

**Efficiency Vermont Comments on
Proposed Home Performance with ENERGY STAR Guidance
December 19, 2007**

General Comments

- We would appreciate better clarity on areas that are requirements as opposed to guidelines or recommendations. It would be helpful if EPA provided a summary of the minimum requirements for each proposal, as in P3.
- We would be interested to know the extent to which outreach has been done to vet the proposals with HPwES contractors. We did not consider forwarding the proposals to participating contractors in Vermont as there was insufficient review time remaining once we realized the potential benefit.
- Overall, we are concerned that the Home Performance Assessment (HPA) requirements outlined in P3 may become so great as to hamper the ability of the contractors to meet the most critical requirements in a cost-effective manner. Our view is that the HPA has value so long as it encourages the installation of retrofit energy saving measures in a safe and effective manner. It should be a tool for the contractor to gain a basic understanding of the house so that s/he can develop a work scope, estimate the cost of the job, and provide the most important information to the homeowner. If the HPA becomes too costly or time-consuming, it may become much less useful for these purposes, and rather become an activity unto itself that does not necessarily lead to any energy savings. Requirements for a Home Performance Assessment should not necessarily be the same as those for an independent, third-party audit, as they are not intended to serve the same purpose.

Specific Comments

P1:

- P1 page 1 line 34-36: The requirement that all jobs performed by contractors using the HPwES logo be reported to the Sponsor is impossible to enforce. We could support a more narrow recommendation that all jobs marketed by the contractor to the customer as HPwES jobs should be reported to the Sponsor.
- P1 page 2 line 4-6: We like the idea of categorizing contractors into different levels based on experience and performance, with a minimum inspection rate of 5% for Level 3 contractors.

P2:

- We are strongly in favor of the new reporting requirements. They are much more reasonable and will enhance our ability to empower our customers to connect directly to contractors. The prior requirements to track all referrals created a barrier for many customers who tried to find contractors using Efficiency Vermont's HPwES website.

P3:

- P3 page 3 line 14: Occupant reported information on attic and wall insulation levels is so unreliable that it should not be included as a minimum requirement
- P3 page 4 section C: While we would like contractors to capture this information, we feel that this should be a recommendation rather than a requirement. We feel that meaningful HP

work can still be done while incrementally increasing the expectations for documentation. Requiring documentation of appliance and showerhead information would likely be perceived as a burden by some of Vermont's participating contractors at this time. Also, we would suggest not making the lighting documentation (section C-2) required during the assessment. This could easily be done during the course of the work on site. Increasing the requirements of the assessment too much may have a negative effect on the contractors' ability to manage assessment costs.

- P3 page 4 section D.1.e: Is it necessary to calculate air change requirements as part of the assessment? Couldn't this be done in the course of the job, so long as communication to the homeowner was clear and timely regarding steps that would be necessary? A house plan drawing may not be needed in all cases.
- P3 page 4 section D.2.b: We would strongly recommend removing this as a requirement. If it is required to count and inspect the attic vents to see if they are compliant, what is the requirement for action if they are not? Increasing ventilation area can be both costly and ineffective, and in some cases will worsen the performance of the home. We are highly skeptical that this requirement will provide any benefit.
- P3 page 5 section D.4.a: Most HPwES contractors will not have sufficient knowledge to determine the likelihood of causing contaminants to become airborne by performing a blower door test. Can any more guidance be provided here?
- P3 page 6 section D.4.b.ii: We are not sure whether it is necessary that contractors look for openings around electrical and plumbing runs in the basement. In our experience, they are always present.
- P3 page 9 section H.1.c: We do not understand why it is recommended that replacement should be proposed whenever a safer, higher efficiency heating system option exists. This will almost always be the case, and in our view would undermine the credibility of the contractors' proposals. If you brought your 3 year old car to a mechanic who recommended that you replace it because a slightly more efficient model existed, wouldn't you question whether s/he had your best interest at heart? One of the primary values of HPwES is the demonstration of contractor credibility; this guidance could undermine that credibility.
- P3 page 10, Minimum Elements to be Included in HPA Summary Reports: Efficiency Vermont's HPwES contractors encompass both the "contractor" and "consultant" models of service delivery. The HPA minimum elements to include in a summary report make sense for a consultant hired to perform a comprehensive home energy audit. However, the minimum elements do NOT make sense for contractors that focus on installation of energy efficiency measures. The proposals to significantly strengthen the HPA reporting requirements could create a barrier for contractors and customers actually going forward to *do the work* by requiring a much more expensive up-front audit and written report. In our view, the minimum elements of an HPA summary report should focus on giving customers the information they need to review a work scope. In particular, the following minimum requirements should be scaled back:
 - Lines 12-26: Pre-improvement home performance assessment findings, including insulation levels for all zones, age of HVAC equipment, appliances, etc. Complete review of all baseline conditions is not necessary; the work scope can simply focus on reviewing the areas needing improvement.
 - Lines 24-26: In Vermont, combustion efficiency tests are only performed by contractors with BPI Heat Specialist certification, which not all contractors have.

