

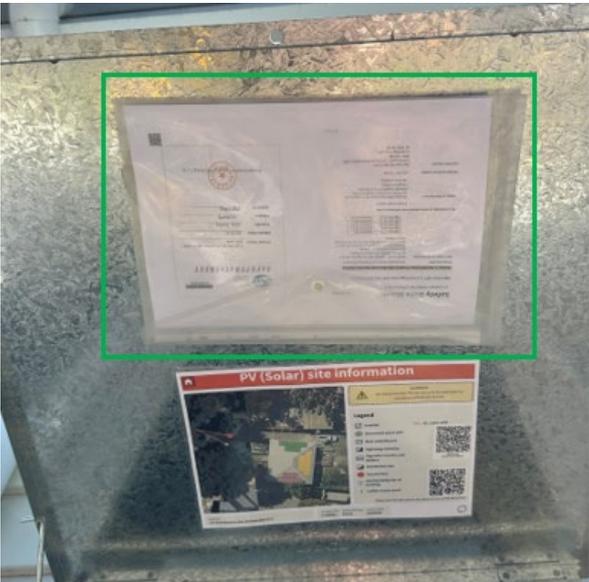
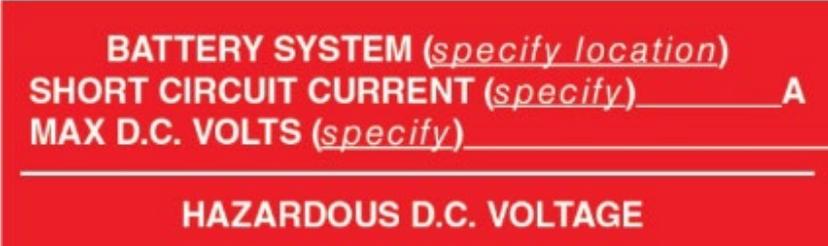
## Grid-connected battery systems (GCBS)

### The 10 most common labelling issues to check on your installation

This document summarises the 10 most common battery labelling non-compliances identified through inspections under the Small-scale Renewable Energy Scheme (SRES).

Installers are encouraged to check their installations for these common issues.

Information sheets providing more information about each of these labelling issues, are available in the [Battery Labelling Non-compliances](#) page of the [Resources and Guides](#) section of the SAA website.

Item to check	CER Checklist item / Standard & clause
<p><b>1</b> Is there a Safety Data Sheet (hard copy, not digital) installed within a document holder at the main switchboard or meter box?</p> 	<p><b>SB &amp; Labelling 5</b></p> <p>AS/NZS 5139:2019 Clause 7.7</p>
<p><b>2</b> Is there a sign adjacent to the lithium-ion pre-assembled BS that states:</p> <ul style="list-style-type: none"> <li>a) Battery System or Battery Energy Storage System</li> <li>b) The correct Short-circuit current (specifying current in amperes)</li> <li>c) The correct Maximum d.c. voltage (specifying voltage in volts)</li> </ul> <p>For systems over DVC-A, the sign shall also state "Hazardous d.c. voltage" <i>This defect applies to section 5 pre-assembled battery systems only.</i></p> 	<p><b>Pre-assembled BS 15</b></p> <p>AS/NZS 5139:2019 Clause 7.6</p>

