Australian Government
Clean Energy Regulator

Solar battery inspection checklist

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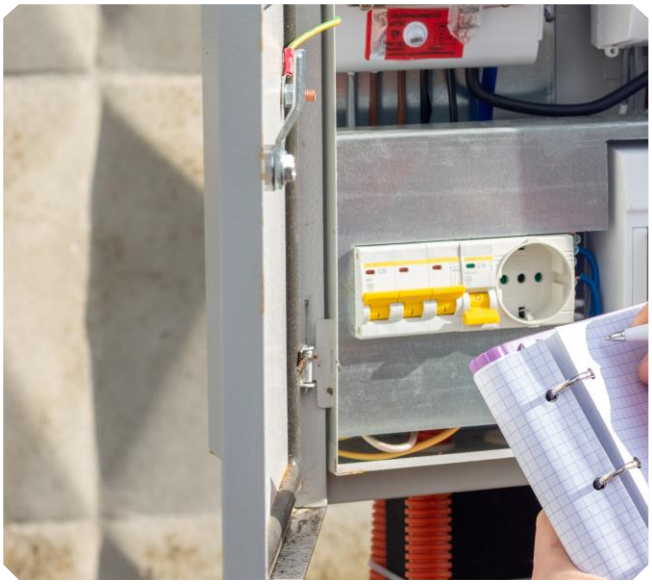

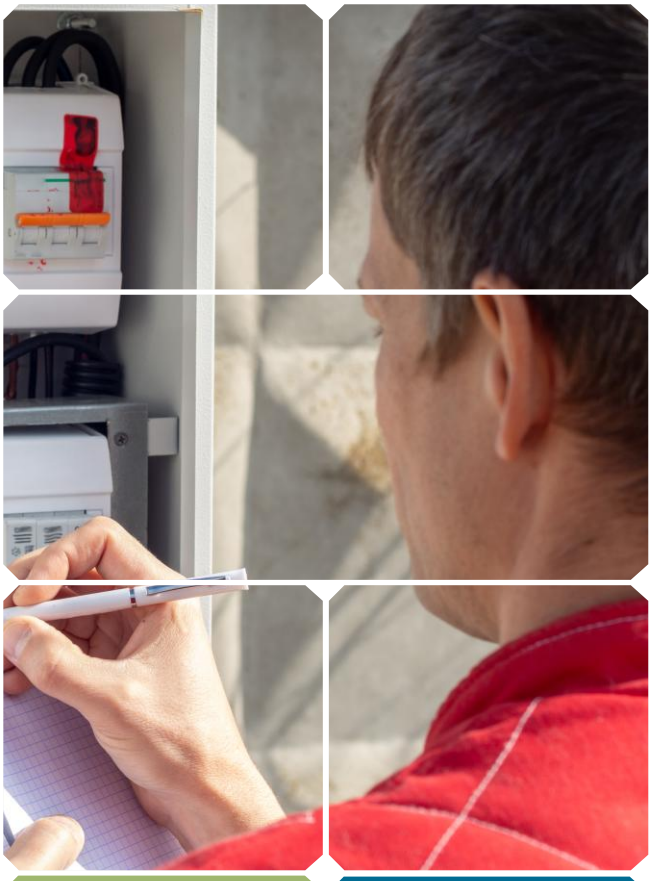

CLEAN ENERGY REGULATOR

Contents

Solar battery inspection checklist

The Clean Energy Regulator (CER) inspections program[1] ensures select systems under the Small-scale Renewable Energy Scheme (SRES):

- meet installation requirements
- are eligible for small-scale technology certificates (STCs).

Inspectors use the inspection checklist when they conduct inspections of solar battery installations.

The inspection checklist is developed specifically for the CER inspections program for solar battery installations under the SRES and is based on the relevant Australian standards. It is not an exhaustive list of all installation requirements.

When installing a solar battery, installers must also comply with:

- the relevant Australian standards
- the Renewable Energy (Electricity) Regulations 2001[2]
- state and territory requirements
- Solar Accreditation Australia requirements[3].

What inspectors assess when conducting inspections

Inspectors assess over 90 checklist items per solar battery installation. Checklist items are broken down into the following categories:

- battery general
- labelling
- installation requirements
- isolation
- mechanical protection
- overcurrent protection
- protection from fire
- restricted locations
- switchboard
- wiring
- documentation.

[1] https://cer.gov.au/schemes/renewable-energy-target/small-scale-renewable-energy-scheme/small-scale-renewable-energy-systems/small-scale-renewable-energy-system-inspections/solar-battery-inspection-results-report
[2] https://www.legislation.gov.au/F2001B00053/
[3] https://saaustralia.com.au/about-accreditation/

How checklist items are rated

Each checklist item is assigned a rating which specifies what actions must be taken if an installation doesn't comply.

Rating	Action required
Information only	The system is safe to remain in operation. The checklist item is not required to be rectified; however, installers are encouraged to change their processes to address this for future installations.
Medium non-compliance	The system is safe to remain in operation but does not meet some of Australian standards or installations requirements. The checklist item should be rectified by the installer.
Rectification required	The system is safe to remain in operation but does not meet Australian standards. In most cases, it isn't an immediate cause for concern but could be an issue later. The checklist item must be rectified by the installer.
Unsafe	The installation is not safe to remain in operation and will be shut down immediately. The checklist item must be rectified before the system can be switched back on.
Unsafe due to product recall	The installation is not safe due to a product recall. The recalled products must be repaired or replaced before the system can be switched back on.

Inspection checklist items

The solar battery inspection checklist is current as of 21 January 2026. We regularly update this checklist in line with changes to Australian standards and Solar Accreditation Australia guidelines.

Battery general

Question ID	Question	Rating	Standards Reference
BG 1	Does the battery system appear operational at commencement of audit (for example no warning lights)?	Information Only	N/A
PV 1	If a PV array is directly connected to the battery system/inverter, does it appear operational at the commencement of the audit?	Information Only	N/A
BG 3	What type of battery system is being audited? - Pre-assembled Integrated BESS (AS/NZS 5139:2019 Section 4) - Pre-assembled BS (AS/NZS 5139:2019 Section 5) - Other (AS/NZS 5139:2019 Section 6) Note: check	Information Only	N/A

Question ID	Question	Rating	Standards Reference
	https://cleanenergycouncil.org.au/industry-programs/products-program/batteries, type in the battery system model number and check "Equipment Category" column to confirm type.		
Integrated BESS 1	This section applies to installations of lithium-ion pre-assembled integrated Battery Energy Storage System (BESS) as defined in AS/NZS 5139:2019 Clause 4.1.		
Integrated BESS 6	Where is the lithium-ion pre-assembled integrated BESS installed? What location is it installed in (internal or external)?	Information Only	
Integrated BESS 7	What is the make of the lithium-ion pre-assembled integrated BESS?	Information Only	
Integrated BESS 8	What is the model of the lithium-ion pre-assembled integrated BESS?	Information Only	
Integrated BESS 9	What is the serial number of the lithium-ion pre-assembled integrated BESS?	Information Only	
Integrated BESS 10	What is the total battery storage capacity in kWh?	Information Only	
Pre-assembled BS 1	This section applies to installations of a lithium-ion pre-assembled Battery System (BS) as defined in AS/NZS 5139:2019 Clause 5.1.		
Pre-assembled BS 6	Where is the lithium-ion pre-assembled BS installed?	Information Only	
Pre-assembled BS 7	What is the make of the lithium-ion pre-assembled BS?	Information Only	
Pre-assembled BS 8	What is the model of the lithium-ion pre-assembled BS?	Information Only	
Pre-assembled BS 9	What is the serial number of the inverter that the battery system is connected to?	Information Only	
Pre-assembled BS 10	What is the serial number of the lithium-ion pre-assembled BS?	Information Only	
Pre-assembled BS 11	What is the total battery storage capacity in kWh?	Information Only	

