



ENERGY STAR® Products Enhanced Testing and Verification: External Power Supplies and Battery Chargers

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Agenda



- Overview of Enhanced Testing and Verification Requirements for ENERGY STAR
- New proposed requirements for External Power Supplies and Battery Chargers
 - Certification programs
 - Lab accreditations for Qualifying and Verifying Products
 - Frequency of testing
- Discussion of product considerations specific to External Power Supplies and Battery Chargers
 - Use of in-house laboratories
 - Challenge testing
 - Obtaining samples from the marketplace

Key Elements of Enhanced Testing Requirements



- Testing and reporting prior to qualification
 - Ensure that EPA has testing information on all products prior to labeling
 - Require test data from accredited labs that is representative of the product in the marketplace
- Continued testing after qualification
 - Verify that products continue to meet the ENERGY STAR requirements regardless of changes in the production process
 - Provide consumers with confidence that ENERGY STAR products are delivering the savings they expect

ENERGY STAR Enhanced Testing and Verification – Market-Based Testing Program

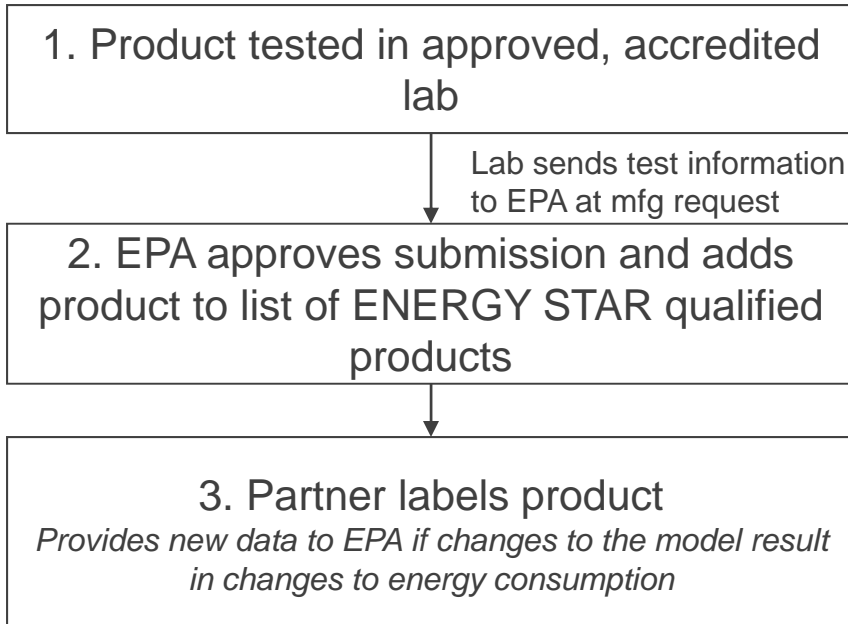


Market-Based Testing

Scope: All ENERGY STAR Product Categories

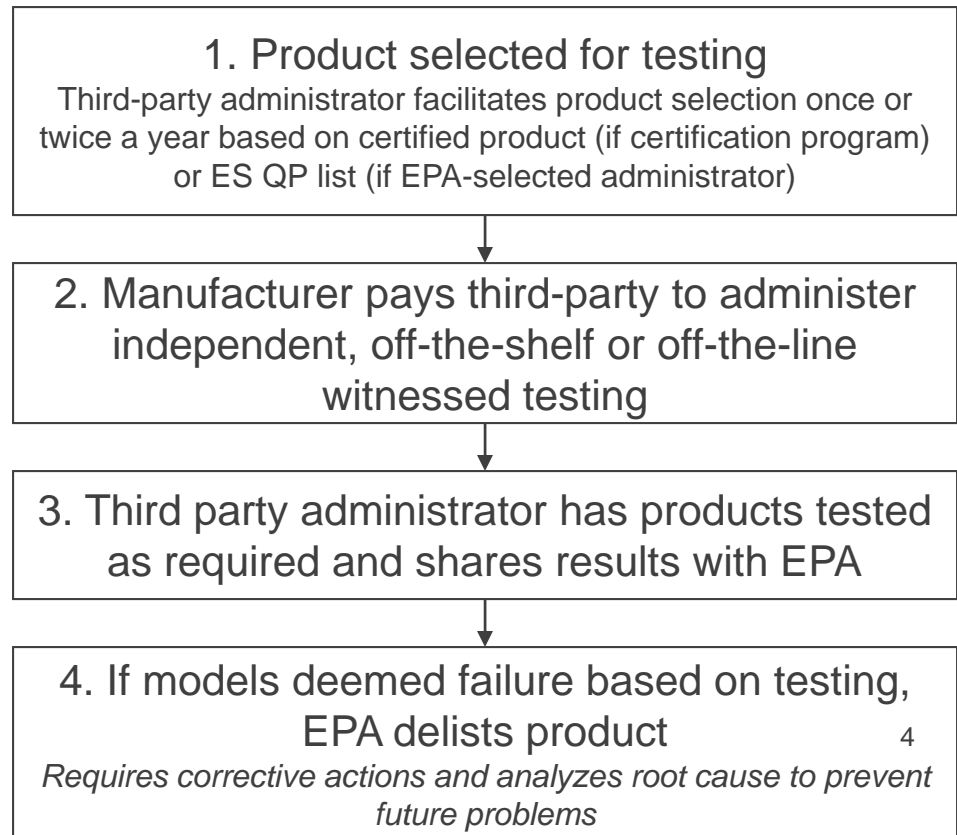
Qualification Testing

Purpose: Ensure that testing is conducted as required by ENERGY STAR specification and that lab submits test results to EPA that are representative of products sold to customer



Verification Testing

Purpose: Ensure that products continue to meet ENERGY STAR requirements



Third Party Certification and Verification Testing



- Laboratory requirements – preference for third-party labs with considerations for manufacturers' in-house labs
- Formal market-based certification programs to administer testing
- Verification testing to be conducted on all products within certain timeframe
- Potential for multiple certification/verification programs to serve this function
 - Off-the-shelf testing where possible
 - Combination of random testing and selected products
- Challenge testing requirements

Third Party Certification and Verification Testing



- Certification and verification testing program administration
- Qualification testing
 - Laboratory Requirements
- Verification testing
 - Laboratory Requirements
 - Process for identifying and selecting products
 - Process for obtaining products or conducting witness testing
 - Number of units to be tested
- Challenge testing
- Partner responsibilities

Third Party Testing – Program Administration



- Third-party entity will administer certification and verification testing program (more than one third-party may offer such programs as long as they meet the qualification criteria)
- Qualifications
 - Proficiency in measurement testing or statistics
 - Demonstrated impartiality regarding the outcome of testing
 - Quality control measures (e.g., ISO/IEC Guide 65:1996)
 - May not require membership for product to be certified
 - Need to be approved by EPA
- Responsibilities
 - Identify and select qualified laboratories for testing
