

# 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.**

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Please indicate organization represented (if any) PV INDUSTRY FORUM

1. Section/Paragraph 690.16(B)

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 as follows and add the informational note:

**690.16(B) Fuse Servicing.** Disconnecting means intended solely for fuse servicing shall be installed on PV output circuits within 1.8 m (6 ft) of fuse locations where ~~overcurrent devices~~ (fuses) must be serviced that cannot be isolated from energized circuits. The disconnecting means shall be within sight of, and accessible to from the location of the fuse or be integral with the fuse holder ~~and shall comply with 690.17~~. Where disconnecting means are located more than 1.8 m (6 ft) from the overcurrent device, a directory showing the location of each disconnect shall be installed at the overcurrent device location.

Non-load-break-rated disconnecting means shall be marked “do not open under load.”

*Informational Note: Multiple fuses bolted on the common busbars in inverter input circuits and fuses in non-load break rated fuse holders in dc combiners represent a shock hazard when being serviced unless all fuses are disconnected from all sources.*

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 intent of this original submission for the 2011 NEC was to address the problem of multiple, large bolt-on fuses in the input circuits of utility-interactive inverters or in PV output circuit combiners. With one end of every fuse connected to an energized PV output circuit and the other end bolted to a common bus bar, there is no way to service the fuses without going into the PV array field and finding all combiner boxes and opening possibly hundreds of finger safe fuse holders.

Unfortunately the interpretation of this requirement is being used to require load break rated disconnects at the output of combiners and in some cases even at the numerous inputs of source circuit combiners. While the inclusion of a load break rated disconnect at the output of each combiner is worthwhile, that requirement does not belong in this section and will be proposed in Section 690.15.

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- (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)

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