Question ID	Question	Rating	Standards Reference
Pre-assembled BS 14	What is the Decisive Voltage Classification (DVC) of the lithium-ion pre-assembled BS? DVC-A <60 Volts DC DVC-B <120 Volts DC DVC-C >120 Volts DC	Information Only	

Labelling

Question ID	Question	Rating	Standards Reference
SB & Labelling 1	Is signage, consisting of circular, green reflector, with the letters "ES", installed immediately on or adjacent to the meter box and switchboard, and is it readily available to be seen by approaching emergency workers?	Medium non-compliance	AS/NZS 5139:2019 Clause 7.3, Appendix B Clause B2
SB & Labelling 2	Is the ES sign at least 100mm in diameter and does it contain the United Nations number for the primary chemistry written below the "ES" lettering – for example, UN3480?	Medium non-compliance	AS/NZ S5139:2019 Clause 7.3, Appendix B Clause B1
SB & Labelling 3	If the Battery Energy Storage System is not easily located, is there a plan or drawing showing the location of the Battery Energy Storage System located at the main switchboard which includes the location of shutdown procedures?	Medium non-compliance	AS/NZS 5139:2019 Clause 7.4, Appendix B example, Figure B.2
SB & Labelling 4	If the Battery Energy Storage System is located adjacent (i.e. next to or adjoining without obstruction and within arm's reach) to the switchboard and if multiple battery systems or BESS are installed, is there a sign for each that provides an identifiable number together with the total number of systems installed? For example, BESS 1 of 3?	Medium non-compliance	AS/NZS5139:2019 Clause 7.6
SB & Labelling 5	Is there a Safety Data Sheet (hard copy, not digital) installed within a document holder at the main switchboard or meter box?	Medium non-compliance	AS/NZS5139:2019 Clause 7.7
SB & Labelling 6	If battery/inverter system is connected to the main switchboard, has the grid supply main switch been labelled "MAIN SWITCH (GRID)" or similar? Alternatively, if the battery/inverter system has been connected to a distribution board has a sign containing the words "MAIN ISOLATOR (GRID)" or similar been placed adjacent to the isolator for the normal supply to the distribution switchboard?	Medium non-compliance	AS/NZS 4777.1:2024 Clause 6.3 (b) & (c)

Question ID	Question	Rating	Standards Reference
SB & Labelling 8	Have supplementary supplies been labelled as “MAIN SWITCH (INVERTER)" at the switchboard to which they are directly connected?	Medium non-compliance	AS/NZS 4777.1:2024 Clause 6.3 (a)
SB & Labelling 26	Has the main switch for alternative supply from the battery system/inverter been labelled "MAIN SWITCH (ALTERNATIVE)"?	Medium non-compliance	AS/NZS 4777.1:2024 Clause 6.3 (d)
SB & Labelling 16[4]	Has a warning label been installed at the main switchboard and all intermediate distribution boards to indicate a multimode inverter with alternative supply has been installed and to follow the shutdown procedure for safe isolation, and is the text "Neutral and earth circuits may be live under fault conditions" included on this sign?	Rectification required	AS/NZS 4777.1:2024 Clause 6.8
SB & Labelling 17[4]	Do switchboards energised by the battery system contain the label "Multiple supplies, isolate all supplies before working on this switchboard”?	Medium non-compliance	AS/NZS 4777.1:2024 Clause 6.3 (g)
SB & Labelling 18	Where the inverter of the battery system is connected to a distribution board, is the following label present on the main switchboard and all intermediate distribution switchboards: “Warning Multiple Supplies Isolate Inverter Supply at Distribution Switchboard at …”?	Medium non-compliance	AS/NZS 4777.1:2024 Clause 6.4
SB & Labelling 19	Are circuits that are backed up when the grid is not available appropriately labelled to indicate their function?	Rectification required	AS/NZS 3000 Clause 2.10.5.2 AS/NZS 4777.1:2024 Clause 5.3.6.1
SB & Labelling 25	Are all signs and labels: (a) sufficiently durable and designed to have a lifetime greater than or equal to the service life of the battery system or BESS (b) constructed of durable materials suitable for the location, and where installed exposed to direct sunlight, shall use UV stabilized materials (c) fixed in a durable manner (d) in English (e) legible and in a letter size appropriate for the	Medium non-compliance	AS/NZS 4777.1:2019 Clause 7.2 AS/NZS 4777.1:2024 Clause 6.1

[4] The **SB & Labelling 16** and **SB & Labelling 17** checklist items are the most common checklist items to be failed during an inspection and require rectification. Accredited installers should ensure they’re familiar with AS/NZS 4777.1:2024 Clause 6.8 and AS/NZS 4777.1:2024 Clause 6.3 (g).

Question ID	Question	Rating	Standards Reference
	location (see guidance in AS/NZS 4777.1 2024 6.1 Note 1) (f) indelible (g) visible, as required, at the installed position.		
Integrated BESS 13	Is there a sign adjacent to the lithium-ion pre-assembled integrated BESS that states: a) Battery System or Battery Energy Storage System b) the correct short-circuit current (specifying current in amperes) c) the correct maximum DC voltage (specifying voltage in volts). For systems over DVC-A, the sign shall also state "Hazardous DC voltage".	Medium non-compliance	AS/NZS 5139:2019 Clause 7.6
Integrated BESS 14	Is there a site-specific shutdown procedure that details the sequential steps to safely shutdown the BESS? The shutdown procedure shall be: a) installed adjacent to the PCE to which the battery system is connected b) placed adjacent to and visible from the equipment to be operated in the event of a shutdown. All labelling of devices shall be consistent with terminology used in the shutdown procedure. The shutdown procedure shall also state that isolation of the battery system by isolation and shutting down the PCE may not de-energise the battery system and further action may be required.	Medium non-compliance	AS/NZS 5139:2019 Clause 7.16
Integrated BESS 15	If battery chemistry is categorised as a having a risk of battery explosion, has a "Danger, Risk of Battery Explosion" sign been installed in a prominent position approaching the battery system?	Medium non-compliance	AS/NZS 5139:2019 Table 3.1 AS/NZS 5139:2019 Clause 7.8
Integrated BESS 16	Is the "Danger, toxic fumes" sign installed adjacent to the enclosure or on all doors to the room where the battery system is located detailing the specific fault conditions (for example fire) under which the fumes will be present? This sign should also include PPE requirements for entering the room/working with the battery system.	Medium non-compliance	AS/NZS 5139:2019 Clause 7.9

Question ID	Question	Rating	Standards Reference
Integrated BESS 17	If the battery chemistry is categorised as having an arc flash hazard above "minor" (see AS/NZS 5139:2019 Clause 6.3.2.2, Table 6.1), is there a sign specifying the dangers of the arc flash? This sign shall be installed either adjacent to the enclosure or on all doors to the room where the battery system is located.	Medium non-compliance	AS/NZS 5139:2019 Clause 7.11
Pre-assembled BS 15	Is there a sign adjacent to the lithium-ion pre-assembled BS that states: a) Battery System or Battery Energy Storage System b) the correct short-circuit current (specifying current in amperes) c) the correct maximum DC voltage (specifying voltage in volts). For systems over DVC-A, the sign shall also state "Hazardous DC voltage".	Medium non-compliance	AS/NZS 5139:2019 Clause 7.6
Pre-assembled BS 16	Is there a site-specific shutdown procedure that details the sequential steps to safely shutdown the BS? The shutdown procedure shall be: a) installed adjacent to the PCE to which the battery system is connected b) placed adjacent to and visible from the equipment to be operated in the event of a shutdown. All labelling of devices shall be consistent with terminology used in the shutdown procedure. The shutdown procedure shall also state that isolation of the battery system by isolation and shutting down the PCE may not de-energise the battery system and further action may be required.	Medium non-compliance	AS/NZS 5139:2019 Clause 7.16
Pre-assembled BS 18	Where multiple energy sources (for example solar and battery) are connected to the one inverter, has a warning sign been installed to indicate all energy sources be turned off to achieve complete isolation?	Medium non-compliance	AZ/NZS 4777.1:2024 Clause 6.11.1
Pre-assembled BS 19	If battery chemistry is categorised as a having a risk of battery explosion, has a "Danger, Risk of Battery Explosion" sign been installed in a prominent position approaching the battery system?	Medium non-compliance	AS/NZS 5139:2019 Table 3.1 AS/NZS 5139:2019 Clause 7.8

Question ID	Question	Rating	Standards Reference
Pre-assembled BS 20	Is the “Danger, toxic fumes” sign installed adjacent to the enclosure or on all doors to the room where the battery system is located and does it detail the specific fault conditions (for example fire) under which the fumes will be present? This sign should also include PPE requirements for entering the room/working with the battery system.	Medium non-compliance	AS/NZS 5139:2019 Clause 7.9
Pre-assembled BS 21	If the battery chemistry is categorised as having an arc flash hazard above "minor" (see AS/NZS 5139 6.3.2.2 Table 6.1), is there a sign specifying the dangers of the arc flash? This sign shall be installed either adjacent to the enclosure or on all doors to the room where the battery system is located.	Medium non-compliance	AS/NZS 5139:2019 Clause 7.11
Pre-assembled BS 98	Has DC battery system cabling or enclosures containing battery system cabling between the battery system and inverter been labelled with the word "BATTERY" at intervals not exceeding 2m?	Medium non-compliance	AS/NZS 5139:2019 Clause 7.14

Installation requirements

Question ID	Question	Rating	Standards Reference
Integrated BESS 4	Are there any signs of alterations or additions that would result in the lithium-ion pre-assembled integrated BESS no longer conforming to the Best Practice Guide: Battery Storage Equipment – Electrical Safety Requirements?	Rectification required	AS/NZS 5139:2019 Clause 4.4.2.3
Integrated BESS 5	Are the signs of alterations or additions that make the lithium-ion pre-assembled integrated BESS no longer conforming such that it is unsafe?	Unsafe	AS/NZS 5139:2019 Clause 4.4.2.3
Integrated BESS 11	Was the lithium-ion integrated BESS an approved product on the Clean Energy Councils "Approved battery list" at the time of installation?	Rectification required	N/A
Integrated BESS 12	Has the lithium-ion integrated BESS been recalled by the manufacturer or regulator?	Unsafe due to product recall	N/A

Question ID	Question	Rating	Standards Reference
Integrated BESS 18	Has the lithium-ion pre-assembled integrated BESS been installed in accordance with manufacturers installation requirements, including reference to the relevant SDS?	Medium non-compliance	AS/NZS 5139:2019 Clause 4.2.1
Integrated BESS 24	If installed indoors does the location of the lithium-ion pre-assembled integrated BESS allow access to the connections and any serviceable equipment, doors and panels that are required to be accessed for installation and maintenance?	Medium non-compliance	AS/NZS 5139:2019 Clause 4.2.2.1 (a) AS/NZS 5139:2019 Clause 4.2.5 - 600mm min, 900mm if accessing 230V
Integrated BESS 25	Does the location of the lithium-ion pre-assembled integrated BESS conform to the requirements for damp situations defined by AS/NZS 3000:2018 Section 6?	Medium non-compliance	AS/NZS 5139:2019 Clause 4.2.2.1 AS/NZS 3000:2018 Section 6
Integrated BESS 39	If required by the manufacturer of the pre-assembled integrated BESS, has an earth fault alarm been installed?	Rectification required	AS/NZS 5139:2019 Clause 4.3.1.3.2
Integrated BESS 43	Where the lithium-ion pre-assembled integrated BESS is categorised as having an explosive gas hazard in AS/NZS 5139:2019 Table 3.1, is the installation in accordance with the instructions of the manufacturer including any venting and containment requirements?	Medium non-compliance	AS/NZS 5139:2019 Clause 4.3.6 AS/NZS 5139:2019 Table 3.1
Integrated BESS 44	Where the lithium-ion pre-assembled integrated BESS is categorised as having a toxic fume hazard in AS/NZS 5139:2019 Table 3.1, is the installation in accordance with the instructions of the manufacturer?	Medium non-compliance	AS/NZS 5139:2019 Clause 4.3.7 AS/NZS 5139:2019 Table 3.1
Integrated BESS 45	Does the lithium-ion pre-assembled integrated BESS have an alarm system provided that will cause an action to be initiated to correct the fault? This could be audible, visual or via an electronic communication.	Medium non-compliance	AS/NZS 5139:2019 Clause 4.3.8
Pre-assembled BS 4	Are there any signs of alterations or additions that would result in the lithium-ion pre-assembled BS no longer conforming to the Best Practice Guide: Battery Storage Equipment - Electrical Safety Requirements? https://cleanenergycouncil.org.au/industry-programs/products-program/batteries	Rectification required	AS/NZS 5139:2019 Clause 5.4.2.3
Pre-assembled BS 5	Are the signs of alterations or additions that make the lithium-ion pre-assembled BS no longer conforming such that it is unsafe?	Unsafe	AS/NZS 5139:2019 Clause 5.4.2.3

Question ID	Question	Rating	Standards Reference
Pre-assembled BS 12	Was the lithium-ion pre-assembled BS an approved product on the Clean Energy Council's "Approved battery list" at the time of installation? https://cer.gov.au/document_page/cec-approved-solar-batteries https://cleanenergycouncil.org.au/industry-programs/products-program/batteries	Rectification required	N/A
Pre-assembled BS 13	Has the lithium-ion pre-assembled BS been recalled by the manufacturer or regulator?	Unsafe due to product recall	AS/NZS 5139:2019 Clause 5.4
Pre-assembled BS 22	Has the lithium-ion pre-assembled BS been installed in accordance with manufacturers installation requirements, including reference to the relevant SDS?	Medium non-compliance	AS/NZS 5139:2019 Clause 5.2.1
Pre-assembled BS 24	If installed indoors does the location of the lithium-ion pre-assembled integrated BESS allow access to the connections and any serviceable equipment, doors and panels that are required to be accessed for installation and maintenance?	Medium non-compliance	AS/NZS 5139:2019 Clause 5.2.2.1 (a) AS/NZS 5139:2019 Clause 5.2.5 See line 49
Pre-assembled BS 25	Does the location of the lithium-ion pre-assembled BS conform to the requirements for damp situations defined by AS/NZS 3000:2018 Section 6?	Medium non-compliance	AS/NZS 5139:2019 Clause 5.2.2.1 AS/NZS 3000:2018 Section 6
Pre-assembled BS 38	If the lithium-ion pre-assembled BS is located in a room, is the room clean, dry and ventilated?	Medium non-compliance	AS/NZS 5139:2019 Clause 5.2.5
Pre-assembled BS 39	If the lithium-ion pre-assembled BS is located in a room, does the room provide and maintain protection against detrimental environmental conditions and other external factors?	Medium non-compliance	AS/NZS 5139:2019 Clause 5.2.5
Pre-assembled BS 40	If the lithium-ion pre-assembled BS is located in a room, is the room suitable to minimise the likelihood of a build-up insect or vermin infestation or other materials on or around the lithium-ion pre-assembled BS?	Medium non-compliance	AS/NZS 5139:2019 Clause 5.2.5

