

Geographical Information System (GIS)

An overview and guide
to the use of symbols.

REF-PS-109 / Rev 1.01



Scottish & Southern
Electricity Networks

Guide to Symbols

The purpose of this document is to improve the clarity of information displayed on our Web based GIS Viewer so that stakeholders can gain a deeper understanding of how our Network is constructed and operated.

A Geographical Information System is a computer system for capturing, storing, checking and displaying data related to positions on Earth's surface. GIS can show many different kinds of data on one map.

Scottish and Southern Electricity Networks offer access to the Web based GIS Viewer system by logging in to the web address ssen.co.uk/CompetitionInConnections/ and registering for access which will allow you access to the viewer which will display electrical network infrastructure.

Web based GIS viewer

To ensure your security and the security of our network information you will need to register online for access.

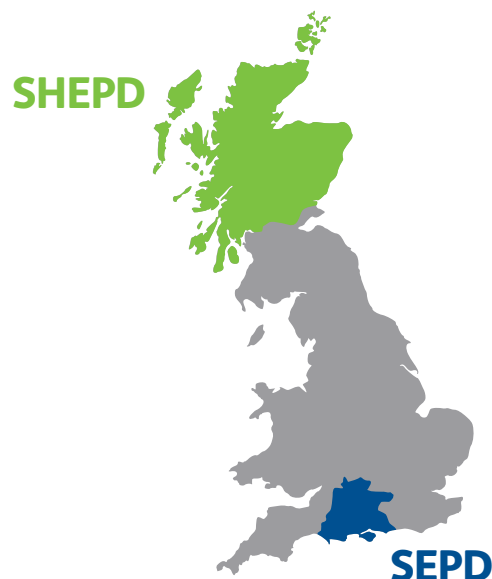
On our Web Based GIS Viewer you will be able to identify detailed mapping as well as Scottish and Southern Electricity Networks' network information. This guide is to help interpret the symbols used with the system so that you are able to understand how our electrical network operates.



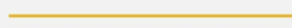

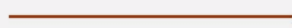

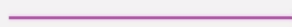

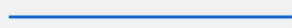





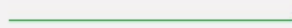


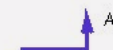

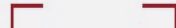






















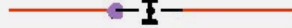


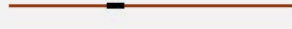



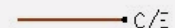


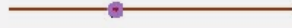

Locations

The map on the right shows the areas covered by Scottish and Southern Electricity Networks, Scottish Hydro Electric Power Distribution (SHEPD) North of Scotland and Southern Electric Power Distribution (SEPD) in the South of England.



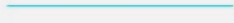

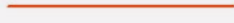

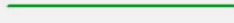

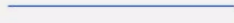

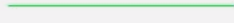
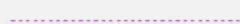


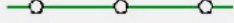

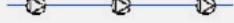

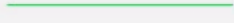
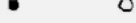



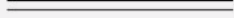
Scottish and Southern Electricity Networks was formed in 1998 with the two different networks falling under one company however the symbols used by each network areas are slightly different. Therefore in this guide we illustrate both North and South symbols. Also included are gas network symbols as these are also available on our GIS map and want to make it clear which is gas and which are electric.



GIS Electric Symbols for Southern England (SEPD)



	LV Underground service cable		Pole
	LV Underground mains cable		Pole mounted transformer
	2kV-3.3kV Underground cable		Substation
	6.6kV Underground cable		Link box
	11kV Underground cable		Pillar
	22kV Underground cable		Major pipeline
	33kV Underground cable		Assumed route
	66kV Underground cable		Cross section
	132kV Underground cable		Ducting
	LV Overhead cable		Flying stay
	2kV-3.3kV Overhead cable		PME Earth
	6.6kV Overhead cable		Neutral earth
	11kV Overhead cable		Oil/Gas gauge
	22kV Overhead cable		Oil/Gas tank
	33kV Overhead cable		Balancer
	66kV Overhead cable		Regulator
	132kV Overhead cable		Pit
	Fibre optic cable		Schematic connector
	Pilot cable		Supply location-property
	Circuit breaker		Supply location-other
	Switch connector		Supply location-street furniture
	Pole box		
	Straight joint		
	Tee joint		
	Trifurcating joint		
	Pot end joint		
	Capped end joint		
	Sealing end joint		
	Service connector joint		
	O/H Connector joint		
	Wall box joint		

GIS Electric Symbols for Northern Scotland (SHEPD)






	Fibre optic cable		Link box
	Pilot cable		Pillar
	6.6kV-11kV Underground cable		Substation
	33kV Underground cable		Water pipeline
	132kV Underground cable		Oil pipeline
	Low voltage underground cable		Gas pipeline
	6.6kV-11kV Overhead line		Switch disconnector
	33kV Overhead line		Circuit breaker
	132kV-275kV Overhead line		Supply point
	Low voltage overhead line		
	Poles		
	Tower		
	Pole termination		
	Joints		
	Ducting		

GIS Environment Guide


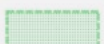
Countryside Agency

-  Areas of Outstanding Natural Beauty (AONB)
-  National park

Environment Agency

-  Borehole
-  Water extraction point
-  Sensitive waterway
-  Source protection zone
-  Vulnerability zone



Forestry Commission

-  Access
-  Ownership

English Heritage/Historic Scotland

-  Monuments





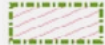



SEPA

-  Flood Area
-  Flood Location

English Nature/ Scottish Natural Heritage

-  Site of Special Scientific Interest (SSSI)
-  National Nature Reserve (NNR)
-  RAMSAR
-  Special Area of Conservation (SAC)
-  Special Protection Area (SPA)
-  Ancient Woodland

Areas of Concern

-  Contaminated
-  Cadmium
-  Methane
-  Heavy Metal-Unclassified
-  Asbestos
-  Ordnance
-  Mercury
-  Restricted Access

If in doubt ask Scottish and Southern Electricity Networks: mapping.services@sse.com



Scottish & Southern
Electricity Networks

Visit us at [ssen.co.uk](https://www.ssen.co.uk)

or contact us on:

Scotland

 **0800 048 3515**

 **connections@sse.com**

England

 **0800 048 3516**

 **connections@sse.com**

All links and information contained in this booklet are correct at time of publication.

