



SF6 Gas Release Prevention Case Study

OXIFREE®
METAL PROTECTION

SF6 Gas Release Prevention solution



Location	Peterhead
Local Environment	Power Station
Date	July 2014
Condition	Dry
Total Coatings	16
Substrate Type	Circuit Breakers
Duration	3 Days

Summary

SSE contacted Oxifree as they required a solution to prevent future SF6 leaks on circuit breakers at the Peterhead Power Station.

SF6 is one of the most potent greenhouse gases.

Objective

Oxifree were commissioned by our client to provide a solution to prevent future SF6 gas releases on one stack of circuit breaker 1180.

The client was looking for a solution to protect the pillar support from corroding and developing an SF6 gas leak.

Process

The first step was to fully understand the nature of the leaks. After years of vulnerability to weather and pollutants, the interface between the ceramic and aluminium support become porous and allow exertion of the contained SF6 gas.

Site



Before



Complete



Complete



Case Study



Solution

The agreed solution was for Oxifree to apply two layers of Oxifree TM198 to give an overall thickness of approximately approx. 4mm.

The amount of applications to job was changed by client from three stacks to eight stacks. Oxifree technicians were instructed to applicate the extra five stacks on the 1180 circuit breaker.

The project was completed by an Oxifree team consisting of a supervisor and an application technician.



Conclusion

The project was completed and the area protected from any further corrosion and the potential for an SF6 gas leak stopped. Oxifree have not had to return to this site, so the project was deemed a success.