Question ID	Question	Rating	Standards Reference
Pre-assembled BS 41	If the lithium-ion pre-assembled BS is located in a room, does the size of the room allow for sufficient clearance around the lithium-ion pre-assembled BS to provide safe handling and access for installation, removal and maintenance? The minimum unimpeded access shall be: a) 900 mm with the doors open b) 600 mm with the doors open for battery systems that have: i) voltage no greater than DVC-A; and ii) a calculated arc flash energy at the output terminals of the battery system not greater than 4.0 cal/cm², or iii) the clearance specified by the manual.	Medium non-compliance	AS/NZS 5139:2019 Clause 5.2.5
Pre-assembled BS 84	Does the lithium-ion pre-assembled BS separated from earth have an alarm system provided that will cause an action to be initiated to correct the fault? This could be audible, visual or via an electronic communication.	Medium non-compliance	AS/NZS 5139:2019 Clause 5.3.1.8
Pre-assembled BS 85	Has the lithium-ion pre-assembled BS been installed in accordance with manufacturer's instructions to limit the exposure to an arc flash hazard during installation and for maintenance?	Medium non-compliance	AS/NZS 5139:2019 Clause 5.3.2
Pre-assembled BS 88	Where the lithium-ion pre-assembled BS is categorised as having an explosive gas hazard in AS/NZS 5139:2019 Table 3.1, is the installation in accordance with the instructions of the manufacturer including any venting and containment requirements?	Medium non-compliance	AS/NZS 5139:2019 Clause 5.3.6 AS/NZS 5139:2019 Table 3.1
Pre-assembled BS 89	Where the lithium-ion pre-assembled BS is categorised as having a toxic fume hazard in AS/NZS 5139:2019 Table 3.1, is the installation in accordance with the instructions of the manufacturer?	Medium non-compliance	AS/NZS 5139:2019 Clause 5.3.7 AS/NZS 5139:2019 Table 3.2
Pre-assembled BS 90	Does the lithium-ion pre-assembled BS have an alarm system provided that will cause an action to be initiated to correct the fault? This could be audible, visual or via an electronic communication.	Rectification required	AS/NZS 5139:2019 Clause 5.3.8

Isolation

Question ID	Question	Rating	Standards Reference
SB & Labelling 11	Have battery/inverter systems utilising an alternative supply been supplied with an alternative supply main switch in the switchboard they are supplying?	Rectification required	AS/NZS 4777.1:2024 Clause 5.3.6.2
SB & Labelling 27	Are circuits that are backed up when the grid is not available grouped?	Medium non-compliance	AS/NZS 4777.1:2024 Clause 3.4.1 & 5.3.4
SB & Labelling 23	Are there no more than 2 inverter main switches connected to any 1 switchboard with attached loads?	Medium non-compliance	AS/NZS 4777.1:2024 Clause 3.5.3.1
SB & Labelling 24	Where 2 inverter supplies are connected to a main switchboard or distribution board with other circuits and loads connected, are the inverter main switches grouped together?	Medium non-compliance	AS/NZS 4777.1:2024 Clause 3.5.3.1
SB & Labelling 33	For systems with alternative supply, is anti-islanding maintained, when "MAIN SWITCH(GRID)" is turned off?	Unsafe	AS/NZS 4777.1:2024 Clause 8.4.1 (b)
Integrated BESS 19	If the battery/inverter is not within 3 meters and line of site of switchboard it is connected to, has an AC isolation device/s, that is able to be secured in the open position, been provided adjacent to the battery/inverter to isolate both supplementary and alternative supplies if applicable?	Rectification required	AS/NZS 4777.1:2024 Clause 3.4.3.2 & 5.3.3
Pre-assembled BS 17	If the battery/inverter is not within 3 meters and line of site to the switchboard it is connected, has an AC isolation device/s, that is able to be secured in the open position, been provided adjacent to the battery/inverter to isolate both supplementary and alternative supplies if applicable?	Rectification required	AS/NZS 4777.1:2024 Clause 3.4.3.2 & 5.3.3

Question ID	Question	Rating	Standards Reference
Pre-assembled BS 50	Has a means of disconnection been installed to isolate the pre-assembled BS from the PCE and vice versa, to allow for maintenance, repair, fault finding and inspection tasks to be carried out safely?	Rectification required	AS/NZS 5139:2019 Clause 5.3.1.3.1
Pre-assembled BS 51	Is it possible to isolate the PCE from all poles of the pre-assembled BS using one of the following load breaking disconnection methods installed? a) An adjacent and physically separate disconnection device. b) A disconnection device integrated into the PCE. c) A disconnection device integrated into the pre-assembled BS.	Rectification required	AS/NZS 5139:2019 Clause 5.3.1.3.2
Pre-assembled BS 52	If a switch-disconnector has been used as the load breaking disconnection device, does it meet the following requirements: a) conform to AS 60947.3 b) be of the non-polarised type c) be DC rated d) have a voltage rating than the battery system's maximum voltage under all operating conditions e) be rated to withstand the maximum short-circuit current f) have a current rating greater than the maximum DC current for the BESS g) be rated to interrupt for full load h) meet the requirements of AS/NZS 3000:2018 Section 2 for isolating device selection i) be rated for independent manual operation j) have a minimum pollution degree 3 classification k) be able to be secured in the open position and only secured when the main contacts are in the open position	Rectification required	AS/NZS 5139:2019 Clause 5.3.1.3.3

Question ID	Question	Rating	Standards Reference
	l) conform to requirements for isolation including marking requirements for an isolation device m) have a utilization category of at least DC21B.		
Pre-assembled BS 53	If an adjacent or physically separated disconnection device is installed indoors, is the disconnection device mounted in an enclosure that has a minimum IP 23 rating?	Rectification required	AS/NZS 5139:2019 Clause 5.3.1.3.4
Pre-assembled BS 54	If an adjacent or physically separated disconnection device is installed outdoors, is the disconnection device mounted in an enclosure that has a minimum IP 56NW when tested under the conditions of AS 60947.3:2018 Clause D.8.3.13.4, D.8.13.3.5, D.8.3.13.6, D.8.3.13.7 and D.8.3.13.8 (in Australian variations Appendix ZZ)?	Rectification required	AS/NZS 5139:2019 Clause 5.3.1.3.4
Pre-assembled BS 55	Are the switch-disconnectors for outdoor use suitably rated for an ambient temperature of 40 degrees Celsius?	Medium non-compliance	AS/NZS 5139:2019 Clause 5.3.1.3.4
Pre-assembled BS 56	If the disconnection device is integrated in the PCE does it meet one of the following additional requirements: a) an isolation device that is mechanically interlocked with a replaceable module of the PCE, and allows the module to be removed from the section containing the isolation device without risk of electric hazards b) an isolation device is located in the same enclosure as the other components of the PCE. With the isolation device in the off position there shall be no risk of electric hazard when any PCE external enclosure cover is	Medium non-compliance	AS/NZS 5139:2019 Clause 5.3.1.3.5

Question ID	Question	Rating	Standards Reference
	removed for repair or replacement of other components of the PCE.		
Pre-assembled BS 57	If the pre-assembled BS includes an internal isolation device operation in all live conductors, is it readily accessible and does it provide the same functions as for an adjacent external isolation device? No additional adjacent external isolation device is required.	Medium non-compliance	AS/NZS 5139:2019 Clause 5.3.1.3.6
Pre-assembled BS 58	Is the isolation device readily accessible?	Rectification required	AS/NZS 5139:2019 Clause 5.3.1.3.7
Pre-assembled BS 59	Where the cables connecting the pre-assembled BS and PCEs are less than 2m in length, is the isolation device(s) installed adjacent to either the pre-assembled battery system or the PCE?	Medium non-compliance	AS/NZS 5139:2019 Clause 5.3.1.3.7
Pre-assembled BS 60	Where the cables connecting the pre-assembled BS and PCE are greater than 2m in length, is the isolation device installed at both the pre-assembled battery system and PCE?	Medium non-compliance	AS/NZS 5139:2019 Clause 5.3.1.3.7
Pre-assembled BS 61	If there are multiple PCEs (for example a solar charge controller and an inverter; or multiple inverters), have separate isolation devices been installed?	Medium non-compliance	AS/NZS 5139:2019 Clause 5.3.1.3.8
Pre-assembled BS 62	If there are two or more lithium-ion pre-assembled battery systems connected in parallel, does each	Medium non-compliance	AS/NZS 5139:2019 Clause 5.3.1.3.9

Question ID	Question	Rating	Standards Reference
	one have a separate isolation device?		

