REMOTE RENEWABLE ENERGY PROJECT

CPS National delivered solar systems to SA Water's Umuwa, Indulkana and Watinuma facilities

OVERVIEW

SA Water proposed installing solar systems at its Umuwa UV disinfection facility, Indulkana RO plant site and Watinuma UV treatment hut.

The objectives of the project were to:

- Minimise the power operating costs at the Umuwa and Watinuma UV facilities and Indulkana RO plant site
- Provide a non-interruptible power supply to the UV units at the Umuwa and Watinuma sites in the event of a prolonged power outage
- Ensure a minimum design life of 25 years for the renewable energy project.

A solar system with battery storage, inverters, switching gear and climate control built within a 10ft cube container and 6kW ground mounted solar array was supplied and installed at Umuwa (see image below).

At Indulkana, a connected inverter system 8.64kW tank roof mounted solar array and battery storage installed within the existing container to provide AC power to the RO plant site were supplied and installed.

While at Watinuma, CPS National provided connected inverter system 5.67kW solar panels on a carport structure with battery storage within a 10ft cube container to provide AC power to the UV treatment hut (see image above).

PROJECT OVERVIEW

Client: SA Water

Location: In the Anangu Pitjantjatjara Yankunytjatjara Lands, which are located about 1,300km north of Adelaide, SA.

PROJECT SCOPE

Design, construction and installation of the solar facilities.

UNIQUE FEATURES

Each site had unique water treatment requirements and usage profiles. Our service included providing detailed site assessments and client consultation to determine the best solutions.

CHALLENGES

Because of the remoteness of the sites, a range of challenges were experienced, including freighting the container from the warehouse to the site and unloading the container at the site. There were also limited accommodation options available for the installers.