

Completion Report

Homelands Housing and Infrastructure Program

DEMED Aboriginal Corporation (insert logo here)

Manmoyi Outstation Three Phase Solar Hybrid Installation



Contents

Project Summary.....	2
Scope of Works Overview	3
Visual Progress.....	4
Approved Variations	12
Attachments.....	13
Final Review and Acceptance.....	14

Service Provider	DEMED Aboriginal Corporation	ABN	76170642779
Contact Details	Martin Corrie General Manager 0498676750	Contractor Accreditation Limited (CAL) Registration Number:	
Project Name	Three Phase Solar Hybrid Installation	Contract No.	
Homeland	Manmoyi Outstation	Community ID	
Project Type	Solar farm	House #	
Commencement Date	25/10/2024	Completion Date	4/12/2024

Project Summary

Include a brief summary of the deliverables on the project. Also include a photo of handover back to residents on completion of the project, if applicable.

This project includes the design and installation of 3 phase solar hybrid system to replace the existing system at Manmoyi community in West Arnhem Land including:

- Removal of older degraded panels and framing
- Increase PV array to 150kW
- Expand battery storage to 483kWh
- Replace single phase diesel generator with 3 phase unit

Scope of Works Overview

Homeland:	Manmoyi Outstation
House/Asset No:	
Scoping Date:	
Ground Mount Solar Array	
<p>Removal of older ground mount framing and panels.</p> <p>Clenergy STII-A fixed ground mounted aluminium frame to suit approximately 150kW PV.</p> <p>Footings for Clenergy STII-A ground mount PV frame will be secured by ground embedment of the C-posts.</p> <p>340 x 440W Phono Bi-facial solar panels.</p> <p>Surge protection and earthing.</p>	
Power System Housing	
<p>Power system housed inside 20ft containers.</p> <p>Thermal lining with installation of air conditioning in both dedicated battery and inverter rooms.</p> <p>Sure foot footings.</p> <p>Tilted roof.</p> <p>Containers mounted 400mm above ground level to allow for pest control.</p> <p>Earthing.</p> <p>Section 40 engineered drawings.</p>	
Generator	
<p>Removal of existing inverter room and 2x redundant generators.</p> <p>110kVA 3 phase Cummins Generator.</p> <p>Automatic start capabilities.</p> <p>Surge protection and earthing.</p>	
Inverter Room	
<p>3 phase 120Vdc 20kW Selectronic Inverters.</p> <p>100kW AC coupled PV regulation (5x 20kW Fronius Symo inverters).</p> <p>AERL DC coupled charge controllers for black start capabilities.</p> <p>MSB with manual transfer/bypass switch for generator.</p> <p>Surge protection and earthing.</p>	
Batteries	
<p>480kWh Selectronic Selectcell batteries.</p>	

<p>Circuit Protection.</p> <p>4x Selectronic PCC control panels.</p> <p>Earthing.</p>
<p>Electrical Reticulation</p>
<p>New 3 phase distribution boards installed throughout community reticulation for sufficient phase balancing.</p> <p>Removal of existing single phase reticulation cabling, installation of new 3 phase reticulation cabling where required.</p> <p>DB 1 generator room.</p> <p>4x Stainless Steel switchboards installed through community.</p> <p>Surge protection and earthing.</p>

Visual Progress

Include before and after images of all areas that received upgrades. Delete/add areas as needed.

BEFORE	AFTER
Ground Mount Solar Array	



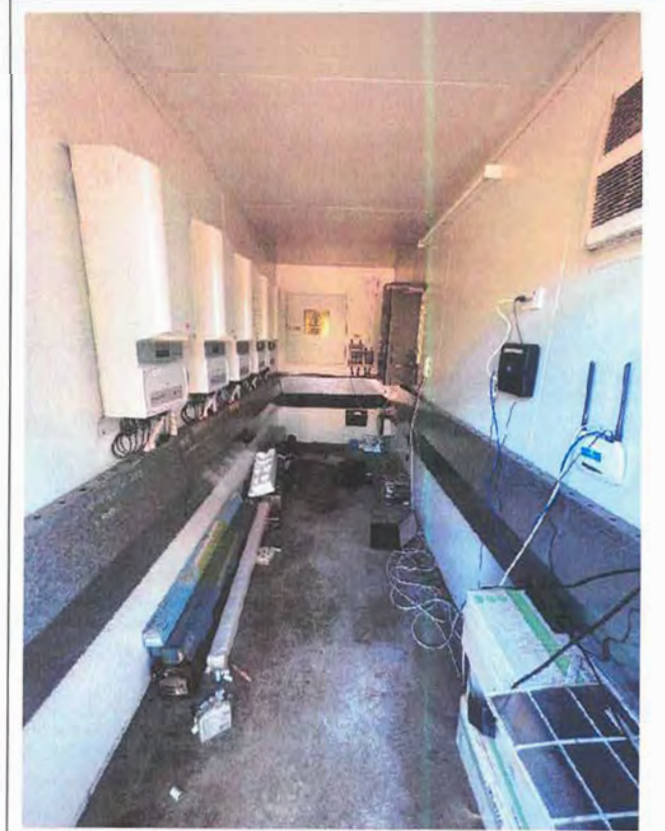
Power System Housing



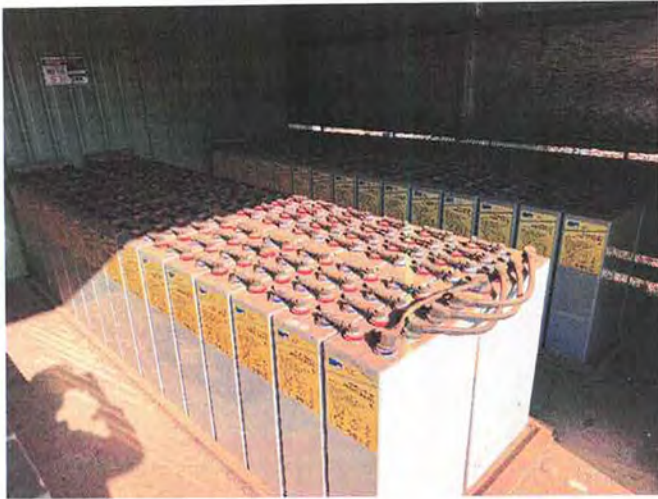
Generator



Inverter Room



Batteries



Electrical Reticulation










Approved Variations

Insert all variations requests that were approved during the lifetime of the project (screenshots/photos).

Attachments

- Electrical Certificate of Compliance
- Serial Number, Warranty and Stove Booklet
- Approved Scope of Works Document
- Talent Release Forms

Final Review and Acceptance

Company Representative:		Department Representative:	
Name	Martin Corrie	Name	
Title	General Manager	Title	
Signature		Signature	
Date		Date	
Comments:		Comments:	