
Comment on Proposal 4-303 (Log #2206 NEC-P04), which was rejected by the CMP.
(690.35(D))

Comment Submitted by: Greg Ball, BEW Engineering / Rep. PV Industry Forum

Text of proposal 4-303 with proposed modification in red:

Recommendation: Revise text to read as follows:

Revise 690.35(D) as follows adding an additional item.

690.35(D) The photovoltaic source conductors shall consist of the following:

- (1) Nonmetallic jacketed multiconductor cables
- (2) Conductors installed in raceways, or
- (3) Conductors listed and identified as Photovoltaic (PV) Wire installed as exposed, single conductors, or
- (4) ~~Direct-buried conductors~~ Conductors that are direct-buried and identified for direct-burial use.

Original Substantiation: This section identifies PV source circuit conductors and/or wiring methods allowed for ungrounded PV systems. By listing the three most common methods, it perhaps inadvertently excludes an option for direct buried conductors. The ability to use direct-buried conductors in (especially) larger ground-mounted systems is useful, and there are no inherent fire-safety issues that should exclude direct burial conductors from use in PV applications. PV Wire is not specified exclusively in (4) because there are other suitable direct burial conductors.

Added Substantiation: It is believed that the proposal was originally rejected because the language was incomplete and could be interpreted to allow use of direct-burial conductors anywhere in the PV system. The revised language clarifies that PV source conductors can be direct-buried underground as long as the conductors are identified for such use. "Direct-buried" means physically installed underground, not listed for direct burial. The language is consistent with other parts of the code.