UPS Maintenance Checklist

Engineer name: _____

Date: _____

Equipment ID: _____

Site / Substation: _____

Voltage Rating: _____

Equipment rating / type: _____

Manufacturer / model: _____

Manual / drawing revision: _____

Approved work scope / plan: _____

Equipment state / access scope: _____

Original report references: _____

Method / measurement point: _____

Load / ambient context: _____

Instrument / calibration reference: _____

User criteria document / locator: _____

Baseline / comparison context: _____

Approved scope and installed components govern applicability. No normal ranges, acceptance values, test settings, intervals or work authorization. Condition OK is a user judgement under external approved criteria. Evidence/task/measurement OK means record completeness, not healthy equipment. Leave unknown results blank and explain pending evidence/criteria; N/A requires a reason. Full part-level form, not a configured subset.

PREPARATION & SCOPE						
No.	Checkpoint	Value	OK	Not OK	N/A	Remarks
1	Record equipment identity, subtype, model and maintenance scope Task / OK = recording task complete	-	[ ]	[ ]	[ ]	
2	Review previous inspection, repair and original test records Task / OK = recording task complete	-	[ ]	[ ]	[ ]	
3	Record operating events, known defects and outstanding follow-up Task / OK = recording task complete	-	[ ]	[ ]	[ ]	
4	Reference current manufacturer maintenance instructions and approved work controls Task / OK = recording task complete	-	[ ]	[ ]	[ ]	
5	Record approved methods and instrument/calibration references for planned tests Task / OK = recording task complete	-	[ ]	[ ]	[ ]	
6	Identify fitted parts, maintenance exclusions and baseline comparison conditions Task / OK = recording task complete	-	[ ]	[ ]	[ ]	

CHARGER & RECTIFIER						
No.	Checkpoint	Value	OK	Not OK	N/A	Remarks
7	Charger model, source and DC output circuit are recorded Evidence / OK = evidence verified; not equipment health	-	[ ]	[ ]	[ ]	
8	Approved charge mode/settings and firmware references are retained Evidence / OK = evidence verified; not equipment health	-	[ ]	[ ]	[ ]	
9	Alarm, cooling and rectifier service observations are documented Evidence / OK = evidence verified; not equipment health	-	[ ]	[ ]	[ ]	
10	DC output/ripple reports identify load, charge state and measurement method Evidence / OK = evidence verified; not equipment health	-	[ ]	[ ]	[ ]	
11	Approved charger output report — attach the approved report with method, conditions and source reference; only if in scope Measurement / OK = measurement record complete	_____ V / A	[ ]	[ ]	[ ]	

CHARGER & RECTIFIER						
No.	Checkpoint	Value	OK	Not OK	N/A	Remarks
12	Maintenance follow-up for charger & rectifier: change from baseline, service/replacement performed and unresolved defect reference Evidence / OK = evidence verified; not equipment health	-	[ ]	[ ]	[ ]	

INVERTER						
No.	Checkpoint	Value	OK	Not OK	N/A	Remarks
13	Inverter model, firmware and topology are recorded Evidence / OK = evidence verified; not equipment health	-	[ ]	[ ]	[ ]	
14	Power-module and DC-link capacitor service records are referenced Evidence / OK = evidence verified; not equipment health	-	[ ]	[ ]	[ ]	
15	Cooling, alarm and overload history are documented Evidence / OK = evidence verified; not equipment health	-	[ ]	[ ]	[ ]	
16	Output quality/functional reports identify load and operating mode Evidence / OK = evidence verified; not equipment health	-	[ ]	[ ]	[ ]	
17	Approved inverter functional report — attach the approved report with method, conditions and source reference; only if in scope Evidence / OK = evidence verified; not equipment health	-	[ ]	[ ]	[ ]	
18	Maintenance follow-up for inverter: change from baseline, service/replacement performed and unresolved defect reference Evidence / OK = evidence verified; not equipment health	-	[ ]	[ ]	[ ]	

