



**EPEAT Clarification #35**

**Definition of Sleep Mode as it pertains to ENERGY STAR requirements for Televisions**

**This Clarification applies to the following IEEE Standards and criteria:**

**Applicable Standards:**

- IEEE 1680.1 – Personal Computers and Displays
- IEEE 1680.2 – Imaging Equipment
- IEEE 1680.3 – Televisions

**Applicable Criteria:**

4.5.2.2 and 4.5.2.3

**CDP Determination:**

For 4.5.2.2, Sleep Mode power consumption is equivalent to Standby-Passive Mode in the ENERGY STAR program requirements for Televisions version 7.0. This specific standby mode was chosen following consultation with the EPA ENERGY STAR program. According to the ENERGY STAR program, Standby-Passive mode is equivalent in definition to the original definition of Sleep Mode in the ENERGY STAR program requirements for Televisions version 5.3.

In order to meet 4.5.2.3, it is acceptable for the television to meet the Sleep Mode requirements using Standby-Passive Mode, Standby-Active Low Mode **or** Standby-Active High Mode. Since different televisions have different functionality needs, the CDP will accept the television switching to sleep mode as a default to any of these three modes as long as the verification requirements of the criterion are met.

**Background Analysis:** ENERGY STAR program requirements for Televisions version 5.3 was in effect at the time IEEE 1680.3 was drafted. This version 5.3 of ENERGY STAR defined Sleep Mode. In subsequent versions of the ENERGY STAR program requirements for Televisions, the definition of Sleep Mode was removed and replaced with three standby modes which are dependent on functionality. Criteria 4.5.2.2 and 4.5.2.3 both require switching into Sleep Mode. Since Sleep Mode is no longer used in ENERGY STAR program requirements for Televisions, questions have come up from Participating Manufacturers about which standby mode used in the current ENERGY STAR program requirements for Televisions, must be used to meet these two criteria.

EPA ENERGY STAR staff were contacted to determine which Standby mode best aligned with the original definition of Sleep Mode which was the basis for the criteria. According to the ENERGY STAR program, the Sleep Mode definition from ENERGY STAR program requirements version 5.3 most closely aligns with Standby-Passive Mode. While this helped to clarify criterion 4.5.2.2, criterion 4.5.2.3 was slightly more complicated. The intent of 4.5.2.3 is that the television switches to a lower power mode within a certain amount of time. The CDP will accept any of the ENERGY STAR standby modes provided that other requirements of the criterion are met.

**Change History:**

Revision A approved by the Conformity Decision Panel and moves to 30 day comment period on 02/08/2016.

Revision A comment period ended 03/15/2016 and no comments were received.

Revision A approved and final and was posted on 03/16/2016.