Mechanical protection

Question ID	Question	Rating	Standards Reference
Integrated BESS 23	Has the pre-assembled integrated BESS been installed in a location where it is protected from mechanical damage, or has sufficient protection been installed (such as vehicle bollard/s) to prevent damage by impact? This also includes inappropriate or poorly installed infrastructure aimed at protecting it from mechanical damage.	Rectification required	AS/NZS 5139:2019 Clause 4.2.2.1
Integrated BESS 41	If mounted on the ground, does the ground appear to be suitable to support the weight of the BESS?	Rectification required	AS/NZS 5139:2019 Clause 4.3.3(a)
Integrated BESS 42	If mounted on a wall or structure, does the wall or structure appear to have the structural integrity to withstand the weight of the BESS?	Rectification required	AS/NZS 5139:2019 Clause 4.3.3(b)
Pre-assembled BS 23	Has the pre-assembled BS been installed in a location where it is protected from mechanical damage, or has sufficient protection been installed (such as vehicle bollard/s) to prevent damage by impact? This also includes inappropriate or poorly installed infrastructure aimed at protecting it from mechanical damage.	Rectification required	AS/NZS 5139:2019 Clause 5.2.2.1
Pre-assembled BS 86	If mounted on the ground, does the ground appear to be suitable to support the weight of the pre-assembled BS?	Rectification required	AS/NZS 5139:2019 Clause 5.3.3(a)
Pre-assembled BS 87	If mounted on a wall or structure, does the wall or structure appear to have the structural integrity to withstand the weight of the pre-assembled BS?	Rectification required	AS/NZS 5139:2019 Clause 5.3.3(b)

Overcurrent protection

Question ID	Question	Rating	Standards Reference
SB & Labelling 10	Are all cables related to the battery installation, and not covered by other questions in this checklist, protected against overcurrent?	Rectification required	AS/NZS 4777.1:2024 Clause 3.4.2 AS/NZS 3000:2018 Clause 2.5.3.1
SB & Labelling 20	Are the inverter/battery supplementary supply cable and associated overcurrent protection device, rated higher than the summation of battery system charging current plus alternative supply overcurrent protection device rating or maximum demand of the alternative supply?	Medium non-compliance	AS/NZS 4777.1:2024 Clause 3.4.1 & 5.3.4
SB & Labelling 29	Are all busbars in the installation rated, or protected against potential overcurrent from summation of grid and supplementary supplies?	Rectification required	AS/NZS 4777.1:2024 Clause 3.4.2 AS/NZS 3000:2018 Clause 2.5.3.1
SB & Labelling 30	Are all cables in the installation rated, or protected against overcurrent from summation of grid and supplementary supplies?	Rectification required	AS/NZS 4777.1:2024 Clause 3.4.2 AS/NZS 3000:2018 Clause 2.5.3.1
SB & Labelling 31	Where required, has overcurrent protection been provided for the alternative supply?	Rectification required	AS/NZS 4777.1:2024 Clause 5.3.5.1 AS/NZS 3000:2018 Clause 2.5.3.1
Pre-assembled BS 43	Is overcurrent protection installed in all live conductors, excluding control and monitoring circuits?	Rectification required	AS/NZS 5139:2019 Clause 5.3.1.2.1
Pre-assembled BS 44	If installed, is the DC overcurrent protection device installed adjacent to the battery system and: a) is it of a non-polarised type	Rectification required	AS/NZS 5139:2019 Clause 5.3.1.2.1

Question ID	Question	Rating	Standards Reference
	b) is it DC rated c) does it have a voltage rating greater than the battery system's maximum voltage under all normal and abnormal conditions d) does it meet the requirements of AS/NZS 3000:2018 Section 2 e) does it have a current rating to protect the cabling from the pre-assembled battery system?		
Pre-assembled BS 45	Where a DC overcurrent protective device is not integrated into the lithium-ion pre-assembled BS, has either a HRC fuse or miniature circuit breaker that meets the requirements of AS/NZS 5139:2019 Clause 5.3.1.2.1 been installed?	Rectification required	AS/NZS 5139:2019 Clause 5.3.1.2.1
Pre-assembled BS 46	If the DC overcurrent protection device is a circuit breaker, does it meet the requirements of AS/NZS 5139:2019 Clause 5.3.1.2.2?	Rectification required	AS/NZS 5139:2019 Clause 5.3.1.2.1 AS/NZS 5139:2019 Clause 5.3.1.2.2
Pre-assembled BS 47	If the DC overcurrent protection device is a HRC fuse, does it meet the requirements of AS/NZS 5139:2019 Clause 5.3.1.2.3?	Rectification required	AS/NZS 5139:2019 Clause 5.3.1.2.1 AS/NZS 5139:2019 Clause 5.3.1.2.3
Pre-assembled BS 48	Where the DC overcurrent protective device is integrated into the lithium-ion pre-assembled BS and is being used to protect the DC cables between the battery system inverter, does it meet all of the following requirements: - Readily available circuit breaker or HRC fuse. - Operates on both the positive and negative conductors. - Rated lower than the current	Rectification required	AS/NZS 5139:2019 Clause 5.3.1.2.1 AS/NZS 5139:2019 Clause 5.3.1.2.4

Question ID	Question	Rating	Standards Reference
	carrying capacity of the DC cables between the battery system and the inverter. - Permitted by the battery manufacturer to protect the outgoing cables between the battery system and inverter.		
Pre-assembled BS 49	If the DC overcurrent protection device is external, is it installed as close as practical to the output terminals of the battery system and no greater than 2m away?	Medium non-compliance	AS/NZS 5139:2019 Clause 5.3.1.2.5
Pre-assembled BS 73	Is the current-carrying capacity of the pre-assembled BS cables to the PCE greater than the rating of the overcurrent protection device installed?	Rectification required	AS/NZS 5139:2019 Clause 5.3.1.4.5
Pre-assembled BS 75	Has overcurrent protection been installed on the pre-assembled BS's DC port of the PCE if: a) the PCE charging current or load current under fault conditions is greater than the current-carrying capacity of the conductor between the PCE and the pre-assembled BS b) the length of the cable between the PCE and the pre-assembled BS overcurrent device is greater than 3m?	Rectification required	AS/NZS 5139:2019 Clause 5.3.1.4.7

Protection from fire

Question ID	Question	Rating	Standards Reference
SB & Labelling 26	Do all AC cables related to the battery installation that pass through penetrations in the switchboard enclosure, pass through a tight fit (less than 5mm diameter) to reduce the spread of fire?	Medium non-compliance	AS/NZS 3000:2018 Clause 2.10.7
Integrated BESS 35	Is the lithium-ion pre-assembled integrated BESS located on, or placed against the wall, or mounted on the floor within 300mm of the wall or structure separating it from a habitable	Rectification required	AS/NZS 5139:2019 Clause 4.2.4.2

