

COMMENTS OF THE NATIONAL CONSUMER LAW CENTER, ALLIANCE FOR AFFORDABLE ENERGY, PENNSYLVANIA UTILITY LAW PROJECT, CONSUMER FEDERATION OF AMERICA, SOUTHFACE, MASSACHUSETTS ENERGY DIRECTORS' ASSOCIATION, GREEN ENERGY CONSUMERS ALLIANCE, GEORGIA WATCH, NORTH CAROLINA JUSTICE CENTER, TEXAS LEGAL SERVICES CENTER, CONSUMERS COUNCIL OF MISSOURI, WILDFIRE, RENEW MISSOURI AND VIRGINIA CITIZENS CONSUMER COUNCIL

**RE: DOCKET EERE-2014 –BT-STD-0031/RIN 1904-AD20
Energy Conservation Program: Energy Conservation Standards
for Consumer Furnaces – Notice of Proposed Rulemaking**

October 6, 2022

The National Consumer Law Center (“NCLC”), on behalf of its low-income clients; Alliance for Affordable Energy; Pennsylvania Utility Law Project; Consumer Federation of America; Southface; Massachusetts Energy Directors’ Association; Green Energy Consumers Alliance; Georgia Watch; North Carolina Justice Center; Texas Legal Services Center; Consumers Council of Missouri; Wildfire; Renew Missouri and Virginia Citizens Consumer Council (“Consumer Groups”) welcome the opportunity to provide comments on the Notice of Proposed Rulemaking (NOPR) regarding standards for consumer furnaces published at 87 Fed. Reg. 40590 (July 7, 2022).

I. OVERVIEW OF OUR INTERESTS

The Consumer Groups comprise a broad range of organizations, both geographically and in the terms of the varying ways in which their organizations advocate for consumers and the environment. This coalition has come together in strong support of the Department of Energy’s proposed furnace efficiency standard rule precisely because it offers such important and substantial benefits for both consumers and the environment. A brief description of each of the individual organizations follows below.

NCLC has a 50-plus year history of advocating for the interests of low-income consumers on a broad range of issues, including energy efficiency. NCLC has specifically been advocating for increasing the efficiency standards for non-weatherized gas furnaces (“NWGFs”) and mobile home gas furnaces (“MHGFs”) for 20 years.¹ We do so because higher efficiency standards lower the bills that

¹ We last submitted formal comments regarding furnace standards to the Department, jointly with three other consumer organizations, on July 15, 2015.

low-income families pay to heat their homes. In addition, because increased efficiency standards will reduce carbon emissions that warm the planet, low-income families will benefit apart from seeing lower heating bills. These families have the least financial ability to mitigate harms caused by global warming – whether resulting from more frequent and stronger hurricanes, unprecedented drought, or massive wildfires. Thus, the benefits of increased furnace efficiency standards go beyond just pocketbook savings – the proposed standards will help address climate change, and also will provide substantial health benefits, as detailed below.

The Alliance for Affordable Energy is a consumer and environmental advocate. The Alliance is concerned with the extreme costs of energy, borne by consumers in the short term through their utility bills and in the long term through the impacts of climate change. Efficient heating and cooling systems serve as both adaptation and mitigation to the climate crisis, which crisis requires action and a significant shift away from combusting fossil fuels. All agencies must properly account for the full breadth of benefits associated with this transition.

The Pennsylvania Utility Law Project is a statewide specialty legal services program. Our mission is to advance just and equitable access to safe and affordable utility services for Pennsylvanians experiencing poverty. We work to achieve this mission by empowering individuals and communities through direct representation, education, advocacy, and community-led coalition support. Our interest in this rulemaking is rooted in our commitment to advancing policies which address intersectional economic, racial, and environmental harms, and prioritize solutions identified and informed by people who have experienced energy poverty and insecurity.

