



# OKLAHOMA

## Uniform Building Code Commission Staff Comment Form - **BEBF 57**

### BEBF Technical Committee

Review of the 2021 Editions of the International Building Code® (IBC®), International Existing Building Code® (IEBC®), International Fire Code®

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#### Code Change Information

Originating Committee: BEBF 2018

Code Modified: 2018 IFC

Original Comment Form Number: CCF-139

Rule Number: 748:20-4-7 (3), (5), (7), (8), (9), (10), (11), (12), (13) and (14)

#### Which area of the code (Section, Table, Figure) was revised?

IFC Chapter 2 Definitions

Page Number: 2021 IFC 2-3 thru 2-4; 2-9 thru 2-10

#### Previous change:

##### Battery Types.

**Flow battery.** A type of storage battery that includes chemical components dissolved in two different liquids. Ion exchange, which provides the flow of electrical current, occurs through the membrane while both liquids circulate in their respective spaces.

**Lead-acid battery.** A storage battery that is comprised of lead electrodes immersed in sulphuric acid electrolyte.

**Lithium metal polymer battery.** A storage battery that is similar to the lithium ion battery except that it has a lithium metal anode in the place of a traditional carbon or graphite anode.

**Lithium-ion battery.** A storage battery with lithium ions serving as the charge carriers of the battery. The electrolyte is a polymer mixture of carbonates with an inorganic salt and can be in a liquid or a gelled polymer form. Lithiated metal oxide is typically a cathode and forms of carbon or graphite typically form the anode.

**Nickel-cadmium (Ni-Cd) battery.** An alkaline storage battery in which the positive active material is nickel oxide, the negative contains cadmium and the electrolyte is potassium hydroxide.

~~Preengineered stationary storage battery system. An energy storage system consisting of batteries, a battery management system, components and modules that are produced in a factory, designed to comprise the system when assembled on the job site.~~

~~Prepackaged stationary storage battery system. An energy storage system consisting of batteries, a battery management system, components and modules that is factory assembled and shipped as a complete unit for installation at the job site.~~

**Nickel metal hydride (Ni-MH) battery.** An alkaline storage battery in which the positive active material is nickel oxide, the negative electrodes is an intermetallic compound and the electrolyte is usually potassium hydroxide.

**Stationary storage battery.** A group of electrochemical cells interconnected to supply a nominal voltage of DC power to a suitably connected electrical load, designed for service in a permanent location.

~~**CAPACITOR ARRAY.** An arrangement of individual capacitor modules in close proximity to each other, mounted on storage racks or in cabinets or other enclosures.~~

**ENERGY STORAGE MANAGEMENT SYSTEM.** An electronic system that protects energy storage systems from operating outside their safe operating parameters, and disconnects electrical power to the energy storage system or places it in a safe condition if potentially hazardous temperatures or other conditions are detected.

**ENERGY STORAGE SYSTEM (ESS).** One or more devices, assembled together, capable of storing energy in order to supply electrical energy at a future time.

**ENERGY STORAGE SYSTEM CABINET.** A cabinet containing components of the energy storage system that is included in the UL 9540 listing for the system. Personnel are not able to enter the enclosure, other than reaching in to access components for maintenance purposes.

**ENERGY STORAGE SYSTEM COMMISSIONING.** A systematic process that provides documented confirmation that an energy storage system functions according to the intended design criteria and complies with applicable code requirements.

**ENERGY STORAGE SYSTEM, ELECTROCHEMICAL.** An energy storage system that stores energy and produces electricity using chemical reactions. It includes, among others, battery energy storage systems and capacitor energy storage systems.

**ENERGY STORAGE SYSTEM, MOBILE.** An energy storage system capable of being moved and utilized for temporary energy storage applications, and not installed as fixed or stationary electrical equipment. The system can include integral wheels for transportation, or be loaded on a trailer and unloaded for charging, storage, and deployment.

**ENERGY STORAGE SYSTEM, STATIONARY.** An energy system installed as fixed or stationary electrical equipment in a permanent location.

**ENERGY STORAGE SYSTEM, WALK-IN UNIT.** A pre-fabricated building that contains energy storage systems. It includes doors that provide walk-in access for personnel to maintain, test and service the equipment, and is typically used in outdoor and mobile energy storage system applications.

**Historical information:**

These definitions were modified or added to the IFC as part of an over-arching change to update chapter 12 of the IFC with the soon to be published 2021 edition modifications.

The 2021 code reflects these changes. Staff recommendation is to delete the changes from the agency's rules and revert to the published code.