Generator maintenance checklist

01 The visit

Generator (name and tag)

Date

Location

Checked by (printed name)

02 Weekly inspection

7 checks

CHECK	OK	FAIL	NOTE
Fuel: main and day tank levels, day tank float switch, piping and hoses, tank vents	☐	☐	
Oil level; oil heater, where fitted	☐	☐	
Coolant level, block heater warm, belts, hoses, radiator fan	☐	☐	
Exhaust: condensate trap drained, joints and supports	☐	☐	
Starting batteries: terminals, electrolyte level (vented types), charger output	☐	☐	
Control switch in Auto, no alarm lamps lit	☐	☐	
Engine and generator: guards on, nothing loose, nothing stored in the room or enclosure	☐	☐	

03 Monthly run under load

9 checks

CHECK	OK	FAIL	NOTE
Start the test by simulating an outage with the transfer switch's test switch; with several switches, start from a different one each month	☐	☐	
Time from simulated outage to power on the emergency loads	☐	☐	
Run at least 30 minutes under load, warm-up and cool-down not counted	☐	☐	
Diesel load: kW reading against 30 percent of the standby nameplate rating, or exhaust temperature against the maker's minimum	☐	☐	
Readings during the run: oil pressure, coolant temperature, voltage, frequency, hour meter at start and stop	☐	☐	
Exhaust smoke	☐	☐	
Transfer back to normal power after its time delay, then the unloaded cool-down run	☐	☐	
Transfer switch looked over: connections, signs of heat, contact wear, dust, covers closed	☐	☐	
Control back in Auto, alarms reset, no leaks after the run	☐	☐	

04 Yearly, and every three years

8 checks

CHECK	OK	FAIL	NOTE
Load bank test for a diesel set whose monthly runs do not reach 30 percent or the exhaust temperature: at least 50 percent of nameplate for 30 minutes, then at least 75 percent for 60 minutes	☐	☐	
Fuel quality test, using ASTM methods; water drained from the tank bottom	☐	☐	
Maker's service: oil and filters, fuel filters, air filter, coolant tested, belts and hoses	☐	☐	
Starting batteries load tested or replaced by age	☐	☐	
Engine safety shutdowns proved: low oil pressure, high temperature, overspeed, overcrank	☐	☐	
Circuit breakers in a Level 1 system exercised, with the generator off	☐	☐	
Transfer switch: infrared scan under load, then cleaned and tightened with it de-energized, by a qualified electrician	☐	☐	
Every 36 months, Level 1 systems: a continuous run for the system's class, up to 4 hours, a diesel at no less than 30 percent of nameplate	☐	☐	

05 Defects and sign-off

Defects found, or no defects

Work orders written

Signature