Consumer Federation of America (CFA) is an association of more than 250 non-profit consumer organizations that was established in 1968 to advance the consumer interest through research, advocacy, and education. CFA has long advocated for cost-effective energy efficiency standards at the state and federal levels as they benefit consumers, especially low-moderate income households, through lower utility bills. With regards to this docket, CFA has worked for more than a decade on increasing furnace efficiency standards, which are long overdue—higher standards will save consumers billions on their energy bills, and reduce greenhouse gas emissions that contribute to climate change.

Southface is a nonprofit on a mission to promote sustainable homes, workplaces, and communities through education, research, advocacy, and technical assistance.

The Massachusetts Energy Directors' Association, MEDA, comprises the non-profit Community Action agencies that deliver energy efficiency services and heating assistance payments across

Massachusetts. MEDA's mission is to engage and support those delivery agencies and advance their work while ensuring priority care and advocacy on behalf of the low-income clients our agencies serve.

Green Energy Consumer Alliance is a nonprofit energy consumers organization based in Boston and Providence.

Founded in 2002, Georgia Watch is the state's leading organization advocating for consumers and working to give families a voice in critical public policy debates. With a vision of equity and justice for all, Georgia Watch strives to protect and inform consumers, so all Georgians prosper, and their communities thrive.

The North Carolina Justice Center is a 501(c)3 nonprofit organization, working on issues of concern to North Carolinians with low incomes. As a leading progressive research and advocacy organization, our mission is to eliminate poverty in North Carolina by ensuring that every household in the state has access to the resources, services, and fair treatment it needs to achieve economic security. With respect to energy issues, our advocacy is focused to reduce energy burden and insecurity, by promoting energy efficiency, weatherization, urgent repair, affordable renewable generation, beneficial electrification, and other energy policies that will positively impact the communities and individuals we serve.

Consumers Council of Missouri is the leading nonprofit voice for residential consumers at the Missouri Public Service Commission, regularly challenging rate increase proposals from gas, electric, and water utilities and maintaining and expanding programs for consumers who are low-income. Consumers Council of Missouri supports the DOE's proposed rule for the reason that it should reduce energy burdens which are often inflated by inefficient gas furnaces.

Wildfire is a growing movement to end poverty. We advocate for fair practices. We collaborate on policy issues. We support community action initiatives. Beyond easing the effects of poverty, our efforts aim to ignite lasting change: to stop poverty before it starts. This is advocacy in action for an Arizona where all may thrive.

Founded in 1977, Texas Legal Services Center (TLSC) educates, empowers, and represents vulnerable Texans including crime victims, seniors, veterans, and people with disabilities. TLSC's attorneys have represented low-income clients before policymakers in successful efforts to expand access to energy efficiency programs and utility funded weatherization services.

Renew Missouri is a non-profit policy advocacy organization working to transform Missouri into a leading state in clean energy. With offices in Columbia, St. Louis and Kansas City, Renew Missouri

combines legislative, regulatory, industry, and community advocacy to advance energy efficiency and renewable energy policy.

Virginia Citizens Consumer Council (VCCC) is a statewide grassroots membership organization. Its members are individual consumers, community and public interest organizations and others committed to the interest of Virginia consumers. By bringing together people and organizations from various parts of the Commonwealth, VCCC gives consumers a way to unite their voices to promote consumer issues and educate consumers.

II. THE PROPOSED TSL 8 EFFICIENCY LEVELS PROMISE SUBSTANTIAL FINANCIAL BENEFITS FOR CONSUMERS, ESPECIALLY LOW-INCOME CONSUMERS

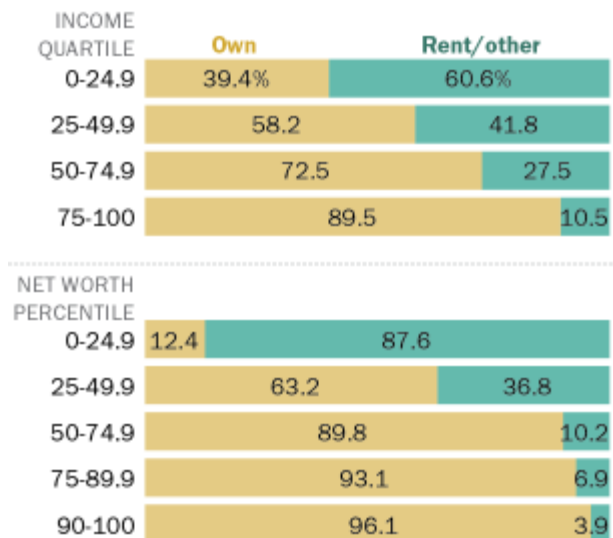
In the NOPR, DOE has proposed adopting Trial Standard Level (“TSL”) 8, which would set the efficiency level (more precisely, the annual fuel utilization efficiency, or “AFUE”) at 95%, a standard that requires the furnace to use condensing technology. Consumer Groups strongly support this proposal. Heating bills are often the largest utility bill households face. In colder, more northern states, annual heating bills can easily exceed \$1,500.² Thus, efficient furnaces are essential. Low-income households stand to especially benefit financially from the proposed TSL 8 efficiency levels. Whereas only 10% of households in the highest income quartile rent rather than own their residence, fully 60% of those in the lowest income quartile are renters, according to a 2021 analysis by the Pew Research Center (available at: <https://tinyurl.com/4pyyx3yr>).

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² For example, the Massachusetts Department of Energy Resource (DOER) estimated that the average 2022-2023 heating bill for gas customers would be \$1081, approximately a 30% increase over 2021-22. <https://www.mass.gov/info-details/massachusetts-household-heating-costs>. Due to the ongoing Russian war on Ukraine and other factors, the DOER projection is likely conservative.

U.S. renters tend to earn less, have less wealth than homeowners

Housing status by income and net worth, 2019



Source: Survey of Consumer Finances 2019, Federal Reserve.

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Owners of low-income rental properties tend to buy less expensive, less efficient furnaces because their tenants usually pay the utility bills (the so-called “split incentive” problem), and they tend to minimize their capital investments given the low rents these properties command. In the absence of strong efficiency standards, low-income renters will be saddled with higher energy bills for more than two decades, on average.³ In colder states where average heating bills can easily exceed \$1,500 annually, the (non-discounted) lifetime bill savings for a tenant who does not incur the capital cost of the furnace could be \$4,000.⁴

DOE’s own analyses demonstrate that low-income households will especially benefit from TSL 8 efficiency standards. As shown in Table V. 13 (87 Fed. Reg. 40671), the simple payback period for low-income households with NWGFs, at TSL 8, is 2.1 years, versus 7.2 years for “All” households. This reflects the fact that low-income households are quite disproportionately renters who do not bear purchase and installation costs but benefit from lower utility bills. Moreover, because tenants cannot dictate the efficiency of furnaces owners purchase, strong standards are often the only way to ensure that they will benefit from having efficient furnaces installed.

³ “DOE estimates the average product lifetime to be 21.4 years for NWGFs and MHGFs.” 87 Fed. Reg. 40637.

⁴ A 95% AFUE furnace, compared to a non-condensing 80% AFUE furnace, can save that cold-climate tenant \$200 annually, for each of 21 years.

When Consumer Groups evaluate a DOE standards proposal, whether for furnaces or other products, we are aware that, at any proposed level, there may be those who will experience a net financial benefit (“winners”) and others who will experience a net cost (“losers”). If the standard is set too high, many consumers will be saddled with purchasing expensive products where the energy savings do not outweigh initial costs. However, if the standard is set too low, that will increase the percent of customers who end up with higher life-cycle costs, due to having imperfect information about the purchase and any installation costs, and resulting energy savings, among other reasons. Therefore, DOE should not reject a standard simply because some consumers will experience net costs over the life of the product.

