

STATE BUILDING CODE INTERPRETATION NO. I-25-11

January 3, 2012

The following is in response to your request for formal interpretation dated December 20, 2011 with regard to grounding of fixed-in-place generators.

Question:

Is a fixed-in-place generator a separately derived system or a non-separately derived system and is the grounding of a generator even necessary if the generator uses the dwelling grounding system or not?

Answer:

The 2005 National Electrical Code portion of the 2005 State Building Code defines a separately derived system as "a premises wiring system whose power is derived from a source of electric energy or equipment other than a service. **Such systems have no direct electrical connection, including a solidly connected grounded (neutral) circuit conductor to supply conductors originating in another system.**

In order to determine whether or not a generator is a separately derived system or a non-separately derived system, the following steps shall be considered:

1. Always consult and follow the manufacturer's installation instructions.
2. If the neutral conductor is broken by the disconnecting means, then the generator would be considered a separately derived system which then would require a grounding electrode system in accordance with the 2005 National Electrical Code, Section 250.30, Grounding Separately Derived Alternating Current Systems. If the generator uses the building's neutral system, then the generator would be considered a non-separately derived system.
3. For portable generators, if the neutral and equipment grounding conductors are bonded together, then the generator **is not** a separately derived system and does not require a grounding electrode system. Test with a continuity tester and place the probes between the neutral and the equipment ground on the generator receptacle to determine if you have continuity.