

Comments of NRDC on Proposed Energy Star Qualified Homes Program

12 August 2005

Introduction

The Natural Resources Defense Council (NRDC) commends the Energy Star Program managers for having adopted the most important of our recommendations on the initial comment period closed in April. We believe that the current program proposal is fundamentally sound, at least as it applies to the proposed scope.

But subsequent events have created a strong need for the Energy Star Program to extend this program design, or something similar to it, to manufactured housing. Also, there are some additional technical issues where further improvement is needed. These will be addressed below.

The Critical Need to Include Manufactured Homes Within the Coverage of the Specification

There is nothing fundamentally different between manufactured housing and site-built housing with respect to the potential for cost-effective energy efficiency. For both buildings, the primary energy efficiency features likely to be used are improved windows, thicker insulation (to a much lesser extent), and more efficient equipment. All of these supplies are produced in national markets that do not distinguish in any fundamental way between manufactured homes and site-built homes. Furthermore, experience in the Pacific Northwest over a dozen years ago showed that it is possible for manufactured homes to equal the performance of energy efficiency site-built homes in a way that retained cost-effectiveness.

But the problem of an unwarranted distinction between manufactured housing and site-built housing has come to a head with the passage last week of the Energy Policy Act of 2005. This act provides incentives for manufactured homes that save 30% of their heating and cooling energy with respect to the International Energy Conservation code (IECC), but also deems Energy Star-compliant homes as having met this 30% savings threshold.

With the current Energy Star specification for manufactured housing, this presumption is incorrect. Even if current Energy Star manufactured housing saves 30% compared to the IECC, the savings will be dramatically lower after the SEER 13 standard goes into effect in January 2006.

Unless EPA updates its Energy Star specification for manufactured housing, hundreds of thousands of manufactured homes are likely to apply for and obtain a \$1,000 federal tax credit for doing almost nothing but complying with the HUD code and installing the minimum required SEER 13 air conditioner or heat pump.

Giving away all this money for almost no energy savings performance would be a travesty for energy efficiency and reflect very badly on EPA's Energy Star program. The level of free ridership inherent in such a business-as-usual case will undoubtedly come to light in follow-up studies and evaluations and will be cited as evidence that energy efficiency policies don't work. Worse yet for EPA, these evaluations will be cited as evidence that Energy Star is a failed program.

Thus, it is in EPA's interest in defending brand equity in Energy Star as well as in defending the nation's financial soundness to modify the Energy Star specification for manufactured housing such that it implements the explicit goal in the Energy Policy Act of obtaining 30% savings relative to a baseline of IECC 2004 and the SEER 13 standard. As a strong supporter of Energy Star, NRDC believes it is in our interest as well to point out the problem to EPA and to advocate its prompt solution.

NRDC does not have rigid recommendations on how to do this, but believes that merely extending the scope of the current proposal to include manufactured housing would be reasonable and equitable.

Other Technical Issues

NRDC has been in communication with working groups at the Consortium for Energy Efficiency and RESNET and supports the consensus comments being submitted by both organizations. NRDC would particularly like to draw EPA's attention to the issue of the draft specifications arbitrarily limiting the amount of credit that can be obtained from CFLs.

RESNET went to a lot of effort to develop a technically-justified method for crediting energy savings from lighting. As far as the consumer and the environment are concerned, a saved kilowatt hour is a saved kilowatt hour irrespective whether it comes from improvements in the building envelope, improvements in the heating and cooling equipment efficiency, or improvements in the lighting system's efficiency.

The only reason we can see to justify the EPA's limitation on credit for CFLs is the possibility that homebuilders could trade off long-lived envelope improvements for shorter-lived lighting improvements. Of course, this is also a problem with offering tradeoff credits for measures like equipment efficiency, whose life is much shorter than the building envelope, and leak-free ducts, whose life is not known with assurance. The only real problem that we can see is that lighting upgrades are so cheap and easy to do that builders might be tempted to go with getting more credit from the lighting package and saving less energy in the building envelope. However, it is very important to point out that Energy Star is a beyond-code program and that almost all who attempt to qualify start with minimum envelope efficiencies an attempt to improve from that point. Therefore, it is highly unlikely that a builder or consumer would trade envelope efficiency features against equipment or lighting features. It is also important to point out that the major increases in code and NAECA stringency over the past decade have impacted

primarily the south, where lighting energy reduction is one of the few remaining significant efficiency “above the bar” improvements that are very cost effective.

This problem can be soundly resolved if EPA follows NRDC’s recommendations from our previously submitted comments: to increase the stringency of the Energy Star specification. If the bar is raised such that it requires a significant commitment to lighting energy efficiency in the reference home, then the problem of encouraging “inappropriate” tradeoffs goes away.

Concluding Remarks

NRDC appreciates the open and collaborative attitude with which EPA is developing the new Energy Star specification. We urge you to expand the specification’s coverage to manufactured homes and to implement the technical improvements suggested in these comments.