

Page	Line	Paragraph/ Figure/ Table	Comment type (Technical / Editorial)	Comment	Proposed Change
ENERGY STAR SHEMS Draft 2 Version 1.0 Specification					
2	59-60		Technical	See comment for Page 6, Line 198-201 regarding the need for SHEMS occupancy sensors to be in high traffic areas of the home. Note: We may want to add a definition for high traffic areas of the home. This would be an area where the home owners spends most of their time while at home (i.e., family room, kitchen, living room, den, etc.)	Change the end of the sentence to indicate that a persistent occupancy device shall be located in a high traffic area of the home "....and is always present in a high traffic area of the home."
2	64-66		Technical	Transient Occupancy Device can be a smart phone using Geo-Fencing.	Add a sentence to the section. "...standalone device like a garage door remote. It also could be a smart phone using Geo-Fencing."
3	82-88		Editorial	CT - used for connected thermostat and current transformer. This is confusing.	Abbreviate only one as CT to avoid confusion.
3	115-117		Technical & Editorial	Do we really want a soft trigger without user notification?	"This shall include a notification to the user that they can override but if ignored the system will carry out the action."
5	165-166		Editorial	Sentence needs clarity regarding SHEMS Energy Star Certification	"Only packages that meet the definition of SHEMS are eligible for SHEMS Energy Star certification."
5	177	Figure 2	Technical	Figure 2 is very confusing. It visually depicts the additional required platform capabilities from section 4.2 in two very different ways. For 4.2 B) Ability to control devices based on relative or absolute time of use energy pricing, it visually shows that function within the SHEMS package boundary (red dotted line). For 4.2 A) Ability to connect to at least one water heater controller or connected water heater which is currently available on the market, it shows that device outside the SHEMS package boundary (red dotted line).	Put the WH image inside the red dotted line with a blue box attached to it (like the lights) stating "ability to connect to a hot water heater"
6	188-189		Editorial	This sentence needs better clarity to indicate that the certification is for Version 1.0.	add Version 1.0 to the end of the sentence "..... to meet all requirements in the specification for the SHEMS to maintain Version 1.0 certification."
6	198-199		Technical	Single point mounted occupancy detectors are less effective than transient devices (like a mobile phone). The single point powered occupancy device only covers a region of a single floor in a residence, whereas geofencing with transient devices covers the entire dwelling.	Add a geo-fenced smart phone to indicate occupancy. "a) include at least one persistent device with constant wired power, a geo-fenced smart phone transient device, or at least two solely battery powered persistent devices;..."
6	200-201		Technical	Occupancy detection is the key indicator (trigger) for the success of the SHEMS offerings. So occupancy sensors should be located in high traffic areas of the home and should be stated as such in the SHEMS marketing, installation, and usage manuals from SHEMS vendors. For instance, if an embedded presense sensor is in a thermostat in a hallway to the bedrooms of a home that is only traversed very infrequently, how can that accurately be used as an occupancy trigger? Now if that same thermostat is used in the family room or kitchen, which are traditionally high traffic areas of the home, it is fine. So all SHEMS vendors must educate the consumer if a thermostat with an embeded occupancy sensor is to be used as an occupancy indicator, it must be located in a high traffic area of their home. If is not possible, given the configation of the home, the SHEMS vendor shall offer an occupancy sensor alternative for the consumer to purchase and install in the high traffic area of the home.	Add another sentence to end of this section stating, "....screwed into a line-voltage socket. All persistent sensors shall be located in a high traffic areas of the home. SHEMS vendors shall communicate this in their marketing, installation, and usage literature. "

7	209-219		Technical	Thank you for clarifying that the default triggers could be changed by users according to their preferences in the comment responses. Please clarify this in the specification as well. In addition, please clarify that machine learning algorithm usage is not normative but suggested when appropriate.	By default, produce energy-saving device control actions through hard, soft, and suggested triggers, specifically by at least one action through each method below: a) facilitating user-established rules and schedules (hard trigger). An energy saving default schedule is a recommended feature; b) implementing control algorithms to automatically modify the operation of the devices in the package to save energy while maintaining positive user experience based on occupancy information and when appropriate, based on machine learning of user behavior, i.e. patterns, preferences and user input (soft trigger); and c) identifying and suggesting energy savings events or actions to promote energy savings while maintaining positive user experience based on occupancy information and when appropriate, based on machine learning of user behavior, i.e. patterns, preferences and user input (service-suggested trigger). Note that users may change the default triggers for control actions (from soft to suggested or vice-versa) based on their preferences.
7	220-221		Technical	The SHEMS can only allow the end user access to energy consumption information on devices connected to the SHEMS, not all connected devices. For instance, a home computer or tablet is a connected device but may not be connected to the SHEMS, so how can the SHEMS provide energy consumption for that connected device?	Change the sentence to indicate that SHEMS will provide energy consumption for SHEMS connected devices. "...including the energy consumption or average power of all SHEMS connected devices."
14	508-509		Technical	This requirement is unrealistic. How do you take the label off or unlabel an already installed energy star system in a consumer's home?	Not sure how to do this other than versioning the SHEMS Energy Star Certification to match the specification. How is this done for other Energy Star labeled products? Like refrigerators? Do they remove the energy star label when that specification evolves?
ENERGY STAR SHEMS Draft 2 Method to Determine Field Performance					
				No New Comments for Draft 2	
ENERGY STAR Program Requirements Product Specification for Smart Home Energy Management Systems - Partner Commitments.					
1	No Line #s	Section 1.1 - 5 (First sentence)	Editorial	This sentence needs clarity. EPA cannot dictate what a vendor can and cannot sell. However, a SHEMS package not meeting the Energy Star Eligibility Requirements cannot be marketed as such.	Add an additional qualifier to the sentence. "Partner shall not market competing package offerings not meeting the ENERGY STAR Eligibility Requirements as ENERGY STAR energy management packages."