

Uninterruptible Power Supply - BMS system for LMH

Activity		Type Of Service				
		A	B	C	D	E
Last Issue Date: 06/10/2020						
1	Check air filters.			Y	Y	Y
2	a) Perform visual checks and operational tests of all UPS equipment and associated switchgear. b) Check any equipment to detect any loose connections, damaged insulation or any other signs of wear. c) Record the input and output voltages and currents in each phase, the power and the power factor. d) Record the room ambient temperature and relative humidity.			Y	Y	Y
3	BATTERY AREA, check battery area for: a) clear ventilation openings. b) operation of mechanical ventilation, (if applicable). c) safety sign condition and that it is in place. d) cleanliness.			Y	Y	Y
4	BATTERY, check condition of batteries, especially for: a) cracks or distortions in containers or covers. b) corrosion at terminals or connections.			Y	Y	Y
5	Clean all cells, battery compartments and cabinets. Measure the temperature of the equipment and equipment connections with a thermographic camera.			Y	Y	Y
6	Carry out a resistance test of each cell.			Y	Y	Y
7	Measure and record the float voltage of each cell.			Y	Y	Y
8	WITH POWER OFF: a) Check all connections and terminations are tight. b) Check all components for stress or heat damage. c) Check battery voltage. d) Vacuum clean inside of UPS.				Y	Y
9	WITH POWER ON: a) Check DC busbar. b) Check electronic grounds with respect to MAIN EARTH BAR. c) Check LCD/MIMIC for correct operation. d) Check operation of audible alarm and cancel pushbutton. e) Check emergency STOP button. f) Check alarm events. g) Check safety systems.				Y	Y
10	WITH SYSTEM ON LOAD: a) Check operation of fans and flaps (where applicable). b) Check DC bus ripple voltage. c) Check battery under-voltage coil supply level. d) Test battery boost (if applicable). e) Check inverter operation. f) Check output waveform quality, harmonic distortion.				Y	Y

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	g) Check condition and operation of circuit breakers. h) Check stopping and starting procedures. i) Check automatic by-pass switch.					
11	OPERATIONAL CHECKS: a) Check operation of LCD panel. b) Check rectifier regulation. c) Check output transient response during step load changes. d) Observe output waveform during mains failure. e) Check battery current limit. f) Check ambient temperature while UPS is operating. g) Check real time clock.				Y	Y
12	ALARM TESTS, check all alarms including: a) battery voltage level. b) DC overvoltage shutdown levels. c) fan failure. d) ambient over-temperature. e) temperature of converters and power components. f) equipment over-temperature. g) voltage alarm fast and slow detectors (if applicable). h) battery earth leakage. i) remote alarm operation & peripheral equipment including USER alarms - alarm events.				Y	Y
13	Check: a) terminals and connections are tight, clean and corrosion free. (*apply approved preservative coating to terminal posts & assemblies.) b) bolted connections are torqued to manufacturer's recommended torque. c) inter-cell and terminal connection resistance. d) integrity of battery stand or enclosure.				Y	Y
14	Carry out battery performance test. Refer to AS 2676.1. Note: The performance test shall test the ability of the battery to operate off the duty cycle required of it by the UPS and load to which it is connected. (This should generally be carried out with an external load bank connected to UPS.)				Y	Y
15	Provide a written report on the tests and findings.				Y	Y
16	Undertake a system status check.	Y		Y	Y	Y
17	Replace the UPS Battery.					Y
18	Record the results in the log book and submit a customer service report to the FMSP.	Y		Y	Y	Y

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Special Comments and Technical Data

A WEEKLY (MAY VARY DEPENDING ON USE. TO BE DONE BY THE SITE).

C SERVICE 3-6 MONTHLY (DEPENDS ON THE BATTERIES AND MANUFACTURER'S RECOMMENDATIONS).

D SERVICE ANNUAL.

E SERVICE 5 YEARLY.

LIAISE AND CO-OPERATE WITH THE SITE REPRESENTATIVE FOR A TIME TO MINIMISE ANY DISRUPTION TO THE AGENCY'S OPERATIONS.

A SPECIALIST SUB-CONTRACTOR IS REQUIRED FOR THIS SERVICE.

APPLICABLE LEGISLATION AND STANDARDS: WH&S REGULATIONS, PUBLIC HEALTH ACT, AS2676, AS1042, AS3000, AS3011.

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