



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
AIR AND RADIATION

February 4, 2021

Dear ENERGY STAR® Smart Home Energy Management Systems Partner or Other Interested Party:

With this letter, the Environmental Protection Agency (EPA) is presenting a draft amendment to the [ENERGY STAR specification](#) for Smart Home Energy Management Systems (SHEMS), to clarify lighting vacation mode requirements and expand flexibility in meeting lighting device requirements. The proposed updates do not impact the eligibility of SHEMS that meet the original requirements to certify to the specification.

Vacation Lighting Mode Requirement

Certified Smart Home Energy Management Systems are required to provide a feature that operates lighting minimally at night or while the user is away. Based on feedback, EPA has further clarified the intent that service providers have flexibility in naming and deploying this feature. This feature is not intended to add lighting load to any lower energy away modes that a service provider may provide, but simply to offer a low energy option for users who like to leave a light on while away. Proposed updates to the Version 1.0 specification are highlighted with bold text below.

Section 4.1:

The SHEMS shall perform the following services:

G) Provide a vacation, nighttime safety, **leave a light on, nightlight, or similarly identified mode** to automate lighting load to operate one or multiple lights minimally at night or while away, using no more than 0.03 kWh per day while the feature is activated. **This feature must be available to the user but need not be enabled by default and should not be a part of a default vacation mode if that setting does not operate lights.**

Note: service providers may ensure that lighting energy does not exceed 0.03 kWh per day either by collecting lighting energy consumption data from connected devices or by limiting runtime based on the rated wattage of a given bulb.

Connected Lighting Device Requirement

EPA has heard from many service providers about market demand and preferences for controlling lighting load at the switch. In response, EPA is proposing to allow a pathway for SHEMS relying on smart switches to earn certification, as outlined below in bold. EPA strongly encourages service providers pursuing this option to select switches compatible with ENERGY STAR dimmable lighting for optimal energy savings and consumer experience. Making this change will accommodate service providers and consumers that prefer smart switches for reasons such as permanence; ease of installation in new construction; similarity to existing lighting controls; added flexibility in choosing communications protocols; power reliability; and lower overall standby power for lighting loads. EPA has also added the word "product" and clarified the definition of ENERGY STAR Certified Smart Lighting Product to address present and potential future device options.

Section 4.3 A):

Any package marketed as an ENERGY STAR certified SHEMS shall include the following devices. (Note: since actual installations may vary, only those installations that include the required devices will be analyzed as part of the compliant population.)

b) At least two connected lighting devices, consisting of:

- Two ENERGY STAR certified smart **lighting products**; or
- One ENERGY STAR certified smart **lighting product** and one lighting load control device capable of measuring lighting load; or
- **Two lighting load control devices capable of measuring lighting load. Service providers using this option are strongly encouraged to select lighting load control devices compatible with ENERGY STAR certified dimmable lighting.**

Please feel free to contact us with questions and submit any comments to smarthomesystems@energystar.gov by February 18.

All comments will be posted to the ENERGY STAR [Product Development Webpage](#) unless the submitter requests otherwise.

Please contact Taylor Jantz-Sell at (202) 343-9042 or Jantz-Sell.Taylor@epa.gov and Théo Keeley-LeClaire at (571) 373-5471 or Theo.Keeley-LeClaire@icf.com with any specific questions or concerns.

Thank you for your continued support of the ENERGY STAR program.

Sincerely,



Taylor Jantz-Sell & Abigail Daken

Co-Leads, ENERGY STAR Smart Home Energy Management Systems
U.S. Environmental Protection Agency

Enclosures:

[ENERGY STAR Smart Home Energy Management Systems Draft Version 1.1 Specification](#)