



April 30, 2010

Ms. Kathleen Vokes  
U.S. Environmental Protection Agency  
ENERGY STAR for Set-Top Boxes  
1200 Pennsylvania Ave., N.W.  
Washington, DC 20460

**Re: ENERGY STAR Enhanced Testing and Verification Program Requirements**

Dear Ms. Vokes:

Thank you for this opportunity to comment on the proposed ENERGY STAR Enhanced Testing and Verification Requirements. As explained below, Motorola urges that EPA allow for the use of independent, in-house laboratories for qualification and verification testing of set-top boxes.

Motorola strongly supports EPA's goals in establishing new testing requirements for qualifying and verifying consumer electronics products. Such testing is critical to maintaining the integrity of the ENERGY STAR program and to providing consumers with confidence that ENERGY STAR products are delivering the energy efficiency savings they expect.

With respect to set-top boxes, Motorola believes that EPA can achieve its goals of ensuring accurate, timely, and cost-effective testing of set-top box products by allowing for the use of independent, in-house laboratories. In contrast to laboratory testing for most other consumer electronics products, set-top boxes require the installation and use of specialized and proprietary equipment that replicates the operation of the typical cable headend. Procuring appropriate equipment to test just one type of set-top box can typically exceed \$150,000 and involve significant efforts to protect intellectual property associated with the headend equipment. Costs for acquiring the appropriate equipment along with the needed laboratory infrastructure to test the many types of set-top boxes on the market can easily exceed \$1 million.

Motorola is extremely concerned that third-party testing facilities would need to charge very high rates for testing set-top boxes in order to recoup their investment costs in specialized testing equipment. These testing costs would likely represent a much higher percentage of the product cost than other consumer electronics equipment. Motorola also is concerned that very few laboratories would likely make this investment in set-top box testing equipment given the number of set-top boxes that are qualified annually as compared to TVs, PCs, and other consumer electronics products. Such limited capacity would lead to long cycle times for testing set-top boxes and potential delays in getting testing work completed and devices to market. This, in turn, might discourage set-top box manufacturers from participating in the ENERGY STAR program. In addition, it is uncertain whether

third-party testing facilities typically have the necessary expertise to properly test set-top boxes given the need to operate the specialized testing equipment.

Motorola strongly suggests that, in light of these unique considerations, EPA allow for the use of independent, in-house laboratories for qualification and verification testing of set-top boxes. Such laboratories should be accredited by a third-party to the international standard ISO/IEC 17025, "General requirements for the competence of testing and calibration laboratories," with the scope of accreditation covering the ENERGY STAR test procedure for set-top boxes. The ISO/IEC 17025 standard requires that an in-house laboratory must demonstrate that it is operating in an impartial manner and that its management and personnel are free from any undue internal and external commercial, financial, and other pressures and influence that may adversely affect the quality of their work.

If consistent testing among manufacturers is a concern, Motorola urges EPA to consider the Federal Communications Commission's model for device certification testing, which is administered by the Telecommunication Certification Bodies Council and provides for third-party review and approval of all test reports prior to device certification.

We are strongly committed to the ENERGY STAR program, and look forward to further discussions with EPA about the Enhanced Testing and Verification Requirements.

Please contact me if you have any questions regarding this matter.

Sincerely,

/s/ Jason E. Friedrich  
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