Question ID	Question	Rating	Standards Reference
	room, and where the surface of the wall is not made of a suitably non-combustible material, has a suitably non-combustible barrier been placed between the pre-assembled integrated BESS and the surface of the wall or structure to the required dimensions shown in AS/NZS 5139:2019 Figure 4.2?		AS/NZS 5139:2019 Figure 4.2
Integrated BESS 36	Have all penetrations larger than 5mm through non-combustible material separating the battery system from a habitable room, within dimensions shown in AS/NZS 5139:2019 Figure 5.2, been filled with a fire-retardant material?	Medium non-compliance	AS/NZS 5139:2019 Clause 4.2.4.2
Pre-assembled BS 35	If the lithium-ion pre-assembled BS is located on, or placed against the wall, or mounted on the floor within 300mm of the wall or structure separating it from a habitable room, and the surface of the wall is not made of a suitably non-combustible material, has a suitable non-combustible barrier has been placed between the pre-assemble integrated BESS and the surface of the wall or structure to the required dimensions shown in AS/NZS 5139:2019 Figure 4.2?	Rectification required	AS/NZS 5139:2019 Clause 5.2.4.2 AS/NZS 5139:2019 Figure 5.2
Pre-assembled BS 36	Have all penetrations larger than 5mm through non-combustible material separating the battery system from a habitable room, within dimensions shown in AS/NZS 5139:2019 Figure 5.2, been filled with a fire-retardant material?	Medium non-compliance	AS/NZS 5139:2019 Clause 5.2.4.2 AS/NZS 5139:2019 Figure 5.2

Restricted locations

Question ID	Question	Rating	Standards Reference
Integrated BESS 26	If installed in a corridor, hallway or lobby does the lithium-ion pre-assembled integrated BESS have at least 1 metre of clearance to allow for safe egress?	Rectification required	AS/NZS 5139:2019 Clause 4.2.2.1
Integrated BESS 27	Is the pre-assembled integrated BESS not installed in any of the below restricted locations? (a) In restricted locations, as defined for switchboards in AS/NZS 3000. (b) Within 600 mm of any exit that has an opening 900mm or less.	Rectification required	AS/NZS 5139:2019 Clause 4.2.2.2

Question ID	Question	Rating	Standards Reference
	(c) Within 600 mm of any vertical side of a window or building ventilation that ventilates a habitable room. (e) Within 900 mm below any of the items included in items (b) and (c). (f) In ceiling spaces. (g) In wall cavities. (h) On roofs, except where specifically deemed suitable. (i) Under stairways. (j) Under access walkways. (k) In an evacuation route or escape route (with less than 1m of safe egress).		
Integrated BESS 28	Is the lithium-ion pre-assembled integrated BESS installed in a habitable room?	Rectification required	AS/NZS 5139:2019 Clause 4.2.2.2
Integrated BESS 29	Are any fixed appliances not associated with the lithium-ion pre-assembled integrated BESS not installed within the restricted zones shown in AS/NZS 5139:2019 Figure 4.1?	Medium non-compliance	AS/NZS 5139:2019 Clause 4.2.2.2
Integrated BESS 30	If the lithium-ion pre-assembled integrated BESS installed does not conform to AS/NZS 60079.14, is the installation not in a location defined to be a hazardous area in AS/NZS 3000:2018 Section 7?	Rectification required	AS/NZS 5139:2019 Clause 4.2.2.2 AS/NZS 60079.14 AS/NZS 3000:2018 Section 7
Integrated BESS 31	Is the lithium-ion pre-assembled integrated BESS installed away from hazardous areas for gas cylinders containing heavier-than-air gases and gas relief vent terminals as defined in AS/NZS 3000:2018 Section 4?	Rectification required	AS/NZS 5139:2019 Clause 4.2.2.2 AS/NZS 3000:2018 Section 4
Integrated BESS 32	Is the lithium-ion pre-assembled integrated BESS installed in a location that will not expose it to temperatures lower than the minimum or greater than the maximum temperatures as specified by the manufacturer?	Medium non-compliance	AS/NZS 5139:2019 Clause 4.2.3 AS/NZS 5139:2019 Clause 4.2.3.2
Integrated BESS 33	Is the lithium-ion pre-assembled integrated BESS installed in a location where it can be protected against damage that might reasonably be expected from the presence of water, high humidity, dust, vermin or direct sunlight?	Medium non-compliance	AS/NZS 5139:2019 Clause 4.2.3 AS/NZS 5139:2019 Clause 4.2.3.2
Integrated BESS 34	Is the lithium-ion pre-assembled integrated BESS installed in a location that will not expose it to localised or general heat sources? This	Medium non-compliance	AS/NZS 5139:2019 Clause 4.2.3

Question ID	Question	Rating	Standards Reference
	may include direct sunlight, generators, stream pipes, hot water systems, air conditioners or space heaters. There should also be no direct airflow from any appliance directed at it.		AS/NZS 5139:2019 Clause 4.2.3.2
Pre-assembled BS 26	If installed in a corridor, hallway or lobby does the lithium-ion pre-assembled BS have at least one metre of clearance to allow for safe egress?	Rectification required	AS/NZS 5139:2019 Clause 5.2.2.1
Pre-assembled BS 27	Is the pre-assembled integrated BS not installed in any of the below restricted locations? (a) In restricted locations, as defined for switchboards in AS/NZS 3000. (b) Within 600 mm of any exit that has an opening 900mm or less. (c) Within 600 mm of any vertical side of a window or building ventilation that ventilates a habitable room. (e) Within 900 mm below any of the items included in items (b) and (c). (f) In ceiling spaces. (g) In wall cavities. (h) On roofs, except where specifically deemed suitable. (i) Under stairways. (j) Under access walkways. (k) In an evacuation route or escape route (with less than 1m of safe egress).	Rectification required	AS/NZS 5139:2019 Clause 5.2.2.2
Pre-assembled BS 28	Is the lithium-ion pre-assembled BS installed in a habitable room?	Rectification required	AS/NZS 5139:2019 Clause 5.2.2.2
Pre-assembled BS 29	Are any fixed appliances not associated with the lithium-ion pre-assembled BS not installed within the restricted zones shown in AS/NZS 5139:2019 Figure 5.1?	Medium non-compliance	AS/NZS 5139:2019 Clause 5.2.2.2 AS/NZS 5139:2019 Figure 5.1
Pre-assembled BS 30	If the lithium-ion pre-assembled BS installed does not conform to AS/NZS 60079.14, is the installation away from a location defined to be a hazardous area in AS/NZS 3000:2018 Section 7?	Rectification required	AS/NZS 5139:2019 Clause 5.2.2.2 AS/NZS 60079.14 AS/NZS 3000:2018 Section 7
Pre-assembled BS 31	Is the lithium-ion pre-assembled BS installed away from hazardous areas for gas cylinders containing heavier-than-air gases and gas relief vent terminals as defined in AS/NZS 3000:2018 Section 4?	Rectification required	AS/NZS 5139:2019 Clause 5.2.2.2 AS/NZS 3000:2018 Section 4

