

*Comment Received From: LG Electronics, USA, Inc.
Submitted On: 5/10/2024
Docket Number: 24-BSTD-01*

**LG Electronics, USA, Inc Comments - Occupant Controller Smart
Thermostat (OCST) Requirements**

Additional submitted attachment is included below.

May 10, 2024

Commissioners and CEC Staff
California Energy Commission, Docket Unit
Docket No. 24-BSTD-01
715 P Street, MS-4
Sacramento, CA 95814
docket@energy.ca.gov

**RE: 24-BSTD-01, 2025 Energy Code
Notice of Proposed Action – 2025 Building Energy Efficiency Standards**

Dear Commissioners and CEC Staff,

LG Electronics U.S.A., Inc. (“LG”) is providing the following comment on the Notice of Proposed Action to the 2025 Building Energy Efficiency Standards. While we support California’s efforts in reducing carbon emissions, LG directs its comment towards the portion of the notice that proposes increasing space conditioning efficiency and control standards for residential and nonresidential buildings where we believe a large opportunity for innovation is being missed.

Joint Appendix 5 references the necessary items required for a device to meet Occupant Controller Smart Thermostat (“OCST”) requirements. In §JA5.3, HVAC System Interface, it requires that the device must have connections similar to NEMA 3-2013 Table 5-1. This table in NEMA 3 indicates the connections required for OCSTs must be the same as Unitary Thermostats.

Many controllers on the market do not have a unitary connection as the vast majority of original equipment manufacturers (“OEM”) have a unique connection which is used to communicate information from the controller to the system. These connections often contain specialized information which is unique to the OEM’s equipment and provide a way to optimize performance for that equipment. Rather than having an on/off switch, these connections ramp the equipment up or down to meet demand. If there is a large temperature difference between what the customer wants and the current room temperature, the equipment works harder than if the temperature difference is small. This technology also allows the room temperature to be maintained with minimal energy expended.

By requiring that all thermostats have a unitary connection, this will cause the equipment to run inefficiently and will stifle development on communication between devices. Often the communication between devices provide component status updates which are not possible via the connections listed in NEMA 3-2013 Table 5-1. By having the equipment run in an inefficient manner, this will minimize savings that are possible with each system and will increase the time needed to meet California’s carbon emission requirements.

We request that the standard be amended to allow for unique connections as long as the OCST meets all the other requirements listed in §JA5. This would involve removing §JA5.3.

We look forward to the possibility of collaborating with the California Energy Commission in the future and sincerely appreciate your valuable feedback and comments.

Sincerely,

David Kim

A handwritten signature in black ink, appearing to read 'David Kim', with a stylized 'D' and 'K'.

Team Lead, Sr. Manager, NA Policy & Product Regulation
NA Policy & Regulatory Affairs Dept.
LG Electronics USA, Inc.