disconnecting means [700.12(D)(4), 701.12(D)(3), and 702.12 amend the general disconnecting means requirement in 225.31], the EGC is connected to the disconnecting means enclosure and to the building's grounding electrode system. This installation is no different from what is required for feeders originating in another building. Where an OCPD is not located at the source (as is the case with many outdoor transformer installations), the grounding and bonding requirements of 250.30(A) apply, and a supply-side bonding jumper is used to complete the ground-fault current path between the source and the building or structure supplied.

## (C) Ungrounded Systems.

(1) Supplied by a Feeder or Branch Circuit. An equipment grounding conductor, as described in 250.118, shall be installed with the supply conductors and be connected to the building or structure disconnecting means and to the grounding electrode(s). The grounding electrode(s) shall also be connected to the building or structure disconnecting means.

## (2) Supplied by a Separately Derived System.

- (a) With Overcurrent Protection. If overcurrent protection is provided where the conductors originate, the installation shall comply with 250.32(C)(1).
- (b) Without Overcurrent Protection. If overcurrent protection is not provided where the conductors originate, the installation shall comply with 250.30(B). If installed, the supply-side bonding jumper shall be connected to the building or structure disconnecting means and to the grounding electrode(s).
- (D) Disconnecting Means Located in Separate Building or Structure on the Same Premises. If one or more disconnecting means supply one or more additional buildings or structures under single management, and where these disconnecting means are located remote from those buildings or structures in accordance with 225.31(B), Exception No. 1 and No. 2, 700.12(D) (4), 701.12(D)(3), or 702.12, all of the following conditions shall be met:
  - The connection of the grounded conductor to the grounding electrode, to normally non-current-carrying metal parts of equipment, or to the equipment grounding conductor at a separate building or structure shall not be made.
  - (2) An equipment grounding conductor for grounding and bonding any normally non-current-carrying metal parts of equipment, interior metal piping systems, and building or structural metal frames is run with the circuit conductors to a separate building or structure and connected to existing grounding electrode(s) required in Part III of this article, or, if there are no existing electrodes, the grounding electrode(s) required in Part III of this article shall be installed if a separate building or structure is supplied by more than one branch circuit.
  - (3) The connection between the equipment grounding conductor and the grounding electrode at a separate building or structure shall be made in a junction box, panelboard, or

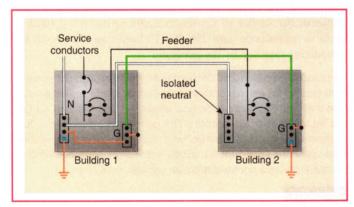
similar enclosure located immediately inside or outside the separate building or structure.

Exceptions to 225.31(B) and requirements within 700.12(D)(4), 701.12(D)(3), and 702.12 permit the disconnecting means to be located elsewhere from the building or structure being supplied. The requirement to make a connection to a grounding electrode system at these buildings or structures still applies, but no disconnecting means is available in which the connection can be made. Sections 250.32(D)(1) through (D)(3) allow for the required connection to be made in a panelboard, junction box, or similar enclosure that is located either inside or outside the building or structure being supplied. The enclosure must be located at a point nearest to where the supply conductors enter the building or structure. An EGC must be run with the supply conductors. The grounded conductor (where installed) must not be bonded to the enclosure or equipment grounding bus. The equipment grounding bus must be connected to a new or existing grounding electrode system at the second building. All noncurrent-carrying metal parts of equipment, building steel, and interior metal piping systems must be connected to the grounding electrode system. Exhibit 250.19 illustrates an installation in which Building 1 houses the disconnecting means for Building 2.

(E) Grounding Electrode Conductor. The size of the grounding electrode conductor to the grounding electrode(s) shall not be smaller than given in 250.66, based on the largest ungrounded supply conductor. The installation shall comply with Part III of this article.

## 250.34 Portable, Vehicle-Mounted, and Trailer-Mounted Generators.

- (A) Portable Generators. The frame of a portable generator shall not be required to be connected to a grounding electrode as defined in 250.52 for a system supplied by the generator under both of the following conditions:
  - The generator supplies only equipment mounted on the generator, cord-and-plug-connected equipment through receptacles mounted on the generator, or both.



**EXHIBIT 250.19** Grounding and bonding for a feeder-supplied separate building under single management with the disconnecting means located remote from the building.