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Via Electronic Mail

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Subject: ENERGY STAR® Windows v7 Draft 2 Specification

This letter is submitted on behalf of the Northwest Energy Efficiency Alliance (NEEA) in response to the recently published ENERGY STAR specification v7 (Draft 2) for windows (and doors and skylights). The Northwest Energy Efficiency Alliance (NEEA) is a non-profit organization working to effect market transformation through the acceleration and adoption of energy-efficient products, services and practices. NEEA is an alliance of more than 140 Northwest utilities and energy efficiency organizations working on behalf of more than 13 million energy consumers.

Our comments build upon the strong support we communicated in our comments to Draft 1. As an organization that works directly with many market actors including utilities, manufacturers, builders, and channel partners, we appreciate the time that EPA took to consider the Draft 1 comments. Specifically, we support the update to the modeling and analysis, the data-supported criteria adjustments, and efforts to balance the market's needs. Further, we commend ENERGY STAR for their efforts to promote energy efficient products, reduce energy consumption, and improve energy security.

The technology needed to meet and even exceed the v7 criteria exists today. Innovators are already building and delivering these products to market in quantity, though scaling product availability to meet national demand will require investments of time, resources, and money. Windows play a critical role in achieving net-zero energy and reducing carbon emissions. Therefore, we believe it is time to begin making these investments.

We recognize that any change in criteria can create headwinds for some market actors, many of whom we work with in our market transformation efforts. But those headwinds cannot be a justification for maintaining the status quo of a voluntary program when it comes to one of the least energy-efficient elements of the building envelope. Especially when more efficient window technologies already exist.

In order to meet ENERGY STAR v7, some well-established manufacturers must invest in factory and tooling updates. Through our participation in the Partnership for Advanced Windows Solutions (PAWS), NEEA is aware the national labs are already providing technical support to window companies to help them redesign products and production lines to produce windows that will meet the new performance criteria. Therefore, we strongly urge ENERGY STAR to commit to putting v7 into effect no later than July of 2023.

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Any delay in implementation will reduce the effectiveness of market transformation efforts already underway in numerous states and regions and continue to divert market share to European manufacturers currently supplying the demand for more efficient windows.

Energy Efficiency Requirements for Windows

NEEA strongly supports the establishment of the U-0.22 for the Northern Climate Zone and appreciates the flexibility offered via the Solar Heat Gain Coefficient (SHGC) tradeoffs. The value of the U-0.22 criteria creates the opportunity for thin triple pane windows to gain market share, which will bring down the cost of these most efficient products and catalyze future innovations that can achieve even greater energy efficiency at affordable prices.

It is worth noting that these more efficient products deliver benefits beyond energy savings and reduced utility bills. They provide improved thermal comfort to occupants and play an increasingly important role in carbon reduction, grid resiliency, and resiliency of homes and buildings participating in demand response programs. Growing evidence from the Department of Energy[1], national labs[2] and green building organizations[3] indicate that we will not be able to meet our national carbon reduction goals without rapidly addressing the most inefficient component of the building envelope. The updated v7 criteria are a good and necessary start to improving building envelope performance.

Doors, Skylights, Air Leakage, Installation Instructions and Testing Requirements

NEEA supports ENERGY STAR's decision to align sliding glass door criteria with other full glass doors and reducing the U-factor requirement for ½-Lite doors to $\leq$0.25.

NEEA also supports ENERGY STAR's proposed requirements for skylight energy performance, air leakage ratings for windows, doors and skylights, installation instructions and reference test methods.

Future ENERGY STAR Updates

We also encourage ENERGY STAR to closely track the adoption of ENERGY STAR v7 and make more timely updates to the specification to keep pace with rapid innovation in the glass and window industry. While some have argued that ENERGY STAR should make smaller changes less frequently, we believe that a regular and more frequent schedule benefits industry. With more regular updates, manufacturers can more easily plan and effectively implement practices to transition to more efficient products as a standard practice. Regarding the magnitude of changes, we continue to support ENERGY STAR's commitment to relying on data that reflect what is technologically feasible and cost-effective rather than on any arbitrary targets.

The value of ENERGY STAR is not only in "providing simple, credible, and unbiased information that consumers and businesses rely on to make well-informed decisions" about energy efficient solutions, as stated on the ENERGY STAR website, but also in creating market pull for products that deliver the benefits

[1] https://www.energy.gov/energysaver/update-or-replace-windows

[2] https://buildings.lbl.gov/news/60871/energy-efficient-windows-to-rea

[3] https://www.fastcompany.com/90694543/from-leaky-windows-to-building-codes-this-is-how-the-infrastructure-bill-will-tackle-buildings

of energy efficient solutions. Consumers equate ENERGY STAR with leading energy efficiency. As noted in our earlier comments, with a market share of nearly 90%, and with available window solutions that far exceed the v6 criteria, ENERGY STAR v6 windows no longer represent the most energy efficient performance.

Thank you for your efforts on this specification and the evolution of the windows market.

Sincerely,
Rick Dunn

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