

MEDIUM VOLTAGE POWER STATION SKID-AU 1 SUNNY CENTRAL



Project name:

Customer:

Address, location of the system:

Product serial number

Product production version

i **Content of the maintenance report**

In conjunction with the other product documentation, the maintenance report assures faultless operation of the inverter and peripheral devices from SMA Solar Technology AG. Maintenance work does not automatically guarantee electrical safety.

The maintenance report contains all necessary maintenance intervals of the inverter as well as the preventive replacement intervals of individual components.

i **Storage of the maintenance report**

- After maintenance work, keep the maintenance report at hand near the product.
- In addition, a copy is to be sent to maintenance.service@sma.de at the latest four weeks after completion of the maintenance work. Enter the serial number of the system on which maintenance was carried out in the subject line.

i **Maintenance instructions**

- All work must only be carried out in accordance with this product documentation. All safety information must be observed.

i **Regular data backup**

Back up and archive the product data at regular intervals. This can be done by remote query or during routine maintenance work.

No.	Appendix

Maintenance Work

General Maintenance Work

Maintenance work	Interval	Date completed
Maintain the key switches and seals.	12 months	
Perform visual inspection.	12 months	
Check the latches, door stops and hinges.	24 months	
Clean the interior.	24 months*	
Check the labels.	24 months*	
Check all components of the product and ensure operational safety after environmental disturbances (e.g. earthquakes, storms or flooding).	Where necessary	
Contact the SMA Service Line after each short circuit.	After any short circuit	

* If the product is subject to adverse ambient conditions, SMA Solar Technology AG recommends that the maintenance interval be reduced in accordance with the ambient conditions.

Maintenance Work on the MV Power Station

Maintenance work	Interval	Date completed
Check the doors and structural components of the door frame for damage. Ensure that the doors and locks function properly.	12 months	
Check the station for cracks, holes and rust. Remove any rust patches and repaint (if necessary).	12 months	
Check whether the warning labels and circuit diagrams are present, complete and legible.	12 months	
Check the function of the fast-stop switch.	12 months	
Check the oil level using the sight gauge on the left side of the low-voltage transformer. Due to a nitrogen buffer, the low-voltage transformer is not completely filled with oil. However, the filling level must exceed the line marking.	12 months	
Check the cooling surfaces of the low-voltage transformer for dirt and damages.	12 months	
Check the low-voltage transformer for paint damage and rust. Remove any rust patches and repaint (if necessary).	12 months	
Check the low-voltage transformer for operating noises.	12 months	

Service work on the inverter

Maintenance work	Interval	Date completed
Clean the air duct and the ventilation grids.	12 months	

Maintenance work	Interval	Date completed
Check the labels.	24 months*	
Clean the heating elements.	24 months	
Check the fuse of the DC surge arrester for continuity.	24 months	
Check the fans.	24 months	
Check the heating elements.	24 months	
Check the functioning of the indicator lights.	24 months	
Maintain the DC load-break switch.	24 months**	
Clean the AC disconnection unit.	24 months**	
Maintain the AC disconnection unit.	4 years / after a short circuit***	
Replace the fuse of the DC surge arrester.	Once triggered	
Replace the DC fuses.	After a fault	

* If the product is subject to adverse ambient conditions, SMA Solar Technology AG recommends that the maintenance interval be reduced in accordance with the ambient conditions.

** In deviation to the maintenance interval of twelve months specified by ABB, the maintenance interval stated in this documentation applies.

*** Deviating from the 3-year maintenance interval specified by ABB, the maintenance interval required by this documentation applies.

The maintenance work must only be performed by SMA Service.

Maintenance work	Interval	Date completed
Replace the lithium-ion rechargeable battery.	10 years	
Replace the Industrial Compact Flash card.	10 years or after an error message	
Replace the interior fan.	14 years	
Replace the inverter bridge fan.	14 years	
Replace the GFDI.	After 7000 cycles or 100 short circuits	
Replace the Remote GFDI.	After 7000 cycles	

Service work at the low-voltage connection between inverter and MV transformer

Maintenance work	Interval	Date completed
Clean air inlets.	12 months*	
Check grounding connections.	12 months*	
Check the connection of the busbars for discoloration.	12 months*	
Replace the filter of the low-voltage connection (Order number: 114416-00.01).	12 months*	

* If the product is subject to adverse ambient conditions, SMA Solar Technology AG recommends that the maintenance interval be reduced in accordance with the ambient conditions.

Maintenance Work on the MV Transformer

Maintenance work	Interval	Date completed
Check the oil level.	12 months	
Check low-voltage and medium-voltage cable entries for discolorations and damages.	12 months	
Check electrical connections for dirt and signs of electric arcs.	12 months	
Check the cooling surfaces for dirt and damages.	12 months	
Check maintenance seal and security seals for damage.	12 months	
Checking the torque of grounding connections	12 months	
Check function of the tap changer.	12 months	
Check the MV transformer for paint damage and rust. Remove any rust patches and repaint (if necessary).	12 months	
Check the cabling.	12 months	
Check all the sealings on the MV transformer for leakages.	12 months	
Check grounding connections.	24 months	
Take an oil sample and have it tested.	Recommended after a failure when, for example, a protection device has tripped.	
Check the MV transformer for operating noise.	Where necessary	

Maintenance Work in the Medium-Voltage Compartment

Maintenance work	Interval	Date completed
Check the MV switchgear's level of gas.	Prior to each switching procedure:	
Carry out the visual inspection of the general condition (cleanliness, no corrosion, etc.). If required, clean the enclosure and repair corroded surfaces.	12 months	
Check the roof lid of electric-arc opening.	12 months	
Check functionality of the over-current protection device.*	12 months	
Check the functionality of the switch.	12 months	
Check grounding connections.	24 months	
Check the circuit breaker.	24 months	
Check the motor-drive function.	24 months	

Maintenance work	Interval	Date completed
Check electrical connections.	6 years	
Check the accessory for completeness and its current state.	6 years	
Check that switch position indicators are aligned.	6 years	
Replace the battery (Saft Type LS 17500, 3.6 V) of the overcurrent protection devices IKI 30E and IKI 35.	15 years	

* This task must only be performed by qualified protection tester.

Maintenance Work on the Oil Spill Containment

Maintenance work	Interval	Date completed
Check for leakages. If necessary, eliminate leakages.	12 months*	
Check for dirt contamination. Clean if necessary.	12 months*	
Check for water to prevent frost damage. Remove water, if necessary.	12 months*	
Replace the oil filter.	12 months	

* If the product is subject to adverse ambient conditions, SMA Solar Technology AG recommends that the maintenance interval be reduced in accordance with the ambient conditions.

Your signature confirms that the work listed above has been carried out.

Customer or contractor company*	Last name, first name*	Date	Signature

* in block letters