Table V.13 (87 Fed. Reg. 40671) is instructive on this point. At TSL 8 for NWGFs, 40.1% of all households, and 46.1% of low-income households experience a net benefit. These are much higher percentages than at TSL 7, which DOE has asked commenters to also consider. Under TSL 8, only 16.6% of all consumers, and 13.7% of low-income consumers, experience a net cost. Moreover, those who experience a net benefit will save much more in dollars than the cost of those who in fact experience a net cost. DOE’s analysis for NWGFs shows that not only are there far more “winners” than “losers,” but the average net benefits are more significant than the average net costs:⁵

LCC Savings Details for TSL 8 (\$) - All Consumers						
Mean	Median	5%	25%	50%	75%	95%
463.96	159.87	-935.14	-98.80	159.70	677.95	2629.27

Further, we believe that DOE may have overstated the number of those with net costs, and the amount of those costs, for several reasons:

1. Consumer Groups believe that DOE may have underestimated future gas costs, and, therefore, the energy savings from installing an efficient furnace. NCLC, one of the Consumer Groups, has been extensively involved in the “Future of Gas” proceedings before the Massachusetts Department of Public Utilities. In that docket, DPU 20-80, the utility companies retained experts to help participants understand the likely future gas price increases, among many other facts, as the state implements its electrification policies and fewer gas customers remain to pay for fixed costs. The expert report, “The Role of Gas Distribution Companies in Achieving the Commonwealth’s Climate Goals Independent Consultant Report” (Mar. 18, 2022)⁶ noted that gas rates to residential consumers may increase 5 to 10

⁵ Table source: Consumer Furnace Life-Cycle Cost and Payback Period Analysis Spreadsheet, <https://www.regulations.gov/document/EERE-2014-BT-STD-0031-0322>.

⁶ Available at: <https://tinyurl.com/stt88ae4>.

fold by 2050, depending on the exact pathway the Commonwealth follows to achieve its electrification goals (report, Fig. 36) and that “energy burdens” (the percent of household income paid for energy needs) for low-income households will double or even triple by 2050 (report, Fig. 38).

2. As the Appliance Standard Awareness Project notes in its comments (in which Consumer Groups join), DOE has not fully considered venting technologies that could bring down the assumed installation costs in settings where installing a condensing furnace may present challenges and add to costs.

3. With the passage of the Inflation Reduction Act, Pub. L. 117-169, there will be funding available to help consumers install efficient heating products as well as assistance from already-existing rebate and subsidy programs offered by many state agencies and utility companies. DOE itself notes the potential availability of “point of sale rebate programs” as well as existing “State or utility program rebates”.⁷ Consumer Groups agree that there will often be programs available to mitigate the cost impact of purchasing and installing efficient furnaces, particularly for low-income households.

Consumer Groups also believe, contrary to comments made at the public hearing, that installing condensing furnaces in manufactured homes will not present unique, significant, or insurmountable challenges. NCLC, one of the Consumer Groups, has worked closely with the network of non-profit agencies in Massachusetts that deliver over \$100 million in energy efficiency and heating system services to low-income households. That network (the Low-income Energy Affordability Network, or LEAN) has been installing condensing furnaces for many years, including in manufactured homes. They are always able to find replacement, condensing furnaces that fit in the available space, when upgrading from non-condensing furnaces.

Overall, DOE estimates that the proposed rule will provide \$6.2 billion to \$21.6 billion in savings for consumers, depending on the discount rate applied to future savings.⁸ Moreover, as noted above, low-income consumers stand to have much shorter payback periods than other households, given that they are disproportionately renters. From a purely economic perspective, DOE should finalize the proposed TSL 8 level standards.

III. THE PROPOSED TSL 8 STANDARDS WILL SIGNIFICANTLY REDUCE GREENHOUSE GAS AND OTHER EMISSIONS, BENEFITTING LOW-INCOME HOUSEHOLDS AND RACIAL MINORITIES

The planet is warming, quickly and dangerously, as evidenced by more frequent and intense wildfires and hurricanes (including, most recently, Ian), and unprecedented high temperatures that threaten the lives and well-being of millions. Because the combustion of natural gas in furnaces emits

⁷ 87 Fed. Reg. 40654.

