

Case Study

Tesla Virtual Power Plant (VPP) - Stage 2 and 3

Project Details

Client name

Tesla

Start date

2019

Completion date

Ongoing

Contract Type

Engineering, Procure, Construct and Commission

Contract value

Approximately \$17.5 million

Key Personnel

Project Manager- Rod Kiddy

Site Supervisors - Gary Treloar and Andrew Parson

Project Support Officer: Elwira Kwasny

Tesla's plan will see 50,000+ homes have solar PV and a Tesla Powerwall battery system installed, creating the world's largest Virtual Power Plant

The Customer

Tesla's mission statement is "to accelerate the world's transition to sustainable energy". To create a sustainable energy ecosystem, Tesla manufactures a range of Electric vehicles and a number of energy generation and storage solutions, including Powerwall and Solar Roof products; enabling homeowners, businesses, and utilities to manage renewable energy generation, storage, and consumption.

The Opportunity

With support from other stakeholders, Tesla is developing a network of potentially 50,000 home solar PV and Powerwall battery systems across both regional and metropolitan South Australia - all working together to form the world's largest Virtual Power Plant (VPP).

SA VPP is designed to provide more affordable, reliable and secure electricity for all South Australians, while increasing homeowners' visibility of their energy use, and supporting South Australia's transition to a renewables-based economy.

The VPP operator uses WiFi technology and sophisticated software to charge or discharge energy from the batteries and trade it on the National Energy Market (NEM).

With many systems working together, small amounts of energy stored in individual home batteries can become large amounts of energy to help support the grid in times of need. The capacity and power of a VPP can sometimes match or even exceed a traditional power station.

The Solution

Stage 2 of the Project involves the installation of 5kW of Solar and a Tesla Powerwall2 (5kW/13.5kWh) at 1,100 HousingSA households across South Australia.

The next stage, Stage 3, the project grows to 3,000 HousingSA homes, where a Tesla Powerwall 2 is being installed along with up to 6.5kW of Solar across Adelaide and regional SA.

Enerven has been involved in the coordination and installation of about 50% all Tesla VPP sites, both Solar and Powerwall to date, across both regional and metropolitan South Australia. Tesla required a delivery partner that is able to mobilise quickly with experience in delivering multi-site programs of work.





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.

Proactive, Collaborative, Dependable

Our values are the DNA of our business. They embody what we stand for and focus firmly on our customers' needs to accomplish long term, sustainable improvements that are reliable, maximise profitability and minimise costs.

Further to this, everything we do is underpinned by an unrelenting focus on safety and wellbeing.

We build our customers' vision. Our driving ambition is to connect you with tomorrow.

Who We Are

Enerven provides construction and maintenance services, including HV transmission line construction, 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.

Contact Us

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