

(A) Special Conditions. Additional feeders or branch circuits shall be permitted to supply the following:

- (1) Fire pumps
- (2) Emergency systems
- (3) Legally required standby systems
- (4) Optional standby systems
- (5) Parallel power production systems
- (6) Systems designed for connection to multiple sources of supply for the purpose of enhanced reliability
- (7) Electric vehicle power transfer systems listed, labeled, and identified for more than a single branch circuit or feeder
- (8) Docking facilities and piers

(B) Common Supply Equipment. Where feeder conductors originate in the same panelboard, switchboard, or other distribution equipment, and each feeder terminates in a single disconnecting means, not more than six feeders shall be permitted. Where more than one feeder is installed in accordance with this section, all feeder disconnects supplying the building or structure shall be grouped in the same location, and the requirements of 225.33 shall not apply. Each disconnect shall be marked to indicate the load served.

(C) Special Occupancies. By special permission, additional feeders or branch circuits shall be permitted for either of the following:

- (1) Multiple-occupancy buildings where there is no space available for supply equipment accessible to all occupants
- (2) A single building or other structure sufficiently large to make two or more supplies necessary

(D) Capacity Requirements. Additional feeders or branch circuits shall be permitted where the capacity requirements are in excess of 2000 amperes at a supply voltage of 1000 volts or less.

(E) Different Characteristics. Additional feeders or branch circuits shall be permitted for different voltages, frequencies, or phases, or for different uses such as control of outside lighting from multiple locations.

Δ (F) Documented Switching Procedures. Additional feeders or branch circuits shall be permitted to supply installations under single management where documented safe switching procedures are established and maintained.

Buildings on college campuses, multibuilding industrial facilities, and multibuilding commercial facilities are permitted to be supplied by secondary loop supply (secondary selective) networks if documented switching procedures are in place. The switching procedures must establish a method to safely operate switches for the facility during maintenance and during alternative supply and emergency supply conditions. Keyed interlock systems are often used to reduce the likelihood of inappropriate switching procedures that could result in hazardous conditions.

Δ 225.31 Disconnecting Means.

N (A) General. Means shall be provided for disconnecting all ungrounded conductors that supply or pass through the building or structure.

Δ (B) Location. The disconnecting means shall be installed either inside or outside of the building or structure served or where the conductors pass through the building or structure. The disconnecting means shall be at a readily accessible location nearest the point of entrance of the conductors. For the purposes of this section, the requirements in 230.6 shall apply.

Exception No. 1: For installations under single management, where documented safe switching procedures are established and maintained, and where the installation is monitored by qualified individuals, the disconnecting means shall be permitted to be located elsewhere on the premises.

Exception No. 2: For buildings or other structures qualifying under 685.1, the disconnecting means shall be permitted to be located elsewhere on the premises.

Exception No. 3: For towers or poles used as lighting standards, the disconnecting means shall be permitted to be located elsewhere on the premises.

Exception No. 4: For poles or similar structures used only for support of signs installed in accordance with 600.1, the disconnecting means shall be permitted to be located elsewhere on the premises.

Although the requirement for locating the disconnecting means for a feeder or branch circuit supplying a structure is essentially the same as that specified for services in 230.70(A), there is an important difference. Where a building or structure is supplied by a feeder or branch circuit, the disconnecting means must always be nearest the point of entrance of the conductors whether inside or outside the building or structure supplied, unless one of the exceptions can be applied.

Many campus-style facilities are supplied by a single utility service, in which the service disconnecting means is remote from the buildings or structures supplied. The supply conductors to the campus buildings are feeders or branch circuits, and this requirement applies to conductors that supply a building as well as conductors that pass through a building.

Exhibit 225.4 shows an example of a disconnecting means for a generator feeder that can be used to meet the requirements of Article 225, Article 445, and Articles 700, 701, or 702 as applicable. The disconnecting means is required to be "within sight" of the building or structure supplied by the generator. An exception to 700.12(D)(4) permits the disconnecting means for an outdoor generator supplying an emergency system to be located other than within sight of the building(s) or structure(s) supplied by the generator. That exception contains the same conditions as used in 225.31(B), Exception No. 1.