March 27, 2003

Mr. Richard H. Karney, P.E.
Manager
ENERGY STAR Program
Building Technologies Program
U.S. Department of Energy
Washington, D.C. 20685

Dear Mr. Karney:

This responds to your letter of February 11, 2003, requesting comments on two alternative standards for the ENERGY STAR windows program. For reasons outlined below, Guardian Industries strongly urges the Department of Energy (DOE) to adopt the three-zone alternative.

- **Energy savings.** DOE's modeling shows no statistically significant difference in national energy savings between the three- and four-zone alternatives. While the analysis circulated with the February 11 letter indicated a small difference in energy savings, it is clear from subsequent discussions with DOE staff that the difference is within the margin of error. Furthermore, estimates will shift significantly depending on assumptions. For example, the DOE model's assumption of an unusually high summertime thermostat setting of 78° biases the outcome in favor of heating energy savings.

- **Environmental benefits.** The three-zone alternative yields greater cooling savings, especially in cities (such as Washington, DC, Nashville, St. Louis, Kansas City, and Richmond) in the north central zone of the country. These savings translate into reduced air pollution. As DOE's analysis points out, "saving on electricity (cooling) reduces air pollution impacts more than savings on gas (heating)." Reducing air pollution and conserving energy are the twin objectives of the ENERGY STAR program.

- **Peak demand.** The DOE analysis concludes that the three-zone proposal, compared with the four-zone proposal, would reduce peak electricity demand, thereby reducing the need for one 115 megawatt power plant each year. This is significant in many urban areas.

- **Simplicity.** The three-zone proposal is far easier for manufacturers to administer and consumers to understand. In fact, from a consumer and window manufacturers perspective, the fewer the zones the better.

- **Comfort.** The three-zone alternative provides significantly greater comfort in all seasons. And comfort, not energy use, typically drives behavior with respect to thermostat settings.
Supporters of the four-zone alternative have made several assertions that are without foundation. These are identified below.

- **Competition.** It has been asserted that the four-zone proposal is preferable because it maintains competition in the marketplace. In fact, there is intense competition among manufacturers of low solar gain low-e products, which include four of the five major glass manufacturers. Because of this competition and window manufacturers' preferences, the market share for low solar gain low-e products is growing steadily, and now exceeds 80 percent. The coating technology for producing such state-of-the-art products is widely available in the marketplace. The mandate of the ENERGY STAR program is to encourage the development of advanced technologies, not to preserve dying technologies.

- **Availability.** It has been erroneously asserted that there is insufficient supply of low solar gain glass to meet market demand. This is demonstrably not true today, and additional investments -- planned and underway -- will ensure that future capacity is even greater.

- **Peak capacity.** It has been argued that there is substantial reserve margin in the peak energy market. That is a highly debatable issue nationwide, but it certainly is not true in major cities in the Northeast such as New York. More importantly, the issue is not current capacity but how much new investment will be needed in future years to preserve adequate capacity.

- **Natural gas prices.** It has been argued that priority should be given to saving heating energy because of the current high prices for natural gas. The spike in prices reflects many factors, including the unusually cold winter and political uncertainty due to the Iraq situation. Energy Star standards should be based on expected energy conditions over the medium and long term. Futures prices for natural gas are not unreasonably high.

Three times over the past two years, you and your colleagues at the Department of Energy have considered how best to modify the standards for the ENERGY STAR windows program. Each time DOE has concluded that the three-zone alternative is best. This approach is supported by a majority of the glass and window manufacturing industry, by environmental experts, and by energy-efficiency experts. The three-zone alternative is clearly best overall and should be implemented on August 29, 2003 as proposed.

Please feel free to contact me with any questions you may have.

Sincerely,

Peter S. Walters
Group Vice President

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