CASE STUDY

CCS Network (ME) Ltd

Blyth 275 kV — Stella West 2 circuit

SITE	CUSTOMEI	DATE OF APPLICATION
Blyth 275 kV substati Stella West 2 circuit, Northun	Nationa Grid	September 2010

POLLUTIO TYPE	EQUIPMEN	DURATION
Saline pollutio from the estuary	3 wall bushing 275 kV	3 days

The challenge

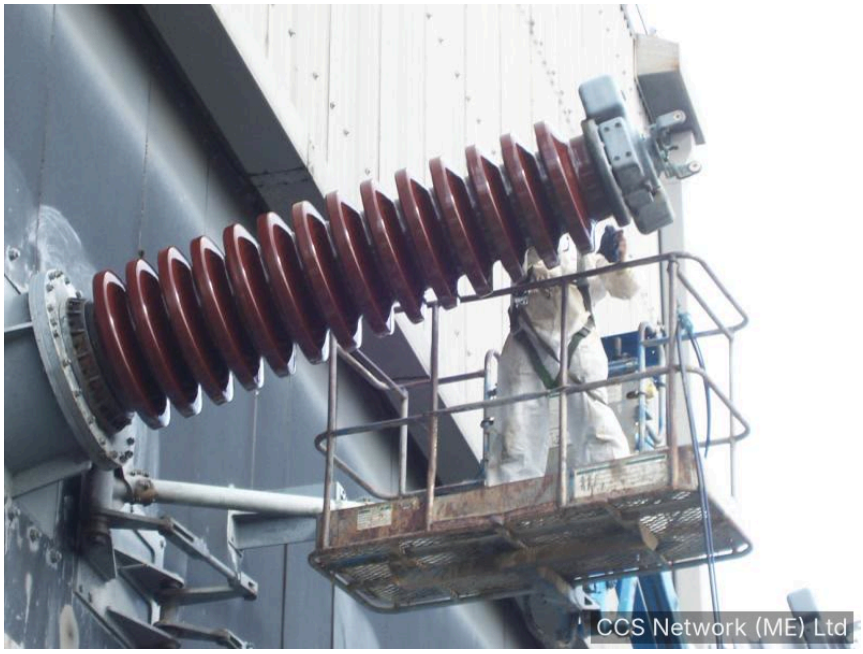
Stella West 2 faces the same estuary as the rest of Blyth. Salt loads the wall bushings, and the earlier hydrocarbon grease and silicone grease were saturated. A grease that no longer sheds water is not pollution protection. It is the next flashover risk, and it has to be removed before a coating can take its place.

The solution

Three days in September 2010, again from mobile elevating work platforms. The contaminated grease was removed from the three wall bushings and RTV silicone HVIC was sprayed on. The same short outage pattern as Fourstones: clean back to the porcelain, then one hydrophobic film.

The result

The grease was removed and the RTV silicone HVIC coating was completed. National Grid took back a smooth light-grey surface, in place of grease the salt had already defeated.



Before



After

Long-term performance

SURVEY DATE	CUSTOMER	POLLUTION TYPE
24 June 2022	National Grid	Saline and construction dust

EQUIPMENT

275 kV, 132 kV and 66 kV insulators, including Stella West circuits

On 24 June 2022 CCS surveyed the whole Blyth substation, including the Stella West circuits. The majority of the insulators carry RTV silicone HVIC, and that coating has given reliable maintenance-free protection for more than 10 years. Salt from the coast and dust from nearby construction are still the pollution. CCS recommended cleaning and an overcoat with RTV silicone HVIC. The photographs are the in-service yard.



In service



In service

CCS Network (ME) Ltd. www.ccs-network.com