
26 30 00 Emergency Power

1. Emergency Power – General

- 1.1. Standby emergency power is required for most University buildings to supply emergency lighting and other emergency services such as fire pumps, sump pumps and similar critical loads. Since maintenance on standby equipment is regulated, it is important to minimize the quantity of generators. Groups of buildings shall be fed from a single generator servicing a designated area whenever possible.
- 1.2. Generators shall be diesel or natural gas powered with three phase, four wire 600/347 volt output complete with automatic transfer switch and battery charger. The engine and generator shall be installed in a room separate from the main transformer and associated switchgear, shall be installed above grade, and shall allow easy access for a resistive load bank for required annual testing.
- 1.3. Disconnects with cam-lock connectors shall be installed at grade to allow for easy connection of a resistive load bank to the generator as well as connection of a temporary generator if the building generator cannot operate (i.e. failure). Consult with PPS Engineering as to when latter provision is required.
- 1.4. In scientific buildings, consideration shall be given to providing each floor with a panel fed at 60 amps (minimum) located adjacent to the main power panels on each floor. These panels should be fed separately from electrical feeds to specific equipment.
- 1.5. Approved generator manufacturers are Cummins, Onan, Kohler, SDMO, and Caterpillar.
- 1.6. Automatic transfer switches (ATS) shall come with ability to bypass in order to maintain and repair switches without affecting the connected loads.
- 1.7. Approved ATS manufacturer is ASCO Power Technologies.
- 1.8. Documentation for the standby equipment shall include all operations and maintenance documentation recommended by the manufacturer, factory load test data, a single line diagram illustrating the complete, as-built distribution of the standby power, a table or panel schedule indicating the precise connected load, the measured load under test conditions and a completed Queen's data sheet for standby generators.