BYPASS SYSTEM						
No.	Checkpoint	Value	OK	Not OK	N/A	Remarks
19	Static/maintenance bypass arrangement and source identity are recorded Evidence / OK = evidence verified; not equipment health	-	[ ]	[ ]	[ ]	
20	Position indicators, labels and accessible mechanism condition are documented Evidence / OK = evidence verified; not equipment health	-	[ ]	[ ]	[ ]	
21	Bypass/transfer interlock evidence is referenced Evidence / OK = evidence verified; not equipment health	-	[ ]	[ ]	[ ]	
22	Temporary bypass status and separately approved restoration records are retained Evidence / OK = evidence verified; not equipment health	-	[ ]	[ ]	[ ]	
23	Approved bypass functional/interlock report — attach the approved report with method, conditions and source reference; only if in scope Evidence / OK = evidence verified; not equipment health	-	[ ]	[ ]	[ ]	
24	Maintenance follow-up for bypass system: change from baseline, service/replacement performed and unresolved defect reference Evidence / OK = evidence verified; not equipment health	-	[ ]	[ ]	[ ]	

BATTERY CELLS						
No.	Checkpoint	Value	OK	Not OK	N/A	Remarks
25	Battery chemistry, model, cell/block IDs and string are recorded Evidence / OK = evidence verified; not equipment health	-	[ ]	[ ]	[ ]	

BATTERY CELLS						
No.	Checkpoint	Value	OK	Not OK	N/A	Remarks
26	Swelling, cracks, leaks and corrosion are documented by cell/block Evidence / OK = evidence verified; not equipment health	-	[ ]	[ ]	[ ]	
27	Rack, spacing and accessible cell interconnections are inspected Condition / OK = user judgement under approved criteria	-	[ ]	[ ]	[ ]	
28	Cell/block voltage records identify charging state and measurement point Evidence / OK = evidence verified; not equipment health	-	[ ]	[ ]	[ ]	
29	Cell/block temperature at the identified location from the approved observation/report; retain charge/load state Measurement / OK = measurement record complete	_____ °C / °F	[ ]	[ ]	[ ]	
30	Approved cell-voltage report — attach the approved report with method, conditions and source reference; only if in scope Measurement / OK = measurement record complete	_____ V / mV	[ ]	[ ]	[ ]	
31	Maintenance follow-up for battery cells: change from baseline, service/replacement performed and unresolved defect reference Evidence / OK = evidence verified; not equipment health	-	[ ]	[ ]	[ ]	

POWER CONNECTIONS						
No.	Checkpoint	Value	OK	Not OK	N/A	Remarks
32	Terminal and conductor identity match the reviewed connection drawing Evidence / OK = evidence verified; not equipment health	-	[ ]	[ ]	[ ]	
33	Discoloration, insulation damage and heat marks are recorded by terminal Evidence / OK = evidence verified; not equipment health	-	[ ]	[ ]	[ ]	
34	Conductor support, bend and strain-relief discrepancies are documented Evidence / OK = evidence verified; not equipment health	-	[ ]	[ ]	[ ]	
35	Approved torque/service evidence is referenced without inferring a torque value Evidence / OK = evidence verified; not equipment health	-	[ ]	[ ]	[ ]	
36	Approved connection-resistance report — attach the approved report with method, conditions and source reference; only if in scope Measurement / OK = measurement record complete	_____ µΩ / mΩ / Ω	[ ]	[ ]	[ ]	
37	Maintenance follow-up for power connections: change from baseline, service/replacement performed and unresolved defect reference Evidence / OK = evidence verified; not equipment health	-	[ ]	[ ]	[ ]	

PROTECTION & INTERLOCKS						
No.	Checkpoint	Value	OK	Not OK	N/A	Remarks
38	Protective device identity and approved settings revision are recorded Evidence / OK = evidence verified; not equipment health	-	[ ]	[ ]	[ ]	
39	Trip, alarm and interlock reports identify the functions actually tested Evidence / OK = evidence verified; not equipment health	-	[ ]	[ ]	[ ]	
40	Any inhibited function, override or temporary setting is documented Evidence / OK = evidence verified; not equipment health	-	[ ]	[ ]	[ ]	

