Traulsen
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Date: May 9, 2011

To: Ms. Ashley Armstrong,
Ms. Brenda Edwards

From: Mr. Chris Boryca, Engineer II

Cc: John Davis, Walt Boryca, Gary Hoying, Mike Lynch, Joe Sanders, Jennifer Baker Reid

Subject: DOE Verification in Support of Energy Star

These comments are in response to the document released on April 22, 2011 related to verification testing in support of Energy Star. As a general statement Traulsen is pleased to hear that the DOE and EPA are working together. We do have several concerns, some of which the DOE has seen before and will be quickly restated.

6.3 Manufacturer Notification

Traulsen believes that barring manufacturers who operate qualified "Client Test Data Program" test labs from the verification process is of concern. If a certification body has qualified the manufacturers test lab under the Client Test Data Program, then why can't they be present to assist in set-up and witness verification testing? Laboratories eligible to participate in these programs have been judged to be competent and knowledgeable in evaluating a product in their respectable categories.

6.3 Manufacturer Notification, 6.4.3 Random Defects, 6.5 Verification Test Report, 6.6 Manufacturer Notification

Traulsen believes these items are all related stemming from two concerns:

1. It is our position that third-party lab personnel will not have product expertise to accurately discern whether a product is operating properly or improperly.
2. It is also our position that inter-laboratory testing can produce subtle variations in test results due to differences in laboratory test equipment and best practices. These anomalies could go unnoticed during verification testing.

As a result a false negative (failed test of a defective unit) is completely possible. Therefore, the lack of manufacturer involvement during the test and the position that manufacturers will not be provided complete test data creates a significant gap in the verification process.

6.4 Tolerance For One Representative Model

As noted before, Traulsen has concern with the stated tolerance for a sample size of one unit. Although we understand product variability cannot be ascertained from a sample size of one, we would like to point out that there can be several variances in the aspects of a typical product evaluation that can skew test results. Examples include nominal environmental test conditions, laboratory equipment calibration, and component part construction variances. Traulsen provided the DOE with test data from multiple tests performed on a single model which yielded results with a variance of more than +/- 10%. A total variation of +/- 15% is not beyond reason. Traulsen has some questions regarding the allowance of a 5% tolerance above the Energy Star specification as it appears to contradict the tolerance allowed during verification testing. We will contact the agency separately for clarification.

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6.4.1 ESTAR Consumption Specification

The document does not clearly state what the ESTAR consumption specification is referring to. Does it refer to the manufacturer rated listing documented with EPA or does it refer to the ESTAR cavity volume equation?

The following comments are from previous experience and would like to be restated due to their relevance.

Clarify Set Points

Traulsen has commented to both the DOE and EPA regarding a perceived disconnect on set point interpretation for out of box testing. We recognize that the agencies are aware of our concerns and restate it here as it is relevant to the topic.

Database Matching & Basic Models

Traulsen anticipates a potential conflict when base model definitions are applied to both programs. This is particularly concerning regarding indications from the agency that data points will be cross-referenced for accuracy as part of the verification process. Furthermore, tolerances and open ended items such as set points create a situation with a lot of unknowns. For example, we make units that are reach-ins and pass-thrus (doors on both sides) that are within a product family. The unit with doors on one side meets both DOE and Energy Star criteria. The unit with doors on both sides would only meet the DOE criteria. In order to minimize testing and other challenges we would prefer to have a DOE base model that covers both units at the higher energy consumption rating and separate Energy Star base model for the reach-in only at a lower energy consumption rating that covered that product alone. A second example would be units of the same family where a larger unit could be listed to cover the smaller units for DOE, again the goal being to minimize testing burdens.

Custom Low Volume Models

Traulsen has commented before that we have products that are subject to both DOE and EPA programs that have low annual sales levels. This should be recognized during model selection. Low volume models are built on a per-order basis and therefore are nearly impossible to obtain the amount of models necessary for verification purposes.

Regards,

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