

**SMUD****SACRAMENTO MUNICIPAL UTILITY DISTRICT**
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Rachel Schmeltz
ENERGY STAR Program Manager
Office of Air and Radiation
U.S. Environmental Protection Agency

Dear Rachel:

The Sacramento Municipal Utility District (SMUD) appreciates the opportunity to comment on the Draft 2 specification for ENERGY STAR-qualified air-source heat pumps and central air conditioners. The Draft 2 specification was spelled out in your letter of May 27, 2005. SMUD offers the following comments regarding the key changes and/or decisions made by EPA since the first draft:

CHANGE: Develop separate specification for proper installation.

COMMENT: SMUD concurs with this change for the near-term. Considerable research supports the potential for significant additional energy and peak-load savings if CAC and HP systems were correctly installed. We believe, however, that additional development in the ENERGY STAR specification, education and training, and program-delivery infrastructure needs to take place before many energy-efficiency programs can help ENERGY STAR implement a proper-installation specification. Delaying implementation of a proper-installation specification by one year would be appropriate. Furthermore, we remain in favor of the two-label approach, one of the equipment, one for proper installation.

CHANGE: Energy-efficiency criteria for split systems have been adjusted (downward) to 14 SEER/11.5 EER/8.2 HSPF.

COMMENT: SMUD strongly objects to this reduction from the Draft 1 proposal of 14 SEER/12 EER/8.5 HSPF. EPA's rationale for reducing these efficiency requirements is that not enough equipment is currently available at the originally proposed efficiency levels, "particularly ... at higher tonnages (~ 5 tons) ..." (line 85).

In Sacramento, we find the average tonnage of CACs and HPs to be 3.08. At the current CEE Tier 2, which comprises the same efficiency tiers as the Draft 1 proposal, program participation at the higher tonnages is small, with 14.0% at 4.0–4.99 tons and only 2.8% at five or more tons. Is this because the Tier 2 standards are too restrictive? Apparently not, as we see nearly identical percentages (14.3% and 2.1%, respectively) for CEE Tier 1—the current ENERGY STAR level of 13/11/8.0. Why sacrifice a higher-efficiency standard for the vast majority of product to accommodate a few more available products at the largest size, which make up a very small part

of the market? This does not appear to be in the best interest of increasing energy efficiency and peak-load savings.

Furthermore, we've been operating a rebate program in which we've been promoting the current ENERGY STAR and CEE tiers for two years. Forty percent of the rebates paid thus far have been for the tier requiring 14/12/8.5—slightly more than the 36% of rebates paid for the current ENERGY STAR level of 13/11/8.0. We see no problem in the availability of 14/12/8.5 equipment and recommend that EPA stick with its original proposal of SEER 14/EER 12/HSPF 8.5.

CHANGE: EPA is considering dropping "gas packs" from the ENERGY STAR specification, until such time as a heating requirement may be instituted.

COMMENT: SMUD strongly objects to removal of gas-packs from the ENERGY STAR specification. ENERGY STAR is a label that represents high-efficiency products in an easily understood and identifiable way to customers and contractors. Gas/electric packaged units have been included from the inception of the ENERGY STAR label for HVAC products. Removal of the product at this time would be a step back for residential air-conditioner consumers.

The rationale to remove gas-packs from the specification is based upon the lack of a heating-efficiency requirement, of which "EPA is not currently able to specify" (line 80). We understand that the underlying reason for some commenters to recommend this action to EPA is their concern about possible proliferation of gas-pack installations in new construction, thereby limiting the potential for installing high-efficiency heaters.

There has been limited research as to the incidence or market penetration of gas packs in new construction. Research in the Sacramento area has clarified that no builders are using this product.

Indeed, the primary market for gas packs in the Sacramento area is for retrofit in existing units, either for new installations where central air conditioners did not previously exist, or for replacement of older central air conditioners. In Sacramento, existing home designs very rarely can accommodate a split system where one did not exist previously. In fact, 25-30% of SMUD ENERGY STAR HVAC rebate-program participants install gas packs. Our understanding is that other California utilities experience similar participation rates. If the label is removed, customers with existing gas-packs will not have the benefit of the label to identify units that are more efficient.

Why sacrifice cooling efficiency for a relatively large market, at least in California where residential air conditioning drives electric peak loads, until EPA institutes a heating requirement?

We recognize the value of a proposal to address the heating component of gas/electric package units in a future specification. We encourage ENERGY STAR to begin research on applicability in varied national climate zones for possible application in future revisions to the standard.

Again, thank you for this opportunity to offer our comments and recommendations.

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