

Case Study

Barker Inlet Power Station

Project Details

Client name
ElectraNet

Order date
March 2018

Delivery date
June 2019

Contract Type
Design & Construct

Contract value
\$8.4 million

Key Personnel
Project Manager - Grant Johnstone
Project Engineer - Peyman Etminan
Construction Manager - Steve Nash
Safety Lead - Brett Beames

“Enerven worked collaboratively with ElectraNet on this project to ensure their custom requirements for Gas Insulated Switchgear were met and to the highest standards.

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 and their clients include SA Power Networks, Enerven and large directly connected clients.

The Opportunity

The Barker Inlet Power Station will have a generating capacity of 210MW delivered through twelve (12) ‘reciprocating engines’ connected to South Australia’s electricity network. The new power station is being constructed by AGL and will ultimately replace two of the old Torrens Island A generating units at their AGL’s Torrens Island Power Station.

The dual-fuel reciprocating engines shall run primarily on natural gas, but are capable of running on diesel fuel if required.

ElectraNet are working on agreements with AGL to construct the connection substation that will connect the power station to the grid. As part of this process, ElectraNet have engaged Enerven as their Design and Construct contractor for the 275kV grid connection substation.

The Solution

What makes this substation unique, is it incorporates Gas Insulated Switchgear (GIS). GIS equipment significantly reduces the footprint that standard Air Insulated Switchgear (AIS) requires, but is more complex to assemble than standard AIS equipment. Space is limited on Torrens Island, hence the decision by ElectraNet to install GIS.

Enerven selected Siemens Australia to manufacture the GIS, which will be sourced from Siemen’s GIS manufacturing plant in Aurangabad, India. Once manufactured, the GIS shall be shipped to Australia in sections and then unpacked and assembled on site. In this case Enerven shall assemble the GIS equipment under supervision of a Siemens technician. This shall effect cost savings that Enerven can pass on to ElectraNet and up-skilling of Enerven substation erection crews is an additional benefit of this arrangement.

ElectraNet had very specific bespoke requirements for the GIS equipment and Enerven have worked collaboratively with ElectraNet to ensure understanding of their requirements so that they can be met and to the highest standards.





The Solution Continued...

This resulted in Enerven engineers making numerous trips to India to work together with Siemens to implement the requirements at manufacturing stage. A true partnering arrangement between client and supplier with a successful project and satisfied end client as the ultimate goal.

Key Capabilities

This project highlights Enerven's ability to deliver quality design & construction projects through established procurement processes, professional project management, competent engineering, and our ability to collaborate with our customers to deliver custom solutions.

Why Enerven?

Our experience in the market place, combined with expertise and industry knowledge, makes Enerven attractive to industry leaders such as Oz Minerals, Lendlease, AGL and BHP Billiton for their energy infrastructure needs.

Enerven invest heavily in the latest technology 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, an SA Power Networks Company, provides a range of construction and maintenance services, including fibre installation, to clients both within SA and nationally. We believe innovations and technology will continue to drive efficiencies, but no more so than the experience, knowledge and capabilities of our people.

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