



**Schneider Electric U.S.A.**

March 17, 2015

Submitted via email: [docket@energy.ca.gov](mailto:docket@energy.ca.gov)

Mr. Andrew McAllister, Commissioner  
California Energy Commission  
Docket No. 14-BSTD-01  
1516 9<sup>th</sup> Street  
Sacramento, CA 95814

California Energy Commission <b>DOCKETED</b> 14-BSTD-01
TN # 75437 MAR 17 2015

**Subject: Schneider Electric Comments in Response to 45-Day Language for the California Building Energy Efficiency Standards California Code of Regulations, Title 24, Part 6 and Appendices**

Dear Commissioner McAllister,

As a global specialist in energy management, Schneider Electric offers integrated solutions across multiple market segments, including in utilities, infrastructure, industry, buildings, and data centers. As part of a major presence in the United States, in California we have approximately 2,600 employees at more than two dozen facilities. We also support thousands of additional direct and indirect jobs in California by working with more than 270 vendors and suppliers located throughout the state.

Schneider Electric is grateful for the opportunity to participate in this discussion and welcomes the opportunity to offer the following comments and observations on the 45-Day Language to be considered for inclusion in the 2106 Residential and Nonresidential *Building Energy Efficiency Standards* (2016 Standards) (California Code of Regulations, Title 24, Part 1, Chapter 10, and Part 6, and supporting language). If you have any questions, please contact me.

Sincerely,

Wayne H. Stoppelmoor, Jr.  
Industry Standards Manager  
(319) 369-6248  
[wayne.stoppelmoor@schneider-electric.com](mailto:wayne.stoppelmoor@schneider-electric.com)

**Schneider Electric**  
1415 South Roselle Road  
Palatine, Illinois 60067

<http://www.schneider-electric.us>

## Section 130.5(a) – Electrical Metering

*Improve responsiveness to energy usage data.*

The exception to Section 130.5(a) allows the usage of utility meters to comply with the requirements of the section. However, the exception does not state when the rate payer / building owner will receive the data. The below proposed revision (shown in red and double underline) makes it clear that the data is readily accessible so that corrective actions may be promptly taken to resolve energy efficiency issues rather than waiting until after receiving an energy bill.

**EXCEPTION to Section 130.5(a):** Buildings Service or feeder for which the utility company provides a metering system capable of electrical energy measurement in accordance with TABLE 130.5-A requirements provided that the data is readily accessible for occupant or user use ~~that indicates instantaneous kW demand and kWh for a user-resettable period.~~

## Section 130.5(b) – Disaggregation of Electrical Circuits / Electrical Energy Monitoring

*Rearrange order of the options to make electrical energy monitoring more prominent.*

Adding electrical energy monitoring as an option for compliance with Section 130.5(b) will reduce the amount of energy usage. It is respectfully submitted that disaggregation of electrical circuits does not reduce energy usage unless monitoring of the loads is actually provided. Additionally, disaggregation of circuits is typically more costly than actually installing a submetering or monitoring system. Therefore, it is respectfully suggested that the metering and measurement option be listed first so that it is shown more prominently over the disaggregation options. This suggested revision is shown below in red with double strikethrough and underline.

### 130.5(b)

**Electrical Energy Monitoring / Disaggregation of Electrical Circuits** ~~**Electrical Energy Monitoring**~~. Electrical power distribution systems shall allow installation of measurement devices for monitoring the electrical energy usage of load types ~~be designed to permit the disaggregated measurement of electrical load energy uses downstream from the service meter according to TABLE 130.5-B. Additive and subtractive methods may be used to determine aggregate and disaggregated energy use.~~ This may be accomplished by any of the following methods:

1. Installation of a complete metering and measurement system is provided that at a minimum measures and reports the loads called for in Table 130.5-B; or

- ~~2.~~ Separate switchboards, motor control centers, or panelboards loads shall be disaggregated to which are connected only the required load for each load type of TABLE 130.5-B allowing their independent energy measurement per TABLE 130.5-B. Up to 10 percent of the disaggregated connected load is permitted to be from any other disaggregated load types specified in TABLE 130.5-B or group of loads; or
- ~~3.~~ Switchboards, motor control centers, or panelboards may supply other distribution equipments with their loads disaggregated for each load types in accordance with TABLE 130.5-B. The measured interval demand loads for each distribution equipment must be able to be added or subtracted from other distribution equipment supplying them. This method must permit permanent measurement and determination of actual interval demand load value for each disaggregated load in the system. Up to 10 percent of the disaggregated connected load type is permitted to be from any other disaggregated load types specified in TABLE 130.5-B. Subpanels of the above to which are connected only the required load or group of loads and for which the subpanel load can be independently measured in aggregate, ~~or.~~
- ~~3.~~ Buildings for which a complete metering and measurement system is provided that at a minimum measures and reports the loads called for in TABLE 130.5-B Branch circuits, taps or disconnects requiring overcurrent protection devices rated 60 amperes or greater.