Grid Connected Solar PV Power System Commissioning Checklist

System Owner Details	
21 McInerney Avenue	
System Owners Name	Peter Smith
System Owners Email	Peter.Smith@westsidegroup.co m.au
System Owners Phone Number	0457 733 140
Date of Install	6/07/2021
Building Type	Single Storey
NMI	
Meter Number	
Number of Phases	3
DNSP	SA Power Networks
Energy Retailer	
SEG Approval Number	
Export Limiting Requirements	
PV Module Checklist	
Panel Manufacturer	Longi
Panel Model	450
MC4 Connectors	Genuine
String 1	
Number of Panels	18
Orientation	Ν
Inverter Number	1

MPPT#	1
String 2	
Number of Panels	18
Orientation	Ν
Inverter Number	1
MPPT#	2
String 3	
Number of Panels	18
Orientation	Ν
Inverter Number	1
MPPT#	18
String 4	
Number of Panels	
Orientation	
Inverter Number	
MPPT#	
String 5	
Number of Panels	
Orientation	
Inverter Number	
MPPT#	
String 6	
Number of Panels	
Orientation	

Inverter Number	
MPPT#	
String Fuse Rating (if applicable)	
DC Isolators	ZJ Benny 1000V/ 32A
Number of DC Isolators	3
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	Huawei
Inverter Model Number	29.9kW
Number of Inverters	1
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		
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	895
Continuity of strings and correct polarity (Y or N)	Yes
Earth Continuity	Yes
Insulation Resistance	200
Open Circuit Voltage (Not Under Load)	895
Short Circuit Current (Not Under Load)	11.65
Voltage (System Operational)	716
Current (System Operational)	0.53
Power (System Operational)	
String 2	
PV Array Maximum Voltage	895
Continuity of strings and correct polarity (Y or N)	Yes
Earth Continuity	Yes
Insulation Resistance	200
Open Circuit Voltage (Not Under Load)	895
Short Circuit Current (Not Under Load)	11.65
Voltage (System Operational)	716
Current (System Operational)	0.53
Power (System Operational)	

String 3	
PV Array Maximum Voltage	895
Continuity of strings and correct polarity (Y or N)	Yes
Earth Continuity	Yes
Insulation Resistance	200
Open Circuit Voltage (Not Under Load)	895
Short Circuit Current (Not Under Load)	11.65
Voltage (System Operational)	715
Current (System Operational)	0.49
Power (System Operational)	
String 4	
PV Array Maximum Voltage	
PV Array Maximum Voltage Continuity of strings and correct polarity (Y or N)	
PV Array Maximum Voltage Continuity of strings and correct polarity (Y or N) Earth Continuity	
PV Array Maximum Voltage Continuity of strings and correct polarity (Y or N) Earth Continuity Insulation Resistance	
 PV Array Maximum Voltage Continuity of strings and correct polarity (Y or N) Earth Continuity Insulation Resistance Open Circuit Voltage (Not Under Load) 	
 PV Array Maximum Voltage Continuity of strings and correct polarity (Y or N) Earth Continuity Insulation Resistance Open Circuit Voltage (Not Under Load) Short Circuit Current (Not Under Load) 	
 PV Array Maximum Voltage Continuity of strings and correct polarity (Y or N) Earth Continuity Insulation Resistance Open Circuit Voltage (Not Under Load) Short Circuit Current (Not Under Load) Voltage (System Operational) 	
 PV Array Maximum Voltage Continuity of strings and correct polarity (Y or N) Earth Continuity Insulation Resistance Open Circuit Voltage (Not Under Load) Short Circuit Current (Not Under Load) Voltage (System Operational) Current (System Operational) 	

String 5	
PV Array Maximum Voltage	
Continuity of strings and correct polarity (Y or N)	
Earth Continuity	
Insulation Resistance	
Open Circuit Voltage (Not Under Load)	
Short Circuit Current (Not Under Load)	
Voltage (System Operational)	
Current (System Operational)	
Power (System Operational)	
String 6	
	String 6
PV Array Maximum Voltage	String 6
PV Array Maximum Voltage Continuity of strings and correct polarity (Y or N)	String 6
PV Array Maximum Voltage Continuity of strings and correct polarity (Y or N) Earth Continuity	String 6
PV Array Maximum Voltage Continuity of strings and correct polarity (Y or N) Earth Continuity Insulation Resistance	String 6
PV Array Maximum Voltage Continuity of strings and correct polarity (Y or N) Earth Continuity Insulation Resistance Open Circuit Voltage (Not Under Load)	String 6
PV Array Maximum Voltage Continuity of strings and correct polarity (Y or N) Earth Continuity Insulation Resistance Open Circuit Voltage (Not Under Load) Short Circuit Current (Not Under Load)	String 6
PV Array Maximum Voltage Continuity of strings and correct polarity (Y or N) Earth Continuity Insulation Resistance Open Circuit Voltage (Not Under Load) Short Circuit Current (Not Under Load) Voltage (System Operational)	String 6
PV Array Maximum VoltageContinuity of strings and correct polarity (Y or N)Earth ContinuityInsulation ResistanceOpen Circuit Voltage (Not Under Load)Short Circuit Current (Not Under Load)Voltage (System Operational)Current (System Operational)	String 6

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	Corey Evans
CEC Accreditation Number	A9458718
Date	6/07/2021
Signed	Al
Licensed Electrician Name	Corey Evans
Electrical Licence Number	PGE291719
Date	6/07/2021
Signed	A