Question ID	Question	Rating	Standards Reference
Pre-assembled BS 32	Is the lithium-ion pre-assembled BS installed in a location that will not expose it to temperatures lower than the minimum or greater than the maximum temperatures as specified by the manufacturer?	Medium non-compliance	AS/NZS 5139:2019 Clause 5.2.3 AS/NZS 5139:2019 Clause 5.2.3.2
Pre-assembled BS 33	Is the lithium-ion pre-assembled BS installed in a location where it can be protected against damage that might reasonably be expected from the presence of water, high humidity, dust, vermin or direct sunlight?	Medium non-compliance	AS/NZS 5139:2019 Clause 5.2.3 AS/NZS 5139:2019 Clause 5.2.3.2
Pre-assembled BS 34	Is the lithium-ion pre-assembled BS installed in a location that will not expose it to localised or general heat sources? This may include direct sunlight, generators, stream pipes, hot water systems, air conditioners or space heaters. There should also be no direct airflow from any appliance directed at it.	Medium non-compliance	AS/NZS 5139:2019 Clause 5.2.3 AS/NZS 5139:2019 Clause 5.2.3.2
Pre-assembled BS 37	If the lithium-ion pre-assembled BS is located in a room, is it located so that access to the battery system is not obstructed by the structure of the building, fixtures and fittings within the room?	Medium non-compliance	AS/NZS 5139:2019 Clause 5.2.5

Switchboard

Question ID	Question	Rating	Standards Reference
SB & Labelling 7	What is the size of circuit breaker controlling "MAIN SWITCH (GRID)?"	Information Only	N/A
SB & Labelling 9	What is the size of circuit breaker controlling “Main Switch Inverter” and/or "Main Switch Alternative"?	Information Only	N/A
SB & Labelling 12	Is there an alternative supply from the BESS/inverter?	Information Only	N/A

Wiring

Question ID	Question	Rating	Standards Reference
SB & Labelling 13	Do the alternative supply circuits have appropriate RCD protection?	Rectification required	AS/NZS 4777.1:2024 Clause 5.3.6.4 AS/NZS 3000:2018 amendment 2 Clause 2.6.3.2.5 (a)

Question ID	Question	Rating	Standards Reference
SB & Labelling 14	Are there any parallel earth-neutral (secondary MEN) connections present in the battery system/inverter or associated wiring?	Rectification required	AS/NZS 4777.1:2024 Clause 8.3.3.2.2 & 8.3.3.3.2. AS/NZS 3000:2018 Clause 8.3.7.2 (f)
SB & Labelling 15	Is neutral continuity maintained for all circuits provided and operating on an alternative supply?	Unsafe	AS/NZS 4777.1:2024 Clause 5.3.2.2 & 8.3.4.4.2
SB & Labelling 21	After turning on the "MAIN SWITCH (INVERTER)" does it take greater than 60 seconds for current to be shown on the supplementary supply active conductor?	Medium non-compliance	AS/NZS 4777.1:2024 Clause 8.4.1 (a)
SB & Labelling 22	After turning off the "MAIN SWITCH (INVERTER)" does it take less than 2 seconds for current to dissipate from the supplementary supply active conductor?	Rectification required	AS/NZS 4777.1:2024 Clause 8.4.1 (b)
Integrated BESS 20	Is the AC interconnection of the lithium-ion pre-assembled integrated BESS to the switchboard or distribution board in accordance with AS/NZS 3000? If not, does the defect pose a potential safety risk at some stage in the life time of the system?	Rectification required	AS/NZS 5139:2019 Clause 4.2.1 AS/NZS 5139:2019 Clause 4.3.1.1
Integrated BESS 21	Is the AC interconnection of the lithium-ion pre-assembled integrated BESS to the switchboard or distribution board in accordance with AS/NZS 3000? If not, is the defect not likely to cause a potential safety risk at some stage in the life of the system?	Medium non-compliance	AS/NZS 5139:2019 Clause 4.2.1 AS/NZS 5139:2019 Clause 4.3.1.1
Integrated BESS 22	If the AC interconnection of the lithium-ion pre-assembled integrated BESS to the switchboard or distribution board is not in accordance with AS/NZS 3000, is it such that it constitutes a safety hazard which poses an imminent risk?	Unsafe	AS/NZS 5139:2019 Clause 4.2.1 AS/NZS 5139:2019 Clause 4.3.1.1
Integrated BESS 37	Do all grid connections of the pre-assembled BESS meet the requirements of AS/NZS 4777.1?	Medium non-compliance	AS/NZS 5139:2019 Clause 4.3.1.2 AS/NZS 4777.1:2024
Integrated BESS 38	Has the earthing of the lithium-ion pre-assembled integrated BESS been installed to manufacturers requirements and meet the earthing requirements in AS/NZS 3000?	Rectification required	AS/NZS 5139:2019 Clause 4.3.1.3.1 AS/NZS 3000

Question ID	Question	Rating	Standards Reference
Integrated BESS 46	Are there any accessible live parts? Are any live parts in direct contact with any equipment, component, terminals or connection, that are tested to be LIVE and accessible by one action to be touched?	Unsafe	AS/NZS 3000
Integrated BESS 47	Are there connectors, couplings, covers or components able to be removed without the use of a tool which provide access to live parts?	Rectification required	AS/NZS 3000
Integrated BESS 48	Has all electrical work associated with the installation of the lithium-ion pre-assembled integrated BESS been installed in line with Australian standards? If not, is the defect likely to pose a potential safety risk at some stage in the lifetime of the system?	Rectification required	AS/NZS 3000:2018, AS/NZS 5139:2019, AS/NZS 5033:2021, AS/NZS 4777.1:2024
Integrated BESS 49	Has any electrical work associated with the installation of the lithium-ion pre-assembled integrated BESS not been installed in line with Australian standards such that it is not likely to cause a potential safety hazard now or for the expected lifetime of the system?	Medium non-compliance	AS/NZS 3000:2018, AS/NZS 5139:2019, AS/NZS 5033:2021, AS/NZS 4777.1:2024
Integrated BESS 50	Has any electrical work associated with the installation of the lithium-ion pre-assembled integrated BESS not been installed in line with Australian standards such that it constitutes a safety hazard which poses an imminent risk?	Unsafe	AS/NZS 3000
Integrated BESS 51	Are there any loose connections in the pre-assembled integrated BESS and associated wiring with no signs of heat?	Rectification required	AS/NZS 3000
Integrated BESS 52	Are there any loose connections in the pre-assembled integrated BESS and associated wiring with signs of heat?	Unsafe	AS/NZS 3000
Pre-assembled BS 42	If the lithium-ion pre-assembled BS has a voltage greater than DVC-A, does all cabling and installation requirements meet the requirements for DVC-C if a non-separated PCE other than an inverter is installed? For example, a solar charge controller.	Rectification required	AS/NZS 5139:2019 Clause 5.3.1.1
Pre-assembled BS 63	Are the battery system cables flexible cables in accordance with: a) AS/NZS 5000.2 (450/750 V insulation) for battery systems with a maximum operating voltage less than 450 V DC	Rectification required	AS/NZS 5139:2019 Clause 5.3.1.4.2

