CASE STUDY

CCS Network (ME) Ltd

Grain 400 kV — replacing water washing with RTV silicone HVIC

SITE	CUSTOMER	SURVEY DATE
Grain 400 kV substati	National Grid	25 June 2021

POLLUTION TYPE	EQUIPMENT	CURRENT PROTECTION
Saline	400 kV insulato	Automated water wash

The challenge

Grain's insulators were being kept clean by an automated water wash, switched on to a regular schedule. A wash is not a coating. It needs a major overhaul, and the maintenance of the system itself is costly. In the recent past the substation flashed over while the wash was running. That flashover tripped the circuit and damaged apparatus.

The solution

On 25 June 2021 CCS surveyed the 400 kV yard for National Grid. This was a condition assessment, not an application. Some circuits at Grain already carry RTV silicone HVIC, and that coating has given reliable maintenance-free protection. The recommendation was to take the water wash out of service and to apply RTV silicone HVIC on the insulators that still depend on it.

The result

A hydrophobic coating removes the need to keep a wash system alive, and it stays on the porcelain between the times a wash would have run. The survey set that

choice out for National Grid: deactivate the wash, and protect the porcelain with RTV silicone HVIC. The photographs are the in-service yard.



In service



In service

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