DOCKETED	
Docket Number:	20-FDAS-01
Project Title:	Flexible Demand Appliance Standards
TN #:	240173
Document Title:	Lutron Electronics Co, Inc Comments to Flexible Demand Appliance Standards
Description:	N/A
Filer:	System
Organization:	Lutron Electronics Co., Inc.
Submitter Role:	Public
Submission Date:	10/29/2021 11:27:30 AM
Docketed Date:	10/29/2021

Comment Received From: Lutron Electronics Co., Inc.

Submitted On: 10/29/2021 Docket Number: 20-FDAS-01

Lutron comments to Flexible Demand Appliance Standards

Additional submitted attachment is included below.



29 October 2021

Lutron Comments on Flexible Appliance Demand Standards

Docket 20-FDAS-01

Lutron appreciates the opportunity to provide the attached comments on the California Energy Commission Flexible Appliance Demand Standards.

As you may know, Lutron was founded in 1961 and is headquartered in Coopersburg, Pennsylvania. From dimmers for the home, to lighting management systems for entire buildings, the company offers more than 17,000 energy-saving products, sold in more than 100 countries around the world. In the U.S. alone, Lutron products save an estimated 10 billion kWh of electricity, or approximately \$1 billion in utility costs per year. The company's early inventions - including the first solid-state dimmer invented by Lutron's founder Joel Spira - are now at the Smithsonian's National Museum of American History in Washington, DC.

Please find our detailed comments below. We look forward to working with you further on this important project. Please contact me if you have any questions or need any more information regarding our comments. Thanks again for your consideration.

Robert Spehalski

Lutron Electronics Co., Inc.

Robert Sophiel.



Cybersecurity -

- Table 8 in the Request for Information contains a partial list of existing standards to use as reference sources for creating minimum cybersecurity requirements. We recommend that the widely recognized ioXt certification program (https://www.ioxtalliance.org/), the NIST publication NISTIR 8228, Considerations for Managing IoT Cybersecurity and Privacy Risks, and IEC 62443 series of standards for Industrial Automation and Control Systems also be used as reference sources.
- 2. We support the minimum Cybersecurity requirements contained in section 1691 of the Pre-Rulemaking Draft of the Proposed Language for Flexible Demand Appliance Standards.

Connected Device -

The definition of connected device should be expanded or clarified so that it includes devices that connect indirectly to the internet through associated system communication. In these cases, the appliance in scope usually is not capable of connecting to the Internet or assigned an Internet Protocol address or Bluetooth address. A separate associated system device may connect to the internet and communicate to the appliance in scope using other communication methods. The following is a suggested modification to the definition of connected device:

"Connected Device" means any device that is capable of connecting to the Internet, and that is assigned an Internet Protocol address or Bluetooth address or any device that communicates with an associated system device capable of connecting to the Internet.

Thermostats -

1. The scope includes "low-voltage system thermostats", but a definition is not included. We recommend adding a definition of "low-voltage system thermostats" or modifying the current definition of "low-voltage thermostat" to reflect low-voltage system thermostats. The following is a suggested modification to the definition of "low voltage thermostat":

"Low voltage <u>system</u> thermostat" means a thermostat that acts to automatically control the temperature of the room or space in which it is installed by controlling the applied energy to a low-voltage operating control in a Class 2 circuit.

2. The definition of "Class 2 circuit" under thermostats should be (1) or (2), not (1) and (2) as follows:

"Class 2 circuit" means a system that has the current limited as follows:

- (1) maximum 20 volts, 5 amperes. Circuits in which the open-circuited voltage does not exceed 20 volts and having overcurrent protection of not more than 5 amperes rating when overcurrent protection is required; and or
- (2) 20 to 30 volts, 3.3 amperes. Circuits in which the open-circuited voltage exceeds 20 volts but does not exceed 30 volts and having overcurrent protection of not more than 3.3 amperes rating when overcurrent protection is required.
- 3. 1690(e)(2)(C), User Display and Interface requirements for thermostats should permit the required information to be displayed by means other than by the thermostat. Often thermostats are remotely mounted out of view for aesthetic purposes and communicate to discrete, barely visible sensors in the controlled space. The information should be permitted to be displayed



either by the thermostat or on an associated display device such as a cellphone or computer application where the user can opt to have notifications alert them of status, current temperature and current setpoint. This is especially important when the user is located remotely from the thermostat and wants to act on a demand response or pricing event.

- 4. January 1, 2024 effective date many connected thermostats with setback capabilities available today do not include the status capabilities required in items 1 and 2 of the user display and interface requirements proposed in the pre-rulemaking draft. The effective date for items 1690(e)(2)(C)1 and 1690(e)(2)(C)2 should be extended to at least January 1, 2025 to give manufacturers time to incorporate these capabilities.
- 5. The terms "demand response period" and "pricing event status" should be defined for clarity to prevent misinterpretations and help drive consistency of the information displayed to the user.