Question ID	Question	Rating	Standards Reference
	b) AS/NZS 5000.1 (0.6/1kV insulation) for battery systems with a maximum operation voltage less than 600 V DC c) IEC 62930 for battery systems with a maximum operating voltage less than 1500 V DC?		
Pre-assembled BS 64	Do the cables between the battery system and the PCE meet the requirements of AS/NZS 3000 for selection and installation of wiring systems? If not, is the defect likely to pose a potential safety risk at some stage in the lifetime of the system?	Rectification required	AS/NZS 5139:2019 Clause 5.3.1.4.2
Pre-assembled BS 65	Do the cables between the battery system and the PCE meet the requirements of AS/NZS 3000 for selection and installation of wiring systems? If not, is the defect not likely to cause a potential safety concern at some stage in the expected lifetime of the system?	Medium non-compliance	AS/NZS 5139:2019 Clause 5.3.1.4.2
Pre-assembled BS 66	If the DC interconnection of the lithium-ion pre-assembled BS to the PCE is not in accordance with AS/NZS 3000, is it such that it constitutes a safety hazard which poses an imminent risk?	Unsafe	AS/NZS 5139 Clause 5.3.1.4.2
Pre-assembled BS 67	Are the cables from the battery system to the PCE: a) double insulated if the battery system's maximum voltage exceeds DVC-A b) double insulated for DVC-A battery systems connected to a non-separated PCE (for example solar charge controller) and where the non-battery side of the PCE is greater than DCV-A?	Rectification required	AS/NZS 5139:2019 Clause 5.3.1.4.2
Pre-assembled BS 68	For all battery systems operating at DVC-A, are all cables between the battery system, the overcurrent protection device and the PCE double insulated?	Rectification required	AS/NZS 5139:2019 Clause 5.3.1.4.2
Pre-assembled BS 69	Are all cables that exit the pre-assembled BS without internal DC overcurrent protection mechanically protected by at least medium duty conduit or equivalent protection up to the over current device?	Rectification required	AS/NZS 5139:2019 Clause 5.3.1.4.3

Question ID	Question	Rating	Standards Reference
Pre-assembled BS 70	For battery systems operating at DVC-B or DVC-C, do the cables between the overcurrent protection device and the PCE have mechanical protection? Refer to AS/NZS 3000:2018 Clause H4.	Medium non-compliance	AS/NZS 5139:2019 Clause 5.3.1.4.3
Pre-assembled BS 71	Is the voltage drop between the battery system and the PCE no more than 2% based on the rated DC battery port current of the PCE and no more than 5% under any operating conditions?	Medium non-compliance	AS/NZS 5139:2019 Clause 5.3.1.4.4
Pre-assembled BS 72	Is the current-carrying capacity of the pre-assembled battery system's cable to the overcurrent protection rated to: a) the maximum current rating of the pre-assembled BS b) the short-circuit current and duration from the pre-assembled BS?	Rectification required	AS/NZS 5139:2019 Clause 5.3.1.4.5
Pre-assembled BS 74	If the BESS consists of two or more pre-assembled BS connected in parallel (that do not have a BMS or similar device that provides a managed voltage and current charge/discharge for each separate system), does the output cable from each battery system come to a point where the parallel battery system connects (for example PCE or Junction box) have equal cable resistance?	Medium non-compliance	AS/NZS 5139:2019 Clause 5.3.1.4.6
Pre-assembled BS 76	Does the installation meet the requirements for segregations for AC and DC circuits within enclosures from AS/NZS 3000:2018 Section 3?	Medium non-compliance	AS/NZS 5139:2019 Clause 5.3.1.5 AS/NZS 3000:2018 Section 3
	There are four categories relating to the earthing arrangements for battery systems connected to PCEs and each has specific requirements. Please select the appropriate category and inspect to the relevant clause.	Information Only	Logic question
Pre-assembled BS 77	Where the BS is not directly or resistively earthed to the battery positive or negative conductors and the installation comprises a single BESS with a voltage grater then DVC-A, are all metallic equipment enclosures associated with the BESS installation bonded together to the earthing system of the electrical installation using a minimum bonding conductor size of 6mm^2?	Medium non-compliance	AS/NZS 5139:2019 Clause 5.3.1.7.3 & AS/NZS 5139:2019 Clause 5.3.1.7.4

Question ID	Question	Rating	Standards Reference
Pre-assembled BS 78	Is the pre-assembled BS earthed according to manufacturer's instructions?	Rectification required	AS/NZS 5139:2019 Clause 5.3.1.7.1
Pre-assembled BS 79	If system is direct earthed (i.e. has an earth been directly connected to the positive or negative battery conductors), is there a conductor connected to the installation earthing system? The pre-assembled battery system earthing conductor shall be rated to withstand the prospective earth fault current of the battery system for a time at least equal to the operating time of the associated overcurrent protective device.	Rectification required	AS/NZS 5139:2019 Clause 5.3.1.6.3
Pre-assembled BS 80	If the system is resistively earthed (i.e. has an earth cable has been connected in line with a resistor to the positive or negative battery conductors), is one conductor of the battery system connected to the installation earthing system via a resistor? The pre-assembled battery system earthing conductor shall be rated to withstand the prospective earth fault current of the battery system continuously.	Rectification required	AS/NZS 5139:2019 Clause 5.3.1.6.4
Pre-assembled BS 81	If system is connected to a non-separated PCE, does it conform with the requirements of AS/NZS 5139:2019 Clause 5.3.1.6.5?	Rectification required	AS/NZS 5139:2019 Clause 5.3.1.6.5
Pre-assembled BS 82	If the pre-assembled BS is directly earthed (i.e. has an earth been directly connected to the positive or negative battery conductors) with voltages greater than DVC-A, are all metallic equipment enclosures associated with the pre-assembled BS installation bonded together to the earthing system of the electrical installation using a minimum bonding conductor size of 6mm^2 or equivalent to the earth conductor size, whichever is the greater?	Rectification required	AS/NZS 5139:2019 Clause 5.3.1.7.3
Pre-assembled BS 83	If the pre-assembled BS is resistively earthed (i.e. has an earth cable has been connected in line with a resistor to the positive or negative battery conductors) with voltages greater than DVC-A, are all metallic equipment enclosures associated with the pre-assembled BS installation bonded together to the earthing system of the electrical installation using a minimum bonding conductor size of 6mm^2 or equivalent to the earth conductor size, whichever is the greater?	Rectification required	AS/NZS 5139:2019 Clause 5.3.1.7.4

Question ID	Question	Rating	Standards Reference
Pre-assembled BS 91	Are there any accessible live parts? Are any live parts in direct contact with any equipment, component, terminals or connection, that are tested to be LIVE and accessible by one action to be touched?	Unsafe	AS/NZS 3000
Pre-assembled BS 92	Are there connectors, couplings, covers or components able to be removed without the use of a tool which provide access to live parts?	Rectification required	AS/NZS 3000
Pre-assembled BS 93	Has all electrical work associated with the installation of the lithium-ion pre-assembled integrated BS been installed in line with Australian standards? If not, is the defect likely to pose a potential safety risk at some stage in the lifetime of the system?	Rectification required	AS/NZS 3000, AS/NZS 5139, AS/NZS 5033, AS/NZS 4777.1
Pre-assembled BS 94	Has any electrical work associated with the installation of the lithium-ion pre-assembled integrated BESS not been installed in line with Australian standards such that it is not likely to cause a potential safety hazard now or for the expected lifetime of the system?	Medium non-compliance	AS/NZS 3000, AS/NZS 5139, AS/NZS 5033, AS/NZS 4777.1
Pre-assembled BS 95	Has any electrical work associated with the installation of the lithium-ion pre-assembled BS not been installed in line with Australian standards such that it constitutes a safety hazard which poses an imminent risk?	Unsafe	AS/NZS 3000, AS/NZS 5139, AS/NZS 5033, AS/NZS 4777.1
Pre-assembled BS 96	Are there any loose connections in pre-assembled BS and associated wiring with NO signs of heat?	Rectification required	AS/NZS 5139 5.4.2.2
Pre-assembled BS 97	Are there any loose connections in pre-assembled BS and associated wiring WITH signs of heat?	Unsafe	AS/NZS 5139 5.4.2.2

Documentation

Question ID	Question	Rating	Standards Reference
Documentation 1	Has a full system manual incorporating all components of AS/NZS 5139:2019 Clause 6.4.1.2 been provided to the home owner?	Medium non-compliance	AS/NZS 5139:2019 Clause 6.4.1.2