Third-Party Certification Training for EPA-Recognized Certification Bodies

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ENERGY STAR Program Integrity
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Learn more at energystar.gov
Agenda

- Part I – ENERGY STAR® Certification Review and Data Transfer (9:00 a.m. – 12:00 p.m.)
- Break for Lunch (12:00 p.m.-1:00 p.m.)
- Part II – Verification and Challenge Testing (1:00 p.m.-2:30 p.m.)
- 15 minute Break (2:30 p.m.-2:45 p.m.)
- Part III – Audits, Accountability and the Relationship with EPA (2:45 p.m.-3:45 p.m.)
- Q&A (3:45 p.m.-4:30 p.m.)
- Note that a lighting-specific training will be offered from 9:00 a.m. to 1:00 p.m. tomorrow.
Part I: ENERGY STAR® Certification Review and Data Transfer
A Brief History of ENERGY STAR

• Early 1990s
  – Started as a manufacturer-focused, self-certification program focused largely upon computers and monitors

• Nearly 20 Years Later
  – ENERGY STAR has evolved as an internationally-recognized program that covers more than 60 product categories from nearly 3,000 manufacturing partners
  – More than 75% of Americans recognize the ENERGY STAR mark
Background and Premise of Third-Party Certification

- Strengthening the Mark: From Self-Certification to Third-Party Certification
  - DOE-EPA Memorandum of Understanding (MOU)
  - Increased scrutiny of voluntary programs
    - Inspector General Reports at EPA and DOE
    - Government Accountability Office ENERGY STAR Investigation
  - Increased financial value of ENERGY STAR
    - Rebates
    - Utility Incentives
Comparing Self-Certification to Third-Party Certification

- **Self-Certification (1992-2010)**
  - Partners test products, confirm conformance to specification, and label with the ENERGY STAR
  - Partners submit test data to EPA to qualify their products
  - EPA reviews test data and adds products to lists of qualified products
  - EPA verifies energy performance of select models only

- **Third-Party Certification (starting in 2011)**
  - Partners will have products tested in EPA-recognized labs prior to qualification and labeling
  - CBs will certify that products meet program requirements based on a review of test data
  - CBs will upload certified data to EPA for creation of qualified product lists
  - CBs will conduct verification and challenge testing after qualification
  - CBs will evaluate retested products that have undergone significant post-qualification changes
Laboratory Requirements under New Third Party Certification Scheme

- CBs may accept data for certification only from labs that are recognized by EPA
  - Based on accreditation to ISO 17025; or
  - If lab participates in CB’s Supervised or Witnessed Manufacturers Testing Lab Program
- First party labs are not required to participate in an SMTL or WMTL if they are recognized by EPA
- CB is responsible for ensuring that test data is acceptable if testing conducted prior to accreditation
Product Certification Overview

• The Guide for Certification Review: An ENERGY STAR Standard Operating Procedure (SOP) for Product Evaluation
  • Designed by EPA to reflect the steps followed when reviewing products against ENERGY STAR product specifications
  • Key Sections of the SOP
    – General Requirements
    – Eligibility Criteria
    – EPA-Recognized Laboratory Report Checklist
    – Product-Specific Appendices
General SOP-Related Guidance

• The SOP is complementary to the ENERGY STAR product specifications
• CBs must ensure that products meet all aspects of the ENERGY STAR product specifications
  – Product specifications can be found at www.energystar.gov/specifications
Collecting Required Data

• Collect all information needed to determine that the product can be certified
  – The information on the Certified Product Data Submission form usually only represents a subset of this data

• Collect other information as needed for purposes of verification and challenge testing

• The ES partner must submit information to certify a product
  – If a recognized lab or other party submits a subset of data and includes the partner in the correspondence, the CB should consider this information submitted by the partner
Verifying Applicant/Partner Status

• To submit a product for certification, manufacturer must have indicated intent to partner with ENERGY STAR by signing and submitting a Partnership Agreement.
  – This results in EPA generation of an Organization ID (OID)
• Log in to My ENERGY STAR Account (MESA) at www.energystar.gov/MESA and look up the manufacturer’s OID
Verifying Laboratory Status

• Check to ensure that lab conducting testing is recognized by EPA
  – By January 1, EPA will begin maintaining an online database of all EPA-recognized labs in addition to the labs listed on the website
  – Log in to MESA to look up the laboratory’s OID
  – Labs will be recognized if participating in the CBs SMTL/WMTL program; however information on these labs must be shared with EPA
Using MESA to Verify Manufacturer and Laboratory Status and OIDs
# Using MESA to Verify Manufacturer and Laboratory Status and OIDs

![ENERGY STAR Program Screenshot](https://pats.crimea.ru/pics/thumb/resization/energy-award_42290410.png)

## SEARCH RESULTS

Your search for XYZ Test Org returned 6 results. [NEW SEARCH]

### Export to Excel

**Organization ID** | **Organization Name** | **Program (Role)** | **Org** | **State**
--- | --- | --- | --- | ---
12345 | XYZ Test Org | Audio/Video (Partner) | New York | NY
54321 | XYZ Testing | Audio Video (Partner) | Boston | MA
12345 | XYZ Test | Telecommunications (Partner) | Miami | FL
19000 | XYZ Test | Telephony (Partner) | Maches | ME
67890 | XYZ Org | Water Coolers (Partner) | Portland | OR
00000 | XYZ Test | Vending Machines (Partner) | Erie | PA

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Verifying Product Family Membership

• If Applicant/Partner wishes to certify a product in a member of a specification-appropriate product family, it must provide:
  – Test report(s) for representative model(s)
  – An explanation of any variations within the family
  – An up-to-date list of models included in the family

• CBs must maintain a list of all products in a family
Certifying Product-Specific Aspects and Performance

<table>
<thead>
<tr>
<th>ENERGY STAR ELIGIBILITY</th>
<th>Applicant satisfies requirements?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the device an included Product, as outlined in Section 2: Scope of most ENERGY STAR specifications? (Model must be on the included list and not be an Excluded Product as defined by the specification.)</td>
<td></td>
</tr>
<tr>
<td>Does the product meet all of the qualification criteria as outlined in the specification? (Typically, refer to Section 3 of the specification. Be sure to check all requirements, including multiple energy efficiency requirements, warranty requirements, packaging requirements, etc. Also, where applicable, ensure calculations have been performed correctly (e.g., TEC calculations).)</td>
<td></td>
</tr>
<tr>
<td>Are the qualification criteria met using the appropriate significant digits and rounding?</td>
<td></td>
</tr>
<tr>
<td>Was the appropriate test method(s) used per the test report?</td>
<td></td>
</tr>
<tr>
<td>Were the correct type and number of units tested, based on specification requirements?</td>
<td></td>
</tr>
<tr>
<td>Was the product tested for qualification at the relevant input voltage/frequency combination for each market, in addition to the United States, in which it will be sold and promoted as ENERGY STAR?</td>
<td></td>
</tr>
</tbody>
</table>

- If the product does not meet the Program Requirements, it **cannot** be certified
Checking Laboratory Test Reports

- At a minimum, locate lab report fields specified on the SOP (serial number, environmental conditions, etc.) to ensure that the product was appropriately tested.
- If the information cannot be verified, the product cannot be certified until that information is furnished.
Adhering to Supplemental EPA Guidance

- SOP Appendix A
  - Product-specific supplemental guidance
- Routing Further Inquiries
  - If other product-specific aspects of certification review are unclear, route any and all questions back to EPA via product-specific ENERGY STAR inboxes
Certifying Privately-Labeled Products

- CB can certify a different brand of the same model without data review if the model is already certified by the CB
  - EPA encourages CBs to work together to avoid duplicative testing and review
  - CBs will need to flag models that are certified under different brand names
  - CBs will need to maintain a data field with the model tested to help track this information
Transferring Data to EPA

