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# 8. Electrical Power Distribution

This chapter describes the Title 24, Part 6, Building Energy Efficiency Standards (Energy Code) requirements in Section 130.5 (§130.5) for electrical power distribution systems of nonresidential and hotel/motel occupancy buildings.

## 8.1 Overview

### 8.1.1 What's New for the 2022 Energy Code?

The significant change for electrical power distribution systems in the 2022 update to the Energy Code is demand-responsive controls for controlled receptacles. See Appendix D for demand-responsive controls and equipment.

### 8.1.2 Scope and Applications

The following requirements for electrical power distribution systems apply to all nonresidential and hotel/motel buildings. All the requirements in §130.5 for electrical power distribution systems are mandatory and are therefore not included in the energy budget for the performance compliance approach.

#### A. New Construction and Additions

The requirements of §130.5 apply to all newly constructed buildings and additions.

#### B. Alterations

The requirements for alterations to electrical power distribution systems are covered in §141.0(b)2P.

For alterations with new or replacement electrical service equipment, the requirements of §130.5(a) must be met. For alterations with entirely new or complete replacements of electrical power distribution systems, the requirements of §130.5(b) and (d) must be met. An electrical power distribution system can encompass service equipment, disconnecting means, overcurrent protection devices, feeders, circuit feeders, luminaires, receptacles, and electrical equipment such as switchboards, step-down transformers, and panelboards. For example, a building rehabilitation project where the entire electrical power distribution system is replaced is required to meet the requirements of §130.5(b) and (d).

For alterations (which include adding, modifying, or replacing) to feeders and branch circuits, the voltage drop requirements of §130.5(c) must be met. See Section 8.6 of this manual and §141.0(b)2P for the requirements for alterations to electrical power distribution systems.

#### C. Acceptance Testing, Commissioning, and Installation Certificates

Acceptance testing is required for demand-responsive controlled receptacles. A certificate of acceptance will be required to document that installed controls meet the requirements of the Energy Code.

See Section 8.8 for more information on compliance, installation, and acceptance documentation.

## 8.2 Service Electrical Metering Requirements

§130.5(a)

Projects are required to provide an electrical metering system that measures the instantaneous power usage and the cumulative electrical energy being used by the building. For metering systems that are not provided by the serving utility company, requirements apply based on the service kilovolt-ampere (kVA) rating as specified in Table 130.5-A and stated below:

1. For electrical service rated at any kVA, the meter must be able to measure instantaneous demand in kilowatts (kW) and energy consumed in kilowatt-hours (kWh) for a user-defined period.
2. For electrical service rated more than 250 kVA, the meter must be able to measure historical peak demand in kW.
3. For electrical services rated more than 1,000 kVA, the meter must be able to measure historical peak demand in kW and energy in kWh per rate period.

Utility-provided meters that indicate instantaneous demand in kW and consumption in kWh for a utility-defined period are sufficient to meet the requirements of this section and are not required to measure historical peak demand. If the utility-provided meter does not indicate instantaneous demand in kW and consumption in kWh for a utility-defined period, a separate meter must be installed that provides the full functionality required by §130.5(a) and Table 130.5-A of the Energy Code.

Each electrical service or feeder must have a permanently installed metering system that complies with these requirements. These terms are defined as follows:

1. "Service" is defined in §100.1 of the Energy Code as "the conductors and equipment for delivering electric energy from the serving utility to the wiring system of the premise served."
2. "Feeder" is defined in Article 100 of the California Electrical Code as "all circuit conductors between the service equipment, the source of a separately derived system, or other power supply source and the final branch-circuit overcurrent device."

This is not a requirement to install meters at the service and at each feeder. Rather, this requirement simply prevents unmetered service or feeder circuits from being installed within a building by requiring that a meter be installed at either the service level or, if not at the service level, at the feeder level.

Healthcare facilities are exempt from the service electrical metering requirement.

**Example 8-1: Service Electrical Metering for Fire Pumps**

**Question:**

There is one service to my building. The building fire pump is installed with the power connection tapped to the same service. Do I need to install another meter for the fire pump, in addition to the service metering already provided by the local utility?

**Answer:**

No, another meter for the fire pump is not required if it is using a service that is already connected to a meter. If it is not using a service that is already metered, then a separate meter may be required.

**Example 8-2: Buildings With Multiple Electrical Services**

**Question:**

There are two services provided by the local utility company to my building. Do both services require meeting the service electrical metering requirement?

**Answer:**

Yes, each electrical service must be metered in accordance with §130.5(a).

