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The following is a draft U.S. Department of Energy (“DOE” or “the Department”) guidance document regarding the test procedure for Television Sets (TVs). This draft guidance document represents the Department’s interpretation of its existing regulations and is exempt from the notice and comment requirements of the Administrative Procedure Act. See 5 U.S.C. § 553(b)(A). Nonetheless, the Department is accepting comments and suggestions from the public until **March 7, 2014**. Comments and suggestions should be provided in WordPerfect, Microsoft Word, PDF, or text file format by sending an email to [televisions@ee.doe.gov](mailto:televisions@ee.doe.gov). Please also include the docket number EERE-2010-BT-TP-0026. At the end of the comment period, this draft guidance document may be adopted, revised, or withdrawn.

On October 25, 2013, the Department of Energy issued a Final Rule establishing a new test procedure for TVs after receiving and considering comments from television manufacturers and other interested parties. 78 FR 63823. The rule became effective on November 25, 2013, with a required compliance date of April 23, 2014. The new test procedure can be found in the Code of Federal Regulations at 10 CFR Part 430 Subpart B, Appendix H and should be followed in conjunction with the sampling plan located at 10 CFR § 429.25. In response to follow-up questions from members of the industry, the Department issues this guidance to provide further explanation and clarification of the rule.

*Q: Are other federal and state agencies required to adopt the DOE test procedure?*

A: Representations about the energy consumption of a TV must fairly disclose the results of testing in accordance with the DOE test procedure. See 42 U.S.C. § 6293(c). The DOE test procedure for TVs preempts any state regulation regarding the testing of the energy efficiency of TVs. See 42 U.S.C. § 6297(a)(1). States that have regulations mandating efficiency standards for TVs must therefore use the DOE test procedure when providing for the disclosure of information with respect to any measure of TV energy consumption. Further, the Environmental Protection Agency (“EPA”) bases its ENERGY STAR specification for TVs on the terms of the EPA-DOE Memorandum of Understanding, found here: [http://www1.eere.energy.gov/buildings/appliance\\_standards/pdfs/epa\\_doe\\_mou.pdf](http://www1.eere.energy.gov/buildings/appliance_standards/pdfs/epa_doe_mou.pdf). See 42 U.S.C. § 6294a(b). EnergyGuide labels for TVs must also reflect results from the use of the DOE test procedure. See 42 USC § 6294(c).

DOE is working closely with other federal and state agencies that administer energy efficiency programs that require manufacturers to make representations on the energy consumption of a TV to ensure they are aware of the new TV test procedure. To that end, the ENERGY STAR program has issued [ENERGY](#)

[STAR Television Specification, Version 6.1](#) which states “After April 23, 2013, representations with respect to the energy use or efficiency of television sets must be made in accordance with tests conducted pursuant to the new DOE test procedure (Appendix H to Subpart B of 10 CFR Part 430 along with 10 CFR Part 429.25).” Additionally, the California Energy Commission posted a [Frequently Asked Questions](#) document on January 15, 2014, explaining “once DOE requires manufacturers to use its test procedure, California, Oregon, and other states may not require manufacturers to use a different test procedure.”

*Q: How are the rated and represented power values and annual energy consumption determined?*

A: Manufacturers must use the test method found at 10 CFR Part 430, Subpart B, Appendix H (“Appendix H”) for measuring the energy consumption of a single television unit. The sampling plan codified in 10 CFR § 429.25 requires manufacturers test at least two televisions of each basic model and then apply the applicable certification statistics in order to calculate the representative power consumption or annual energy consumption metric of a television basic model. Consistent with how DOE treats other products regulated under EPCA, the minimum of two units tested is needed to establish a confidence level, which increases the accuracy of the represented value and avoids relying upon a result from testing one unit that may not be truly representative of a model’s energy consumption. See 78 FR 63837.

The sampling plan found at 10 CFR § 429.25 should be followed when making any representation of the energy consumption of a television basic model. This is further explained in Discussion Section III.N of the preamble to the Final Rule. See 78 FR 63837.

*Q: How is standby testing conducted for a television with network capabilities?*

A: Section 5.10.2 of Appendix H requires that the TV with network capabilities be connected to a network in on mode prior to being placed into standby mode.

If the network connection is still active when the TV is placed into standby mode, then by definition, the TV supports standby-active, low mode because the TV is capable of exchanging data with an external source. The standby-active, low mode test (section 7.3.3 of Appendix H) should be performed with the network connection enabled. In order to perform the standby-passive mode test (section 7.3.2 of Appendix H) the network connection must be disabled.

