## **NFPA Document Proposal Form**

NOTE: All Proposals must be received by 5:00 pm EST/EDST on the published Proposal Closing Date. FOR OFFICE USE ONLY For further information on the standards-making process, please contact the Codes and Standards Administration at 617-984-7249 or visit www.nfpa.org/codes. Log #: For technical assistance, please call NFPA at 1-800-344-3555. 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.) Tel. No. **Date** Name Marvin Hamon Company **Email** City Zip Street Address State \*\*\*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) 1. (a) NFPA Document Title ROP A2013 NFPA No. & Year NFPA 70 2014 (b) Section/Paragraph 4-253; 690.12 new text revised text deleted text Proposal Recommends (check one): 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).] 690.12 PV Arrays on Buildings Response to Emergency PV Source Circuit Shutdown. For PV Systems installed on roofs of buildings, photovoltaic PV source circuits shall be deenergized not exceed a maximum voltage of 80V from all sources within 10 seconds of when emergency a shutdown is initiated, or when the PV power source disconnecting means is opened. When the source circuits are deenergized, the maximum voltage at the module and module conductors shall be 80 volts. 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 current definition of the PV source circuit affects the wording of this section. The PV source circuit, as defined in 690.2, currently starts at the PV module junction box and goes to the first common connection point. The last sentence is confusing as it is redefining the PV source circuit as starting at the "module conductor" and not the PV module. As modified the 80V limit would apply to the PV source circuit as currently defined. In practice the PV module or parts of the PV string would have to be isolated to get down to the 80V limit and anything down stream of the isolation point in the string would be deenergized. "Emergency shutdown" is not defined and could require the addition of some kind of expensive failsafe emergency system by an AHJ. It is better just to reference "shutdown." "PV power source" in undefined and ambiguous. Is the PV power source the PV modules, storage battery, or grid? I can make a good case for any of them and so will some AHJ. As currently written the proposal would render multimode PV systems useless as the "or" clause would require the system to shutdown if disconnected from the grid. Based on the modifications above the key defining factor for having the PV source circuit shutdown for all systems would be a generic shutdown procedure. The shutdown could be a signal to a DC-DC converter on a module, it could be shutting down the inverter, or it could be disconnecting/loss of grid power. It would be left up to the installer and AHJ and would allow a shutdown system that did not compromise the operation of multimode inverters. 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)

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

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Fax to: (617) 770-3500 OR Email to: proposals comments@nfpa.org

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