

May 5, 2005

Jonathan Passe
Energy Star Homes Program
U. S. Environmental Protection Agency
1200 Pennsylvania Ave. NW
6202J
Washington, D.E. 20460

Dear Mr. Passe:

Salt River Project is the nation's third largest public power agency, serving 860,000 customers in metropolitan Phoenix, Arizona. We appreciate the opportunity to provide input on the proposal to revise the Energy Star Homes qualifying criteria. SRP has reviewed the comments and recommendations made by CEE, and while there are slight variations in our respective letters, SRP supports the overall positions taken by CEE. SRP's position is as follows:

Prescriptive/Performance Paths

- *Prescriptive path:* In general, the proposal to establish more rigorous requirements for this path has merit. SRP supports basing the thermal requirements on the IECC, which will encourage broader implementation of these codes. It is suggested that the requirement for heating equipment in hot climates be one, if not two, AFUE percentage points larger than the minimum required by local code.
- *Performance path:* Setting the Energy Star reference level at the HERS score achieved as if it were built to the prescriptive specification results in too many conditions being unspecified, which increases the probability of discovering ways to game the calculation. That this probability exists may be enough to prevent some from participating in the program, whether building or buying. This situation could also produce an inconsistent procedure between code compliance and the Energy Star path. SRP recommends the use of the IECC/RESNET method for creating a reference home and calculating compliance.

Field Verification

SRP supports the EPA proposal that both the Performance and Prescriptive Paths require field verification, using both inspections and testing, to ensure that projected savings targets are met.

Thermal Bypass Checklist

The proposed Thermal Bypass Checklist represents a very good start at incorporating more building science concepts into residential construction. To ensure accurate interpretation, implementation and enforcement, there are several questions that SRP feels should be addressed. These are as follows:

- How many items on the Checklist need to be met to pass? What are the consequences of a failure?
- What if a particular item on the checklist isn't applicable to the climate zone? What happens if one or more such items are not checked off?
- The related costs will be significant. Who will bear these costs? If it's the buyer, has EPA determined how many will be "priced out" of buying a home due to these increased costs?
- Who is to be responsible for ensuring compliance with the checklist?

Implementation Date

SRP supports the proposed effective date of January 1, 2006 for the new specification. It is recommended that the “grandfathering period” for homes to qualify under the existing program be defined as those that have been contractually committed to the Energy Star Home program by December 31, 2005 through the local program administrator or Energy Star Home partner.

Heating and Cooling Equipment

- The two-region approach, given the disparities in cooling and heating degree-days, is reasonable. However, this approach does contribute to the loss of a single value threshold for this national program.
- SRP supports EPA’s proposal to incorporate Energy Star-qualified heating and cooling equipment into the Homes program.
- SRP recommends establishing market-transforming standards for fossil fuel HVAC equipment and related auxiliary electric devices plus the inclusion of renewable energy technologies.
- SRP also supports EPA’s inclusion of right sizing and asks what level of over-sizing is acceptable for all equipment types.

Duct Insulation and Leakage

- SRP supports the inclusion of duct insulation standards and leakage testing into the Homes program. However, the proposed leakage goal represents a very large jump in performance for production homebuilders to achieve in what little time will elapse before adoption and implementation of the new standards. SRP recommends that EPA set the 2006 standard to 6 cfm per 100 sq. ft. and delay the proposed standard of 4 cfm leakage rate for at least one year.
- The proposed use of IECC insulation levels (R-8) in the specification presents a barrier to program participation, as currently this product is not readily available locally. SRP suggests use of R-6 insulation levels in 2006 and upgrading to R-8 insulation when manufacturers can better support market demand.

Lighting and Appliances

SRP supports the inclusion of lighting and appliance requirements as it represents a step towards addressing internal loads. SRP recommends the inclusion of compact fluorescents (CFLs) as a qualifying item for this requirement. Studies in the Northeast and Pacific Northwest have shown that screw-in CFL bulbs have about the same persistence level as Energy Star hard-wired light fixtures and that acceptance levels of the screw-in bulbs is substantially higher. Program requirements should identify the areas of the home in which the fixtures may be installed to meet the required number of appliances.

Water Heaters

SRP supports the inclusion of standards for water heaters and asks that the EPA take into consideration two circumstances before implementing the standards proposed. The first circumstance is the variance in temperature of the incoming water inherent in the different regions, which, in the hot climates, drives the second, that being the very limited availability of units with such high ratings. SRP recommends EPA establish slightly lower standards for hot-climates to ensure availability of units meeting program standards. It is also recommended that standards be established for alternative energy-powered units.

Thermostats

SRP supports EPA's proposal to include programmable thermostats within the Homes specification.

SRP thanks the EPA for this opportunity to comment on the proposed changes to the Energy Star Home program and looks forward to reviewing the finalized version.

Sincerely,

Michael W. Lowe