

## DOCKETED

|                         |   |
|-------------------------|---|
| <b>Docket Number:</b>   | 17-BSTD-01  |
| <b>Project Title:</b>   | 2019 Building Energy Efficiency Standards PreRulemaking |
| <b>TN #:</b>            | 221538  |
| <b>Document Title:</b>  | Comments of Nest Labs                                   |
| <b>Description:</b>     | N/A   |
| <b>Filer:</b>           | System  |
| <b>Organization:</b>    | Rick Counihan   |
| <b>Submitter Role:</b>  | Public  |
| <b>Submission Date:</b> | 10/19/2017 9:51:58 AM                                   |
| <b>Docketed Date:</b>   | 10/19/2017  |

*Comment Received From: Rick Counihan*

*Submitted On: 10/19/2017*

*Docket Number: 17-BSTD-01*

## **Comments of Nest Labs**

*Additional submitted attachment is included below.*

Commissioner Andrew McAllister  
Lead Commissioner  
Docket No. 17-BSTD-01  
Attn: Dockets Office, MS-4  
California Energy Commission  
1516 Ninth Street

Sacramento, CA 95814-5512

**Docket No. 17-BSTD-01: Comments of Nest Labs**

Dear Commissioner McAllister:

Nest Labs (“Nest”) welcomes the opportunity to provide these comments on the 2019 Building Energy Efficiency Standards Pre-Rulemaking (Docket 17-BSTD-01). Nest appreciates the Commission’s continuing leadership on energy efficiency issues, in general, and building standards in particular.

California and this Commission are leading the nation in the right direction, emphasizing energy efficiency and energy savings through its thoughtful development of robust Title 24 Standards. The Commission’s leadership has resulted in strong, common-sense standards for Occupant Controlled Setback Thermostats (“OCSTs”), both throughout the Standards and in the applicable appendix, Joint Appendix 5 (“JA5”).

Nest has been pleased to be part of the progress that has taken place in the industry since the promulgation of the current 2016 Standards, participating in numerous state and federal initiatives to advance energy efficiency programs. Recently, the U.S. Environmental Protection Agency’s ENERGY STAR Program promulgated new standards for smart thermostats



known as the ENERGY STAR Program Certified Smart Thermostat.<sup>1</sup> These new standards promote important public policy objectives, including increased energy efficiency while ensuring that consumers retain control over their thermostats.

Sometimes also referred to as “Connected Thermostats,”<sup>2</sup> the ENERGY STAR Program Certified Smart Thermostat program embodies the principles that gave rise to California’s Title 24: energy savings through energy efficiency. U.S. EPA provides this simple admonition:

Make the smart choice for your new thermostat by choosing ENERGY STAR certified smart thermostats. Only thermostats that have earned the ENERGY STAR deliver what you expect from a smart thermostat: including demonstrated energy savings and environmental benefits as well as reliable performance and convenience, insight and control. ENERGY STAR is the smart choice made simple.<sup>3</sup>

In addition to having to demonstrate energy savings, ENERGY STAR certified smart thermostats are required to:

- Work as a basic thermostat in absence of connectivity to the service provider;
- Give residents feedback about the energy consequences of their settings;
- Provide information about HVAC energy use, such as monthly run time;
- Provide the ability to set a schedule; and
- Provide the ability to work with utility programs to help prevent brownouts and blackouts, while preserving consumers’ ability to override those grid requests.<sup>4</sup>

After rigorous testing, the Nest Learning Thermostat was the first smart thermostat certified under the new ENERGY STAR Program Certified

---

<sup>1</sup> [https://www.energystar.gov/products/spec/connected\\_thermostats\\_specification\\_v1\\_0\\_pd](https://www.energystar.gov/products/spec/connected_thermostats_specification_v1_0_pd).

<sup>2</sup> *Id.*

<sup>3</sup> [https://www.energystar.gov/products/heating\\_cooling/smart\\_thermostats](https://www.energystar.gov/products/heating_cooling/smart_thermostats).

<sup>4</sup> [https://www.energystar.gov/products/heating\\_cooling/smart\\_thermostats/key\\_product\\_criteria](https://www.energystar.gov/products/heating_cooling/smart_thermostats/key_product_criteria).

Smart Thermostat specification, confirming that the Nest Thermostat meets EPA's energy savings criteria.<sup>5</sup> Currently there are eight smart thermostat models that have earned the ENERGY STAR designation.<sup>6</sup> In furtherance of the Commission's national and international leadership in energy efficiency standards, Nest urges the Commission to incorporate the ENERGY STAR Program Certified Smart Thermostats into Title 24.

Nest observes that there is no definition for "Occupant Controlled Setback Thermostat" in either the current, 2016 Standards or in the 2019 Pre-Rulemaking to date, despite the importance of this term in the Standards and JA5. Accordingly, Nest proposes that the 2019 Standards include a definition for "Occupant Controlled Setback Thermostat" in Subchapter 1 that reflects the ENERGY STAR Program Certified Smart Thermostat initiative, as follows:

OCCUPANT CONTROLLED SETBACK THERMOSTAT is a thermostat that has been self-certified to the Energy Commission as meeting the requirements of Joint Appendix 5 and has been certified by the U.S. Environmental Protection Agency as an ENERGY STAR Program Certified Smart Thermostat.<sup>7</sup>

Conforming changes should also be made in JA5. As one example:

---

<sup>5</sup> <https://nest.com/blog/2017/02/28/the-nest-thermostat-earns-an-energy-star/>.

<sup>6</sup> <https://www.energystar.gov/productfinder/product/certified-connected-thermostats/results>.

<sup>7</sup> Nest notes that the Codes and Standards Enhancement ("CASE") Reports developed by the California Statewide Utility Codes and Standards Team have proposed replacing the term "Occupant Controlled Setback Thermostat" with "Demand Response Thermostat." Nest will comment on this proposal, should it be incorporated into the Rulemaking process. If that terminology is considered, then the new definition could be as follows: "DEMAND RESPONSIVE THERMOSTAT is a thermostat that has been certified by the Energy Commission as meeting the requirements of Joint Appendix 5 and has been certified by the U.S. Environmental Protection Agency as an ENERGY STAR Program Certified Smart Thermostat." Conforming changes reflecting the new definition would need to be made throughout the Standards and Appendices. As described in these comments, however, Nest respectfully encourages the Commission to ensure that the goals served by JA5 include *both* demand responsive control and overall energy savings.

***JA5.1 Introduction***

The Occupant Controlled Smart Thermostat (OCST) shall be self-certified by the manufacturer to the Energy Commission as meeting the requirements described in this joint appendix **and shall be certified by the U.S. Environmental Protection Agency as an ENERGY STAR Program Certified Smart Thermostat.** \* \* \*<sup>8</sup>

Nest thanks the Commission for its leadership and for this opportunity to comment on the 2019 Building Energy Efficiency Standards Pre-Rulemaking. We look forward to continuing to work with the Commission on these important initiatives.

Sincerely,



**Rick Counihan**

Head of Energy Regulatory and Governmental Affairs  
Nest Labs  
[415.517.1861](tel:415.517.1861)  
[rcounihan@nestlabs.com](mailto:rcounihan@nestlabs.com)

---

<sup>8</sup> As noted above, if the stakeholder-lead working group's proposals for JA5 are incorporated into the Rulemaking process, conforming changes would also be required throughout the Standards and Appendices.