CASE STUDY

CCS Network (ME) Ltd

Gortawee 110 kV — Quinn cement works

SITE:
Gortawee 110 kV substation, Quinn cement works, Ballyconnell, County Cavan

CUSTOMER:
ESB

DATE OF APPLICATION:
May 2010

POLLUTION TYPE:
Cement dust

EQUIPMENT:
3 current transformers, 2 busbar sectionalisers (12 insulators) and 8 support posts, 110 kV



Finished coating

The challenge

Gortawee stands next to the Quinn cement works. Cement dust on a wet porcelain surface can form a tracking path and lead to flashover. RTV silicone HVIC had been in use at Gortawee since 2004, and no flashover had occurred on the coated equipment. This work applied the same protection to new porcelain before it was exposed to the dust.

The solution

Over three days in May 2010 the new equipment was coated at ground level, so a live-bay outage was not required. The porcelain was cleaned, metal sections were shrink-wrapped, and RTV silicone HVIC was sprayed. The sectionalisers and support posts were set on a portable gantry. The current-transformer crates were opened just enough to coat all round. The insulators went to site already protected.

The result

Adhesion and thickness were checked and recorded as sufficient. Coating before installation provides a hydrophobic surface from the day the porcelain is energised.



After



Before