailed in sections 8.2 below to allow a strategic assessment of the need to retain the substation to be made without the need for further site visits. Responsibility for the treatment of the situation shall then rest with the Strategic Planning Manager.

8.2 The Network Referral form shall contain a description of the site and its environment including:

- any evidence of actual vandalism of, entry to or theft from the substation;
- any evidence or indication of an increase in local vandalism and graffiti;
- redundant factory premises; or
- widespread demolition of connected properties
- photographs showing the substation and local environment

8.3 The Strategic Planning Manager shall undertake a desktop assessment to identify the requirement to retain the substation based on information contained within the Network Referral, and also customer consumption history. This information is currently available in. The substation shall be removed from the network if it is not required operationally and:

- the consumption history shows no meter advance for the previous three months or
- the status of the connection is shown as 'Disconnected' or
- information in the Network Referral demonstrates the substation is redundant

8.4 In assessing the operational requirement for a substation, the following shall be taken into account:

- operation of the HV network;

- existing LV demand: and
- outstanding applications for new connections or additional load.

8.5 A flowchart describing this process is included as [Figure A1 in Appendix A](#).

8.6 Where a request is made by a consumer, who is a sole user in a substation, to be disconnected, it is not sufficient to de-energise the exit point. All the substation equipment shall be taken out-of-commission, unless the appearance and security of the site is to be maintained such that there is no increased risk of vandalism or unauthorised interference. Any decision not to take such a substation out of commission shall be based on there being an application, actually received by the business, for connection, such that the most cost-effective means of making that connection requires the substation to be retained.

8.7 Once it has been identified that a substation should be removed in accordance with this Section 8, it shall be taken out-of-commission as soon as possible, which shall be no later than one month from the date of that identification.

8.8 Where programmed alterations to the Network permanently disconnect all load from a substation, rendering it redundant, the substation shall be made dead and disconnected within 10 working days. Such disconnection shall include any LV distribution board. It is not desirable that even a free-standing LV distribution pillar in an otherwise idle outdoor substation remain backfed, unless a risk assessment and appropriate procedures are applied.

8.9 New substations shall not be constructed more than three months in advance of their need, nor energised longer than is reasonably practical in advance of the need to provide connections.

8.10 The Strategic Planning Manager shall review annually information in DADS to identify any HV metered points where there has been no meter advance for three months or more. These sites shall be investigated accordingly to determine whether or not the supply is redundant.

## 9 Land Ownership, Easements and Wayleaves

Certain assets owned by Electricity North West Limited occupy land or easements owned by Electricity North West Limited or are subject to wayleaves agreements. When any such assets are permanently removed, disconnected or dismantled, without there being any intention for Electricity North West Limited to replace or re-use the equipment in the same location, the Estates and Wayleaves Manager shall be notified. This will apply in the following situations:

- permanent removal of a substation;
- permanent disconnection of a cable laid under private land;
- permanent dismantling of an overhead line erected over private land.



## 10 Documents Referenced

DOCUMENTS REFERENCED	
CP012	Electricity Geographical Information System (GIS)
CP304	Management of Plant Refurbishment, Disposal and Transfer of Ownership
CP411	Mains Practice up to and Including 132kV
CP492	The Making Safe & Removal of Idle Services – Guidelines on Procedures.
Electricity North West Limited Internal Control Manual	

## 11 Keywords

Asset; Cable; Idle; Line; Redundant; Substation.

## Appendix A

Figure A1 – Flow chart for substation identified as potentially being a source of unacceptable risk or redundant

