

**NC Department of Insurance
Office of the State Fire Marshal - Engineering Division
1202 Mail Service Center, Raleigh, NC 27699-1202
919-647-0001**

Electrical Utility Conductors and Equipment

Code: 2017 Electrical Code
Section: 90.2(B)(5)

Date: February 19, 2019

Question 1:

If service drop or lateral conductors are installed and under the control of electrical utility within customer owned equipment, does the State Electrical Code have jurisdiction to regulate any portion of the utility's installation?

Answer 1:

The State Electrical Code includes the 2017 NEC with State amendments. Section 90.2(B)(5)(a) of the NEC designates electrical utility service drop or lateral installations as "Not Covered" within the scope of the NEC; thus, such utility drop or lateral conductors cannot be governed by the State Electrical Code. Additionally, there is no exception that grants the State Electrical Code the authority to regulate electrical utility service drop or lateral installations when installed within customer owned equipment.

Question 2:

If the electrical utility's service drop or lateral conductors are installed under the terminal lugs of a customer owned molded case circuit breaker (which is the service disconnect), must extra provisions be made to insure the electrical utility conductors do not violate sections 240.4(B), 240.4(C), or 310.15 of the State Electrical Code?

Answer 2:

Sections 240.4(B) and 240.4(C) are restrictions for the ampacity of overcurrent devices with respect to the conductors being protected by such devices. Section 310.15 generally regulates the ampacity of electrical conductors. The State Electrical Division interprets sections 240.4(B), 240.4(C), and 310.15 as being applicable only to conductors within the NEC's scope.

The State Electrical Division interprets the "service point" in Article 100 as the specific location in the electrical system that separates the State Electrical Code's jurisdiction from the electrical utility's jurisdiction. The State Electrical Code stays silent on the method of connection required to create the "service point". If the lugs on a molded case circuit breaker are the method of connection to the electrical utility, then the State Electrical Code's jurisdiction ceases where the lug makes contact with the utility conductor. Therefore, the electrical inspector's jurisdiction to enforce the State Electrical Code also ceases where the lug makes contact with the utility conductor.

Question 3:

Can a certificate of compliance be withheld or denied for an electrical installation that is regulated by the State Electrical Code because the installation does not comply with provisions required by the serving electrical utility?

Answer 3:

Electrical installations that meet the provisions of the State Electrical Code are entitled to a certificate of compliance in accordance with section 204.8.2 of the NC Administrative Code and Polices. Compliance with the State Electrical Code does not require compliance with the Duke Energy White Book, adherence to site plans when the installation is Code prescriptive, or installations that exceed the scope of the NEC as described in section 90.2(B).

Question 4:

Who determines where the service point will be located?

Answer 4:

“The service point can be described as the point of demarcation between where the serving utility ends and the premises wiring begins. The serving utility generally specifies the location of the service point based on the conditions of service.” 2017 NEC Art. 100 Definition of *Service Point* Informational Note.

Question 5:

If the electrical utility installs and exclusively controls a meter base, main service panel, transfer switch, generator, or HVAC monitoring equipment on property owned or leased by the utility, does the State Electrical Code have jurisdiction to regulate any portion of the utility’s installation? What if the same equipment is installed and exclusively controlled by the electrical utility, and is located within the utility’s easement on private property?

Answer 5:

The State Electrical Code includes the 2017 NEC with State amendments. Section 90.2(B)(5)(b) of the NEC designates electrical utility installations for equipment used for communications, metering, generation, control, transformation, transmission, energy storage, or distribution on property owned or leased by the utility as “Not Covered” within the scope of the NEC; thus, such utility equipment cannot be governed by the State Electrical Code. Additionally, section 90.2(B)(5)(c) excludes the same equipment from the State Electrical Code’s jurisdiction when installed within the utility’s easement on private property.