Appliance Standards Awareness Project
Natural Resources Defense Council

October 30, 2019

Ms. Catherine Rivest
U.S. Department of Energy
Building Technologies Program
Mailstop EE-5B
1000 Independence Ave, SW
Washington, DC 20585-0121

Docket Number: EERE-2017-BT-STD-0021
RIN: 1903-AD90

Dear Ms. Rivest:

This letter comprises the comments of the Appliance Standards Awareness Project (ASAP) and the Natural Resources Defense Council (NRDC) in response to the Department of Energy's Request for Information regarding energy conservation standards for unfired hot water storage tanks posted August 9, 2019. We appreciate the opportunity to provide these comments.

The Energy Policy and Conservation Action of 1975 (EPCA) directs DOE to consider amending the energy conservation standard for unfired hot water storage tanks (UFHWST) each time ASHRAE Standard 90.1 is amended with respect to UFHWST. ASHRAE 90.1 was last updated in October 1999. EPCA also requires DOE to evaluate energy conservation standards every six years and test procedures every seven years (42 U.S.C. 6313(a)(6)(C)(i)). Both the standards and test procedure for unfired hot water storage tanks (UNHWST) are long overdue for review. DOE published this RFI to collect data and information to inform its decision about whether or not to amend the standard.

DOE should complete a rulemaking for the UFHWST test procedure before proceeding with a UFHWST standards rulemaking.

In a May 2016 notice of proposed rulemaking (May 2016 NOPR) on Commercial Water Heaters, Unfired Storage Tanks, and Hot Water Supply Boilers (EERE-2014-BT-TP-0008-0016) for the test procedure for commercial water heating equipment, DOE stated "After considering public comments from stakeholders and interested parties, DOE proposes to adopt a standby loss test for unfired storage tanks that is based, in part, on existing industry test methods (*i.e.,* GAMA Testing Standard IWH-TS-1 (March 2003 edition))." The May 2016 NOPR included a detailed discussion of DOE's process of evaluating, and selecting, this proposed test procedure to assess stand-by energy losses from UFHWST (81 FR 28601-28604).

In the May 2016 NOPR DOE also noted shortcomings in the UFHWST test procedure "The current R-value requirement does not ensure that all surfaces of the tank are adequately insulated, nor does it encourage other methods to reduce heat loss, such as anti-siphon connections and/or eliminating thermal bridges." July 8, 2016 comments filed in response to the NOPR by ASAP and the American Council for an Energy Efficiency Economy stated "…We support DOE's proposal to adopt a standby loss

procedure for unfired storage hot water tanks, provided that a procedure is also established to validate AEDMs for these products, which are often built to order in custom configurations. Performance-based test procedures will provide a better understanding of actual energy consumption for this class of product."

In November 2016, DOE published a final rule for the test procedure for commercial water heater equipment (EERE-2014-BT-TP-0008-0038) which did not cover UFHWST. The final rule stated that while DOE had "…proposed to adopt a method for testing the standby loss for UFHWST in lieu of relying on the current R-value metric and ASTM standards. DOE received numerous comments on this topic and is still considering those comments. Therefore, DOE will address the comments and its proposed test procedure for UFHWST in a separate rulemaking notice."

Now DOE has issued an RFI for the UFHWST standard only and has claimed that it is limited to considering changes to the existing prescriptive R-value requirement for tank insulation, with no mention of a UFHWST test procedure rulemaking. DOE's RFI and initiation of a UFHWST standards rulemaking is diametrically opposed to DOE's earlier stated intent to revise both the UFHWST test procedure and standard. DOE's action can only result in either a determination not to amend the standard, or a final rule amending the R-value requirements of the existing prescriptive standard with no consideration of the improvements to the UFHWST test procedure that DOE had identified earlier. If DOE proceeds on this path, the Department (and US businesses) will needlessly forego additional significant, economically justified energy savings from incorporating standby losses and other beneficial changes into the UFHWST test procedure.

ASAP and NRDC encourage DOE to fulfill its obligations under EPCA and to review the test procedure and standard for UFHWST in that order. We support DOE's earlier proposal to adopt a UFHWST test procedure that considers standby losses and call again for DOE to adopt a performance-based test procedure. We strongly recommend that DOE broaden its current inquiry and initiate a rulemaking on the UFHWST test procedure before proceeding with a rulemaking on the UFHWST standard.

Sincerely,

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