



Third-Party Certification Training for EPA-Recognized Certification Bodies

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ENERGY STAR Program Integrity
December 2, 2010
Farragut Center, Washington, DC

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



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My ENERGY STAR Account
Welcome John Doel

Manufacturer Lab/Lookup
*Possible introductory text... **1**

- You must input data or select from at least one field to obtain a list of search results.

Identification O_Id:

Manufacturer/Lab Name:

Program:

City:

State:

2

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Organization ID	Organization Name	Program: (Roles)	City	State
12345	XYZ Test Org	Audio/Video (Partner)	New York	NY
54321	XYZ Testing	Audio/Video (Partner)	Boston	MA
12121	XY Test	Televisions (Partner)	Miami	FL
19098	XY Tess	Telephony (Partner)	Machias	ME
56780	X Org	Water Coolers (Partner)	Portland	ME
09890	X Test	Vending Machines (Partner)	Erie	CO

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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



ENERGY STAR ELIGIBILITY	Applicant satisfies requirements? (Yes/No/Not Applicable and Comments)
Is the device an Included Product, as outlined in Section 2: Scope of most ENERGY STAR specifications? ¹ (Model must be on the Included list and not be an Excluded Product as defined by the specification.)	
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).)	
Are the qualification criteria met using the appropriate significant digits and rounding?	
Was the appropriate test method(s) used per the test report?	
Were the correct type and number of units tested, based on specification requirements?	
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?	

- 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



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Welcome John Doel

ABC Test Org OPX Spreadsheets
*Possible introductory text...

Templates:

Upload File:

Declaration:

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 submittal. I understand that the ENERGY STAR program will associate all data in this submittal with the products listed in this submittal upon receipt. I understand that 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.

Date:

My Organization OPX Spreadsheets [View Previous Submissions](#)

Data File Name	Template	Program	Uploaded On	Processed On	Submitter	Status
Spreadsheet 1	Clothes Washers Template	Clothes Washers	11/18/10		Contact 1	Submitted
Spreadsheet 2	CFLs Template	CFLs	11/18/10	11/15/10	Contact 2	Success
Spreadsheet 3	Decorative Light Strings Template	Decorative Light Strings	11/04/10	11/12/10	Contact 3	Error
Spreadsheet 4	Televisions Template	Televisions	11/01/10	11/02/10	Contact 4	Success

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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 and included subtype
 - Category: Imaging.
 - Subtypes: copiers, digital duplicators, fax machines, mailing machines, multi-function devices, printers, scanners.
- 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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