



Schneider Electric U.S.A.

November 24, 2014

Submitted via email: docket@energy.ca.gov

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



Subject: Schneider Electric Comments in Response to Staff Workshop on Draft Language for the Residential and Nonresidential Building Energy Efficiency Standards

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 draft revisions 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). For technical questions, please contact Wayne Stoppelmoor below.

Sincerely,

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Section 110.2: Mandatory Requirements for Space Conditioning Equipment

Exempt in-row cooling HVAC systems until ANSI/ASHRAE standards are set.

There are many types of HVAC systems deployed in small to large-scale computer rooms. Some of the new HVAC systems are still going through efficiency assessment under various ANSI/ASHRAE standards and in-row cooling HVAC systems have not yet been assessed for true and accurate energy efficiency methods under ANSI/ASHRAE 127-2007. Therefore, in-row cooling HVAC system should be exempt from Section 110.2 (a), until such time in which in-row cooling must be certified to the efficiency standard of ANSI/ASHRAE 127-20xx and such rating standard is adopted in Table 110.2-A through Table 110.2-K.

Add Exception 3 to Section 110.2(a):

In-row cooling with remote outdoor condenser/chiller units, intended for computer rooms, is deemed “Other Type of HVAC” system under ANSI/ASHRAE 127-2007, and not required to be certified to ASHRAE 127-2007. Hence, in-row cooling HVAC systems are not required to be certified by any test procedure in Table 110.2-A through Table 110.2-K.

Section 140.9: Prescriptive Requirements for Covered Processes

Add flexibility to ensure optimal operating efficiency and total cost of ownership.

When the cooling load imposed by a new computer room in a new building is best served by non Economizers based on overall efficiency and total cost of ownership, other options must be made available to computer room owners. For example, in-row cooling systems may be deployed for a new room with over 5 ton IT load and this HVAC system would still provide the best overall operating efficiency and total cost of ownership. If this option is not permissible by Covered Processes for Computer Room, Section 140.9(a), the intent of the energy efficiency standard would be undermined. Therefore, Exception 5 and 6 are proposed to cover those HVAC system usages in a computer room in a new building.

Add Exception 5 and 6 to Section 140.9(a)1

Exception 5 to 140.9(a)1: Individual computer room in a new building served by space-conditioning system which is specified in Table 110.2-A through Table 110.2-K and certified to Section 110.2 and complies with Section 140.4 Prescriptive requirements for space-conditioning systems.

Exception 6 to 140.9(a)1: Individual computer room in a new building served by a HVAC system which does not fall under the scope of Section 110.2 and 140.4.

Section 130.5(a): Energy Management Control System (EMCS)

Improve energy efficiency with energy management system reporting.

Section 130.5(a)(1) requires the electrical usage be recorded; however, it does not provide any requirement as to what should be done with that data. Energy consumption of the building will be reduced if there is a requirement to report the energy usage into an energy management system so building owners and operators may take action upon the information.

Add #3 to Section 130.5(a):

3. For buildings 25,000 ft² and greater, the energy usage data required in Table 130.5-A shall be reported to an Energy Management and Control System.

Section JA5.3.4: User Display Interface

Improve Demand Response effectiveness with remote capability.

The present language does not require remote control, which is a critical element that makes Demand Response and Price Signals actionable. Without remote control, a large benefit of two-way communication is lost.

Add language to JA5.3.4:

The OCST shall have the capability to provide remote access for control and Demand Response functions in order to perform the following functions:

- (a) Remote Demand Response and pricing notification through a mobile application or Internet portal.
- (b) Remote opt-in and opt-out capability of Demand Response and price events through a mobile application or Internet portal.