

Grid Connected Solar PV Power System Commissioning Checklist

System Owner Details	
23 Riverbanks Road Angle Vale SA 5117	
System Owners Name	
System Owners Email	
System Owners Phone Number	
Date of Install	4/08/2021
Building Type	Single Storey
NMI	
Meter Number	
Number of Phases	3
DNSP	SA Power Networks
Energy Retailer	
SEG Approval Number	
Export Limiting Requirements	30
PV Module Checklist	
Panel Manufacturer	Longi
Panel Model	LR4-72HPH-450M
MC4 Connectors	Genuine
String 1	
Number of Panels	2.18
Orientation	N
Inverter Number	3

MPPT#	1
String 2	
Number of Panels	2.16
Orientation	N
Inverter Number	3
MPPT#	2
String 3	
Number of Panels	16
Orientation	N
Inverter Number	3
MPPT#	3
String 4	
Number of Panels	2.18
Orientation	N
Inverter Number	4
MPPT#	1
String 5	
Number of Panels	2.16
Orientation	N
Inverter Number	4
MPPT#	2
String 6	
Number of Panels	16
Orientation	N

Inverter Number	4
MPPT#	3
String Fuse Rating (if applicable)	
DC Isolators	ZJ Benny 1000V/ 32A
Number of DC Isolators	6
All DC Isolators are correctly rated and configured for the PV Arrays they isolate.	
Inverter has and integrated DC Isolator	
All DC Isolators have been tested (turned off) under load.	
Conduit has been compliantly installed and adequately supported.	
Roof penetrations have been adequately sealed.	
Cable is mechanically protected and supported as per AS/NZS 3000 and AS/NZS 5003.	
DC Cable volt drop is less than 3%	
Inverter Checklist	
Inverter Manufacturer	Sungrow
Inverter Model Number	SG30cx
Number of Inverters	4
Inverter is installed to all relevant standards, guidelines and manufacturer's specifications.	
AC Isolator is mounted adjacent to the inverter if applicable. This Isolator is correctly rated and is lockable.	
AC Circuit Breaker is mounted in the switchboard and is correctly rated.	
AC Cable voltage rise from inverter to the point of supply is <2%	
Mounting System Checklist	
Mounting System Manufacturer	Clenergy
The mounting system is installed to all relevant standards, guidelines and manufacturers specifications.	

The array frame is certified to AS/NZS 1170.2

Other

System is labelled as per requirements in AS/NZS 3000, AS/NZS 5033, AS/NZS 477.1 and CEC Guidelines.

LV Wiring has been installed, tested and certified by a licenced electrician.

System is compliant as per AS/NZS 5033 Section 5 – Marking & Documentation and Appendix A.

Inverter Settings

Inverter is installed as per network service provider (NSP) Connection Agreement.

Country Code settings are set to Australia.

Volt Var Settings

V1	207 / 31% Leading
V2	220 / 0
V3	248 / 0
V4	253 / 44% Lagging

Volt Watt Settings

V1	207 / 100%
V2	220 / 100%
V3	248 / 100%
V4	253 / 100%
10 min OVP Setting	258 volts
Export Limitation	30

Inverter shuts down within 2 seconds of isolation.

Inverter takes at least 60 seconds to start after reconnection.

Inverter then takes 6 minutes to ramp up to 100%.


String 1	
PV Array Maximum Voltage	945.1
Continuity of strings and correct polarity (Y or N)	Yes
Earth Continuity	Yes
Insulation Resistance	>200
Open Circuit Voltage (Not Under Load)	840
Short Circuit Current (Not Under Load)	23.2
Voltage (System Operational)	744
Current (System Operational)	12.5
Power (System Operational)	9300
String 2	
PV Array Maximum Voltage	840.1
Continuity of strings and correct polarity (Y or N)	Yes
Earth Continuity	Yes
Insulation Resistance	>200
Open Circuit Voltage (Not Under Load)	751
Short Circuit Current (Not Under Load)	23.2
Voltage (System Operational)	640
Current (System Operational)	12.1
Power (System Operational)	7750

String 3	
PV Array Maximum Voltage	840.1
Continuity of strings and correct polarity (Y or N)	Yes
Earth Continuity	Yes
Insulation Resistance	>200
Open Circuit Voltage (Not Under Load)	752
Short Circuit Current (Not Under Load)	11.6
Voltage (System Operational)	640
Current (System Operational)	5.2
Power (System Operational)	3300
String 4	
PV Array Maximum Voltage	945.1
Continuity of strings and correct polarity (Y or N)	Yes
Earth Continuity	Yes
Insulation Resistance	>200
Open Circuit Voltage (Not Under Load)	842
Short Circuit Current (Not Under Load)	23.2
Voltage (System Operational)	645
Current (System Operational)	13.3
Power (System Operational)	8550

String 5	
PV Array Maximum Voltage	840.1
Continuity of strings and correct polarity (Y or N)	Yes
Earth Continuity	Yes
Insulation Resistance	>200
Open Circuit Voltage (Not Under Load)	751
Short Circuit Current (Not Under Load)	23.2
Voltage (System Operational)	632
Current (System Operational)	13.3
Power (System Operational)	8400
String 6	
PV Array Maximum Voltage	840.1
Continuity of strings and correct polarity (Y or N)	Yes
Earth Continuity	Yes
Insulation Resistance	>200
Open Circuit Voltage (Not Under Load)	750
Short Circuit Current (Not Under Load)	11.6
Voltage (System Operational)	639
Current (System Operational)	6.1
Power (System Operational)	3900

Declaration of Responsible Persons

I hereby sign and verify that this system has been designed, installed and commissioned to all relevant Australian Standards, state & territory regulations and CEC guidelines.

CEC Accredited Designer's Name	Corey Evans
CEC Accreditation Number	A9548718
CEC Accredited Installers Name	Dale
CEC Accreditation Number	A2883606
Date	4/08/2021
Signed	
Licensed Electrician Name	Dale
Electrical Licence Number	Pge261953
Date	4/08/2021
Signed	