

## Case Study **Cultana Substation Augmentation**

### Project Details

**Client name**  
ElectraNet

**Start date**  
December 2012

**Completion date**  
October 2014

**Contract value**  
Approximately \$50 million

**Key contract successes**  
190,000 hours delivered  
Zero LTIs or MTIs  
Completed to schedule

**Key personnel**  
Project Manager - Garen Derharoutian  
Construction Manager - Jason Semmler

**The Cultana Substation Augmentation Project forms a key element of ElectraNet's broader operational network strategy to reinforce electricity supply to the Eyre Peninsula of South Australia.**

### The Customer

ElectraNet delivers safe, affordable and reliable solutions to power South Australian homes and businesses. Their transmission network is a crucial part of the electricity supply chain and is used to safely deliver electricity throughout South Australia including regional and remote areas. ElectraNet specialise in asset and project management, contract management and their clients include SA Power Networks, Enerven and large directly connected clients.

### The Opportunity

ElectraNet had a requirement to reinforce the electricity supply to the Eyre Peninsula of South Australia. ElectraNet contracted Enerven to design, construct and deliver this project to a specific timeframe, taking consideration of the culturally sensitive environment.

### The Solution

There were a number of key deliverables required for this project. First the access road to the substation required upgrading as it was not suitable for the required equipment to travel on. The scope of works then included the design and construction of the following:

- Installation of two 200MVA transformers
- One new diameter of 275 kV switchgear (breaker and a half) and;
- Two new diameters of 132kV switchgear (breaker and a half).

There was a requirement for diversification of interrelated lines including double circuit upgrade of the existing 275kV line to Davenport Substation, connection of a 132kV line to Yadnarie Substation, and establishing a 132kV bypass line between Playford, Whyalla and Yadnarie Substations.

It was necessary to upgrade all control systems to IEC 61850, in both greenfield and brownfield applications. We installed new oil/water separation units and connected AC/DC supplies. As the works were undertaken in a culturally and environmentally sensitive area, it was imperative that our high standards were upheld during this project.

Enerven was able to utilise a number of key resources and subcontractors to deliver this project safely, and to the required timeframe required by ElectraNet.





## Why Enerven?

Our experience in the market place, combined with the expertise and industry knowledge of our team, makes Enerven's offering second to none - which is why industry leaders such as Oz Minerals, AGL and BHP Billiton trust Enerven with their energy infrastructure assets.

We invest heavily in the best equipment and the professional development of our staff, which means we combine experience and history with innovation and technology to deliver solutions that address the evolving energy distribution requirements of the community.

With a strong supplier and partner network behind us, our highly skilled staff work closely with you to fully understand your specific needs and vision, and will tailor a solution to suit.

Delivering the highest standard of work in a safe and environmentally sustainable manner is our top priority, and we have an outstanding track record to prove it. We focus on building long-term relationships with our clients, we're committed to working with you for the lifecycle of your project and beyond.

## Who We Are

**Enerven provides construction and maintenance services to clients both within South Australia and nationally, with specific expertise in high voltage infrastructure, and solar and storage infrastructure. We believe innovation and technology will continue to drive efficiencies, but no more so than the experience, knowledge and capabilities of our people.**

## Contact Us

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Enerven is a wholly owned subsidiary of SA Power Networks operating independently and is the business name used by Enerven Energy Infrastructure Pty Ltd (ABN 31 621 124 909)

Enerven is accredited to AS/NZS ISO 14001 and is compliant to all regulatory requirements. We maintain full compliance with Australian Standard AS/NZ 4801 and have achieved the internationally recognised ISO18001 accreditation.