Storage Ready

IECC: CA103.6 (New)

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2018 International Energy Conservation Code

Add new text as follows:

CA103.6 Interconnection pathway. Construction documents shall indicate pathways for routing of conduit or piping from the solar-ready zone to the electrical service panel and electrical energy storage system area, or service hot water system.

CA103.7 Electrical Energy Storage System-Ready Area. The floor area of the electrical energy storage system-ready area shall be no less than 2 feet in one dimension and 4 feet in another dimension, and located in accordance with Section 1206.2.8 of the *International Fire Code.* The location and layout diagram of the electrical energy storage system-ready area shall be indicated on the construction documents.

CA103.8 Electrical service reserved space. The main electrical service panel shall have a reserved space to allow for installation of a dual-pole circuit breaker for future solar electric and a dual-pole circuit breaker for future electrical energy storage system installation. These spaces shall be labeled "For Future Solar Electric and Storage." The reserved spaces shall be positioned at the end of the panel that is opposite from the panel supply conductor connection.

CA103.9 Construction documentation certificate. .....

Reason Statement: Appendix CA in IECC-commercial and Appendix RB in IECC-residential have proven useful for jurisdictions seeking to add solar ready provisions to state or local codes. As many jurisdictions in which the appendices are being considered are also facing current or future constraints on electric grid capacity to accomodate existing and new distributed solar generation resources, policy objectives are emerging to support the storage of energy produced by solar panels and shift its temporal impact on the grid.
This proposal modifies Appenidx CA provisions to ensure that there is design and space consideration for a standard sized battery rack, and for the connections to the electrical panels. As with the rationale for solar-ready, it is generally much more cost-effective at the time of new construction to design for future installation of this equipment than it is to retrofit later in the building's life.

The proposed language also cites the IFC to ensure there is sufficient clearance around the battery rack to meet life/safety concerns. The IFC is already referenced in Chapter 6.

Cost Impact: The code change proposal will increase the cost of construction
The cost impacts are limited to additional design professional fees, to markings on the panels, and to additional construction costs only if there were not spare square footage available in the equipment or storage rooms where panels are generally located. In that case, it would be equal to the construction costs for an additional 8 square feet of storage space.