**Example 8-3: Buildings With Separate Metering for Tenant Spaces 1**

**Question:**

I own a nonresidential building with four tenant units. The building has one service, and there are four sets of meters and disconnect switches, one set for each tenant unit. The meters, which are provided by the utility company, provide the required kW and kWh information, and I intend to use the meters to meet the §130.5(a) requirement. Is this allowed by the regulations?

**Answer:**

Yes, metering each feeder instead of metering the service is allowed and is intended to address situations where one service feeds multiple tenants.

**Example 8-4: Buildings With Separate Metering for Tenant Spaces 2**

**Question:**

I have a building with multiple tenant spaces, and each tenant space is served by separate feeders. There is an individual meter for each feeder. Do I have to install a separate meter at the building service to fulfill the §130.5(a) requirement?

**Answer:**

No, it is not necessary to install a separate metering system for the service if a) there are individual meters for all the feeders, and b) all the meters meet the metering functionality requirements, based on the building service size, in Table 130.5-A of the Energy Code.

**Example 8-5: Buildings With Multiple Tenant Spaces**

**Question:**

I have a building with multiple tenant spaces, and each tenant space is served by a separate feeder. The building has one service with a utility metering system installed. Do I have to install a separate meter for each tenant space feeder to fulfill the §130.5(a) requirement?

**Answer:**

No, it is not necessary to install a separate metering system for each tenant space feeder if the building service utility metering system meets the functionality requirements in §130.5(a).

# 8.3 Separation of Electrical Circuits for Electrical Energy Monitoring

§130.5(b)

The separation of electrical circuits requirement allows monitoring the specific contributions of separate loads to the overall energy use of a building. By designing the electrical distribution system with separation of electrical loads in mind, energy monitoring can be readily set up and implemented without significant physical changes to the electrical installations. The goal is to be able to monitor the electrical energy usage of each load type specified in Table 130.5-B of the Energy Code. Building owners, facility management, and others can make use of such energy usage information to better understand how much energy has been used by each building system during a certain period. Further analysis of such energy information can help facilitate energy efficiency and related measures to improve building energy performance for building owners and operators.

Table 130.5-B specifies the load types that must be separated. These requirements vary depending on the kVA rating of the electrical service.

Healthcare facilities are exempt from the separation of electrical circuits requirement.

**Example 8-6: Separation of Electrical Loads – Service Rated Less Than 50 kVA**

**Question:**

My new nonresidential building is served by a single panel with a service less than 50 kVA.

What is the required separation of electrical circuits for this building?

**Answer:**

Renewable power sources and electric vehicle charging stations must be separated from other electrical load types and from each other, in accordance with the "Electrical Service rated 50kVA or less" column of Table 130.5-B and §130.5(b). The renewable power sources must be separated by group. All electric charging vehicle loads can be in aggregate.

If there are no renewable power sources or electric vehicle charging stations in this building, it is not required to separate the electrical circuits for electrical energy monitoring.

## 8.3.1 Compliance Methods

Electrical power distribution systems must be designed so that measurement devices can monitor the electrical energy usage of load types according to Table 130.5-B. However, for each separate load type, up to 10 percent of the connected

load may be of another load type. The Energy Code allows any approach that provides the ability to measure the loads of the building separately.

The separation of electrical circuits requirement of §130.5(b) may be satisfied by any method that accomplishes this goal, including any of the following example methods:

### A. Example Method 1 (See Example 8-7)

Switchboards, motor control centers, or panelboards may be separated by load type, allowing energy measurement of each load type independently and readily. This method must allow measurement and determination of the actual interval demand load value for each disaggregated load in the system.

This is a straightforward approach for measurement of each load type, as each switchboard, motor control center, or panelboard serves a single load type. Summation of the load measurement of the distribution equipment in accordance with the respective load type can result in the energy usage of each load type. This method is simple and straightforward in terms of the effort required in compiling the measurement data.

### B. Example Method 2 (See Example 8-8)

Switchboards, motor control centers, or panelboards may supply other distribution equipment with the associated loads separated for each load type. The measured load for each piece of distribution equipment must be able to be added or subtracted from other distribution equipment supplying them. This method must allow measurement for each disaggregated load in the system.

This method allows distribution equipment to serve more than one load type while allowing the separate energy use of each load to be determined. More effort may be required in obtaining the energy usage of each load type.

### C. Example Method 3 (See Example 8-9)

Switchboards, motor control centers, or panelboards may supply more than one load type as long as each branch circuit serves a single load type, and the equipment includes provisions for measuring individual branch circuits. For example, neighboring branch circuits in a panelboard may serve receptacles and fans, respectively, but the branch circuits cannot serve mixed load types.

### D. Example Method 4

Buildings for which a complete metering and measurement system is provided so each load type can be measured separately.

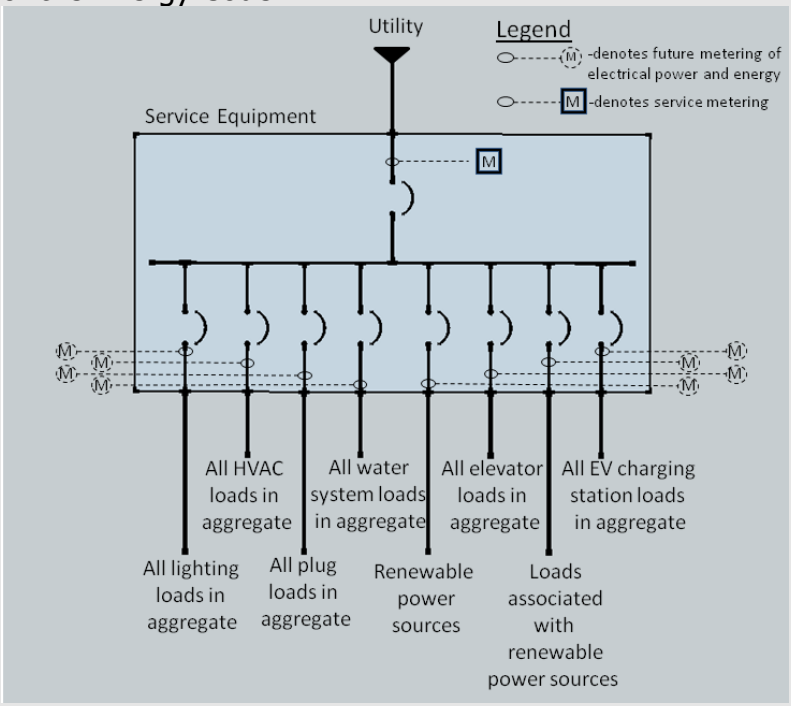
This method allows a complete metering system to be used to meet the requirements of §130.5(b), provided that, at a minimum, the system measures and reports the loads called for in Table 130.5-B of the Energy Code. Such an installation goes beyond the requirement of the Energy Code as it meters and measures the power and energy usage of each load type. It provides benefits for

building owners and operators by giving them a readily available tool for assessing the building energy usage as soon as the facility is turned over to them.

**Example 8-7: Separation of Electrical Circuits by Panelboard**

**Question:**

I am working on a new nonresidential building project with a service more than 50 kVA and less than 250 kVA. Following is the proposed separation of circuits for connecting different load types to the service equipment. Does this concept meet the requirements of the Energy Code?




**Answer:**

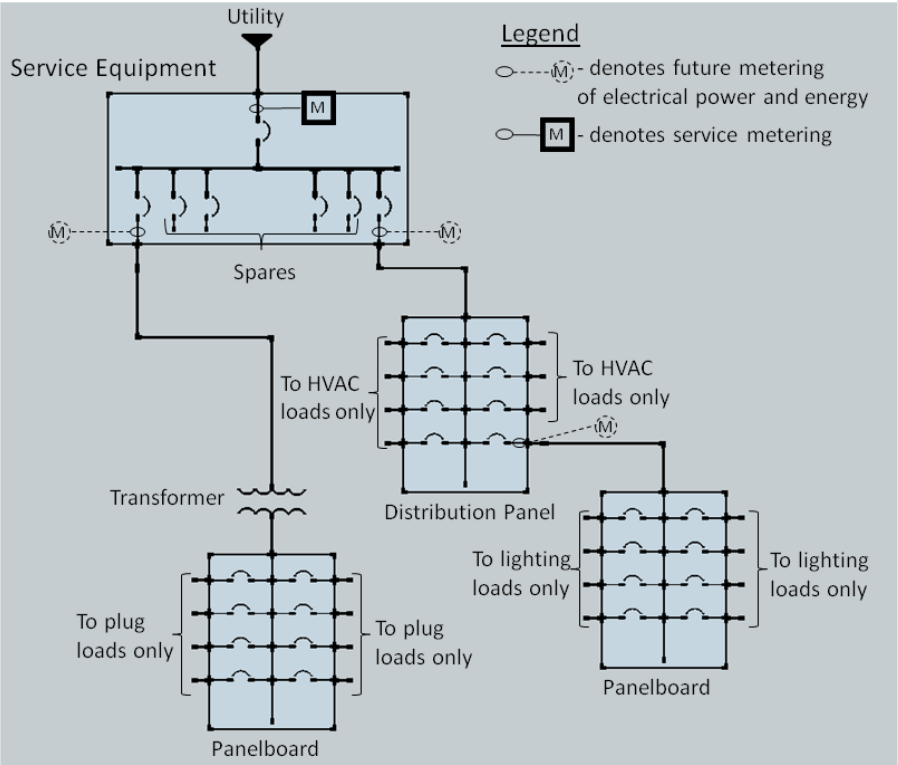
The proposed design meets the separation of electrical circuit requirement of §130.5(b) as there are separations of circuits for connecting different load types to the service equipment. There should be provisions including physical spaces for future setup of measurement devices for energy monitoring at each electrical installation location.

**Example 8-8: Separation of Electrical Circuits by Panelboards and Subpanels**

**Question:**

Part of my proposed design is to use a distribution panel serving HVAC loads, with the panel also feeding a lighting subpanel. There is a separate panelboard serving plug loads only.

Does this design meet the requirements of the Energy Code?



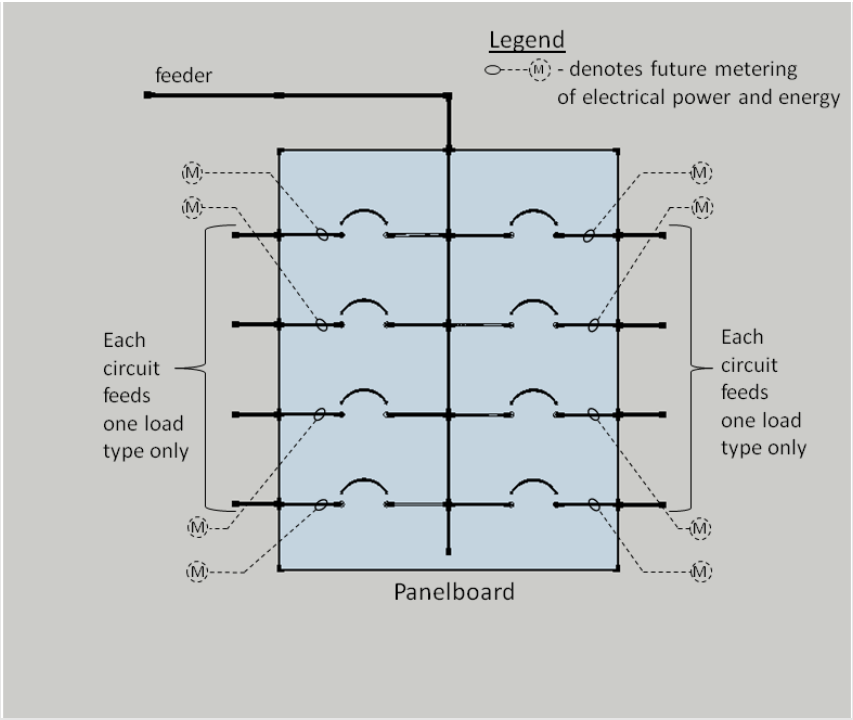

**Answer:**

The proposed design meets the separation of electrical circuit requirement of §130.5(b) as each load type in the building can be accounted for by addition and subtraction of the measured loads, as indicated in Method 2.

**Example 8-9: Separation of Electrical Circuits by Branch Circuits**

**Question:**

Can a panelboard with provisions allowing branch circuit energy monitoring be used to meet the separation of electrical circuits requirement? Each circuit would serve no more than one load type.




**Answer:**

The proposed design allows each load type to be separately measured at the branch circuit, so it meets the requirements of §130.5(b).

### 8.3.2 Application Considerations

The Energy Code allows the use of conventional panelboards, motor control centers, and other standard wiring methods for meeting the separation requirement. The requirement may also be met by a well-planned wiring approach, such as connecting all HVAC units to a single feeder from the service using a combination of through feeds and taps. The regulations are intentionally written to specify the "what" without prescribing the "how," providing flexibility.

In a "typical" small building with a service size of 50 kVA or less, separation of electrical loads is not required for the building loads, except for any renewable power sources (solar PV systems) and electric vehicle charging stations installed at the building.

In buildings with a service size between 50 kVA and 250 kVA, separate risers for lighting, receptacles/equipment, and HVAC are allowed to be used for meeting the separation of electrical circuits requirement. Large loads or groups of loads, such as an elevator machine room or a commercial kitchen, may be connected to panelboards or motor control centers served by a dedicated feeder, and the electrical power and energy of the entire group of loads can be measured by metering the feeder.

For buildings with a service size more than 250 kVA, lighting and plug loads are required to be separated by floor, type, or area. In a single-story building, all the

lighting loads could be fed from a single panel, and all the plug loads could be fed from another panel (or, alternatively, both types of loads could be fed from one panel with provision to allow for future metering for each load type – metering data further be further organized, compiled, and viewed with software or mobile applications for each load type).

In a multistory building, a simple way to comply would be to install a separate lighting panel and a separate plug-load panel for each floor of the building. However, it would also be acceptable (and may be more useful) to divide the load according to which area of the building it serves (such as office, warehouse, and corridors) or by the type of light fixture (for example, metal-halide, fluorescent, dimmable, and fixed-output). For example, the first- and second-floor office lights could be fed from the same panel, while the warehouse lights are fed from a second panel. Dividing the load by area or type instead of by floor is more likely to yield useful information when the loads are analyzed in an energy audit. All the above approaches are acceptable methods of complying with the Energy Code.

## 8.4 Voltage Drop Requirements

§130.5(c)

The voltage drop requirement is as follows:

*Voltage drop of feeder + voltage drop of branch circuit must be ≤ 5%*

The maximum combined voltage drop on both installed feeder conductors and branch circuit conductors to the farthest connected load or outlet must not exceed 5 percent. This is the steady-state voltage drop under normal load conditions.

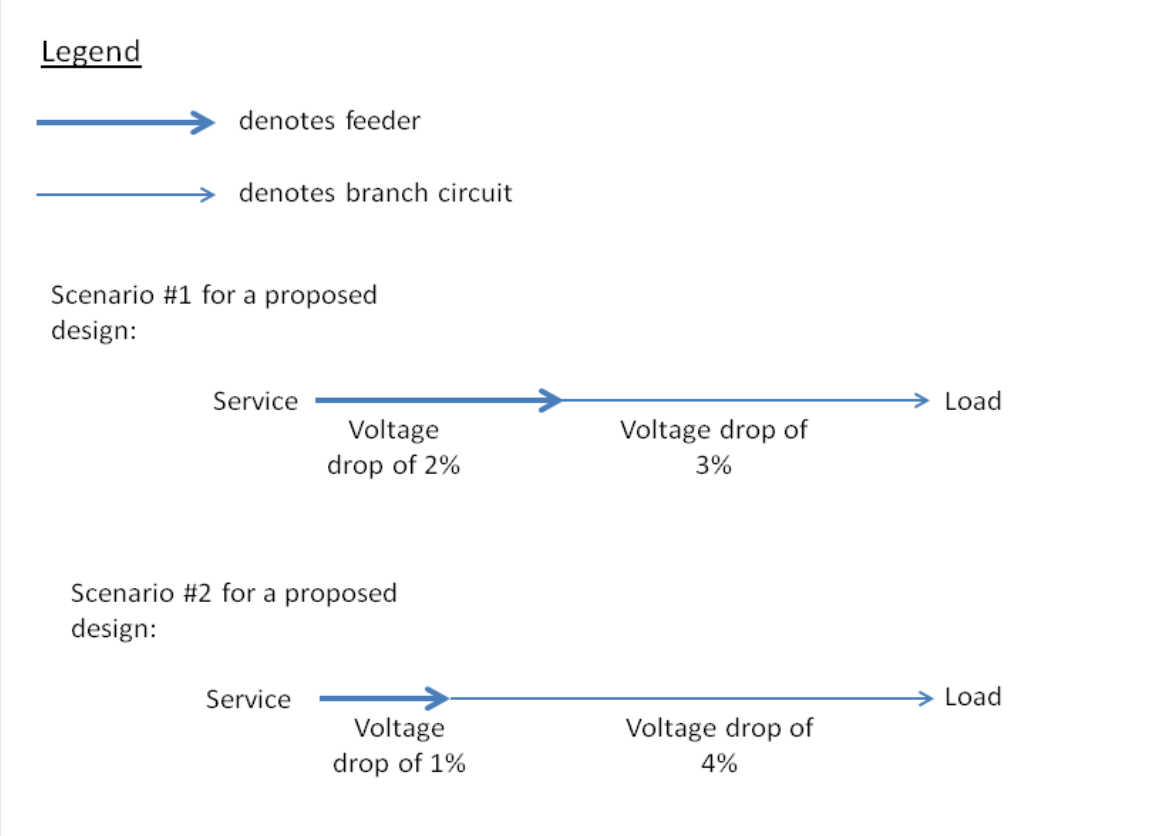
The voltage drop permitted by California Electrical Code Sections 647.4, 695.6, and 695.7 are exempted from this requirement.

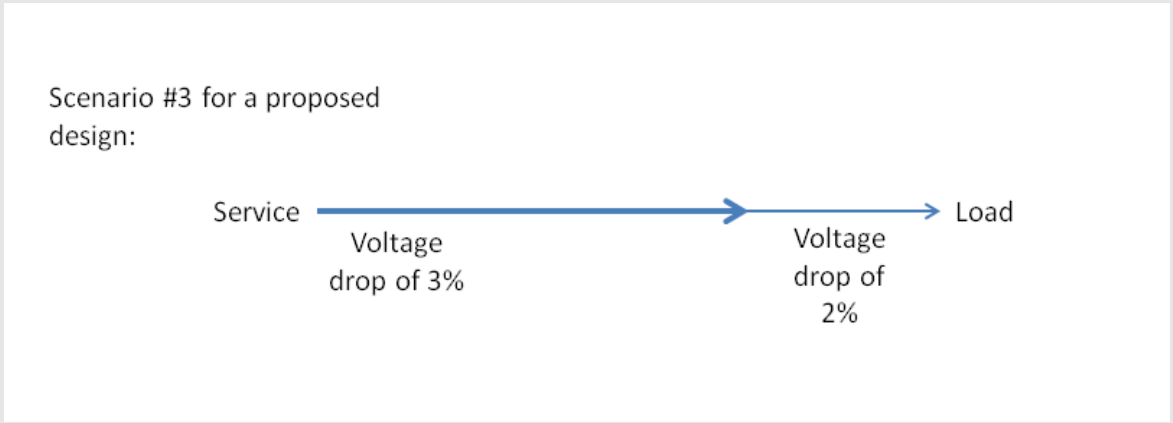
Voltage drop losses are cumulative, so voltage drop in feeders and voltage drop in branch circuits contribute to the load at the end of the branch circuit. Excessive voltage drop in the feeder conductors and branch circuit conductors can result in inefficient operation of electrical equipment.

Compliance documentation must include voltage drop calculations for each installed feeder and branch circuit conductor showing that the combined voltage drop for the farthest load for each type of load will not exceed 5 percent.

**Example 8-10: Voltage Drop Calculations**

**Question:** Do the following proposed designs meet the voltage drop requirement of §130.5(c)?




**Answer:**

All the above proposed design scenarios meet the voltage drop requirement of §130.5(c), as the combined voltage drop of the feeder and the branch circuit does not exceed 5 percent.

**Example 8-11:**

**Question:** Do healthcare facilities have to comply with the voltage drop requirement?

**Answer:**

Healthcare facilities must meet the voltage drop requirement in §130.5(c).

## 8.5 Circuit Controls and Controlled Receptacles for 120-Volt Receptacles

§130.5(d)

Healthcare facilities are exempt from the controlled receptacle requirements.

"Office plug loads" are the loads with the largest power density ($W/ft^2$) in most office buildings. The Energy Code requires controlled and uncontrolled 120-volt receptacles in lobbies, conference rooms, kitchen areas in office spaces, copy rooms, and hotel/motel guest rooms. Controlled receptacles allow plug loads to be turned off automatically when the space is unoccupied, resulting in energy savings.

All controlled receptacles must be marked to differentiate them from uncontrolled receptacles.

Either circuit controls or controlled receptacles can be used for meeting the requirements of Section 130.5(d).

Either of the following is required for compliance:

1. At least one controlled receptacle located within 6 feet of each uncontrolled receptacle
2. Split-wired receptacles that provide at least one controlled outlet

The controlled receptacle requirement does not require that there be one controlled receptacle for each uncontrolled receptacle.

In open office areas where receptacles are installed in modular furniture, at least one controlled receptacle must be provided for each workstation. Any controlled circuits already built into the building system can be used to meet the requirement.

Controlled receptacles or circuits must be capable of automatically switching off when the space is not occupied. See Section 8.5.1 for example approaches of using automatic means for shutting off controlled receptacles. An automatic time switch with manual override may be used for meeting the requirement. Occupant sensing controls may also be used.

Plug-in strips and other plug-in devices do not meet this requirement, but a hardwired power strip controlled by an occupant sensing control does.

Controlled receptacles are not required in the following situations:

1. Receptacles in kitchen areas specifically for refrigerators and water dispensers
2. Receptacles specifically for clocks. (The receptacle must be mounted 6’ or more above the floor to meet this exception.)
3. Receptacles in copy rooms specifically for network copiers, fax machines, audio-visual equipment, and data equipment other than personal computers
4. Receptacles on circuits rated more than 20 amperes
5. Receptacles connected to an uninterruptible power supply that are intended to be in use 24 hours per day, every day of the year, and are marked to distinguish them from other standard uncontrolled receptacles or circuits.

### 8.5.1 Application Considerations

The following are example approaches to meeting the controlled receptacle requirements:

#### A. Private Offices, Conference Rooms, and Other Spaces With Periodic Occupancy

Occupant-sensing controls that are part of a lighting control system may be used to control general lighting and receptacles. For example, a common occupancy sensor can control general lighting and receptacles, with auxiliary relays connected to the lights and the controlled receptacles to provide the needed functionality.

#### B. Lobbies, Break Rooms, and Other Spaces With Frequent Occupancy During Business Hours

Astronomical time-switch controls, with either a vacancy sensor or switch override, can be used to control receptacles. Programmable relay panels or controllable breakers can be used, or, for simpler projects, a combination of vacancy sensors and programmable time switches can accomplish the same task. If vacancy sensing is used, controls will likely need to be room-by-room or space-by-space, but if time-switch control with manual override is used, whole circuits may be controlled together.

#### C. Open Office Areas

Receptacles in open office areas can be controlled by the automatic shutoff system of the building or by controls integrated into the modular furniture systems. Automatic time-switch controls with relays or controllable breakers, and manual override switches, may be used for zones within an open office space. A system using vacancy sensors might also be considered if sensors can be added as needed to address partitioning of the workstations (thus ensuring proper operation). Systems contained within workstation systems are an acceptable alternative provided that they are hardwired as part of the workstation wiring system.

**D. Networked Control Systems and Building Automation Systems**

Most advanced lighting and energy control systems can be easily designed to accommodate receptacle controls.

Certain office appliances, such as computers, need to be powered continuously during office hours to provide uninterrupted service. These would be connected to uncontrolled receptacles. Other appliances, such as task lamps, fans, heaters, and monitors, do not need to be powered when occupants are not present. These controllable loads would be plugged into the controlled receptacles to ensure they are automatically shut off and to prevent any unnecessary standby power draw.

In open office areas, it is advisable to implement vacancy sensor controls at each workstation or cubicle to maximize the opportunities of shutoff controls. Modular office system furniture is usually equipped with more than one internal electrical circuit, and some of these circuits can be dedicated for controllable plug loads.

### 8.5.2 Demand Response

§130.5(e), 110.12(e)

When demand-response controls are required for lighting systems, controlled receptacles must comply with demand-responsive control requirements in §110.12. Controlled receptacles must be capable of automatically turning off all connected loads in response to a demand-response signal.

Spaces where health or life safety statute, ordinance, or regulation does not permit receptacles to be automatically controlled are exempt from this requirement.

See Appendix D of this manual for guidance on compliance with the demand-responsive control requirements.

## 8.6 Additions and Alterations

Additions are like newly constructed buildings, and all requirements of §130.5 apply to additions. For additions, the discussions in the previous sections of this chapter apply.

A summary of requirements for alterations of electrical power distribution systems is as follows:

1. **Service Electrical Metering –** New or replacement electrical service equipment shall meet the requirements of §130.5(a). Alterations that do not install new service equipment or replace existing service equipment are not held to these requirements. This requirement applies only to the service and does not apply to new or replaced feeders.
2. **Separation of Electrical Circuits for Electrical Energy Monitoring –** For entirely new or complete replacement of electrical power distribution systems, the entire system shall meet the applicable requirements of §130.5(b). Alterations that do not install an entirely new power distribution system or

completely replace an existing power distribution system are not held to these requirements.

3. **Voltage Drop –** Alterations of feeders and branch circuits that include any addition, modification, or replacement of both feeders, and branch circuits must meet the requirements of §130.5(c). Alterations that do not include **both** the feeder and branch circuit are not held to these requirements. For example, if a branch circuit is replaced but the feeder to the panel board is not touched, the feeder and branch circuit would not need to meet the 5 percent maximum voltage drop requirement.

   The same exceptions for voltage drop permitted by the California Electric Code apply for alterations.

4. **Circuit Controls for 120-Volt Receptacles and Controlled Receptacles –** For entirely new or complete replacement of electrical power distribution systems, the entire system shall meet the applicable requirements of §130.5(d) and §130.5(e).

**Example 8-12: Alterations Limited to Adding New Feeders**

**Question:**

I have an existing building with multiple tenant spaces, and each tenant space is served by separate and individual feeders. I am breaking up one large tenant space into two smaller ones. I plan to reuse the existing feeder and add a new feeder. Is it mandatory to provide a meter for the new feeder?

**Answer:**

No, this requirement is limited to new or replacement electrical service equipment and does not apply to feeders. For alterations involving only new or replacement feeders, there is no requirement to install a meter for the newly added or replaced feeder.

**Example 8-13: Alterations With Entirely New or Complete Replacement Electrical Power Distribution Systems**

**Question:**

Does the language "entirely new or complete replacement" in §141.0(b)2Pii and iv refer to the entire building or just the altered areas of the building?

**Answer:**

This language applies to the electrical power distribution system within the building and therefore effectively refers to the entire building. A modification of only part of the electrical power distribution system does not trigger the requirement.

For example, the scope of work for a tenant improvement project does not typically involve installing or replacing the entire electrical power distribution system; therefore, separation of electrical circuits would not typically be required. However, first-time buildouts of tenant spaces must meet requirements for newly buildings if the local enforcement agency classifies first-time buildouts as a newly constructed building or space. See Example 8-14 for more information.

Another example is a project where a portion of the system is upgraded for greater electrical capacity and the work scope includes replacement of panelboards, associated feeders, and overcurrent protection devices. This is not a complete replacement or entirely new electrical power distribution system, since there is existing equipment that is not changed or replaced.

**Example 8-14: First-Time Buildouts in Shell Spaces**

**Question:**

Do controlled receptacle requirements and separation of electrical circuits requirements apply to first-time tenant improvements in a building with multiple tenant shells?

**Answer:**

Yes. If the local enforcement agency classifies first-time buildouts (first-generation tenant improvement) as a newly constructed building or space, it must meet all requirements for newly constructed buildings. These requirements include controlled receptacles and separation of electrical circuits in §130.5. Check with the local enforcement agency for its policy on first-generation tenant improvements.

A tenant improvement to an existing space that has been previously developed must meet the alteration requirements for controlled receptacles and separation of electrical circuits in §141.0(b)2Piv. Controlled receptacle and separation of electrical circuit requirements will apply only to alterations where there is an entirely new or complete replacement of the electrical power distribution system for the entire building.

## 8.7 Equipment Requirements – Electrical Power Distribution Systems

The Energy Code specify in §110.11 that low-voltage dry-type distribution transformers may be installed only if the manufacturer has certified model information to the Energy Commission as required by the Title 20 Appliance Efficiency Regulations. In addition, §110.1 specifies that appliances regulated by the Title 20 Appliance Efficiency Regulations may be installed only if the appliance fully complies with those efficiency regulations, and both medium-voltage dry-type and liquid-immersed transformers are included in the Appliance Efficiency Regulations.

This means that builders, electrical contractors, electrical engineers, or owners who wish to install a distribution transformer will generally need to check the Appliance

Efficiency Database to confirm that the model they are selecting has been certified by the manufacturer as required by law. A link to the database is below:

https://cacertappliances.energy.ca.gov/Pages/Search/AdvancedSearch.aspx

The following types of transformers are exempt from certification requirements, and are not required to be listed in the database:

1. Autotransformers
2. Drive (isolation) transformers
3. Grounding transformers
4. Machine-tool (control) transformers
5. Nonventilated transformers
6. Rectifier transformers
7. Regulating transformers
8. Sealed transformers
9. Special-impedance transformers
10. Testing transformers
11. Transformers with tap range of 20 percent or more
12. Uninterruptible power supply transformers
13. Welding transformers.

## 8.8 Electrical Power Distribution Systems Compliance Documents

### 8.8.1 Overview

This section describes the compliance documentation (compliance form[s]) required for compliance with the Energy Code requirements regarding electrical power distribution systems.

At the time a building permit application is submitted to the local enforcement agency, the applicant also submits plans and energy compliance documentation.

This section is addressed to the person preparing construction and compliance documents, and to the local enforcement agency plan checkers who are examining those documents for compliance with the Energy Code.

### 8.8.2 Compliance Documentation and Numbering

List of compliance documents for electrical power distribution systems is as follows; the documents are downloadable from California Energy Commission website under the "Compliance Manuals and Compliance Documents" section.

- NRCC-ELC-E, Certificate of Compliance, Electrical Power Distribution Systems
- NRCI-ELC-E, Certificate of Installation, Electrical Power Distribution Systems

- NRCA-LTI-04-A, Certificate of Acceptance, Demand Responsive Controls

A certificate of acceptance (NRCA-LTI-04-A) will be required for projects that must meet the demand responsive controlled receptacle requirements in §130.5€ and §110.12(e). Acceptance testing for demand responsive controlled receptacles must be completed by a certified lighting controls acceptance test technician.

The following is the numbering scheme of the compliance documentation forms:

| | |
|---|---|
| NRCC | Nonresidential Certificate of Compliance |
| NRCI | Nonresidential Certificate of Installation |
| NRCA | Nonresidential Certificate of Acceptance |
| ELC | Electrical power distribution systems |
| LTI | Lighting, indoor |
| E | Primarily used by local enforcement authority |
| A | Primarily used by acceptance tester |

A permit applicant should use a single compliance form for each building included in the permit application. This ensures clarity of information for the permit and plan check process. The person who is eligible under Division 3 of the Business and Profession Code to accept responsibility for the building design can sign the compliance form.