

April 16, 2012

Ms. Abigail Daken  
ENERGY STAR Water Heater Program Manager  
U.S. Environmental Protection Agency  
Ariel Rios Building  
1200 Pennsylvania Avenue, N.W.  
Washington, DC 20460

Dear Abigail:

Supplementing our participation in the April 5, 2012 webinar, we have the following comments on the Draft 3 Version 2.0 Water Heaters Specification.

#### General

During the webinar, EPA indicated its intent to require hybrid units to comply with the flammable vapor ignition resistance (FVIR) requirements of the Z21 safety standard for residential storage water heaters. Reaffirming our comments during the webinar, as a general principle EPA should not be establishing additional safety requirements for Energy Star products. When this program was initiated we encouraged EPA to include criteria that water heaters comply with the applicable nationally recognized, consensus safety standards. Those standards establish the construction and performance requirements that define a safe water heater for the U.S. and Canadian markets and are developed through a deliberate consensus process that involves all interested parties. Our earlier comments did not suggest that EPA should develop its own, unique safety requirement for products covered by those standards. In the case of the FVIR requirements, the changes to the residential storage water safety standard (Z21.10.1/ CSA 4.1) were developed over several years and were supported by research and product development that cost millions of dollars. The ANSI accredited Z21/83 Committee, which is responsible for the gas water safety standards, adopted the FVIR requirements for those water heaters models for which it determined such a standards change was appropriate. Gas equipment safety standards are complex documents whose requirements have both direct and subtle effects on product design and ultimately, the market. EPA has neither the authority nor the broad range expertise to establish its own safety requirements for gas-fired equipment. If EPA has a concern regarding

some aspect of the safety of gas water heaters, it should present that concern to either the Z21/83 Committee or the U.S. Consumer Product Safety Commission.

Our previous comments have noted the concern that residential electric and oil storage water heaters are excluded from the Energy Star program. The action to remove the proposed criteria for electric, point of use water heaters adds to our concerns about limiting the benefits of the Energy Star program. There is a clear benefit to an Energy Star program that identifies the higher efficiency models for those millions of consumers who will replace their existing electric or oil-fired storage water heaters with the same type of water heater. Although the individual savings may be relatively small, the cumulative savings could be significant.

### Definitions

The definition of “Hybrid type” residential water heaters is confusing and inconsistent. The accompanying “Note” indicates that the intent is to include a subset of units defined by DOE regulations as instantaneous and which are appropriate for residential use. We are supportive of this intent but believe that this objective can be achieved by implementing something which EPA already has planned as a new program. If EPA develops Energy Star specifications for commercial water heaters based on the existing definitions and the existing efficiency descriptors found in federal regulations, the issue of defining a hybrid type residential water heater becomes easier.

### Qualification Criteria

The first sentence of the additional requirement in 3) A.1. should be modified to state:

The unit shall include a visible or audible alert to notify if the compressor shuts off due to a blockage in condensate drain or any other system failure.

The manufacture may use various design approaches to address concerns about blockage of the condensate drain. It is not correct to assume that where there is a condensate drain and it becomes block, the compressor will always be turned off. Our suggestion reflects the intent that if the compressor shuts off in response to any type of abnormal or failure condition, an alert should be provided. This also addresses the problem that the current proposal literally requires an alert every time the compressor shuts off, even during the normal pattern of cycle operation.

If EPA develops Energy Star specifications for commercial water heaters, the criteria in 3) B.c can be simplified to a requirement for NAECA covered gas water heaters with volumes of 20 gallons or less. The other “Gas Hybrid Units” that are proposed to be addressed in this specification will be covered by the commercial water heater specification. Furthermore, when

DOE revises its efficiency test procedures to cover the NAECA-covered, less than 20 gallon models, DOE will have to amend the test procedures to define those models.

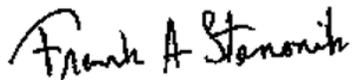
#### Testing Requirements

The addition of the sentence “Further, all individual models within a basic model must have the same certified rating.” in 4) B.2 is unnecessary. The requirement that all models within a basic model group must comply with the definition of basic model group in Section 1 is sufficient. The critical requirement of the Energy Star program is compliance with a minimum level of efficiency. As long as all models within a basic model group meet those criteria, EPA should not be concerned if one or more models are the basic model group has an efficiency rating slightly higher than other models in the group.

We appreciate the opportunity to comment on this draft specification document. Although we do not have recommendations for appropriate thermal efficiency and stand by loss criteria for commercial water heaters at this time, we can develop such a recommendation if desired by EPA.

If you have any questions, please do not hesitate to call me.

Respectfully submitted,



Frank A. Stanonik  
Chief Technical Advisor