

2022 Energy Code Updates – Solar and Storage Requirements for New Buildings

Background: Updates to the 2022 Title 24 Energy Code include solar and battery storage requirements for new building construction. Based on the unique site characteristics of many UC campuses, interpretation of these requirements is necessary.

[SECTION 140.10, PRESCRIPTIVE REQUIREMENTS FOR PHOTOVOLTAIC AND BATTERY STORAGE SYSTEMS](#) outlines a compliance path focused on solar and battery storage resources physically located within or adjacent to new buildings based on standard sizing equations.

UC's alternative position is that because of the unique design of many campuses with owned electrical distribution systems located behind a single utility meter, the entire campus is included as the project site. Using a whole-campus site approach has precedent in achieving compliance for state environmental regulatory requirements, certification programs such as LEED, along with UC's Sustainable Practices Policy. This would allow existing or new solar and battery storage resources connected anywhere on the same campus-owned utility distribution grid to satisfy the code requirement using the same standard sizing equations.

For a campus to utilize this approach to meet code requirements, clear documentation and accounting of the campus distribution grid connected solar and battery resources are necessary (see below). This record keeping would be overseen by the campus Energy Manager or other appropriate facilities staff and would include a comprehensive accounting of all solar and battery storage resource capacities connected to the campus-owned utility distribution grid, updated annually at a minimum.

To ensure energy resources are not double counted, an allocation of how the capacity of these connected solar and battery storage resources have been assigned to specific buildings and/or loads on the campus distribution grid shall be documented and made available to stakeholders, including the designated Campus Building Official.

Documentation Requirements

The campus Energy Manager or appropriate designated staff will maintain a comprehensive accounting of all solar and battery storage resources connected to the campus-owned utility distribution grid. This data will be reviewed and updated annually at

minimum, and will include at least the following system data for each solar and battery storage resource:

- Name/description of resource
- Type (solar or battery storage, if system includes both create separate entries)
- Physical location description, address
- On campus distribution grid? (y/n)
- Total rated capacity (kW for solar, kW and kWh for battery)
- Portion of capacity that has been assigned to one or more buildings/loads (kW for solar, kW and kWh for battery)
- For each building/load that is assigned capacity from this resource please list:
 - Name/description
 - Location
 - On campus distribution grid? (y/n)
 - Capacity assigned (kW for solar, kW and kWh for battery)
 - Start date of assignment
 - Duration of assignment
 - Reason for assignment (building code, LEED requirement, etc)

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