- Lines 30-34: This requirement should be removed. It is inappropriate and unrealistic to encourage contractors to replace all HVAC equipment and appliances if a higher efficiency option exists. Replacement should only be recommended if it is *cost-effective* for the customer and/or would generate significant energy savings.
- Lines 35-36: It is appropriate to provide energy savings estimates, and EPA should continue to steer clear of requiring the use of specific software tools, and leave this decision up to Sponsors.

P4:

- Efficiency Vermont is in favor of providing a Certificate of Completion to customers and generally likes the template EPA has designed.
- P4 page 1 lines 10-12: Minimum requirements for receiving the HPwES certificate should be consistent with the standards for what qualifies as an HPwES job, and should be left to Sponsors to define. Efficiency Vermont has many customers whose only “measures” are airsealing and insulation, yet they save substantial amounts of energy. Should these customers not qualify for the certificate because they haven’t had at least three qualified improvement measures?

P5:

- P5 page 4 line 16: There is a risk that the requirement for an air flow test will discourage contractors who don’t have this expertise from touching the ductwork at all. It’s a good recommendation, but we are not sure that all HPwES contractors will realistically be able to meet this requirement. In particular, contractors who have BPI Building Analyst certification are only trained to perform “pressure pan” tests. Duct Blaster, Delta Q and other types of duct leakage testing are only performed by contractors that hold BPI Heat Specialist certification.

P6:

- P6 page 1 lines 8-14: Are these effectively the minimum requirements for QA? More clarity about minimum requirements versus recommendations would be particularly helpful in this QA guidance.
- P6 page 1 line 10: As noted above, a full written Home Performance Assessment should not be required in all cases, and therefore should not be made part of the QA program. The QA program should evaluate whether contractors made proper recommendations for energy improvements, properly implemented those recommendations, performed diagnostic tests confirming the results, and provided good customer service. This process may or may not involve a formal written Home Performance Assessment, though it will always involve a thorough audit of home energy issues for purposes of developing a job scope.
- P6 page 1 line 14: Contract review should be limited to assuring that the contractor included appropriate measures in the job scope/contract and then installed those measures correctly following the terms of the contract. It should not require any review of pricing or other contract elements not directly related to energy efficiency.
- P6 page 2 line 19: The process of randomly inspecting jobs to QA post-completion may be at odds with the requirement that the in-field inspection include a customer interview. Some customers may not be willing to have yet another home visit or lengthy interview. Those jobs

with unwilling customers will be less likely to undergo QA, rendering the inspection process non-random. Randomization should be a goal, not a minimum requirement.

