

Completion Report

Project Name:	Burt Creek, Anpanaye & Corkwood Bore HHIP
Property Address	Burt Creek – Community Solar System





Table of Contents

Project Summary.....	3
Visual Progress.....	6
Attachments.....	9

Project Summary

Service provider	Ingkerreke Services Aboriginal Corporation
Contact details	Ms. Jozan Collins T: 08 8950 2200
Australian Business Number (ABN)	41 353 678 701
Contractor Accreditation Limited (CAL) Registration Number	A-18-14798-02-25
Community ID	713
Asset No.	Community Solar System
Contract No.	HHIPC00011
Completion date	28/11/2025

Ingkerreke Services Aboriginal Corporation (ISAC) conducted upgrade works to the community solar system at Burt Creek Homeland on behalf of the NT Government and Homeland Residents.

The works have been completed in accordance with the submitted scope of works and saw the final product delivered to the high quality expected by our customer and the community.

The works to the Community Solar System started on the 7/8/2024 and was completed on 11/10/2024, representing a 9 week works program. With an approved variation to install an extra string of batteries commencing and finishing on 28/11/2025. All works to the community solar system were completed on 28/11/2025.

The works were designed in consultation with our solar contractor and the community. With specific attention to family/individual needs as determined by consultation with Residents, other stake holders and ISACs in-house knowledge gained from ongoing MES and R&M works at the Homeland.

As we are the service provider for Burt Creek our goal in conducting these works was maximise the output of this funding in-line with resident's needs. As well as to ensure quality and durability of work.

Ingkerreke Services Aboriginal Corporation have been engaged to deliver the following upgrade works for to the community solar system as part of Capital Grant Funding Agreement (HHIPC00011). The completed works are as follows:

Initial Refit Works:

1. Remove old equipment from the existing RAPS enclosure, retain diesel genset and associated wiring. Clean rooms and prepare for refit.
2. Pour a new 2.4m x 3.0m slab extension to provide a suitable base for a new battery room.
3. Construct a new 2.4m x 3.0m insulated panel battery room with double opening doors to external.
4. Make good the existing equipment enclosure, internal inverter room, re-line room with either insulated panel or minirib as required.
5. Remove existing old enclosure roof solar modules, frames and wiring.
6. Lengthen existing enclosure roof to north by up to 2m to shade battery room.
7. Install a new 24 pole metal commercial main distribution panelboard to the inverter room with circuit breakers, surge diverters and kwh metering, to supply the community.
8. Install both passive ventilation and split system air-conditioning to inverter room or battery room, complete with transfer fan, speed controller and thermostat.
9. Install new power and light to enclosures as required.
10. Install new DC and AC wiring as required
11. Install new DC switchgear and fusing as required
12. **Battery** - Install a new Selectronic Selectcell 2 string lithium battery consisting of 6 x 13.44kwh modules, wiring, base frames and main DC connection board. (80.64kwh total storage and 56.4kwh usable night capacity @ 70% depth of discharge)
13. **Inverters DC** - Install 1 x new 120V/**20kw** Series 2i Selectronic SPPro inverter (trade in existing 48v/7.5kw unit).
14. **Inverters AC** - Install 3 x new Fronius **10kw** Gen24 managed grid tie inverters and associated AC and managed control wiring.
15. **Solar A** - Roof - Install 20 x 475w (**9.5kw**) new solar modules to roof, with roof array framing, isolation and wiring.
16. **Solar B** - Ground - Install 44 x 475w (**20.9kw**) new solar modules to new north or east/west facing ground arrays north of enclosure, with framing UG cabling, isolation.
17. **Solar C** - Disconnection of the old existing rooftop arrays and grid tie inverters on 2 remotely situated community houses. Given the condition and age of this equipment,

and coupled with the issues connecting remote PV we consider this to be the best solution for the time being. Radio control links are not currently available from Selectronic whilst during product redevelopment. We also discourage the installation of long underground control cables as we have found this can damage inverter control PCB's in the event of a nearby lightning strike. There is a possibility some of the remote PV could be connected to the system via simple RF links controlled by an inverter state of charge output if necessary.

18. Extend approximately 60m of new chainmesh fencing to match the existing, install 1 x double gate for rear access to the new battery room and ground array/s. (Any ground cover weed mat or gravel by Ingkerreke)
19. Remove 2 shed doorways and install 1 new doorway to the inverter room, cover windows as required and resheet.
20. Install a new 200 litre internal diesel fuel tank with an external fill point to allow refuelling access by community members, low level fuel genset cutoff to PLC, low level warning light visible by community, CAV filter assembly and piping as required.
21. Install a new diesel control Deepsea PLC, integrate with new inverter/s for automatic operation.
22. Install a Select live remote access device for connection to a local internet service. (if available).
23. Install appropriate signage and wall instructions.
24. Programming and testing

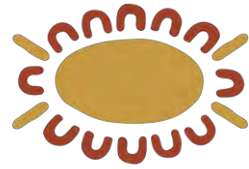
Approved Variation - Works to Install Extra String of Batteries:

Supply and installation of an extra 120V string of Lithium Select Cell batteries at Burt Creek community.

Capacity of extra string is 40/32kwh usable @80%dod

Total capacity with extra string is 120kwh/96kwh usable @80%dod

1. 3 x 13.44kwh Selectronic Select cell 48V modules in series, connected to the existing fused PCC (Power control cabinet)
2. Connection components, comms cables etc.
3. Programming of PCC to suit extra string.



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Visual Progress

Before:



After:

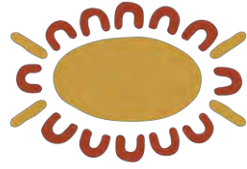


Before:



After:

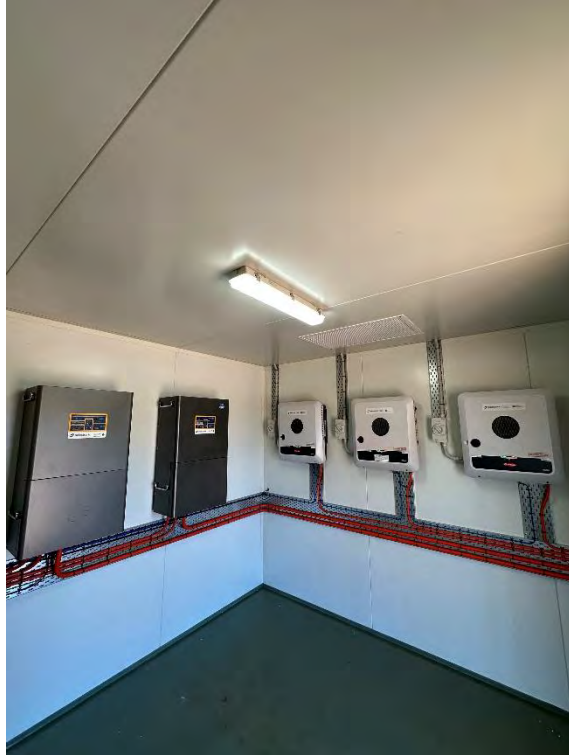




Before:



After:

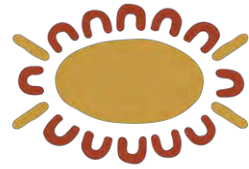


Before:



After:





**Ingkerreke
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Before:



After:



Before:



After:

