





# Electrical Power Distribution



CERTIFICATE OF COMPLIANCE	NRCC-ELC-01-E
Electrical Power Distribution	(Page 3 of 10)
Project Name:	Date Prepared:

## **BA. Electrical Service Electrical Metering**

Check one of the three boxes below if the electrical power distribution system is in compliance with Section 130.5(a).

Check all that apply:

- ~~Each For~~ newly installed electrical service in newly constructed buildings, Service Electrical Metering (in both existing and newly constructed buildings) is required to be metered according to Section 130.5(a). Fill out Column A thru F of table below, as set out in Table 130.5-A, which is reproduced below.
- For new or replacement electrical service equipment in existing buildings, Service Electrical Metering is required according to Section 141.0(b)2P130.5(a). Fill out Column A thru F of table below.
- EXCEPTION to Electrical Service Metering: Service or feeder for which the utility company provides a metering system that indicates instantaneous kW demand and kWh for a utility-defined period. Fill out Column A, B and G of table below with the compliance information. Indicate in Column A if it is for newly constructed building or existing building.

Fill out Column A, B and G of table below.

Fill out a separate line for each electrical service that is connected to the building. If additional table space is needed for electrical service information, use prepare and submit additional page for with the required information.

Column H to be filled out by Building Officials.

Electrical Service Schedule	Electrical Service Rating	Metering Capabilities (check all that are present)				Exception to 130.5(a)	Field Inspector
		<del>03</del>	<del>04</del>	<del>05</del>	<del>06</del>		
<u>01A</u>	<u>02</u>	<u>03</u>	<u>04</u>	<u>05</u>	<u>06</u>	<u>07</u>	<u>08</u>
Designation/location in building/description Electrical Service Designation/Location/Description	kVA	Instantaneous (at the time) kW <del>demand</del>	Historical peak <del>demand</del> (kW)	Tracking kWh for a user-definable period	kWh per rate period	Utility metering system	Check that the metering complies
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Electrical Power Distribution**CEC-NRCC-ELC-01-E (Revised MM/YY)

CALIFORNIA ENERGY COMMISSION



CERTIFICATE OF COMPLIANCE

NRCC-ELC-01-E

Electrical Power Distribution

(Page 4 of 10)

Project Name:

Date Prepared:

*TABLE 130.5-A MINIMUM REQUIREMENTS FOR METERING OF ELECTRICAL LOAD*

<b>Metering Functionality</b>	<b>Electrical Services rated 50 kVA or less</b>	<b>Electrical Services rated more than 50kVA and less than or equal to 250 kVA</b>	<b>Electrical Services rated more than 250 kVA and less than or equal to 1000kVA</b>	<b>Electrical Services rated more than 1000kVA</b>
Instantaneous (at the time) kW demand	Required	Required	Required	Required
Historical peak demand (kW)	Not required	Not required	Required	Required
Tracking kWh for a user-definable period.	Required	Required	Required	Required
kWh per rate period	Not required	Not required	Not required	Required

# Electrical Power Distribution



CERTIFICATE OF COMPLIANCE	NRCC-ELC-01-E
Electrical Power Distribution	(Page 5 of 10)
Project Name:	Date Prepared:

**CB. Disaggregation Separation of Electrical Circuits for Electrical Energy Monitoring**

*Check all that apply boxes below if the electrical power distribution system is in compliance with Section 130.5(b). :*

- The electrical power distribution system ~~installation~~ meets the separation of electrical circuits for electrical energy monitoring requirement of Section 130.5(b). The electrical power distribution systems is designed such that measurement devices can monitor the electrical energy usage of load types according to TABLE 130.5-B.
- Each newly installed switchboard, panel, and motor control center (in both existing and newly constructed buildings) is required to be disaggregated according to the requirements of Table 130.5-B, shown on the next page.
- Individual branch circuits, taps or disconnects that require overcurrent protection devices rated 60A or greater.
- As an alternative, current transformers can be added for individual branch circuits and loads throughout the building, and a permanent measurement system can be installed. In this case, disaggregated wiring would not be required as long as the metering system allows the equivalent disaggregated measurements.
- Fill out a separate line for each switchboard, motor control center, panelboard and subpanel. Describe the electrical power distribution system installed and the compliance method ~~in~~ chosen in ~~how~~ meeting the requirement of Section 130.5(b) ~~is being met~~. Use the space below to include the information. Examples of compliance methods are detailed in Nonresidential Compliance Manual Chapter 8.

*Fill out Column 1 thru 3 with the compliance information. Fill out Column A thru C.*

<del>Switchboard, motor control center, panelboard or subpanel</del> General information	<u>Electrical Power Distribution System information and Method of compliance</u> <del>Electrical Service that supplies that switchboard or panel</del>	Electrical Service Rating	<u>Enforcement Agency</u>
<u>A01</u>	<u>BB02</u>	<u>€03</u>	<u>04</u>
<u>Electrical Service Designation/Location/Description in building/description</u>	<u>Describe the electrical power distribution system installed and the compliance method used. Designation/location in building/description</u>	kVA	<u>Check that the system complies</u>

# Electrical Power Distribution

CEC-NRCC-ELC-01-E (Revised MM/YY)



CERTIFICATE OF COMPLIANCE

NRCC-ELC-01-E

Electrical Power Distribution

(Page 6 of 10)

Project Name:

Date Prepared:

			<input type="checkbox"/>
--	--	--	--------------------------

Field Inspector Notes:




CERTIFICATE OF COMPLIANCE

NRCC-ELC-01-E

Electrical Power Distribution

(Page 7 of 10)

Project Name:

Date Prepared:

TABLE 130.5-B MINIMUM REQUIREMENTS FOR SEPARATION OF ELECTRICAL LOAD

Electrical Load Type	Electrical Services rated 50 kVA or less	Electrical Services rated more than 50kVA and less than or equal to 250 kVA	Electrical Services rated more than 250 kVA and less than or equal to 1000kVA	Electrical Services rated more than 1000kVA
Lighting including exit and egress lighting and exterior lighting	Not required	All lighting in aggregate	All lighting disaggregated by floor, type or area	All lighting disaggregated by floor, type or area
HVAC systems and components including chillers, fans, heaters, furnaces, package units, cooling towers, and circulation pumps associated with HVAC	Not required	All HVAC in aggregate	All HVAC in aggregate and each HVAC load rated at least 50 kVA	All HVAC in aggregate and each HVAC load rated at least 50kVA
Domestic and service water system pumps and related systems and components	Not required	All loads in aggregate	All loads in aggregate	All loads in aggregate
Plug load including appliances rated less than 25 kVA	Not required	All plug load in aggregate Groups of plug loads exceeding 25 kVA connected load in an area less than 5000 sf	All plug load separated by floor, type or area Groups of plug loads exceeding 25 kVA connected load in an area less than 5000 sf	All plug load separated by floor, type or area All groups of plug loads exceeding 25 kVA connected load in an area less than 5000 sf
Elevators, escalators, moving walks, and transit systems	Not required	All loads in aggregate	All loads in aggregate	All loads in aggregate
Other individual non-HVAC loads or appliances rated 25kVA or greater	Not required	<u>All loads in aggregate</u>	<u>All loads in aggregate</u>	<u>All loads in aggregate</u>
Industrial and commercial load centers 25 kVA or greater including theatrical lighting installations and commercial kitchens	Not required	<u>All loads in aggregate</u>	<u>All loads in aggregate</u>	<u>All loads in aggregate</u>
Renewable power source (net or total)	Each group	Each group	Each group	Each group
Loads associated with renewable power source	Not required	All loads in aggregate	All loads in aggregate	All loads in aggregate
Charging stations for electric vehicles	All loads in aggregate	All loads in aggregate	All loads in aggregate	All loads in aggregate

# Electrical Power Distribution



CERTIFICATE OF COMPLIANCE	NRCC-ELC-01-E
Electrical Power Distribution	(Page 8 of 10)
Project Name:	Date Prepared:

<p><b><u>DCE. Voltage Drop</u></b>  <u>Check all boxes below if the electrical power distribution system is in compliance with Section 130.5(c).</u></p> <p><input type="checkbox"/> <u>The electrical power distribution system meets the voltage drop requirement of Section 130.5(c). The maximum combined voltage drop on feeder conductors and branch circuit conductors to the farthest connected load or outlet, do not exceed 5 percent.</u></p> <p><input type="checkbox"/> <u>Voltage drop calculation documents showing compliance to Section 130.5(c) are submitted as part of the compliance document submittal.</u></p>	<p><b><u>Enforcement Agency</u></b>  <u>Check that the system</u>  <u>complies</u></p> <p style="text-align: center;"><input type="checkbox"/></p> <p style="text-align: center;"><input type="checkbox"/></p>
---	--

# Electrical Power Distribution



CERTIFICATE OF COMPLIANCE	NRCC-ELC-01-E
Electrical Power Distribution	(Page 9 of 10)
Project Name:	Date Prepared:

<b>EDF. Circuit Controls for 120-Volt Receptacles and Controlled Receptacles</b>	<b>Field Inspector</b>
<i>Check one or more boxes below for applicable requirements of Section 130.5(d) for the electrical power distribution system.</i>	<u>Cehck that the system complies</u>
<input type="checkbox"/> <u>The control is capable of automatically shutting OFF the controlled receptacles when the space is typically unoccupied, either at the receptacle or circuit level. For the automatic time switch control, it incorporates an override control that allows the controlled receptacle to remain ON for no more than 2 hours when an override is initiated and an automatic holiday "shut-OFF" feature that turns OFF all loads for at least 24 hours and then resumes the normally scheduled operation. Countdown timer switches are not be used to comply with the automatic time switch control requirements. The controls meet the requirement of Section 130.5(d)1.</u>	<input type="checkbox"/>
<input type="checkbox"/> <u>There is at least one controlled receptacle within 6 feet from each uncontrolled receptacle. Where receptacles are installed in modular furniture in open office area, at least one controlled receptacle is installed at each workstation. The receptacles meet the requirement of Section 130.5(d)2.</u>	<input type="checkbox"/>
<input type="checkbox"/> <u>There are installed split wired receptacles with at least one controlled and one uncontrolled receptacle. Where receptacles are installed in modular furniture in open office area, at least one controlled receptacle is installed at each workstation. The receptacles meet the requirement of Section 130.5(d)2.</u>	<input type="checkbox"/>
<input type="checkbox"/> <u>Permanent and durable marking for controlled receptacles or circuits to differentiate them from uncontrolled receptacles or circuits is provided. The marking meet the requirement of Section 130.5(d)3.</u>	<input type="checkbox"/>
<input type="checkbox"/> <u>For hotel and motel guest rooms, there are controlled receptacles for at least one-half of the 120-volt receptacle in each guest room. Electric circuits serving controlled receptacles in guestrooms are installed to have captive key controls, occupancy sensing controls, or automatic controls so the power is switched off no longer than 30 minutes after the guest room has been vacated. The receptacles meet the requirement of Section 130.5(d)4.</u>	<input type="checkbox"/>
<input type="checkbox"/> <u>Receptacles that are only for the following purposes are excepted from Section 130.5(d):</u> <u>-Receptacles specifically for refrigerators and water dispensers in kitchen areas.</u> <u>-Receptacles located a minimum of six feet above the floor that are specifically for clocks.</u> <u>-Receptacles for network copiers, fax machines, A/V and data equipment other than personal computers in copy rooms.</u> <u>-Receptacles on circuits rated more than 20 amperes.</u> <u>-Receptacles connected to an uninterruptible power supply (UPS) that are intended to be in continuous use, 24 hours per day/365 days per year, and are marked to differentiate them from other uncontrolled receptacles or circuits.</u>	<input type="checkbox"/>

**Electrical Power Distribution**CEC-NRCC-ELC-01-E (Revised MM/YY)

CALIFORNIA ENERGY COMMISSION



CERTIFICATE OF COMPLIANCE		NRCC-ELC-01-E
Electrical Power Distribution		(Page 10 of 10)
Project Name:	Date Prepared:	

**DOCUMENTATION AUTHOR'S DECLARATION STATEMENT**

1. I certify that this Certificate of Compliance documentation is accurate and complete.

Documentation Author Name:	Documentation Author Signature:
Company:	Signature Date:
Address:	CEA/ HERS Certification Identification (if applicable):
City/State/Zip:	Phone:

**RESPONSIBLE PERSON'S DECLARATION STATEMENT**

I certify the following under penalty of perjury, under the laws of the State of California:

- The information provided on this Certificate of Compliance is true and correct.
- I am eligible under Division 3 of the Business and Professions Code to accept responsibility for the building design or system design identified on this Certificate of Compliance (responsible designer).
- The energy features and performance specifications, materials, components, and manufactured devices for the building design or system design identified on this Certificate of Compliance conform to the requirements of Title 24, Part 1 and Part 6 of the California Code of Regulations.
- The building design features or system design features identified on this Certificate of Compliance are consistent with the information provided on other applicable compliance documents, worksheets, calculations, plans and specifications submitted to the enforcement agency for approval with this building permit application.
- I will ensure that a completed signed copy of this Certificate of Compliance shall be made available with the building permit(s) issued for the building, and made available to the enforcement agency for all applicable inspections. I understand that a completed signed copy of this Certificate of Compliance is required to be included with the documentation the builder provides to the building owner at occupancy.

Responsible Designer Name:	Responsible Designer Signature:
Company :	Date Signed:
Address:	License:
City/State/Zip:	Phone: