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June 22, 2023

Ann Bailey, Director
ENERGY STAR Labeling Branch
U.S. Environmental Protection Agency
1200 Pennsylvania Ave NW
Washington, DC 20460

Submission via HVAC@energystar.gov

Re: Comments of National Energy & Fuel Institute on EPA's Proposal to Sunset ENERGY STAR Version 4.1 Specification for Furnaces and Remove CACs from the ENERGY STAR Version 6.1 Specification for CAC and Heat Pump Equipment

Dear Ms. Bailey:

These comments are submitted by the National Energy & Fuels Institute ("NEFI") in response to the request for input on the ENERGY STAR proposal dated May 18, 2023, to sunset the ENERGY STAR Version 4.1 Specification for Furnaces and remove CACs from the ENERGY STAR Version 6.1 Specification for CAC and Heat Pump Equipment.¹

Established in 1942, NEFI, formerly known as the New England Fuel Institute, is a national trade association that represents over 400 wholesale and retail distributors of safe, reliable liquid heating fuels and related service companies. Our retail members, often referred to as "fuel dealers," deliver warmth and comfort to millions of American homes and businesses each winter. We represent both fuel delivery and "full service" businesses that extend their services beyond fuel delivery to the sale, installation, and maintenance of various HVAC systems. These include oil- and biofuel-fired furnaces and boilers, gas systems, water heaters, and electric air source heat pumps. Most NEFI members are small, multigenerational family businesses, averaging around 28 full-time equivalent employees.

The ENERGY STAR program, established in 1992, is a joint initiative of the U.S. Environmental Protection Agency ("EPA") and the U.S. Department of Energy and is authorized by Congress.² The program's original purpose was to reduce environmental impact and lower energy costs by promoting energy efficiency in homes and businesses. To this end, the program provides labels to help consumers identify the most efficient appliances for their budget, including HVAC systems.

¹ On June 5, 2023, the EPA issued a notice announcing the release of the ENERGY STAR Residential Boilers Discussion Guide and inviting early stakeholder feedback on proposals to sunset the ENERGY STAR boilers specification and create a new specification to cover heat pump hydronic heating appliances. NEFI reserves the right to submit separate and additional comments on those proposals at a later date.

² ENERGY STAR is a registered trademark of the U.S. Environmental Protection Agency. It operates under authority provided under Section 103(g) of the Clean Air Act and Section 131 of the Energy Policy Act of 2005.

Consumers often look for the ENERGY STAR label when shopping for home appliances and electronics. According to the EPA, the ENERGY STAR label “provides simple, credible, and unbiased information that consumers and businesses rely on to make well-informed decisions” (emphasis added).³ Additionally, when procuring energy-consuming products, the Federal Acquisition Regulations require agencies to procure ENERGY STAR products, or products that are designated under the Federal Energy Management Program of the Department of Energy, as being among the highest 25 percent of equivalent products for energy efficiency.⁴

Moreover, many state and local governments and private businesses consider ENERGY STAR the “gold standard” when it comes to energy efficiency. As a result, many public and private entities utilize ENERGY STAR in establishing the minimum requirement for energy efficiency tax credits, rebates, and financing programs.

As set out more fully below, NEFI has a number of concerns about the ENERGY STAR proposals as the proposals restrict consumer choice, increase consumer costs, and conflict with Congressional and Administration policy. Yet NEFI asserts that EPA may use the ENERGY STAR proposals to meet its objective of decarbonizing the economy without forcing adoption of electric-powered products that are less energy efficient and more expensive than those on the market today.⁵

First, consumers rely on a diversity of heating fuels and technologies, depending on factors like geography, personal preference, and affordability. By excluding furnaces (and potentially boilers) from the ENERGY STAR program, the proposal severely restricts consumer choice and ability to select the most suitable and efficient heating technology for their needs and, importantly, household budget.

Conversion of an average-size home to a heat pump system can exceed \$20,000 and place an undue financial burden on lower-income families.⁶ Even with tax credits and rebates, conversion costs and the resulting operational costs of electric heating systems, particularly in regions like New England, are substantial and place these systems beyond the financial reach of many moderate to low-income consumers.

EPA is proposing to update the ENERGY STAR designation for residential furnaces and CACs with a one-page letter to stakeholders that provides virtually no insight into the EPA’s justifications for its approach. The letter cites the Inflation Reduction Act as the impetus for taking this step “to support the most energy-efficient equipment available” by guiding consumers to choices that “support the electrification of residential space conditioning.”

The EPA states that leading up to this sunset proposal, it “heard from” a “range” of stakeholders emphasizing the opportunity to focus the ENERGY STAR label on efficient electric products like air source heat pumps “in order to highlight products that reduce energy

³ <https://www.energystar.gov/about>.

⁴ Section 104 of the Energy Policy Act; 42 U.S.C. § 8259b(b)(1).

⁵ NEFI also joins in and endorses the comments submitted to this docket by the National Propane Gas Association (“NPGA”) and incorporates those comments herein.

⁶ Uglietto, Joe, Cost of Residential Air Source Heat Pumps, Diversified Energy Specialists, September 24, 2021.

consumption, improve energy security, and reduce pollution.” But the agency has failed to indicate which stakeholders provided input that led to this conclusion, what analysis was conducted, and how the EPA determined that only electric products like air source heat pumps could achieve the agency’s goals.

Section 131(c)(5) of the Energy Policy Act of 2005 provides that EPA and the U.S. Department of Energy must solicit comments from interested parties prior to establishing or revising an Energy Star product category, specification, or criterion (or prior to effective dates for any such product category, specification, or criterion). Subsection (c)(6) further provides that, on adoption of a new or revised product category, specification, or criterion, the agencies must provide reasonable notice to interested parties of any changes (including effective dates) in product categories, specifications, or criteria, along with an explanation of the changes, and as appropriate, responses to comments submitted by interested parties. See 42 U.S.C. § 6294a(c).

This proposal to eliminate whole categories of products from eligibility for ENERGY STAR certification does not meet these statutory requirements. It appears that the EPA has predetermined its course of action prior to soliciting public input from the affected industries. Moreover, without offering appropriate substantive analysis for the proposals, the agency has precluded affected parties from making informed comments on the considerations and justifications underlying the decision to delete the product categories from the program.

In its online description of the program, the EPA states that “electric appliances are not responsible for any direct emissions and garner significant emissions reductions even when source or upstream emissions from electricity generation are factored in.” But NEFI contends that this conclusion is not justified by a comprehensive analysis of the emissions generated by these products and does not provide a true picture of emissions and net energy savings.

As set out in the NPGA comments, the EPA should adopt the Department of Energy’s “Statement of Policy” calling for the use of “Full Fuel Cycles (“FFC”) measures of energy use and emissions.”⁷ ENERGY STAR should be using FFC energy and associated emissions as the basis for analysis of its criteria development and in order to be consistent with EPA’s use of source energy (FFC energy less extraction loss). The FFC metric includes the energy consumed in extracting, processing, and transporting primary fuels (i.e., coal, natural gas, petroleum fuels), and thus presents a more complete picture of the impacts of energy conservation standards.” The EPA has not committed to using or evaluating an FFC analysis of its emissions claims, which may make its claims at odds with conclusions reached by its partner, the DOE. The EPA should clarify this claim, as it is unsupported by the document and fails to account for the FFC analysis employed by the Department of Energy.

Notwithstanding the procedural and analytical infirmities of this proposal, NEFI believes that the ENERGY STAR program may still achieve its objectives by focusing on the reduction of energy consumption and greenhouse gas emissions, rather than promoting the exclusive electrification of appliances. Allowing use of electric appliances in tandem with renewable fuels can provide a more efficient solution that accomplishes the agency’s energy and climate goals with fewer technical hurdles, lower consumer costs, and higher system performance.

⁷ 76 Fed. Reg. 51282-89 (Aug. 18, 2011).

The oilheat industry is transitioning towards low-carbon fuels, most notably in the form of Renewable Liquid Heating Fuels (RLHFs), such as Bioheat® fuel. These RLHFs are compatible with legacy heating systems and are far easier to develop and deploy at higher blends compared to more technologically challenging alternatives, like Sustainable Aviation Fuels (SAFs). We understand that decarbonization of the aviation sector is a major priority for the administration. However, feedstocks can be refined into biofuels more easily and efficiently for heating applications. Consequently, the immediate demand for renewable fuels in the heating sector can drive the development of sustainable feedstocks at scale, potentially years ahead of other applications. By promoting the adoption of higher blends of RLHFs in the near term, we can accelerate utilization of low-carbon fuels in other sectors, such as aviation, in the long run.

In 2019, the home heating oil industry made a formal commitment via the 'Providence Resolution' to achieve at least a 40% reduction in emissions by 2030, aiming for net-zero-carbon emissions by 2050. The roadmap towards these ambitious goals includes leveraging innovation and efficiency in space heating technologies and promoting the deployment of large volumes of RLHFs. To support these objectives, NEFI collaborates with its members, as well as related local, state, and national associations. Furthermore, several states, such as Connecticut, New York, and Rhode Island, have mandated renewable fuel blending in all home heating oil and aim to achieve at least 50% blends by 2030.⁸ This provides an additional layer of market certainty. Meanwhile, other states are considering implementing blending requirements or incentive programs to further promote RLHF adoption.

Manufacturers of oilheat appliances and equipment are also proactively supporting the objectives outlined in the Providence Resolution. For years, RLHF/oil-fired boilers and furnaces capable of operating with B20 (up to 20% biofuel blends) have been readily available to consumers. Now, the introduction of liquid fuel burners rated for B100 (up to 100% biofuel blends) is facilitating the deployment of fully renewable fuel-fired furnaces and boilers. This marks a significant stride towards achieving residential decarbonization. The ENERGY STAR program could enhance its mission to reduce residential energy consumption and greenhouse gas emissions by continuing to endorse both approaches, without compelling consumers to choose one type of product over another. Conversely, the sluggish pace of decarbonization within the power grid considerably undermines the touted benefits of heat pump systems in terms of emissions reduction.

In cold climates, it is also critically important to allow for utilization of hybrid systems that integrate heat pump use with backup heating systems. B100 compatible high-efficiency furnaces and boilers address this need and further encourage adoption of higher renewable fuel blends to accelerate market transformation. Hybrid systems are also required as some insurance companies do not provide coverage to cold climate homes that solely rely on heat pumps, especially in cases with older housing stock.⁹ ENERGY STAR partnering with renewable fuels for the RLHF industry addresses this need in a unique way that is not available at scale for any other cold climate heating application.

⁸ See 296 CGS §16a-21b; NYCL ENV §19-0327; 23 RIGL §23-23.7.

⁹ <https://www.wmtw.com/article/heat-pump-predicament-maine-homeowner-describes-difficulty-updating-insurance/43645429> (accessed June 22, 2023)

I If ENERGY STAR certification and labeling for liquid-fuel and RLHF-fired furnaces and boilers were to be discontinued, it would blur the distinction between high- and low-energy-saving products. This could unintentionally influence consumers to opt for lower-cost, lower-efficiency, higher-carbon-emitting boilers and furnaces—a result counter to the program's stated objectives. Consumers should be able to make a more energy-efficient, climate-conscious decision by recognizing the ENERGY STAR label without needing to understand all the technical details. It's crucial to develop a solution that supports this objective.

We appreciate the opportunity to submit comments on this proposal. For any further discussion, questions, or if additional information is required, please feel free to contact me at (202) 508-3645 or jim.collura@nefi.com.

Respectfully submitted,



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