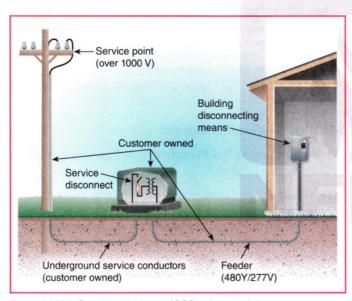


EXHIBIT 235.1 Service rated over 1000 volts supplied by a utility-owned transformer.



**EXHIBIT 235.2** Service rated over 1000 volts supplying a customerowned transformer.

240.21(C)(4) for outside conductors connected to a transformer secondary. Conductors (not shown) on the load side of the building disconnecting means are also feeders. Each building or structure is required to have a disconnecting means, in accordance with 225.31.

- **N 235.402 Service-Entrance Conductors.** Service-entrance conductors to buildings or enclosures shall be installed to conform to 235.402(A) and (B).
- N (A) Conductor Size. Service-entrance conductors shall not be smaller than 6 AWG unless in multiconductor cable. Multiconductor cable shall not be smaller than 8 AWG.

**N** (B) Wiring Methods. Service-entrance conductors shall be installed by one of the wiring methods covered in 305.3 and 305.15.

## N 235.404 Isolating Switches.

N (A) Where Required. Where oil switches or air, oil, vacuum, or sulfur hexafluoride circuit breakers constitute the service disconnecting means, an isolating switch with visible break contacts shall be installed on the supply side of the disconnecting means and all associated service equipment.

Exception: An isolating switch shall not be required where the circuit breaker or switch is mounted on removable truck panels or switchgear units where both of the following conditions apply:

- (1) Cannot be opened unless the circuit is disconnected
- (2) Where all energized parts are automatically disconnected when the circuit breaker or switch is removed from the normal operating position
- **N** (B) Fuses as Isolating Switch. Where fuses are of the type that can be operated as a disconnecting switch, a set of such fuses shall be permitted as the isolating switch.
- *N* (C) Accessible to Qualified Persons Only. The isolating switch shall be accessible to qualified persons only.
- N (D) Connection to Ground. Isolating switches shall be provided with a means for readily connecting the load side conductors to a grounding electrode system, equipment ground busbar, or grounded steel structure when disconnected from the source of supply.

A means for grounding the load side conductors to a grounding electrode system, equipment grounding busbar, or grounded structural steel shall not be required for any duplicate isolating switch installed and maintained by the electric supply company.

## N 235.405 Disconnecting Means.

**N** (A) Location. The service disconnecting means shall be located in accordance with 230.70.

For either overhead or underground primary distribution systems on private property, the service disconnect shall be permitted to be located in a location that is not readily accessible, if the disconnecting means can be operated by mechanical linkage from a readily accessible point, or electronically in accordance with 235.405(C), where applicable.

The general requirement for service disconnecting means in systems rated over 1000 volts is that it be readily accessible. Because ready access might not be possible, or desirable (if it could put employees at risk), the use of a readily accessible operating mechanism or an electronic switching device is an acceptable alternative.

**N**(**B**) **Type.** Each service disconnect shall simultaneously disconnect all ungrounded service conductors that it controls and shall