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September 28, 2012

Doug Anderson ENERGY STAR* Program U.S. Environmental Protection Agency Washington, DC 20460

Dear Mr. Anderson,

The Consortium for Energy Efficiency (CEE) respectfully submits the following comments in response to the *ENERGY STAR® Draft 1 Version 6.0 of the Windows, Doors, and Skylights Product Specification* released by the Environmental Protection Agency (EPA) in July, 2012.

CEE is the binational organization of energy efficiency program administrators and a staunch supporter of the ENERGY STAR® Program. CEE members are responsible for ratepayer-funded efficiency programs in 45 US states and eight Canadian provinces. In 2011, CEE members directed over \$7.8 billion of energy efficiency program budgets in the two countries. CEE's Members work to strengthen ENERGY STAR as a platform for energy efficiency across North America.

CEE highly values the role ENERGY STAR plays in differentiating energy efficient products and services that the CEE membership supports locally throughout the US and Canada. We appreciate the opportunity to provide these comments.

Enhance Minimum Performance Criteria to Align with the Brand Promise

CEE thanks EPA for providing additional background and rationale behind the proposed eligibility requirements as outlined in the *Version 6.0 Draft 1 Criteria and Analysis Report*. We recognize that windows, doors, and skylights are a particularly unique product category with special cost-effectiveness considerations, and appreciate EPA's effort to provide for greater differentiation of ENERGY STAR products through this specification revision. However, CEE is concerned that the proposed qualification criteria could result in product availability levels that are too high for ENERGY STAR to serve as an effective differentiator for voluntary energy efficiency programs. Analysis provided by other stakeholders indicated that the specification ranges proposed in the *Version 6.0 Specification Framework Document* would result in a 41

percent market share for ENERGY STAR. Moreover, the qualification criteria outlined in Draft 1 propose U-factor and SHGC values that fall in the upper half of the ranges set forth in the *Framework Document*, which suggests that market share might be even higher once Version 6.0 goes into effect in 2014. For this reason, CEE encourages EPA to aim for criteria levels that keep qualification closer to ENERGY STAR's typical goal of 25 percent market availability than does the current draft's goal of "less than 50 percent." This would position the ENERGY STAR label as an effective differentiator of the best performing and most energy efficient products available in the market.

Support for More Stringent Energy Efficiency Requirements

In order to better align with the ENERGY STAR Guiding Principles and ensure adequate product differentiation mentioned above, CEE recommends consideration of more stringent U-factor and Solar Heat Gain Coefficient (SHGC) requirements for windows, doors, and skylights, particularly in the Northern Climate Zone. Based on the trends apparent in ENERGY STAR Window Market Share to date (see Figure 1 in the *Criteria and Analysis Report*), as well as current data on product availability, CEE is concerned that implementing the U-factor and SHGC levels as currently proposed will result in a market that is overweight with qualified products once the specification goes into effect. Increasing the stringency of these two requirements for windows, doors, and skylights in the Northern Climate Zone would effectively moderate the market share of products qualifying under Version 6.0.

Promotion of Equivalent Energy Performance

CEE finds merit in EPA's proposal to offer an equivalent energy performance pathway for windows to achieve ENERGY STAR recognition in the Northern Climate Zone. In addition to the proposed "=0.28 U-factor / \geq 0.32 SHGC" window criteria, CEE recommends that EPA consider including a second option of "=0.29 U-factor / \geq 0.37 SHGC" for the equivalent window energy performance path. This would allow additional products that provide comparable savings to qualify for ENERGY STAR in regions where a SHGC tradeoff results in equivalent energy performance. Although Figure 8 in the *Criteria and Analysis Report* indicates that very few CPD products currently meet either of the alternative criteria levels listed above, we still support both optional substitutes in the Northern Climate Zone because they offer equivalent energy performance. So long as the adoption of these criteria does not impact the brand promise (a performance level defining the highest quartile of energy performance among available products), CEE advocates the inclusion of the two equivalent paths.

Support for Air Leakage Requirement

CEE continues to see potential value in adding air leakage requirements to the ENERGY STAR Version 6.0 criteria and harmonizing these levels with the International Energy Conservation Code in order to reduce the compliance burden on manufacturers and promote consistency in

the market. Provided that the labeling methodology is allowed under existing procedures and does not present stakeholders with additional burdening costs, CEE supports the inclusion of an air leakage requirement as well as EPA's proposed collaboration with the National Fenestration Rating Council to establish consistent certification and labeling.

Recommendations for Installation Instructions

CEE recognizes the impact that proper installation of windows, doors, and skylights has on energy as well as non-energy outcomes, and supports EPA's commitment to ensuring that ENERGY STAR products are properly installed and that customers are satisfied with their purchase. We do not propose specific criteria related to instructions for inclusion in the Version 6.0 specification, but believe that disclosure of general product information – including comprehensive installation instructions – could contribute to both product differentiation and maintenance of brand integrity for the ENERGY STAR program. Although it is unclear how much the provision of instructions will influence actual installation of windows in the field, we commend EPA for acknowledging the significance that proper installation of windows, doors, and skylights plays with respect to overall product performance. Should EPA wish to explore avenues that address quality installation beyond the ENERGY STAR label, CEE provides the following suggestions:

- Drive for quality installation could come in part from the market. EPA could explore strategies for educating consumers about the importance of proper installation as a mechanism to help spur consumer demand for quality installation.
- Certification and training requirements may help establish standards by employing third party checks. EPA could look into opportunities to utilize testing methods or installation protocols to help ensure proper product installation on site.
- The energy efficiency program community's experience with ENERGY STAR promoting HVAC quality installation may serve as a possible model for identifying similar opportunities to promote quality installation of ENERGY STAR windows, doors, and skylights.

Approval of Proposed Timeline

As discussed above, the current market share figures for Version 5.0 qualified windows, doors, and skylights (81%, 71%, and 70% respectively) are already too high for some CEE members to effectively leverage ENERGY STAR as a program platform. Moreover, EPA notes that "it is expected for market share to grow in the years following the specification revision as manufacturers create new designs and find ways to reduce product costs". Since research presented in the *Criteria and Analysis Report* indicates that many models already meet the proposed energy efficiency requirements, CEE would support the January 1, 2014 effective date

currently proposed in the revised timeline, which would bring the new specification to bear in the market earlier, as opposed to deferring the effective date to 2015. While we understand the cost-effectiveness challenges and other unique considerations associated with this ENERGY STAR category, EPA's research indicates that 40 to 50 percent of products are expected to meet the proposed Version 6.0 criteria, and for this reason, believe the current timeline and effective date is consistent with meeting market availability objectives.

Thank you for your consideration of these comments. CEE strongly supports ENERGY STAR and appreciates the opportunity to offer the comments provided in this letter. Please contact CEE Program Manager Alice Rosenberg at arosenberg@cee1.org or 617-337-9287 with any questions.

Sincerely,

Ed Wisniewski

Executive Director

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