



Department of Facilities

POLICY AND PROCEDURE

POLICY NUMBER: 558
VERSION: 1

SUBJECT: EC 7.30 Emergency Power Generator and automatic Transfer Switches

POLICY: EC 7.30

Emergency power generators will be tested and inspected as per all Regulatory Compliance, The Joint Commission and the Preventative Maintenance Program.

PURPOSE:

To ensure the safe and reliable operation of the emergency generator and Automatic Transfer switches (ATS).

PROCEDURE:

All testing intervals and procedures will be done as per Regulatory Compliance and the Preventative Maintenance Program.

Monthly:

The generator will be ran for forty five (45) minutes under a dynamic load that is at least 30% of the generators name plate rating. This is done to prevent wet stacking.

The following pre-checks will be conducted prior to operating the emergency generator:

1. Water jacket, oil and fuel level.
2. Loose terminals, frayed wiring and frayed engine belts.
3. Remove any excessive dirt, dust, oil or foreign objects from on or around the engine.
4. Check battery terminal connections.

During the operation of the generators observe the following:

1. Operation of exhaust fans.
2. Operation of the fuel pumps.
3. Gauges, oil, water temperature (all engine gauges).

All automatic transfer switches (A.T.S.) will be tested at least monthly.

These switches are used to start the generator and add load to the test. The emergency generator must start and assume the emergency load within 8 seconds. List in the log the following items from the generator: Start time, emergency load transfer time, oil temperature, water temperature, voltage in each phase, amperage demand of each phase, KW KVAR readings, running time, and any unusual incident of the emergency power system. All unusual incidents shall be forwarded through the chain of command for any necessary action. The operator will assure that the emergency generator and emergency synchronizing switchboard is in their automatic position.

The operator will also inspect the following:

1. Indicating lamps and instrumentation and protective devices.
2. Devices and components.

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3. Terminal connections.
4. Timing of power transferring.
5. Any accumulation of foreign objects.
6. Operational performance.
7. Exterior and interior cleanliness and condition of switchgear and Switch-gear housing.

After the test, check that all systems are normal. Exhaust is to be checked for proper temperature and evidence of wet stacking.

Annually:

A load-bank test is performed connecting the following supplemental loads: 25% of nameplate rating for 30 minutes; followed by 50% of name plate rating for 30 minutes; followed by 75% of nameplate rating for 60 minutes for a total of two hours continuously.

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| Approved By: Anthony Corliss (MANAGER I, FACILITIES OPERATIONS AND CRAFTS) | |
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