CASE STUDY

CCS Network (ME) Ltd

Littlebrook 400 kV — surge arresters

SITE	CUSTOMEI	DATE OF APPLICATION
Littlebro 400 kV substati beside the Thames	Nationa Grid	11 August 2008

POLLUTIO TYPE	EQUIPMEN	DURATION
Industri and automo pollutio with high rainfall	3 surge arreste 400 kV	4 days

The challenge

Littlebrook sits on the Thames near the Dartford crossing and the surrounding industrial park. Industrial and road pollution, with the rainfall typical of the UK, had saturated the hydrocarbon grease on three 400 kV surge arresters. Once grease is saturated it no longer prevents a pollution flashover, and it has to be cut off before anything better can go on.

The solution

Four days from 11 August 2008, working from a scaffold. The hardened grease was removed, corona rings and other metal parts were masked, and three coats of RTV silicone HVIC were sprayed to a thickness of 0.5 mm.

The result

Adhesion and thickness were checked and recorded as sufficient. The arresters carry a smooth white hydrophobic film at the stated 0.5 mm, in place of grease that the rain and the local pollution had already exhausted. That build is there to stay in service, without the washing and regreasing cycle.



Before



After



Finished coating