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U.S. Environmental Protection Agency

FROM: Ken J. Salaets

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SUBJECT: Proposed Conditions and Criteria for Recognition of Laboratories

ITI welcomes the opportunity to provide comments and recommendations regarding the referenced subject, and appreciate the one-week extension in the comment deadline. In particular, we welcome the embrace of the ISO/IEC 17025 standard as a means to enhance and complement the considerable investments ENERGY STAR® Partners are already making in designing, building and qualifying highly-efficient information and communications technology (ICT) products under the program.

We wish to reiterate at the outset our strong support for continuation of the highly-successful ENERGY STAR® validation model, whereby ICT manufacturers have the option to test and self-declare product compliance with relevant program specifications. None of the recent reports criticizing various aspects of the ENERGY STAR program have found anything other than anecdotal instances of improper or incorrect product labeling among the thousands of manufacturer reports, validating “supplier’s declaration” as a viable and effective model for assuring conformity with ENERGY STAR specifications and program requirements.

We have been encouraged by staff comments indicating that self-testing and self-reporting will remain an option under the new product testing and verification regime being developed by EPA. We are concerned, however, that some of the proposed requirements, if adopted, will undermine the advantages that would flow from the adoption and utilization of international standards such as ISO/IEC 17025, and would hinder rather than enable ENERGY STAR Partners from conducting their own testing and compliance reporting. Further, we believe that the proposed timeline is unrealistic, given the significant changes that will have to be made by manufacturers and other stakeholders. These concerns are addressed in detail below.

We highly recommend holding detailed reviews with industry practitioners and experts, so we may cover the points made in the feedback. Such sessions would offer open and publicly transparent dialog to address questions on the implementation details. The discussions may also aid in quickly resolving or clarifying some of the details without enduring multiple review cycles.

Background: Supplier's Declaration of Conformity

As you know, currently, many manufacturers and their suppliers perform ENERGY STAR product qualification testing “in-house,” often using personnel who are regular employees of the business units. This approach has been employed for years in the U.S. and elsewhere, and has been highly successful in achieving compliance with an array of regulatory and market requirements, including those associated with ENERGY STAR, FEMP, the Clean Air and Clean Water Acts, safety and electromagnetic emissions testing, and so on. In many cases, it would be unusual if not impractical to utilize personnel from an independent business entity, regardless of whether said entity is from within or outside the company. Moreover, using outside personnel would negate many of the benefits associated with the current testing process.

Manufacturers create very specialized environments to test our equipment, and that includes highly trained people that often need to work directly with the development organizations. Often, they do a lot of testing before the product is ready for release. Just like with electromagnetic compatibility and safety regulations, these testers need to be intimately familiar with the equipment and the usage methods. It typically takes years to develop the expertise required to be a lead tester or a manager of an in-house lab. Further, experienced testers provide valuable feedback into the development organization and the design process, often helping to identify methods that result in greater efficiency. This benefit would be lost if EPA in effect mandates that testing be performed by employees or 3rd party testers who have essentially have no stake in the company or in product improvement.

General Requirements – ISO/IEC 17025

- Maintain accreditation to ISO/IEC 17025, “General requirements for the competence of testing and calibration laboratories,” by an EPA-recognized Accreditation Body (AB). Noteworthy elements of ISO/IEC 17025...

The proposed adoption of ISO/IEC 17025 has practical benefits and is consistent with Federal requirements spelled out in OMB Circular A-119, which among things directs government agencies to “to use voluntary consensus standards in lieu of government-unique standards except where *inconsistent with law or otherwise impractical*” (emphasis added). The ENERGY STAR program does not meet either threshold. Indeed, we would argue that adoption of ISO/IEC 17025 would be very practical and appropriate, given that many if not most ICT manufacturers have already implemented systems in order to be certified relative to the standard’s personnel and documentation requirements (in particular, see section 4 and its associated notes).

