

FORM FOR PROPOSAL FOR 2014 NATIONAL ELECTRICAL CODE®

INSTRUCTIONS — PLEASE READ CAREFULLY

Type or print **legibly** in **black ink**. Use a separate copy for each proposal. Limit each proposal to a **SINGLE** section. All proposals **must be received by NFPA by 5 p.m., EST, Friday, November 4, 2011**, to be considered for the 2014 National Electrical Code. Proposals received after 5:00 p.m., EST, Friday, November 4, 2011, will be returned to the submitter. If supplementary material (photographs, diagrams, reports, etc.) is included, you may be required to submit sufficient copies for all members and alternates of the technical committee.

For technical assistance, please call NFPA at 1-800-344-3555.

FOR OFFICE USE ONLY

Log #: _____

Date Rec'd: _____

Please indicate in which format you wish to receive your ROP/ROC electronic paper download
(Note: If choosing the download option, you must view the ROP/ROC from our website; no copy will be sent to you.)

Date 2 Nov 2011 Name John C. Wiles, Jr Tel. No. 575-646-6105
Company Southwest Technology Development Institute, New Mexico State University Email jwiles@nmsu.edu
Street Address 3705 RESEARCH DR/MSC 3 SOL City LAS CRUCES State NM Zip 88003

****If you wish to receive a hard copy, a street address MUST be provided. Deliveries cannot be made to PO boxes.*

Please indicate organization represented (if any) PV INDUSTRY FORUM

1. Section/Paragraph _____

2. Proposal Recommends (check one): new text revised text deleted text

3. Proposal (include proposed new or revised wording, or identification of wording to be deleted): [Note: Proposed text should be in legislative format; i.e., use underscore to denote wording to be inserted (inserted wording) and strike-through to denote wording to be deleted (~~deleted wording~~).]

Revise 690.31(E) as follows and add the informational note:

690.31 (E) Direct-current Photovoltaic Source and DC Output Circuits inside a Building. Where dc PV photovoltaic source and dc PV output circuits from a building integrated or other ~~photovoltaic~~ PV system are run inside a building or structure, they shall be contained in metal raceways, Type MC metal clad cable that complies with 250.118(10) or metal enclosures from the point of penetration of the surface of the building or structure to the first readily accessible disconnecting means. The disconnecting means shall comply with 690.14(A) through (H)(~~B~~), and (~~D~~). The wiring methods shall comply with the additional installation requirements in (1) through (4).

Informational Note: This requirement does not apply to the ac output circuits of inverters or ac PV modules because those circuits are very similar to ac branch circuits. They can be de-energized at the main service disconnect and at any intermediate disconnecting means or circuit breaker. These circuits respond to faults by activating an overcurrent protective device at the first panel to which they are connected.

4. **Statement of Problem and Substantiation for Proposal:** (Note: State the problem that would be resolved by your recommendation; give the specific reason for your Proposal, including copies of tests, research papers, fire experience, etc. If more than 200 words, it may be abstracted for publication.)

The terms “dc” are inserted for clarity. Some AHJs throughout the country continue to apply this requirement to the ac output circuits from inverters. Only the dc PV circuits, always energized by the sun, present the fire and shock hazards.

Abbreviation of photovoltaic to PV after the first use is consistent with the NEC Style Manual

The reference to 690.14 (A) through (H) is changed to match a proposal for that section.

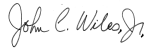
The informational note is required to inform AHJs that ac inverter output circuits are not to be treated as the sunlight-energized dc PV source and output circuits. With ac PV modules and micro inverters attached to dc PV modules, the situation can be confusing.

5. Copyright Assignment

- (a) I am the author of the text or other material (such as illustrations, graphs) proposed in the Proposal.
- (b) Some or all of the text or other material proposed in this Proposal was not authored by me. Its source is as follows: (please identify which material and provide complete information on its source)

I hereby grant and assign to the NFPA all and full rights in copyright in this Proposal and understand that I acquire no rights in any publication of NFPA in which this Proposal in this or another similar or analogous form is used. Except to the extent that I do not have authority to make an assignment in materials that I have identified in (b) above, I hereby warrant that I am the author of this Proposal and that I have full power and authority to enter into this assignment.

Signature (Required)



PLEASE USE SEPARATE FORM FOR EACH PROPOSAL

Mail to: Secretary, Standards Council · National Fire Protection Association
1 Batterymarch Park · Quincy, MA 02169-7471 OR
Fax to: (617) 770-3500 OR Email to: proposals_comments@nfpa.org 8/5/2010