- P6 page 2 lines 27-28: The only option listed for when jobs may occur is post-job completion. Efficiency Vermont's QA process includes post-completion QA field inspections, but we also have provisions for QA *during* the job or even before the job. While post-completion QAs focus on obtaining *customer* feedback, during-job QAs focus on working with the *contractor* and providing feedback before the job has closed, to improve the quality of work and the customer service experience while there is still time to intervene. Efficiency Vermont believes that these mentoring-style QA field visits play an important role, and are completely in accord with the recommendation that "QA communications be delivered in a positive spirit of assistance, education, and continuous improvement" (P7 page 1 lines 28-30).
- P6 page 2 lines 44-47: Given the above comment, does the 5% QA sampling rate for Phase 3 contractors mean that all those QA inspections must be post-completion, or can during-job QAs be included in the 5%?
- P6 page 3 lines 8-30: The customer discussion should be a recommendation, not a requirement, particularly the requirement that the customer received an HPA report and that the report was comprehensive in terms of its recommendations.
- P6 page 3 line 38: How does one perform a visual inspection of wall insulation levels?
- P6 page 3 line 40: What exactly is the goal of the visual mechanical inspection? In general, the inspections of HVAC systems, mechanical systems, and appliances should focus on whether all major energy improvement opportunities were recommended and whether those implemented were done correctly.
- P6 page 3 lines 45-46: Define the word "verify." A quick visual check is fine, but requiring the QA inspector to record the age and type of every appliance and light is far too burdensome, particularly if they didn't need to be addressed in the HPwES job. What is the expectation for checking proper venting of exhaust fans?
- P6 page 3 line 49: We are very concerned about positioning the sponsor as the arbiter of contract disputes. While we always hope for clear contracts, they don't always occur, and this seems like a very murky area for sponsors. Also, contracts are legal documents, and most inspectors are not lawyers.
- P6 page 4 section 1.4: While it seems like this scoring concept might be reasonable and helpful, the proposed scoring system is confusing and needs more clarity and consistency.
- P6 page 4 section 1.6- This leaves open course of action and liability questions in situations where the contractor is either unavailable or unresponsive.

P7:

- P7 page 2 lines 36-42: This leaves open course of action and liability questions in situations where the contractor is either unavailable or unresponsive. What if the customer refuses to abandon the site? Is the inspector required to remain on site indefinitely? If the inspector finds dangerous CO levels and the customer refuses to leave, should the inspector leave? Is it appropriate for HPwES to instruct inspectors to take remedial actions that may be governed by a certification authority for which the inspector is not properly certified? We appreciate the intent, but would suggest that this area requires more clarity. Perhaps the minimum requirement here should focus on clear and immediate *notification* of both customer and

contractor, in recognition that the QA inspector cannot control the customer's response or the contractor's availability.

- P7 page 2 lines 44-49 and Page 3 lines 1-7: The statement "If the customer is dissatisfied..." requires agreement by the inspector that there is cause before corrective actions are required. Sometimes customers are dissatisfied, and the inspector will, if forced to be the arbiter, determine that the contractor has done nothing wrong. We would suggest removing the text "If the customer is dissatisfied..." and leaving the corrective action determination to be based on any deficiencies that are found.
- P7 page 4 line 27: This sample disciplinary process refers to working with a "mentor" during the probationary period. This brings forth the question of whether the mentor and the QA inspector can be the same person. Efficiency Vermont's QA program, in the spirit of collaboration and education, appoints a mentor for each contractor during their training. This mentor continues to offer guidance after the contractor passes certification and begins performing HPwES work, and this same mentor also performs all types of QA (during job and post-completion) for the contractor. This develops a relationship between mentor and contractor that builds trust and allows for better communication throughout the process.

P8:

- P8 page 2 lines 9-10: Customers may be more likely to respond honestly to anonymous surveys. If the guidelines call for communicating survey concerns to contractors, it would require asking the customer to provide their identifying information, as well as the name of the contractor. We would suggest that surveys could be anonymous, but that customers are asked if they are comfortable with the sponsor sharing the results of their survey with the contractor, and if so, then the customer could be asked for the identifying information.