CASE STUDY

CCS Network (ME) Ltd

Shoreham 132 kV switchyard

SITE	CUSTOMEI	DATE OF APPLICATION
Shoreha power station, 132 kV switchya	Scottish Power	August 2007

POLLUTIO TYPE	EQUIPMEN	DURATION
Sea spray from the English Channel	Switchy insulato 132 kV	8 days

The challenge

The switchyard is close to the English Channel, and the wind puts sea spray straight onto the insulators. Another contractor had applied an RTV silicone coating about five years earlier. Preparation had been poor, so adhesion was poor, but the film had still limited pollution flashover in a harsh marine yard. By 2007 the hydrophobicity was no longer adequate and electrical activity had been noticed. Scottish Power needed the protection back, and this time the porcelain had to be properly prepared.

The solution

Eight days in August 2007, from a scaffold. The original coating was removed by high-pressure water jet. Surfaces were cleaned with solvent and wiped with isopropyl alcohol immediately before spraying. Metal parts were masked. Three coats of RTV silicone HVIC were applied to 0.5 mm.

The result

Adhesion and thickness were checked and recorded as sufficient. The yard was returned with a 0.5 mm hydrophobic film on porcelain that had actually been prepared, which is what the earlier coating had lacked. Even that poor earlier film had limited flashover. That is the practical case for keeping a hydrophobic coating on a sea-spray site, and for applying it properly.



After



Before

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