 - Work with manufacturers to test ENERGY STAR products for both initial qualification and verification purposes
 - Ensure testing remains on schedule
 - Provide detailed test reports and summaries of results to EPA/DOE

Third Party Qualification Testing



- Third-party independent lab will be required by default
 - In-house labs may be allowed if appropriate
- Products may not be certified based on the rating of another product unless differences do not impact the energy performance of the product
- To certify product, manufacturer must provide information on the distribution of product (for purposes of conducting verification testing)

Comments: How will in-house testing be an improvement? Will there be additional requirements for in-house labs? Will these lab requirements be adequate for verification testing?

Third-Party Verification Testing: Laboratory Requirements



- Third-party independent accredited lab will be required by default
- Witness testing may be allowed on a product-specific basis

Third-Party Verification Testing: Selecting Products



- Selected by third-party program, allowing for input from EPA/DOE and other stakeholders
- Must test all certified products at least every three years
- Need to ensure that products still available on market and that the current specification applies

Third-Party Verification Testing: Obtaining Products



- Preferred option is to obtain products from the marketplace
- Other option for products not available “off-the-shelf”
 - Random selection of unit(s) off production line
 - Testing at manufacturer laboratory under supervision

Third-Party Verification Testing: Sample Size



- The number of units to be tested should be at least the same as required for qualification

Third Party Testing: Partner Responsibilities



- Partner is required to pay for third-party certification of product
 - Verification testing will be included in the fee
 - Testing will occur at least annually

EPS Product Considerations



- Current program requirements:
 - Marking: Not the ENERGY STAR Certification Mark, but the Roman numeral V.
 - Test procedure: No departure from the test procedure is acceptable.
 - Model obsolescence: Partners must remove from the qualified products list models that are neither made to nor marked level V.
 - Multiple voltages: A model may be qualified only if it meets level V at *all applicable market voltages*.

EPS Product Considerations



- Information collected on EPSs pursuant to qualification. Under consideration:
 - Is the model currently available for order?
 - Does the model exist only as a prototype?
 - Has the model been manufactured since November 1, 2008 to an efficiency level lower than V?
 - May the model be manufactured to an efficiency level lower than V?

EPS Product Considerations



- Challenge testing
- Obtaining samples from the marketplace

Next Steps



- Comments due April 30, 2010
 - ENERGYSTARVerificationProgram@energystar.gov
- Complete draft including product-specific requirements – May 2010
- Finalize Requirements – July/August 2010
- Phase-in requirements for certification programs

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