



SP ENERGY NETWORKS

Case Study: Low voltage cable joint embedded in concrete



The above image highlights a situation which occurs all too frequently, no cable records or cable locator on site, customer in the process of constructing a garage damages a distribution cable.

The cable is repaired; the foundations are laid with the overspill of concrete encasing the low voltage repair joint. Covering ScottishPowers cable in concrete is not an acceptable practice with the possibility of the concrete corroding the cable and the cable joint. The key to avoiding contact with electricity cables in this type of situation is to plan the job correctly: Cable record enquiries are to be directed to ScottishPower Data Management section on the telephone number below.

Prior to any excavations taking place cable records should always be consulted.

Always assume cables are present and live until proved otherwise.

All Cable Record enquiries should be addressed to:

SP Energy Networks (North)

Data Management
(Correspondence)
55 Fullerton Drive
Cambuslang
Glasgow G32 8FD

t: 0141 567 4155 or 0141 567 4455

e: Requestforplansscotland
@scottishpower.com

SP Energy Networks (South)

Data Management
(Correspondence)
North Cheshire Trading Estate
Prenon Way
Prenon
Birkenhead CH43 3ET

t: 0151 609 2373

e: Requestforplansmanweb
@manweb.co.uk

All Cable Deviation Requests /Service Alterations enquiries should be addressed to:

SP Energy Networks (North)

Customer Connections
55 Fullerton Drive
Cambuslang
Glasgow G32 8FA

t: 0141 614 9997

SP Energy Networks (South)

Customer Connections
PO Box 290
Lister Drive
Liverpool L13 7HJ

t: 0151 221 2110

Emergency contact

In an emergency, or if there is any damage to SP Energy Networks cables or plant, call the appropriate number:

SP Energy Networks North

Central & Southern Scotland

0845 272 7999

SP Energy Networks South

Cheshire, Merseyside & North Wales

0845 272 2424





Case Study: Concreting Over Underground Cables (1)



The above image's, highlight a typical situation which occurs on a regular basis on construction sites. The task was to install concrete foundations to enable a boundary wall to be constructed.

ScottishPower had Low and High Voltage underground cables at the location of the proposed wall construction. Site management, were aware of the presence of the underground electrical network at the location, and proceeded to pour concrete around the cables.

SP Energy Networks advised site management that the concrete be removed immediately or alternatively a substantial bill for diverting the cables would be forth coming. Fortunately for the construction site the concrete had not set and they were able to remove the concrete by hand excavations. Pouring Concrete Around The Underground Electrical Network Is Not Acceptable.

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**Case Study:
Concreting Over Underground Cables (2)**



The above image highlights a situation which occurs on a regular basis on construction sites.

The task was to install drainage for a car park and a concrete structure to enable a fence to be installed on top of the concrete foundation.

In between the kerb stones in the above image, concrete was to be poured forming the foundation for the proposed fence. At the newly installed kerbs/drainage system location ScottishPower had numerous low and high voltage underground cables running to a nearby sub-station. Construction site were advised to remove all newly installed kerbs/drainage to ensure that ScottishPower had unrestricted access to the underground electrical network. This situation was caused by poor planning, the contractor being informed by the client that there were no underground cables on site. The advice given to the contractor on site by SP Energy Networks consisted of:

Never accept utility information by word of mouth, always seek written confirmation regarding the possibility of underground electrical plant at all site locations. Always procure cable records from utilities prior to undertaking ground penetration operations or construction works.



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**SP Energy
Networks
South**

Cheshire,
Merseyside
& North Wales

0845 272 2424



Case Study: Concreting in Proximity To Underground Cables



The above image highlights a situation which occurs on a frequent basis on local footpaths/ highways.

The task for ScottishPower EnergyNetworks was to install a new service cable for a business. Having located the required electrical cable to joint the new service onto it was found that the existing cable had been surrounded with concrete. Encasing the underground electrical network with concrete causes ScottishPower inconvenience as it restricts access to the cables and in older type cables, wire or tape armour the concrete can have a detrimental impact on the network causing cables to go into a fault situation.

**Scottish Power Energy Networks underground
Cables Are Not To Be Concreted over At Any
Time**

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