



Rachel Schmeltz
Energy Star Program Manager
US Environmental Protection Agency
MS-6202J
1200 Pennsylvania Ave. NW
Washington, DC 20460

23 June, 2005

Re: Draft 2 (Energy Star® Program Requirements for ASHP's and CAC's) Specifically addressing - Third Party Verification recommendation.

Dear Ms. Schmeltz,

We would encourage the EPA to not relegate the program to equipment efficiency alone in the second draft of this program, and to continue the efforts it began in Draft 1 by encouraging efficiency through testing the installed system's performance.

On behalf of over 6,000 NCI certified HVAC contractors, National Comfort Institute wishes to address and comment on Energy Star's proposal to require *Third Party Verification* of the quality of air conditioning and heating system installation as a part of your recent program considerations.

External of any government funding or direction, NCI contractors have become the largest HVAC system performance verification organization in the world. Over 200,000 systems are voluntarily tested, renovated, adjusted and balanced annually. These systems typically show an increase in BTU output (in heating), and BTU removal (in cooling), of 25-40% compared to typical system installations.

This work is being accomplished without regulations or rebates. The testing performed has existed for generations. Air testing and balancing has been the undisputed standard for HVAC system performance measurement for many decades.

It appears Energy Star is attempting to further regulate the energy efficiency of HVAC system performance since the 13 SEER minimum law has nearly eliminated equipment efficiency from the formula. We believe EPA's recommendation to require Third Party Field Verification will likely have the opposite effect of its intention.

As is already occurring in California, homeowners and contractors will figure out how to circumvent the new laws requiring third party testing – in many cases permits won't be pulled and shoddy work will be performed because the public doesn't want to be forced into having work done without a choice. To burden the American public with additional cost and a layer of poorly trained inspectors with questionable HVAC system measurement ability would be an extreme disservice.

Most HVAC contractors will likely reject any testing involving an on-site third party verifier. However, many are eager to learn, implement and profit from real time, live system performance testing.

Testing could be encouraged voluntarily by the contractor before and after the equipment replacement and duct renovation work is completed. Air balancing test procedures are easily adaptable to the sales and technical sides of the HVAC industry.

Quality testing and adjusting of HVAC systems is an essential element of quality installation and start-up. Maximum performance of an HVAC system is not achievable without it. To use testing as an afterthought by a third party has never worked, nor will it ever as a stand-alone requirement. Real testing is an essential part of installation.

Current EPA Energy Star tests including blower-door and duct tightness testing only address a small portion of system performance. Although these tests are intended to assure the consumer an efficiently performing system, the reality is systems can pass these tests and still deliver only 60% of rated capacity.

Essential HVAC system performance testing includes static pressure measurement, air temperature and enthalpy readings, refrigeration charge adjustment, combustion efficiency testing, delivered duct system airflow tests, live in-field BTU measurement and installed system energy efficiency ratings. Without these additional tests, it is impossible to assure consumers that a high efficiency system has been delivered.

Should HVAC contractors be encouraged to implement these self administered tests as part of EPA HVAC system test standards, the country would have a solid program that could be embraced by quality contractors. Since each report is self sustaining and auditable, the reports could be submitted to a knowledgeable body for extremely effective third party verification.

We encourage your committee to break away from the notion of requiring an additional third party field verifier. This layer of government involvement is sure to be rejected by the HVAC industry.

Consider HVAC contractor self-testing that can become an essential part of each installation. Create a third party-hands-off verification authority that can receive real-time field reports that are technically sound and document real energy savings on each system tested.

In our opinion, the retreat to HVAC equipment efficiency ratings at this time is a step in the wrong direction.

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