The following information shall be included in specifications prepared for use on all University of Cincinnati construction and renovation projects. This information is supplemental and not intended to be a complete specification.

GENERAL STANDARDS

General Criteria
Alternate Power Sources - The University of Cincinnati Master Plan provides for connecting groups of buildings with parallel power circuits so that electric power supply to a building can be obtained from alternate sources. Where the interruption of electrical supply to a building would result in hazard to life or property, or major loss of research or equipment, provision shall be made for an emergency supply of power, to be used in the event of failure of the normal supply.

Details of the plans as they apply to the project shall be explained and included in the early Design Development submittal and conferences. If tie-in on an existing circuit or feeder is not practical, provision shall be made for the future. Reliable equipment and transfer switch must be specified.

Emergency Standby Equipment Systems - An emergency system/standby power source must be designed. It must be supplied by an engine generator.

► Exception: Tapping ahead of the main disconnect switch as an emergency means of power is not permitted except as a subservice for maintenance purposes.

Emergency Generators

- Emergency generator drives may not be naturally aspirated gas engines.
- Any generator over 400 kW will have paralleling controls and equipment installed on the unit.
- At completion if generator installation, contractor to perform step load acceptance test. This test is performed by operating the generator at 25% of nameplate rating for 30 minutes. Followed by 50% of nameplate rating load test for 30 minutes. Followed by 80% load test of nameplate rating for 60 minutes for a total of 2 continuous hours. Load test should be performed with the use of a resistive load bank provided by the generator vendor. Documentation of the test provided to The University at conclusion of test.

Emergency Lighting

When an emergency lighting or generator system is provided, emergency lights will be included at the generator, in all mechanical equipment spaces, and in electric transformer and switchgear spaces.

Emergency Panelboards

An emergency panelboard shall be provided for: Exit lights, Minimal hallway and stairway lighting and telephone power, Fire alarms, building security equipment, and fire protection systems & Elevators, when required by the International Building Code (IBC)
**Emergency Lighting**
Wiring for emergency systems shall be in separate conduits. Switches for emergency lighting circuits shall not be accessible to the public.

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**PRODUCT STANDARDS**

All engines on emergency generators shall be manufactured by Caterpillar, Kohler, Cummings, Detroit Diesel or Perkins Diesel. No parts on a generator set are to be proprietary.

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**EXECUTION STANDARDS**

(*No Standards for this Section*)

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