

EMERGENCY POWER SUPPLY

DESIGN GUIDELINES

1. Summary:
 - a. This section provides guidelines and standards for new and existing Emergency Power Supply Systems and Optional Standby Systems.
2. Design
 - a. Diesel Generators will provide the emergency power.
 - b. Runtime shall be determined on a per building basis.
 - c. Generators shall be provided with remote annunciators and remote monitoring to the Building Automation System.
 - d. Buildings other than Health Care Facilities
 - The emergency system shall contain a minimum of two distinct emergency systems served by a minimum of two transfer switches that will automatically supply illumination, power, or both to designated areas upon failure of the normal supply:
 1. Emergency System: Dedicated for loads as defined in NEC Article 700. These loads supply, distribute and control power and illumination essential for safety to human life such as: fire pumps, egress lighting, including exit signs and night-lights, fire alarm system, security systems and elevators. One elevator shall run on emergency power per bank of elevators or as instructed by engineer and WUSM.
 2. Legally Required System: Dedicated for loads as defined in NEC Article 701 such as heating and refrigeration systems, communications systems, ventilation and smoke removal systems and other systems that are not of the life safety nature, however, if interrupted could cause hazards or hamper rescue operations.
 - e. WUSM OFMD must review other emergency systems such as Optional Standby Systems prior to design.
 - f. Optional Standby Systems as defined in NEC Article 702 shall be provided where determined by WUSM OFMD to supply backup power for requested equipment in tenant spaces. Typically, each tenant shall not exceed 2 Watts per Net Assignable Sq.Ft (NSF) connected to the Optional Standby System unless approved by WUSM OFMD.
 - g. Risers and panels shall be sized for minimum 2 Watts/NSF.
 - h. Only enough emergency receptacles shall be installed and connected for allocated emergency equipment to achieve the maximum of 2W/NSF. In remodel area, unused emergency receptacles shall be disconnected and removed.
 - i. Emergency power for mechanical systems shall be reviewed on a building by building basis.
 - j. Consideration shall be given to providing portable generator hook-up and/or load bank cam-lock connection boxes. Coordinate with WUSM OFMD.

3. Related Sections

- a. Automatic Transfer Switches

EQUIPMENT and PRODUCT REQUIREMENTS

1. Emergency Generators

- a. Approved Manufacturers:

- Caterpillar
- Onan/Cummins
- Kohler

END OF SECTION