

PROJECT FACT SHEET

Customer:

Signal Energy

Project:

Darlington Point Solar Farm

Project Profile:

Nilsen started on site at the Darlington Point Solar Farm Project in June 2019 with final completion expected in June 2020.

The Darlington Point Solar Farm is a 333.0 MW DC single-axis tracking project located approximately 10km south of the town of Darlington Point in the Murrumbidgee shire of Western NSW and on 1,993 acres of former grazing land adjacent to TransGrid's Darlington Point substation at Donald Ross Drive.

The solar farm is expected to generate 685,000MWh of renewable energy a year, which will be enough to power more than 115,000 Australian homes. It will also offset 600,000 tonnes of CO2 emissions a year over its estimated life of 30 years.

Darlington Point Solar Farm will be Australia's largest solar farm at the time of its completion.

Nilsen's scope of work includes all construction, installation, Commissioning, testing, documentation and repair of all defects during the Defects Notification Period, necessary for the safe and efficient operation of the facilities.

The works consisted of the installation of the following major equipment and packages:

- 114,681 – Array foundation piles
- 9,803 – ATI Hz V3 solar PV panel module single axis tracking mounting structures and associated equipment, these consist of 8,993 three string tracker arrays and 722 two string tracker arrays

33kV Cable



Last Panel being put in place at Darlington Point



- 826,848 – Canadian Solar CS3W-P HiKu solar PV panel modules, this also included:
 - 7,743 CS3W-395PB BiHiKu Bi Facial solar panels, this is the first major commercial installation of the Bi-Facial type of panels in Australia
- 1,223 – DC/PV Combiner Boxes
- 54 – SMA Power Conversion Units (PCUs) comprising inverter units, 33 kV transformers and associated equipment based on a skid mounted solution
- O&M buildings and structures for housing of equipment and personnel
- Approximately 160,000 metres of 33kV HV in ground cable
- Approximately 405,000 metres of 400mm in ground DC cable
- Approximately 365,000 metres of 10mm in ground PV cable
- Approximately 12,500 metres of Fiber Optic Communications cabling.

The project has presented the Nilsen team with many unique and challenging aspects, with Nilsen for the first time self-performing in all areas of solar farm construction. This included foundation pile installation, tracker array assembly, PV Module installation as well as all associated electrical works.

Through an onsite culture and attitude of constantly striving to improve and grow processes and systems, the Nilsen team has been able to overcome initial project setbacks and struggles to deliver a high quality installation.

Thanks to the “One Nilsen” attitude of the DPSF team and the greater Nilsen Company, we were able to draw on resources and expertise internally from right across Australia. Darlington Point Solar Farm benefited from the combined knowledge and expertise from Nilsen offices in Queensland, New South Wales, Victoria, Western Australia and South Australia.

The Nilsen DPSF Team are proud to have achieved such a technological success in building Australia’s largest Solar Farm to date, to the high quality standard that is expected and become synonymous with the Nilsen brand.

Darlington Point Drone West Facing



Darlington Point Drone East Facing

