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November 14, 2008

Mr. Richard Karney P.E., Manager Energy Star Program United States Department of Energy 1000 Independence Ave SW Mailstop EE-40 Washington, DC 20585

RE: Comments on the ENERGY STAR Criteria Revision for Windows, Doors, and Skylights.

Dear Mr. Karney and Department of Energy Staff:

Thank you for the opportunity to offer these comments on the ENERGY STAR criteria revision proposed by the Department of Energy (DOE). The Midwest Energy Efficiency Alliance (MEEA) is a collaborative network advancing energy efficiency in the Midwest to support sustainable economic development and environmental preservation. MEEA supports the strengthening of ENERGY STAR requirements for doors, windows, and skylights; however, we remain concerned that the proposed SHGC trade-off requirements for northern climates ES4 and ES5 are likely to have significant unintended negative consequences on peak electricity and natural gas demand, peak electricity use, and HVAC sizing and comfort.

We understand that the inclusion of SHGC tradeoffs for climate zones 4 and 5 are intended to be energy neutral by capturing winter solar gain to offset weaker window insulating values. However, these climate zones experience summer temperatures on par with southern latitudes. Therefore, while allowing a higher SHGC for northern climate zones may reduce winter heating requirements, it does so at the expense of requiring higher summer air conditioning loads. These loads occur even in areas such as Bismarck, ND, which regularly experiences summer temperatures of 90 degrees or higher. In addition, the hoped-for winter energy savings may not materialize, because they are subject to the orientation of specific windows and residents' decisions regarding the use of their window treatments. These decisions depend on variables that are unrelated to energy use.

Reducing electricity demand during peak summer hours reduces both the price of electricity and the price of natural gas. In the short term, by reducing peak demand during the highest-cost hours of the year, it reduces the market clearing price in the wholesale power market, which produces energy price savings throughout the regional system during those peak hours. In the longer term, it reduces the need for new peaking power plants, which in turn reduces the amount of capital outlay that must be recovered through power prices. Reducing peak electricity demand also reduces the price of natural gas by reducing its market clearing price. For example, in the PJM electric grid operator footprint, 24% of peaking power plants are fueled by natural gas. Thus, high peak electricity demand increases the demand for, and price of, natural gas. Revising these proposals to remove an SHGC trade-off in northern climates will reduce electricity and natural gas usage when that reduction is most needed.

We urge you to revise these proposals to minimize their effect on peak summer electricity demand. Lower heat gain through windows will reduce peak cooling loads, thus reducing the size requirements for air conditioning systems and reducing the capital cost of the home to the buyer. In addition, lower heat gain through windows reduces the overall peak electricity system demand because residential cooling loads are typically highly coincident with peak system demand. In contrast, promoting higher SHGCs and higher peak demands may make it more difficult for northern utilities to meet their energy efficiency targets using programs that promote Energy Star windows.

We acknowledge and support the desire of DOE to develop meaningful ENERGY STAR standards and criteria and we look forward to working cooperatively with DOE in the future to further strengthen the ENERGY STAR program so that it reflects new technologies and updates to international building codes. We would again like to thank DOE for the opportunity to comment on what has become an increasingly important issue throughout the Midwest and beyond. Please feel free to contact me directly should you have any questions. Thank you for your consideration.

Sincerely,

Wendy B. Jaehn Executive Director

Midwest Energy Efficiency Alliance

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