

August 25, 2009

Mr. Laverne Dalgleish
Chairman of the Board
Building Performance Institute
410-250 McDermot Avenue
Winnipeg, MB R3B 0S5
Canada

Dear Laverne:

This letter is in response to your undated letter sent by e-mail on July 13, 2009, informing RESNET that the BPI Board of Directors had voted to table action for an undetermined period of time on adoption of the Comprehensive Home Energy Audit (CHEA) standard. I apologize for the delay in my response but I felt that careful consideration of this matter by the RESNET Board was important.

The RESNET Board of Directors voted on July 22, 2009 by a vote of 15 yeas, 1 nay and 1 abstention to adopt the June 26, 2009 version of the joint BPI / RESNET CHEA Standard.

Your correspondence states that the BPI board has tabled the adoption of this important standard due to the following concerns:

- The applicability of RESNET software verification procedures, requiring that adoption wait on the completion of the BESTEST-EX software test suite and implying that “new” home simulation tools are not applicable to “existing” homes
- The work scope portion of the standard being too “prescriptive and onerous for home performance contractors to implement.”

In terms of the work scope portion of the standard, RESNET relied heavily on the expertise of the BPI Technical Committee in development of this section of the CHEA draft. We are very interested in additional details on BPI’s concerns and on how the BPI board would like to move forward to address this issue.

Since RESNET has been extensively involved in developing standards for software tool verification for standardized ratings and tax credit qualification, many of our concerns are focused on this issue.

While RESNET agrees that enhanced software tools and expanded software verification procedures are needed where there is a utility billing history that allows more accurate prediction of energy use for a specific set of home occupants, we do not agree that there is any difference in the physics that underpins the accurate simulation of “new” and “existing” homes. The difference lies not between new and existing homes, but rather between standard and calibrated operating conditions in occupied homes.

RESNET desires to continue its discussions with BPI on these important challenges. To that end, we believe it is important to briefly describe some of RESNET's ongoing efforts in this area.

RESNET has established an Occupied Home Software Calibration Task Force and Work Group designed specifically to address the need for standardized methods and procedures for projecting energy use in occupied homes. The Task Force represents a diverse group of individuals with expertise in software modeling tools, building performance analysis, home energy auditing and home energy ratings as well as representatives of the U.S. Department of Energy and the Environmental Protection Agency.

This effort includes both "asset ratings" based on standard operating conditions and "operational ratings" based on calibrated models of occupied homes. Derived from utility billing histories, calibrated engineering models are capable of replicating actual operating conditions and reported energy uses in occupied homes. The Work Group has already identified and come to agreement on a 6-step framework process for development of calibrated engineering models and has begun work on filling in standard methods and procedures appropriate for each step of the process.

The work being conducted under the U.S. Department of Energy (DOE) BESTEST-EX project comprises a critical component of one of these six steps in the RESNET framework. RESNET is an active participant in DOE's BESTEST-EX project and we encourage BPI to be involved in this project as well. When this project is completed, RESNET fully intends to incorporate the resulting test suite into its requirements for software verification for occupied homes. In fact, RESNET sees two distinct levels of software accreditation: the first consisting of its current software test procedures for software that uses standard operating conditions and a second, higher-level accreditation for software that can not only pass the current software verification tests but also can pass the model calibration tests being developed under the BESTEST-EX project. A software tool could then be accredited either for use under standard operating conditions or for use under both standard and calibrated operating conditions.

We would like to invite BPI to become an active participant in RESNET's effort to develop standardized methods and procedures for projecting energy use in occupied homes. There is much to gain by the two organizations working together proactively on this important task.

The RESNET Board agrees that a dialog between representatives of both boards could be productive in resolving the issues identified by the BPI Board. As you know, we have been actively involved in a dialog with BPI on the CHEA standard for the past three years. Based on BPI's Board action on this standard, we believe it is important to complete two steps before the dialog can continue productively:

- The BPI Board should delineate their specific concerns on the work scope portion of the draft standard. It would be most beneficial if the BPI Technical Committee develops a proposed alternative that addresses the BPI Board's concerns.
- DOE's BESTEST-EX project and RESNET's effort to develop standardized procedures for projecting energy use in occupied homes are important in addressing the BPI Board's concerns. Therefore, as the BPI Board requested, both of these efforts should be completed prior to continuing our dialog on software verification.

Mr. Lavern Dagleish
August 25, 2009
Page 3

RESNET has also begun the process of relocating all testing and diagnostic methods and procedures into a single chapter of the RESNET Standards. This new Chapter 8 will contain not only the new standards for IR thermography, but also standards for envelope leakage and distribution system leakage testing. RESNET also believes that it is important to move forward with standards for combustion zone safety testing so we plan to utilize the important standards development work already accomplished by the BPI / RESNET joint standards committee to augment the already planned additions to this chapter of the RESNET Standards.

Since the joint BPI / RESNET standard on comprehensive home energy audits has been placed on hold until the issues identified by the BPI Board are resolved and because RESNET continues to receive frequent requests for this standard, RESNET also intends to modify Chapter 7 of the RESNET standards to address work scope development and other comprehensive home energy audit requirements.

While RESNET is disappointed that the BPI Board could not approve adoption of the CHEA standard at this time, we believe that there is great value in working together with BPI to address the significant issues that face us all in the development of high-quality, highly-efficient homes that address energy security and climate change. We look forward to hearing more from BPI on how they believe we can best work together to meet these great challenges of our time.

Sincerely,



Philip Fairey
President, RESNET Board of Directors

cc: RESNET Board of Directors
BPI Board of Directors