PROTECTION & INTERLOCKS						
No.	Checkpoint	Value	OK	Not OK	N/A	Remarks
41	Review/disposition references for protection discrepancies are retained Evidence / OK = evidence verified; not equipment health	-	[ ]	[ ]	[ ]	
42	Approved protection and interlock verification report — attach the approved report with method, conditions and source reference; only if in scope Evidence / OK = evidence verified; not equipment health	-	[ ]	[ ]	[ ]	
43	Maintenance follow-up for protection & interlocks: change from baseline, service/replacement performed and unresolved defect reference Evidence / OK = evidence verified; not equipment health	-	[ ]	[ ]	[ ]	

COOLING & VENTILATION						
No.	Checkpoint	Value	OK	Not OK	N/A	Remarks
44	Ventilation openings, filters and air paths have documented condition Evidence / OK = evidence verified; not equipment health	-	[ ]	[ ]	[ ]	
45	Fans, guards and cooler/radiator surfaces are inspected within approved access Condition / OK = user judgement under approved criteria	-	[ ]	[ ]	[ ]	
46	Cooling stage control and alarm evidence are referenced where fitted Evidence / OK = evidence verified; not equipment health	-	[ ]	[ ]	[ ]	
47	Ambient/load context and sensor location accompany temperature records Evidence / OK = evidence verified; not equipment health	-	[ ]	[ ]	[ ]	
48	Cooling-system temperature at the identified measurement location Measurement / OK = measurement record complete	_____ °C / °F	[ ]	[ ]	[ ]	
49	Cooling-system functional or temperature report — attach the approved report with method, conditions and source reference; only if in scope Measurement / OK = measurement record complete	_____ °C / °F	[ ]	[ ]	[ ]	
50	Maintenance follow-up for cooling & ventilation: change from baseline, service/replacement performed and unresolved defect reference Evidence / OK = evidence verified; not equipment health	-	[ ]	[ ]	[ ]	

GROUNDING & BONDING						
No.	Checkpoint	Value	OK	Not OK	N/A	Remarks
51	Protective earth and bonding conductor identification is recorded Evidence / OK = evidence verified; not equipment health	-	[ ]	[ ]	[ ]	
52	Accessible bonds, clamps and joints show documented condition Evidence / OK = evidence verified; not equipment health	-	[ ]	[ ]	[ ]	
53	Missing conductors, corrosion and mechanical damage are recorded Evidence / OK = evidence verified; not equipment health	-	[ ]	[ ]	[ ]	
54	Reviewed earth drawing and continuity measurement locations are referenced Evidence / OK = evidence verified; not equipment health	-	[ ]	[ ]	[ ]	
55	Approved bonding-continuity report — attach the approved report with method, conditions and source reference; only if in scope Measurement / OK = measurement record complete	_____ mΩ / Ω	[ ]	[ ]	[ ]	

GROUNDING & BONDING						
No.	Checkpoint	Value	OK	Not OK	N/A	Remarks
56	Maintenance follow-up for grounding & bonding: change from baseline, service/replacement performed and unresolved defect reference Evidence / OK = evidence verified; not equipment health	-	[ ]	[ ]	[ ]	

REVIEW & FOLLOW-UP						
No.	Checkpoint	Value	OK	Not OK	N/A	Remarks
57	Attach original reports, photographs and manufacturer-document references Task / OK = recording task complete	-	[ ]	[ ]	[ ]	
58	Record units, method, conditions and instrument identity for each entered result Task / OK = recording task complete	-	[ ]	[ ]	[ ]	
59	Explain excluded or inapplicable parts and missing evidence Task / OK = recording task complete	-	[ ]	[ ]	[ ]	
60	Record discrepancies and assign follow-up owner and due-date reference Task / OK = recording task complete	-	[ ]	[ ]	[ ]	
61	Record qualified review and separately authorized disposition Task / OK = recording task complete	-	[ ]	[ ]	[ ]	
62	Reference restoration or release records; this checklist does not authorize release Task / OK = recording task complete	-	[ ]	[ ]	[ ]	

Additional remarks / follow-up: _____

Engineer signature: _____ Reviewer / reference: _____

Independent draft. Completion does not certify safety, compliance or fitness for service.