Adoption of ISO/IEC 17025 will in effect expand current ENERGY STAR reporting and documentation requirements, and would be consistent with various new provisions that EPA has instituted relative to qualifying products. Accordingly, industry supports this proposal. In addition, ITI recommends that the EPA require test reports from labs accredited to ISO 17025 for the specific test procedure from an accrediting body acknowledged by the International Laboratory Accreditation Cooperation’s Mutual Laboratory Acceptance Agreement [see <http://www.ilac.org/ilacarrangement.html>]. This step would eliminate the need for EPA or its agents to get involved in the laboratory accreditation process and thereby ensure that the independence of accreditation bodies is not compromised.

- Allow EPA or an EPA-appointed representative, at its discretion, to witness any testing performed for qualification or verification of qualification to the requirements of the ENERGY STAR program. EPA or its appointed representative agrees to operate solely as an observer and not interfere in any way with the testing activities of the laboratory

Unlike traditional EPA audits of facilities, ENERGY STAR testing of products involves information that is business confidential in order to perform the audit. For qualification and testing, the entity conducting the observations must be able to enter into a nondisclosure agreement. Accordingly, this requirement must be left up to the accrediting body, as the U.S. government is not able to enter into the required nondisclosure agreement.

Inter-Laboratory Comparison (ILC) Testing

Industry has serious concerns regarding this requirement, which appears to have been adapted from other EPA testing regimes unrelated to ICT. We believe that such a requirement is inappropriate for ICT products. Under other EPA regulatory programs, manufacturers are required to ship small samples of water, soil, etc. to different laboratories, a relatively simple process. On the other hand, the costs and logistical impact to ship, install and uninstall imaging equipment, computers and peripherals would be substantial.

EPA needs to be sensitive to the complexity of ICT products and the importance of the tuning and set-up process to generating reproducible results. For some product segments, such as data center storage and computer servers, the test procedures require familiarity with configuring the product under test for optimal performance, and minimal energy consumption for the hardware unit being tested. Without that knowledge, the test results will not be reproducible. This is a result of the number of configuration parameters for compute and storage systems, not a lack of skill on the part of any given in-house laboratories. Indeed, given the expertise needed to test new technologies from different system suppliers, an ILC process will need to direct specific products or product types only to those labs that are performing testing on those types of equipment.

Finally, if applied to in-house testing facilities this requirement would create risks for exposing confidential or sensitive product information. Manufacturers should not be asked to send their equipment to potential competitors. ITI recommends removal of this provision, or at least creating a provision for in-house manufacturer laboratories to only test their own equipment under the ILC program.

Reporting – Input on Specific Proposed Requirements

Nearly all of the additional requirements being proposed by EPA under this section are already covered by ISO/IEC 17025 accreditation, and are addressed by the oversight of the accrediting bodies for ISO/IEC 17025. Accordingly, if EPA adopts the ISO standard for ENERGY STAR testing, there is no real need or justification for imposing additional requirements above and beyond those already addressed by the standard. Indeed, imposing extra requirements that exceed a widely-accepted and adopted international standard will confuse the marketplace, and complicate efforts to maintain ENERGY STAR as the preeminent global energy efficiency labeling program for ICT products.

There are other serious concerns. If the proposed extra requirements are applied to all testing facilities and operations, i.e., including in-house laboratories and related personnel, the “conditions and criteria” will essentially have a cost and logistical impact similar to simply mandating use of 3rd party independent laboratories for product testing. The implications for ENERGY STAR partners and, by extension, the future success of the program, would be substantial. This proposal far exceeds what is required to respond to the relatively minor or *potential* issues identified by the U.S. General Accountability Office and EPA’s Office of Inspector General.

Submit to EPA evidence of accreditation...

The requirement for laboratory facilities to report to EPA details of their accreditation and the major laboratory changes listed in the conditions and criteria places an unnecessary burden on laboratory facilities. Moreover, it provides no additional assurance to EPA regarding the ability of the laboratory to perform qualification and verification testing. Under ISO/IEC 17025, standard laboratories are required to maintain updated processes, procedures and documentation, all of which must be made available upon request for an accreditation inspection. If concerns arise regarding a laboratory’s performance, EPA can simply undertake an accreditation inspection or request submission of the relevant management documents already required under ISO/IEC 17025.