Item to check	CER Checklist item / Standard & clause
<p><b>3</b> Is there a site-specific shutdown procedure that details the sequential steps to safely shutdown the BS? The shutdown procedure shall be:</p> <p>a) installed adjacent to the PCE to which the battery system is connected; and</p> <p>b) placed adjacent to and visible from the equipment to be operated in the event of a shutdown.</p> <p>All labelling of devices shall be consistent with terminology used in the shutdown procedure.</p> <p>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.</p> <div data-bbox="619 781 1082 1469" style="border: 1px solid black; padding: 10px; margin: 10px 0;"> <p style="text-align: center;"><b>SHUTDOWN PROCEDURE</b></p> <ol style="list-style-type: none"> <li>1. Turn off the MAIN SWITCH (INVERTER) or INVERTER A.C. ISOLATOR</li> <li>2. Turn off the MAIN SWITCH (ALTERNATIVE) or ALTERNATIVE SUPPLY A.C. ISOLATOR</li> <li>3. Turn off the PV ARRAY D.C. ISOLATOR located at the Inverter</li> <li>4. Turn off BATTERY SYSTEM D.C. ISOLATORS located at the Inverter or Battery</li> </ol> <p><b>ZYX</b> System installed by ZYX Electrical Phone 0412 345 678</p> <div style="background-color: yellow; border: 1px solid black; padding: 5px;"> <p style="text-align: center;"><b>WARNING</b></p> <p style="text-align: center;">PV ARRAY D.C. ISOLATORS DO NOT DE-ENERGISE THE PV ARRAY AND ARRAY CABLING</p> </div> <div style="background-color: yellow; border: 1px solid black; padding: 5px;"> <p style="text-align: center;"><b>WARNING</b></p> <p style="text-align: center;">BATTERY SYSTEM D.C. ISOLATORS DO NOT DE-ENERGISE THE BATTERY SYSTEM AND BATTERY SYSTEM CABLING</p> </div> </div>	<p><b>Pre-assembled BS 16</b></p> <p>AS/NZS 5139:2019 Clause 7.16</p>

<p><b>4</b> 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?</p> <div data-bbox="301 1684 1075 1966" style="background-color: yellow; border: 1px solid black; padding: 10px; margin: 10px 0;"> <div style="display: flex; align-items: center;">  <div> <p style="text-align: center;"><b>WARNING</b></p> <p style="text-align: center;">MULTIPLE MODE IES CONNECTED NEUTRAL AND EARTH CIRCUITS MAY BE LIVE UNDER NORMAL AND FAULT CONDITIONS FOLLOW SHUTDOWN PROCEDURE</p> </div> </div> </div>	<p><b>SB &amp; Labelling 16</b></p> <p>AS/NZS 4777.1:2024 Clause 6.8</p>
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Item to check	CER Checklist item / Standard & clause
<p>5 Are circuits that are backed up when the grid is not available appropriately labelled to indicate their function?</p>   	<p><b>SB &amp; Labelling 19</b></p> <p>AS/NZS 3000 Clause 2.10.5.2</p> <p>AS/NZS 4777.1:2024 Clause 5.3.6.1</p>
<p>6 Has the main switch for alternative supply from the battery system/inverter been labelled "MAIN SWITCH (ALTERNATIVE)"?</p>  	<p><b>SB &amp; Labelling 26</b></p> <p>AS/NZS 4777.1:2024 Clause 6.3 (d)</p>
<p>7 Is the ES sign at least 100 mm in diameter, and does it contain the United Nations number for the primary chemistry written below the "ES" lettering, e.g. UN3480?</p> 	<p><b>SB &amp; Labelling 2</b></p> <p>AS/NZS 5139:2019 Clause 7.3, Appendix B Clause B.1</p>

Item to check	CER Checklist item / Standard & clause
<p>8 Do switchboards energised by battery system contain the label "Multiple Supplies Isolate all Supplies before Working on this Switchboard"?</p> 	<p><b>SB &amp; Labelling 17</b></p> <p>AS/NZS 4777.1:2024 Clause 6.3 (g)</p>
<p>9 Is there a sign adjacent to the lithium-ion pre-assembled integrated BESS that states:</p> <ul style="list-style-type: none"> <li>a) Battery System or Battery Energy Storage System</li> <li>b) The correct short-circuit current (specifying current in amperes)</li> <li>c) The correct maximum d.c. voltage (specifying voltage in volts)</li> </ul> <p>For systems over DVC-A, the sign shall also state "Hazardous d.c. voltage".</p> 	<p><b>Integrated BESS 13</b></p> <p>AS/NZS 5139:2019 Clause 7.6</p>
<p>10 Is there a site-specific shutdown procedure that details the sequential steps to safely shutdown the BESS?</p> <p>The shutdown procedure shall be:</p> <ul style="list-style-type: none"> <li>a) installed adjacent to the PCE to which the battery system is connected; and</li> <li>b) placed adjacent to and visible from the equipment to be operated in the event of a shutdown.</li> </ul> <p>All labelling of devices shall be consistent with terminology used in the shutdown procedure.</p> <p>The shut down 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.</p> 	<p><b>Integrated BESS 14</b></p> <p>AS/NZS 5139:2019 Clause 7.16</p>