# EMBEDDED NETWORK CASE STUDY: WIRELESS SOLAR EXPORT LIMIT & SECONDARY PROTECTION

Operational since: June 2024

## At a glance

Working with Genelec Power Solutions, the DNA Energy system provides a low cost RPEQ Compliant solution to export limit and secondary protection on multiple solar PV systems in a residential embedded network. By using wireless controllers, there was also a reduction in site disruption.

## Key learnings

Expensive export limit and secondary protection systems in multiple inverter sites can add unnecessary cost. Using wireless controllers is a smart way of quicker, lower cost delivery. In QLD, the added cost and complication of GSD devices can put added pressure on system commercials. The DNA Energy system provides a simple solution that meets compliance sign off requirements.

## Also..

The same DNA Energy system can be used to control batteries, whether it's a residential embedded network, commercial building or utility scale operation.

## CONTACT

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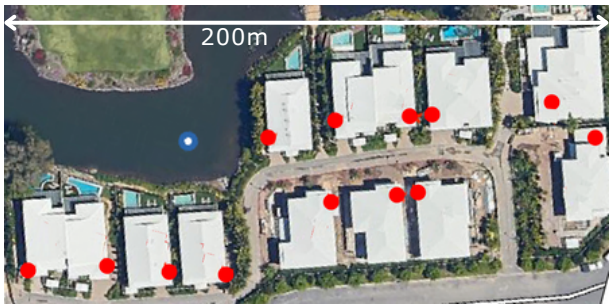
## CHALLENGE

The residential site in Far North QLD was well under construction before the solar PV systems were due to be installed. The builders had not made a provision for export limit cabling, which presented a challenge for the solar EPC.

## SOLUTION

A DNA Energy wireless mesh control system was installed at each inverter. Overlaying the control system is DNA Energy's software, which ensures the system remains compliant.




MAP OF THE EXPANSIVE SITE. RED DOTS ARE SOLAR INVERTERS

## BENEFITS

1

### Compliant

The system delivers contactor secondary protection, configured to State regulations; export limit, the emergency backstop mechanism and five second time trip.

2

### High value

As well as the software balancing dynamic export control proportionally across the site, DNA Energy's GSD adaptor means only one GSD across the entire site.

3

### Real-time monitoring & asset management

**All inverters are displayed on the DNA Energy Command Centre dashboard**, with Modbus registers available via API.