• If product can be certified
  – Enter the relevant product and product subtype being certified into the relevant Certified Product Data Submission form

• After data entry
  – Submit data to EPA using the MESA interface

• Frequency of data submission
  – Initially will start on a bimonthly basis, but will move to monthly for most products
Certified Product Data Submission on MESA

By checking this box, I declare that the information submitted via this form is, to the best of my knowledge, accurate and associated with the products included for qualification in this submission. I understand that the ENERGY STAR program will associate all data in this submission with the products listed in this submission. I understand if any of the submitted information is found to be inaccurate, the products will be removed from the ENERGY STAR qualified products list. I understand that intentionally submitting false information to the U.S. government is a criminal violation of the False Statements Act, Title 18, U.S.C. section 1001.
Transferring Data to EPA, Continued

- Timeline for Evolution of Data Exchange Process
  - Near-Term (January to Mid-2011)
    - Use Excel-based data submission forms to submit Qualified Product and Product Development data
  - Mid-2011
    - Approximate completion date of the XML-based system allowing for simultaneous data transfer and validation
    - New system will involve the addition of new fields to what CBs will collect in the near-term (e.g. tested versus certified values, codes that will link privately-labeled models, UPC codes, version numbers)
Keeping Certified Product Lists Current

- CBs are responsible for keeping lists of certified products up to date
  - Need to establish a policy for ensuring that certified products are available for verification testing
  - CBs will need to delist products that are no longer available or are disqualified
Enhancing the Impact of ENERGY STAR: Collaboration with California EE Programs

• Complying With CEC Appliance Standards
  – EPA encourages CBs to offer Title 20 reporting services in conjunction with their ENERGY STAR certification programs in order to allow more ENERGY STAR qualified products to receive rebates.
  – More information (and a list of covered appliances) can be found at http://www.energy.ca.gov/appliances/
Questions?
Part II: Verification and Challenge Testing

Eamon Monahan
ENERGY STAR Labeling Branch
Goals of Verification and Challenge Testing

- Ensure the process of third-party certification has effectively represented the energy savings claims of ENERGY STAR partners
- Allow for a fair process for partners to challenge the performance claims of competitors
Model Selection for Verification Testing

- Annually test a minimum of 10% of certified products in each category
- Product Families
  - All members of family are subject to testing, but not more than one per round
- Private labelers
  - Brand A, B, and C are all one product for verification testing purposes
EPA Role in Verification Testing Model Selection

• “Approximately 50% of models shall be randomly selected…”

• Best interpreted as “at least 50%” In practice it could vary
  – Partners with routine failures can be subject to additional testing
  – Referrals from third parties such as consumer groups are accepted only at CB discretion
  – Referrals from EPA may be limited

• In the event of significant failures, EPA may request an increase in the number of models selected in subsequent years
Verification Testing Model Selection

• “The more recently a model has undergone verification or challenge testing, the less likely it should be randomly selected.”
  – EPA has not defined “less likely.”
  – Products can be removed entirely from the pool for a given amount of time, or simply rejected if it is randomly chosen, in favor of another random selection.
Verification Testing Model Selection

- Information not included in QPL that can inform model selection:
  - All relationships between products, including:
    - Base model and manufacturer for each privately labeled product
    - All privately labeled model numbers associated with each OEM product
    - Clear indication of which qualified products are OEM products and which are privately labeled products
  - All relationships between manufacturers not covered by OEM-PL relationship
    - e.g.: “Acme submitted this product on behalf of Roadrunner”
Procurement of Units for Verification Testing

• Off-the-shelf procurement is favored
• EPA does not define “prohibitively expensive to purchase or transport…”
  – If a CB allows for warehouse or off-the-line procurement, it should be prepared to justify that choice.
• Partners are required to provide at least three locations where a product is available, EPA suggests this be included in product submissions for certification.
Preferred Locations for Verification Testing