If the network connection is not active when the TV is placed into standby mode, then by definition, the television is in standby-passive mode and the standby-passive mode test (section 7.3.2 of Appendix H) should be performed while the TV remains connected to the network. This television would not support standby-active, low mode, so the standby-active, low mode test should not be performed.

*Q: What hourly weightings should be used for a television that is capable of entering both standby-active, low mode and standby-passive mode?*

A: The Annual Energy Consumption weightings in Table 2 of Appendix H allocate 5 hours to on mode and 19 hours to standby mode. As shown in the table, if the TV supports standby-active, low mode, then the 19 hours in standby are allocated to standby-active, low mode. If the TV does not support standby-active, low mode, the 19 hours in standby mode are allocated to standby-passive mode.

By definition, a TV that supports standby-active, low mode can transition into another mode of operation (i.e., from standby-active, low to standby-active, high) via an external signal. In order to receive such a signal and transition into another mode, the TV would remain in this “ready” state whenever it is in standby. Therefore, for TVs that support standby-active, low, DOE proposed in a supplemental notice of proposed rulemaking to amend the TV test procedure (“SNOPR”) to allocate all 19 hours in standby to this mode because DOE expects such a TV to remain in this mode whenever it is not in on-mode. See 78 FR 15808, 15826 (March 12, 2013). DOE adopted these allocations in the Final Rule after receiving no objection to this allocation and not finding any TVs on the market that transitioned between standby-active, low and standby-passive. For further information on this topic, see the discussion in section III.O.2 of the DOE Final Rule, found at 78 FR 63837-8, and section III.H.1 of the DOE Supplemental Notice of Proposed Rulemaking found at 78 FR 15826.

*Q: Appendix H requires the TV be placed in home configuration for several different tests. Because the home configuration is selected from the forced menu, how should manufacturers test TVs that do not have a forced menu? For example, how do you select preset picture settings for a TV that does not have a forced menu? How do you conduct luminance testing for a TV without a forced menu?*

A: For a TV without a forced menu, manufacturers should consider the as-shipped configuration to be the home configuration whenever Appendix H references the home configuration. Thus, a TV without a forced menu should be in the default as-shipped picture setting for all on mode tests, and luminance measurements should be taken in the as-shipped default and as-shipped brightest selectable preset picture settings.

*Q: Do the requirements of Appendix H section 5.5 regarding the configuration of a special function apply to selections within a forced menu?*

A: While the TV is in on mode, the most power consumptive configuration must be selected whenever a message prompt is displayed requesting the configuration of a special function, including configurations selected from a forced menu. As explained in the note to section 5.5, the sole exception to this is the initial selection of the home or retail configuration from the forced menu.

*Q: Can manufacturers use other neutral density filters besides those described in Appendix H?*

A: No, manufacturers must use a 67 mm 2 F-stop neutral density filter for testing in accordance with Appendix H.

*Q: How can manufacturers identify lamps that meet the requirements of the test procedure?*

A: Section 7.1.3.3 of Appendix H specifies that a standard spectrum, halogen incandescent aluminized reflector lamp with a lamp diameter of 95 mm ( $\pm 10$  mm), a beam angle of 30 degrees ( $\pm 10$  degrees), and a center beam candlepower of 1500 cd ( $\pm 500$  cd) should be used for testing. Manufacturers must obtain lamps that meet these requirements in order to complete testing in accordance with Appendix H. DOE notes that lamp manufacturers list these specifications in their product catalogs, so television manufacturers may refer to these catalogs to help identify lamp models which meet the requirements.

*Q: Section 7.2.2, Luminance Meter Set-up states that the luminance meter specifications are in Section 3.1.3, but there is no section 3.1.3 in the test procedure.*

A: The luminance meter requirements are specified in section 3.4. Section 7.2.2 should refer to section 3.4 instead of 3.1.3. DOE will take steps to correct this drafting error.

*Q: The amendments to Part 430 of the CFR described in the Final Rule do not include adding IEC 62301 to Section 430.3.*

A: IEC 62301 Ed. 2.0 was already incorporated by reference at 10 CFR § 430.3(o)(4) in a previous rulemaking and has been approved for Appendix H. It was therefore not necessary to add this reference in the Final Rule.