Submit to EPA documentation demonstrating the impartiality and freedom of laboratory management and personnel...

- Laboratory employee compensation or annual bonuses are not tied to the financial performance of the parent company

Industry strongly opposes this requirement. The provision is extremely narrow and unnecessarily limiting, and appears designed to in effect eliminate all potential laboratory environments except for non-profit enterprises. If applied across the board, this provision would result in either manufacturers having to forgo ENERGY STAR product qualification testing, or having to set up separate business entities to perform such tests, with costs and logistical impact similar to requiring use of 3rd party independent labs for product testing. We urge you to drop this provision.

- Laboratory engineering personnel do not originate with or return to the parent company, or otherwise look to the parent company for career advancement

The concerns are the same as noted above. Further, it may even trigger legal reviews regarding participation in the ENERGY STAR program, given its potential implications for employee relations and career advancement opportunities.

- Laboratory employees are required to participate and regularly pass third-party ethics and compliance audits conducted in accordance with the International Federation of Inspection Agencies (IFIA) Compliance Code or equivalent standards for ethics and compliance programs

Again, this requirement seems intended to create a de facto preference for certain types of laboratories. While industry could develop a parallel process, we do not believe this requirement is warranted or necessary, especially given that manufacturers typically have their own internal codes of conduct, and provide the necessary training and education to ensure that employees associated with company laboratories are familiar with and adhere to international standards and norms.

- Mechanisms for reporting and responding to attempts to exert undue influence on the test results are in place. This shall include establishment of an external system for employees to make such reports and follow-up on such claims, as well as regular education of staff as to what avenues are available to them should they identify attempts to influence test reports.

Please see the above comment. Most corporations already provide multiple avenues for employees to report attempts to exert undue influence, including via ombudsman operations, ethics hotlines and other similar channels. We believe that the lack of evidence that this has been a problem relative to the ENERGY STAR program, there is no need for manufacturers to develop or adopt additional, redundant programs, or to be required to employ outside organizations to provide the same service.

Key Milestones for Implementing Enhanced Qualification Testing Requirements

The timeline suggested by EPA is too aggressive, and does not fully take into account the time and effort that ICT manufacturers will have to undertake in order to transition to an ISO/IEC 17025 accredited program for ENERGY STAR testing and reporting, even for entities that already have accredited laboratories. For example, once the requirements are finalized, it will require time for manufacturers to modify their documentation and practices to meet all of the requirements contained in ISO/IEC 17025, and then subsequently audit, assess and accredit a number of laboratories, while ensuring minimal disruption of the ongoing qualification and labeling of ENERGY STAR-qualified products.

Given the above, we believe that twelve (12) months from the date the finalization is an aggressive but realistic schedule, and would help avoid interruption of the use of ENERGY STAR label for products that meet the technical specifications.

Request for Clarification

EPA's Milestones seem to indicate that they have made a decision to require 3rd party "certification" of external power supplies and battery chargers. This does not seem warranted or justified. We request further clarification from EPA why the agency deems this necessary.

EPA requirements identified in Milestone Document (for CY 2011):

Verification Testing: In addition to requiring that products be tested for qualification in independent laboratories, EPA will be instituting a verification testing requirement.

For products subject to participation in third-party certification programs, those programs will be required to have continuous verification testing procedures in place. For CE/IT products, ENERGY STAR will establish and commence a verification testing process in 2011 that involves

selecting third-parties to administer the verification testing. This testing will also be funded by manufacturers. Lighting products are already subject to verification testing, administered by EPA/DOE.

The scope and intent of this requirement is not clear. Industry needs greater clarification regarding EPA's intentions before we can offer informed comments on this provision. In addition, we are concerned that this comment appears to preclude the option of manufacturers continuing to administer post-market verification testing, with possible additional requirements to allow a third party observer audit the process. Such an approach would be far more practical and minimize cost and time impacts. We urge EPA to refrain from making decisions in this area pending further consultations with ENERGY STAR Partners.