



Thomas & Betts

ANALYSIS OF NEC ®

2017 Code Changes: Article Article 691 (NEW) Large-Scale
Photovoltaic (PV) Power Production Facility
Article 691 (NEW) Large-Scale Photovoltaic (PV) Power
Production Facility

Thomas&Betts
A Member of the ABB Group

Article 691 (NEW) Large-Scale Photovoltaic (PV) Power Production Facility

Article 691 (NEW) Large-Scale Photovoltaic (PV) Power Production Facility

691.1 Scope. This article covers the installation of large-scale PV electric power production facilities with a generating capacity of no less than 5000 kW, and not under exclusive utility control.

Informational Note No. 1: Facilities covered by this article have specific design and safety features unique to large-scale PV facilities and are operated for the sole purpose of providing electric supply to a system operated by a regulated utility for the transfer of electric energy.

Informational Note No. 2: Section 90.2(B)(5) includes information about utility-owned properties not covered under this *Code*. For additional information on electric supply stations, see ANSI/IEEE C2-2012, *National Electrical Safety Code*.

Analysis of the Change

Article 691 was added to cover the installation of large scale PV electric power production facilities with a generating capacity of no less than 5,000 kW, and not under the exclusive control of the utility. The NEC has covered the installation of PV systems for several editions but has not covered PV systems that are contained in the scope of this article. Large-scale photovoltaic (PV) stations are designed for the supply of merchant power into the electricity grid. These stations are differentiated from most building-mounted and other decentralized solar power applications in that they supply power at the utility level, rather than to local users. This article is an attempt to keep up with the the rapid increase in the number of large-scale PV electric supply stations presents new challenges to authorities having jurisdiction (AHJs). Due to the complexity of these systems, it is unlikely that the AHJ will have expertise in the design and construction of multi-megawatt PV power plants.

Products

T&B Solar Grouding Lug , ABB: PVI-5000/6000-TL-OUTD Inverter, PVS800-57 central inverters, and PVS980 central inverters



© 2017 Thomas & Betts. Specifications are subject to change without notice.

Contact Us

If you have any questions or require interpretation assistance, please contact the following:

David Kendall 1-800-888-0211 Ext. 8879

Greg Steinman 1-800-888-0211 Ext. 5719

Jean Blanc 1-800-888-0211 Ext. 5670

Thomas & Betts Corporation

8155 T&B Blvd.

Memphis, TN 38125

www.tnb.com

Disclaimer: This is not intended to be an iteration of all the changes, but a reference of a change that may affect the Thomas & Betts, ABB & Baldor product lines. For a more in-depth document, please contact the International Association of Electrical Inspectors at www.iaei.org.

Material taken from the National Electrical Code is reprinted with permission from NFPA 70®-2017, National Electrical Code®, Copyright © 2016, National Fire Protection Association, Quincy, MA. This material is not the official position of the NFPA on the referenced subject, which is represented only by the standard in its entirety.

National Electrical Code® and NEC® are registered trademarks of the National Fire Protection Association, Quincy, MA.

The National Fire Protection Association did not produce, review or approve this publication and assumes no responsibility for the application or use of any NEC related material or product set out herein.

Do not duplicate any part of this publication without the permission of a member of the Industry Affairs Group of Thomas & Betts.



Thomas&Betts
A Member of the ABB Group