

PROJECT FACT SHEET

Customer:

Downer

Project:

Ross River Solar Farm

Project Profile:

Located in the dry topics of Queensland, the Ross River Solar Farm has a minimal DC rated capacity of 148MWpDC and a minimum AC rated capacity of 116 MVA. The 200 hectare farm consists of nearly half a million solar panels that produce 300,000 MW per annum, which is enough energy to power 54,000 homes. Nilsen commenced the Ross River Solar Farm project in February 2018 and reached practical completion in August the same year.

Most impressively, the Nilsen team designed, manufactured and utilised an aluminium IPC Connector Jig to ensure a perfect connection across some 4500 IPC Connectors. The overwhelming success of the 'jig' has lead its' application on other installations, both within Australia and overseas.

Nilsen's primary scope of work included:

- 33kV AC Distribution across 32 x Inverter Stations (Nilsen also built the Inverter Stations under a separate 6 month contract with Schneider off-site)
- DC Sub Array, AC Supply and Communication Distribution (Underground Works)
- Installation and Termination of Cables, IPC Connectors and Tracker Motors (Aboveground Works) including:
 - 200 kilometers of cable
 - 0 kilometers of cable ladder
 - Over 4,600 rows of solar panels (32 blocks with 144 rows in each)
 - 500,000 cable clips and one million cable ties used
- Installation of Met Station and CCTV Network
- HV Cable terminations

The degree of difficulty on this installation was less than our previous solar projects that had taken an underground cabling approach. In saying this, our team utilised well developed skills from previous farms as well as developing new skills for this type of installation. The overall success of the project was such that the farm is now used a quality benchmark for the client, Downer. Nilsen are incredibly proud of both our project management and employees on this project who always performed cooperatively, professionally, diligently and safely, completing an outstanding project with an incredible quality of finish on time and budget.



The project has further validated Nilsen's expertise and productivity within the utility scale solar farm market. After project completion, Nilsen staff employed on the Ross River project transitioned to either our Finley or Clare Solar Farm Rectification projects. By having a core team of high level staff who intimately understand solar projects we have positioned ourselves to be a leader in the renewables sector. By the end of the 2019 calendar year, Nilsen will have completed over 900MW in large scale solar projects since October 2016, powering almost 350,000 Australian households annually.

The project has also been nominated for the 2019 Queensland Best Industrial Medium project at the National Electrical and Communication Association Awards.