⁸ 87 Fed. Reg. 40681.

greenhouse gases, and gas furnaces are the most common heating source in the country, DOE's proposed furnace standards are an important tool to mitigate climate change. DOE estimates that the proposed AFUE standards will reduce CO₂ emissions by 363 million metric tons over 30 years of sales.⁹

Low-income households have the least ability to mitigate the harm that climate change brings. When wildfires burn down homes or hurricanes destroy property, low-income families are less likely to have adequate insurance or the cash needed to relocate or make repairs. Low-income households and racial minorities are more likely to live in areas projected to have significant increases in asthma and heat-related deaths caused by climate change. Individuals in these areas are more likely to have jobs, including in agriculture and construction, where they will be exposed to excessive heat.¹⁰

Reducing the combustion of natural gas in furnaces reduces not only emissions of planet-warming CO₂, but of nitrogen oxides and methane as well, all of which yield health benefits. Depending on the discount rate employed, DOE estimates net health benefits between \$6 billion and almost \$20 billion from reduced nitrogen oxides emissions. 87 Fed. Reg. 40594. These benefits are particularly important for low-income communities and racial minorities, as they already experience higher rates of negative health outcomes (e.g., higher rates of heart disease, diabetes and other chronic conditions), have more limited access to affordable health care, and struggle with higher amounts of medical debt.¹¹

Reduced heating-energy bills also provide significant ancillary benefits for low-income households, since when they are faced with unaffordable energy bills they cut back on necessities such as food, medicine and medical care.¹²

⁹ There are other, significant environmental benefits due to reduced emissions: "DOE estimates that the proposed standards would result in cumulative emission reductions (over the same period as for energy savings) of 363 million metric tons ('Mt') 6 of carbon dioxide ('CO₂'), 0.8 million tons of nitrogen oxides ('NOX'), and 5.1 million tons of methane ('CH₄'). The proposed standards would result in cumulative emission increases of 52 thousand tons of sulfur dioxide ('SO₂'), 0.3 thousand tons of nitrous oxide ('N₂O'), and 0.3 tons of mercury ('Hg')." 87 Fed. Reg. 40593.

¹⁰ See, for example, a September 21, 2021 EPA press release (available at: <https://www.epa.gov/newsreleases/epa-report-shows-disproportionate-impacts-climate-change-socially-vulnerable>) which noted: "A new EPA analysis released today shows that the most severe harms from climate change fall disproportionately upon underserved communities who are least able to prepare for, and recover from, heat waves, poor air quality, flooding, and other impacts. EPA's analysis indicates that racial and ethnic minority communities are particularly vulnerable to the greatest impacts of climate change."

¹¹ B. Haynes, "The Racial Health and Wealth Gap Impact of Medical Debt On Black Families" (National Consumer Law Center, Mar. 2022), available at: <https://www.nclc.org/images/pdf/medical-debt/RacialHealth-Rpt-2022.pdf>.

¹² See, National Energy Assistance Directors' Association, 2011 National Energy Assistance Survey (Nov. 2011)(to pay their energy bills, 24% of LIHEAP recipients went without food, 37% went without medical or dental care, 34% did not fill or took less than the full dose of a prescribed medicine). Available at <http://www.neada.org/news/nov012011.html>; Mark Nord and Linda S. Kantor, Seasonal Variation in Food Insecurity Is Associated with Heating and Cooling Costs Among Low-Income Elderly Americans, *The Journal of Nutrition*, 136 (Nov. 2006) 2939-2944 (low-income families experience increased food insecurity when energy bills are high); Deborah A. Frank, MD et al., Heat or Eat: The Low Income Home Energy Assistance Program and Nutritional and Health Risks Among Children Less Than 3 years of Age, *AAP Pediatrics* v.118, no.5 (Nov. 2006) e1293-e1302.

IV. CONCLUSION

Consumer Groups strongly support DOE’s proposed TSL 8 furnace efficiency standards. The standards provide billions of dollars in pocketbook savings for consumers, especially for low-income consumers; they will reduce climate emissions and help mitigate climate change, thus benefitting the low-income communities that are most likely to suffer the adverse effects of climate change; and they provide substantial health benefits for families. There has not been a significant increase to the furnace standard for over two decades. We urge the Department to adopt new furnace efficiency standards as expeditiously as possible—they are long overdue.

Respectfully submitted on behalf of the Consumer Groups,

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