



University Fire Marshal Authority

Office of the Provost

Design and Construction Management

Standard, June 16, 2005

TESTING STANDARDS FOR EMERGENCY GENERATORS

1. Emergency generators shall be exercised on a monthly basis (an automatic weekly exercise is recommended, not NFPA required) and is optional per request of each facility.
2. Quarterly testing is required, refer to NFPA for details.
3. Annual full load test is required per NFPA (connected building load). This must be done utilizing a disconnect switch at the main switchgear to all the emergency power connected circuits. This is the only way to test the transfer switch correctly simulating a power outage. Anything less would not be a valid test and would result in a possible failure. Utilizing the generator test switch is not acceptable for this test. This is also done for 90 minutes in conjunction with the emergency lighting test which includes verifying that all circuits and fixtures are on providing emergency lighting throughout the exit paths and in places of assemble.
4. All tests shall be documented for submittal during the annual fire inspection.
5. All tests shall be conducted per NFPA

TESTING AT FACILITIES THAT UTILIZE EMERGENCY GENERATORS FOR BACK-UP POWER

Facilities similar to the Structural Biology Center utilizing the emergency generator for back-up power throughout the building shall be tested the same as above. This would be true for Malott, MRB, Simons etc. At the time of design it is discussed that for the short duration switch over to the emergency/back-up power that any critical systems and computers must be protected by UPS systems. This switchover is under 10 seconds for the initial startup and just a brief fraction of a second for switch back to normal power.