

September 29, 2020

Dominion Energy (DOM) guidelines for small-cell antenna control box (shroud or cabinet) installations mounted below the communication space on DOM owned poles

DOM engineering standards allows a maximum cabinet size, for pole-mounted installations, of 16 cubic feet and weight of 100 lbs. Larger cabinets should be pad-mounted at a minimum of 10 feet away from the pole. Whenever possible, cabinets should be mounted on the field side of pole and counterflow to vehicular traffic.

Small-cell control cabinet dimensions are also dictated by pole type:

- Wood poles: Maximum 48” height x 24” length x 24” width (16 cubic feet in total volume)
- Non-wood streetlight poles: Maximum 64” in height (12 cubic feet in total volume)

**A 4” standoff bracket is required for all cabinets exceeding 18” in height in wood pole applications. Dominion Energy shall also reserve the right to review all specifications prior to approving any cabinet, regardless of the height.

Additional construction notes regarding control cabinets, power-supplies, and other equipment attached in this space:

- Cabinets should be mounted to adhere to all NESC height and separation clearances. If mounting any equipment below 9 feet of ground clearance on the pole, 8 feet of separation from the top of cabinet to next piece of equipment (handhold/foohold attached above) must be maintained.
- The meter base is to be mounted 4’-6’ above grade provided that:
 - It does not obstruct a walkway; otherwise 9’ of ground clearance required
 - The pole is not climbable as defined in NESC 217.A.2
- Battery backup power is not permitted
- A power disconnect shall be installed and is subject to Dominion approval. The device shall provide disconnecting means for de-energizing power to the antenna.
The disconnect shall:
 - be a standard NEMA type enclosure
 - be readily accessible in accordance with NEC 404.8.
 - be clearly labeled as the antenna power disconnect.
- **Dominion’s ground may not be used to satisfy NEC requirements for the equipment case AC service ground.** DOM requires that both the equipment case and its AC service ground be bonded to the DOM ground conductor on the pole at least 6” above ground level using a No. 6 Cu conductor. Connection to the DOM’s ground rod or connector is not approved.
- Bonds shall be made between the ground wire and the equipment cabinet (not neutral bus) of the power supply/switch. These connections are to avoid potential differences between devices on the poles. Bond to the power supply/switch shall be external and visible from the ground. When a DOM driven ground exists on a pole, the equipment case bonding wire need extend only from the switch to the DOM ground wire.

* all guidelines are subject to change based on the discretion of Dominion Energy or industry standards.