



Fire Protection Across States: Murraylink Electricity

Murraylink is a 180km long, high voltage direct current electricity transmission link between Red Cliffs in Victoria and Berri in South Australia, connecting the electricity grids of both states. It is reportedly the world's longest underground transmission system.

The Brief

The project was a design and construct and completed in house at the ENGIE South Australia branch (excluding civil and architectural design).

The project involved multiple facets of fire systems including fire pumps, fire tanks, gas suppression systems, sprinkler systems, fire panels and fire hydrant systems and was completed in June 2018.

A major part of the works involved deenergizing the interconnector's converter stations at Red Cliffs and Berri for three weeks. This had to be done to ensure safe installation in a usually high-voltage environment.

The project then included the installation of sprinkler systems, gas suppression systems and VESDA smoke detection systems.



The Benefit

ENGIE's ability to pull resources from offices in both states meant that the project was delivered on time and without a single injury or any damage to the client's assets.

The delivery of equipment into and out of the building through a standard set of double doors was an additional difficulty that was overcome by the team. Delivering on the original brief, the ENGIE team managed to provide the best engineered solution within the design scope.

The total project value was \$4.5m with a duration of 14 months.



The Solution

The works had to be completed within the three weeks as the station could not be left out of service any longer.

The team installed equipment protection and around 40 tonnes of scaffold before any of the fire protection installation works could take place. After completion of works all protection had to be removed and the site was cleared before handing it back to the client.

ENGIE were the principal contractor onsite and had to coordinate the civil works and the building works site clearing, earth works and slabs. The fire system was mainly required to ensure asset protection. This nevertheless required a very high standard of design and installation.



Design & construction of multiple facets of fire systems



180 km long, high voltage direct current electricity transmission link