

Description:

The purpose of the section is to highlight the current applicable UMCP Design Standards for the design, selection and installation of emergency power units.

Related Sections:

- TBD

Effective Date:

July 10, 2009

Applicable Standards:

- TBD

General Requirements:

- Emergency power for the following systems is required:
 - Fire Alarm
 - Security
 - Emergency Lighting
 - Telephone Service
 - CCMS
 - Other systems as may be needed/identified by the University.

Lighting equipment pertaining to code required illumination shall be also supported by an emergency generator. All mechanical and electrical rooms having disconnecting or air handling equipment shall have 50% of connected lighting served by an emergency circuit. All lighting shall be switchable at entry to room. Where applicable, new loads shall be connected to existing generators to maximize the use of existing equipment.

- The size of the generator set shall be calculated by A/E based upon the connected load include any Alternate plus 20 percent spare capacity for future expansion.
- Provide for and show a generator set with automatic transfer switch, manual by-pass, start/stop control system, remote alarm annunciator, battery charger, and other accessories for a complete working system.
- Fuel to power the generator shall be selected on the basis of cost and availability with a preference for natural gas followed by fuel oil and propane gas.
- Acceptable locations for Emergency Generators):
 - SCUB
 - Basement or ground floor of building,
 - A weather protected enclosure meeting noise abatement standards adjacent to building.No other locations are acceptable.
- Generator exhaust shall not be discharged in a fashion to cause it to enter any building's air handling system or into pedestrian walkways.
- Generator rooms must be large enough to enable repairs. Access doors must be large enough to permit removal and replacement of the generator without having to dismantle the generator in any way.
- The generator shall be run for several hours while the building is in use and occupied; therefore, the generator must be properly exhausted and sound-proofed so as not to interfere with the building's usage.
- Overhead lighting, on an emergency circuit, is required in the generator room or within the weather protected enclosure while the generator is operational.