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FIRE INDUSTRY BULLETIN 2017-004

SCOPE

Additional information related to photovoltaic power system (PVPS) plans preparation and system installation for designers, contractors, engineers, and other stakeholders.

PURPOSE

The purpose of this industry bulletin is to remind and provide commentary to all applicable stakeholders of the requirements of *Fresno Municipal Code* (FMC) Sections 10-5065.11.4/.5 related to PVPS' within the City of Fresno and contract service areas. These code sections include minimum required elements for plan review and installation approval.

BACKGROUND

As noted in the *California Fire Code* (CFC), the fire code official has the authority to modify code requirements they deem necessary based upon local conditions. These include both plan submittals and required installation elements for all systems, including PVPS.

To attempt to minimize some of the most common errors found on plans and field installations, the Department has prepared this bulletin, and it is the Department's intent to continue to help stakeholders reduce the number of plans that have to be returned for errors or omissions, and to help reduce the number of field inspections for all PVPS installations.

INFORMATION

The adopted FMC sections (which are duplicated in the contract service area ordinance adoptions with minor editorial changes that have no regulatory effect) are as follows:

FMC §605.11.4. Disconnect Locations. All photovoltaic solar power system disconnecting means shall be enclosed in a minimum NEMA 3R box, and shall be installed on the building's exterior in a readily accessible and approved location, regardless of the actual number of disconnects

"To protect and put service above all else."

required. Disconnects shall be located as close to the power system as possible to reduce the length of energized wiring.

FMC §605.11.5 Disconnecting Equipment. All photovoltaic solar power system disconnecting means, including rapid shutdown equipment, shall be indicating, of an approved size and type, and shall be placed in an approved position that is plainly visible to approaching fire department personnel.

❖ The term “indicating” as defined within these sections (only related to PVPS disconnecting equipment) means that a method of readily determining if the equipment is energized or not must be provided.

Providing an “indication” via a lever or dial, does not in and of itself meet the definition of “indicating” for section 605.11.5.

Numerous PVPS disconnecting equipment systems use a lever or dial in various positions which designate the status of the equipment, but these systems must also have some sort of signage or labeling that indicates what position the level or dial is actually in (i.e. “On – Off”/“Energized” – “Not Energized”).

Equipment that uses embossed, depressed, or raised lettering on the housing or equipment which is the same color as the box or housing does not meet the definition of indicating for this section and thus is not compliant with the section.

Generally, using an indicating lever or dial and including a sign or label directly adjacent to it that indicates what position the level or dial is actually in (i.e. “On – Off”/“Energized” – “Not Energized”) would meet the “indicating” requirement.

Also of note is that all PVPS installed labeling must be of a contrasting color (i.e. white lettering on a red background) and meet size, fade resistance, etc. requirements.