- Verification must generally occur only at EPA-recognized third party labs.
- EPA-Recognized first party facilities are permissible ONLY when off-the-line testing is the only practical option, provided that:
  - CBs witness the test
  - CBs must be able to defend their decision to allow use of first party lab (as with procurement)
Re-evaluation of Products in the Event of Significant Changes

- CBs require partners to notify them of product changes
- CB is not required to re-test all changed products
  - The CB retains discretion to decide if changes warrant a re-test
- Notify EPA
  - If there is no change in status, on the normal upload schedule
  - If there is a change in status (product no longer meets ES requirements), within two business days
Challenge Testing

• CB must have a policy built into the contracts it signs with partners.
  – Challenges can be initiated by partners outside of your certification scheme
• CB must judge the legitimacy of a challenge claim
• CBs have discretion to establish the rules for challenge testing program
  – A “loser pays” scheme may be easiest
Challenge Testing

• “A challenge may be initiated only when the CB has conveyed details of the challenge to the challengee…”

• To ensure partners cannot influence the procurement process, EPA has defined “initiated” to mean after the unit has been procured.
Enforcement Threshold for Verification and Challenge Testing

- EPA will allow for a 5% enforcement threshold during verification testing
- If a product exceeds the ENERGY STAR spec by 5% or more it will be considered a failure
  - Aligns with DOE procedures for appliances
  - Allows EPA to target resources on products that do not
- Only one “tier” or “stage” of testing is allowed
  - A failed test should not trigger a second round of testing
Reporting Failures to EPA

• Delisted products can simply be omitted upon a full refresh of the qualified products list
• However, all failures must also be reported via a product-specific report to EPA.
  – At present, EPA is developing a procedure for transmitting information related to products that can no longer qualify
  – CB will need to notify EPA within 2 business days of initial product failure
Questions?

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Part III: The Ongoing Relationship between Certification Bodies and EPA
Ensuring Procedural Accountability

• Auditing CB Operations
  – EPA is developing a comprehensive audit plan
  – EPA will work with IAF MLA signatory accreditors (A2LA, ANSI, and SCC) for each CB to ensure sufficient oversight
  – Audits will likely include site visits and interviews with CB reviewers and personnel

• Following up on deficiencies
  – EPA will work with recognized CBs to resolve issues as needed
  – Failure to adhere to the “Conditions and Criteria for Recognition of Certification Bodies for the ENERGY STAR program” may result in EPA revoking recognition
Usage of the ENERGY STAR Mark

• The ENERGY STAR marks are reserved for partner use only
  – CBs are not permitted to use (or have access to) ENERGY STAR logos or marks in any of their marketing materials or upon anything that they distribute
  – Use of the mark by non-partners (including recognized CBs, ABs, and labs) will be treated as a logo violation by the Agency
ENERGY STAR Marketing Materials Review

• Ensuring Message Consistency
  – EPA will review all marketing materials (ENERGY STAR-related web pages, press releases and other communications to clients) to ensure that partners have a clear, consistent understanding of the requirements
  – Please submit all marketing materials as described above (either existing or planned) to ENERGYSTARVerificationProgram@energystar.gov for EPA review.
Common Third-Party Certification Communication Issues

- Refer to the procedures as “Third-Party Certification,” not “Enhanced Testing and Verification”
- Capitalize ENERGY STAR in all communications and use the superscripted registered mark (®) only with the first usage of ENERGY STAR in a given context
- Refer to Third-Party Certification as a set of procedures, not as a new program
- Do not refer to the procedures as “a new program” or a “new ENERGY STAR”
- Do not advertise certification services that you are not yet recognized by the Agency to offer
Ongoing Communications with CBs

• EPA Short-Term Objectives
  – Share final data templates and standard operating procedure
  – Share detailed schedule for when data templates should be uploaded during interim data exchange process

• EPA Longer-Term Objective
  – Webinar/Meeting in Spring 2011 to discuss long-term data exchange, verification testing issues and audits for CBs and Laboratories
Questions?

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