

PV array inspection report		<input type="checkbox"/> Initial verification
		<input type="checkbox"/> Periodic verification
Installation address		Reference
		Date
Circuits inspected	Inspector	
General	DC system has been designed, specified and installed to the requirements of IEC 60364 and IEC TS 62548:2013 <input type="checkbox"/>	
	The maximum PV array voltage is suitable for the location <input type="checkbox"/>	
	All system components and mounting structures have been selected and erected to withstand the expected external influences such as wind, temperature and corrosion. <input type="checkbox"/>	
	Roof fixing and cables entries are weatherproof <input type="checkbox"/>	
Protection against electric shock	Protective measure provided by extra low voltage (SELV/PELV) <input type="checkbox"/>	
	Protection by use of class II or equivalent insulation adopted on DC side <input type="checkbox"/>	
	PV string and array cables have been selected and erected so as to minimize the risk of earth faults and short circuits. Typically achieved by the use of cables with protective and reinforced insulation (often termed “double insulated”) <input type="checkbox"/>	
Protection against the effects of insulation faults	Galvanic separation in place inside the inverter or on the AC side <input type="checkbox"/>	
	Functional earthing of any DC conductor <input type="checkbox"/>	
	PV array Earth Insulation Resistance detection and alarm system is installed -to the requirements of IEC TS 62548:2013 <input type="checkbox"/>	
	PV array Earth Residual Current Monitoring detection and alarm system is installed -to the requirements of IEC TS 62548:2013 <input type="checkbox"/>	
Protection against overcurrent	Systems <u>without</u> string over current protective device <input type="checkbox"/>	
	I _{MOD_MAX_OCPR} (the module maximum series fuse rating) is greater than the possible reverse current <input type="checkbox"/>	
	String cables are sized to accommodate the maximum combined fault current from parallel strings <input type="checkbox"/>	
	Systems <u>with</u> string overcurrent protective device <input type="checkbox"/>	
	String overcurrent protective devices are fitted and correctly specified to the requirements of IEC TS 62548:2013 <input type="checkbox"/>	
	Systems <u>with</u> array/sub array overcurrent protective device <input type="checkbox"/>	
Overcurrent protective devices are fitted and correctly specified to the requirements of IEC TS 62548:2013 <input type="checkbox"/>		
Systems where the inverter(s) can produce a DC back-feed into PV array circuits <input type="checkbox"/>		
Any back-feed current is lower than both module maximum fuse rating and string cable ampere rating. <input type="checkbox"/>		
Earthing and bonding arrangements	Where the PV system includes functional earthing of one of the DC conductors <input type="checkbox"/>	
	The functional earth connection has been specified and installed to the requirements of IEC TS 62548:2013 <input type="checkbox"/>	
	Where the PV system has direct connection to earth on the DC side <input type="checkbox"/>	
	A functional earth fault interrupter is provided to the requirements of IEC TS 62548:2013 <input type="checkbox"/>	
Array frame bonding arrangements have been specified and installed to the requirements of IEC TS 62548:2013 <input type="checkbox"/>		
Where protective earthing or equipotential bonding conductors are installed <input type="checkbox"/>		
They are parallel to, and bounded with , the DC cables <input type="checkbox"/>		
Protection against the effects of lightning and overvoltage	To minimize voltages induced by lightning, the area of all wiring loops has been kept as the small as possible. <input type="checkbox"/>	
	Measures are in place to protect long cables (e.g. screening or the use of SPDs <input type="checkbox"/>	
	Where the e fitted, they have been installed to the requirements of IEC TS 62548:2013 <input type="checkbox"/>	
Selection and erection of electrical equipment	PV modules are rated for the maximum possible DC system voltage. <input type="checkbox"/>	
	All DC components are rated for continues operation at DC and at the maximum possible DC system voltage and current as defined in IEC TS 62548:2013 <input type="checkbox"/>	
	Wiring systems have been selected and erected to withstand the expected external influences such as wind, temperature, UV and solar radiation <input type="checkbox"/>	
	Means of isolation and disconnection have been provided for the PV array strings and PV sub-arrays to the requirements of IEC TS 62548:2013 <input type="checkbox"/>	
	A DC switch disconnector is fitted to the DC side of the inverter to the requirements of IEC TS 62548:2013 <input type="checkbox"/>	
	If blocking diodes are fitted, their reverse voltage rating is at least 2 x V _{oc} (stc) of the PV string in which they are fitted (IEC TS 62548:2013) <input type="checkbox"/>	
	Plug and socket connectors mated together are of the same type and form of the same manufacture and comply with the requirements of IEC TS 62548:2013 <input type="checkbox"/>	
AC system	A means of isolating the inverter has been provided on the AC side. <input type="checkbox"/>	
	All isolation and switching devices have been connected such that PV installation is wired to the “load” side and the public supply to the “source” side. <input type="checkbox"/>	
	Where a RCD is installed to the AC circuit feeding an inverter, the RCD type has been verified to ensure it has been selected according to the requirements of IEC TS 62548:2013. <input type="checkbox"/>	
Labelling and identification	All circuits, protective devices, switches and terminals suitably labelled to the requirements of IEC 60364 and IEC TS 62548:2013 <input type="checkbox"/>	
	All DC junction boxes (PV generator and PV array boxes) carry a wiring label indicating that active parts inside the boxes are fed from a PV array and may still be live after isolation from the PV inverter and public supply. <input type="checkbox"/>	
	Means of isolation on the AC side is clearly labelled. <input type="checkbox"/>	
	Dual supply warning labels are fitted at point of interconnection. <input type="checkbox"/>	
	A single line wiring diagram is displayed on site. <input type="checkbox"/>	
	Installer details are displayed on site. <input type="checkbox"/>	
	Shutdown procedures are displayed on site. <input type="checkbox"/>	
	Emergency procedures are displayed on site (where relevant) <input type="checkbox"/>	
	All signs and labels are suitably affixed and durable <input type="checkbox"/>	

I certify that the above filled particulars are true and correct

Inspected by:

NameSignatureDate

(Chartered Electrical Engineer registered at (CEB/LECO)

POST VERIFICATION EVIDENCES (DC SYSTEM)	
<input type="checkbox"/>	Name Plate Data of PV module
<input type="checkbox"/>	Picture: Insert picture of name plate of PV module
<input type="checkbox"/>	Installation of PV modules
<input type="checkbox"/>	Picture: Insert picture of installed PV modules on roof top
<input type="checkbox"/>	DC Junction Box
<input type="checkbox"/>	Picture: Insert Picture of DC junction box with open cover
<input type="checkbox"/>	PV Module fixing Structure
<input type="checkbox"/>	Picture: Insert picture which shows fixing arrangement of structure.
<input type="checkbox"/>	Sealing of roof fixing points
<input type="checkbox"/>	Picture: Insert picture which shows sealing condition of roof at structure mounting/cable entries
<input type="checkbox"/>	DC Cable arrangement
<input type="checkbox"/>	Picture: Insert Picture which shows how DC cables are arrange on the roof