RESIDENTIAL ENERGY STORAGE SYSTEM (ESS) INSTALLATION POLICY

Under the San José Municipal Code, the San José Fire Department (SJFD) Development Services Division reviews construction projects, in partnership with the Building and Planning Division of PBCE. All Fire reviews are assigned and completed to ensure timely approval of the projects.

This policy clarifies residential ESS plan reviews in Group R3 and R4 occupancies as required by 2022 California Fire Code (CFC) section 1207.11.

The CFC requires that *"Individual units shall be separated from each other by at least 3 feet (914 mm) of spacing unless smaller spacing distances are documented to be adequate based on large scale fire testing complying with section 1207.1.5)."*

When the provision was written, the term "unit" identified an assembly of battery cells and other essential components for composing a single functional ESS, listed to UL 9540 as a single functional ESS unit.

As technology advanced, manufacturers developed smaller ESS units to scale up the installation based on user demand. However, the CFC does not address closer spacing for smaller units (aggregate < 20 kWh).

The SJFD has determined that single functional ESS units were intended to include smaller ESS units up to a total capacity of 20 kWh. This decision was developed in collaboration with AHJs, the Department of Energy, the Office of the State Fire Marshal, industry professionals, listing agencies, and industry consultants.

2022 CFC section 1207.11.2.1: Spacing. Individual units shall be separated from each other by at least 3 feet (914 mm) of spacing unless smaller spacing distances are documented to be adequate based on large-scale fire testing complying with section 1207.1.5)

> A "unit" grouping may consist of more than one ESS unit only where the units are allowed by the manufacturer's UL 9540 listing and associated documents. The spacing, configuration, and total capacity (< 20 kWh) must be demonstrated in the UL 9540 listing and UL 9540A testing.

The maximum total capacity to be considered as one ESS is 20 kWh. Any additional capacity above 20 kWh is considered a separate ESS system. ESS units are required to meet minimum spacing requirements of 3 feet unless large-scale fire testing data is provided to the SJFD for reduced spacing consideration.

This policy does not apply to projects submitted with individual Residential ESS units exceeding 20 kWh. This policy intends to provide clarity for customers and plan reviewers about the definition of individual Residential ESS systems and how minimum spacing requirements shall apply.

For any questions, please contact the Fire Marshal.
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