

Northern lights in electricity's new wave

Solar farm set to supply the grid from January 2017

They are fast perfecting the art of panel racking at the former Lilyvale cattle station outside Normanton, where businessman Doug Scouller's dream of solar generation to meet the Gulf region's energy needs is taking shape.

Scouller Energy has started installing the 16,000 solar photovoltaic panels required for the 5MW Normanton Solar Farm.

And while manufacturing the panels may require hi-tech engineering, it also takes everyday electricians, plumbers with good roofing experience and machinery operators to put together a solar farm.

"It has been challenging - but we're all tradesmen, we're all practical people and it's not rocket science." Mr Scouller said.

All of the hardware required for the \$14.3 million project is on site and the team began installing panels in the first week of Sentember

Mr Scouller expected to have about 40 people on the job at its peak, including up to 24 workers from the local Bynoe Community

Advancement Co-operative Society.

The construction involves 50 rows of racking, with each row 175m long.

So precise placement is crucial to ensure panels do not end up out of alignment – an area in which Mr Scouller said the experience of roofing workers was invaluable.

"It's a delicate operation – like putting a roof on," he said. "We picked up 12mm over 10 panels – so we've corrected that. We are certainly getting quicker as we go along."

The project has a January 17 commissioning date locked in with network provider Ergon Energu.

"We've basically matched the generation capacity to the load of Normanton – all the power that is distributed from the Normanton substation to Normanton township, Karumba township and lines to the surrounding area – nearly to Burketown and Burke and Wills roadhouse," Mr Scouller said.

"That's an area one and a half times the size of Tasmania that we will be powering up."

The local generation source helps overcome one of the major problems with energy distribution throughout vast areas of regional Queensland – the loss of electricity in the transmission process due to the distance travelled

"In some places the network losses exceed 50 per cent – crazy stuff - and that contributes to increasing power prices. So let's fix the problem," Mr Scouller said.

An electrician by trade, Mr Scouller also built and owns motel in Karumba – where steep electricity bills got him researching the issue.

Unfortunately the solar farm coming online won't change what people in the Normanton area are being charged for power.

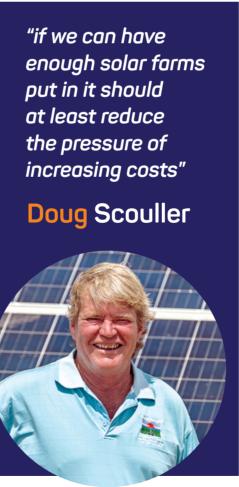
"But if we can have enough solar farms put in it should at least reduce the pressure of increasing costs," Mr Scouller said.

"If we have enough of these sprinkled around western Queensland to make the distribution network far more efficient, there is no more need for rising prices."

Scouller Energy has partnered with Canadian Solar for the Normanton project and won an \$8.3 million grant from the Australian Renewable Energy Agency (ARENA).

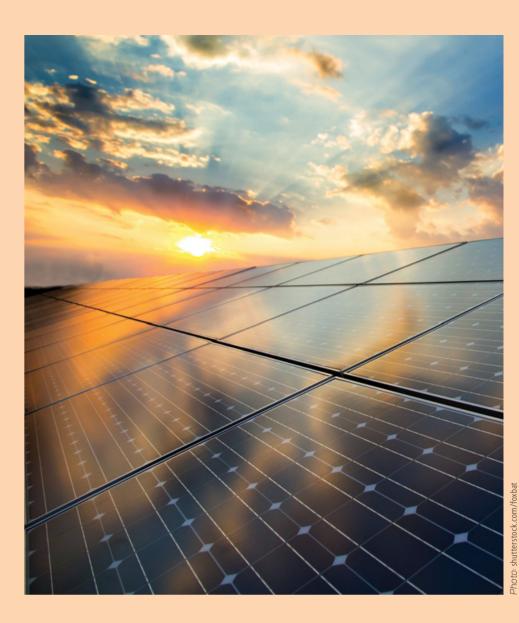
The project is being used as a test case regarding the ability of solar PV energy to address network challenges in fringe-of-grid locations in regional Australia.

Mr Scouller said one of the major difficulties in getting his concept off the ground was getting through the ARENA and Ergon Energy processes.



"I wasn't a major EPC contractor like they are used to talking to," Mr Scouller said.

"I don't fit the general mould of a corporate heavyweight. But they gave us the money and we will prove that we are capable."



ARENA backs more projects

Six Queensland projects are among a dozen large-scale solar photovoltaic (PV) projects to win a share of almost \$92 million in funding from the Australian Renewable Energy Agency (ARENA).

ARENA chief executive officer Ivor Frischknecht said Australia's big solar industry was coming of age thanks to ARENA support, ensuring large-scale solar was a competitive, sustainable energy option

"Six plants in Queensland, five plants in New South Wales and one plant in Western Australia are slated for funding, in a major milestone that's expected to triple Australia's large-scale solar capacity from 240 MW to 720 MW," Mr Frischknecht said.

"They will provide enough energy to power 150,000 average Australian homes and deliver one tenth of the new capacity required to meet Australia's 2020 renewable energy target.

"Regional economies will benefit massively from the growing big solar industry, with 2300 direct jobs and thousands more indirect jobs expected to be created by this round."

Ratch Australia's proposed \$100 million Collinsville Solar Farm was among those to win ARENA funding, being awarded \$9.5 million – or almost 10 per cent of the project's forecast construction costs.

Ratch executive general manager – business development Anthony Yeates said the grant would further improve the project's cost competitiveness and elevate its appeal to prospective electricity off-takers.

"There are still a lot of things moving around at the moment, but if all goes to plan, construction could kick off early next year which would be a great outcome for the Collinsville and Whitsundays region," he said.

Edify Energy and Solar Choice's proposed \$122 million Whitsunday Solar Farm near Collinsville was also among the grant recipients along with a \$216.7 million project planned for Dalby and Genex Power's Kidston Solar Farm.

Canadian Solar's planned \$28.7 million Longreach Solar Farm and the proposed \$47.5 million Oakey Solar Farm also attracted ARENA funding.

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