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Submitted via Regulations.gov

RE: “Energy Conservation Standards for Residential Conventional Cooking Products,” Docket ID No. EERE-2014-BT-STD-0005

Dr. Shapiro,

We appreciate this opportunity to provide comments on the Department of Energy’s (DOE) proposed rule introducing stringent energy efficiency standards for conventional cooking products.¹

In summary, this comment will focus on the following key points:

- 1. The Agency attempted to circumvent its statutory comment period requirements.*
- 2. The proposed standard for gas cooktops does not meet the “technologically feasible” criteria for prescribing new or amended standards.*
- 3. The Agency does not consider whether the proposed standard for gas cooktops will “lessen utility.”*
- 4. The proposed standard for gas cooktops does not meet the “economically justified” criteria for prescribing new or amended standards.*
- 5. The proposed standard for gas cooktops does not meet the “significant energy savings” criteria for prescribing new or amended standards.*
- 6. The proposed standard overestimates climate impacts and perpetuates the Administration’s anti-conventional fuels agenda.*
- 7. The proposed standard do not meaningfully fulfil the intent of EPCA*

1) The Department of Energy Attempted to Circumvent the Statutory Comment Period

Before delving into finer details, we want to briefly touch on the Agency’s initial, truncated comment period for this proposed rule. The Environmental Policy and Conservation Act (EPCA) establishes the Department of Energy’s statutory authority to review and, if it determines necessary, update energy efficiency standards for consumer cooking products.² According to EPCA, “there will not be less than 75 days for public comment on the [notice of proposed

¹ The views we have expressed in this comment are our own and should not be construed as representing any official position of The Heritage Foundation.

² 42 U.S. Code § 6295, (m)(1), <https://www.law.cornell.edu/uscode/text/42/6295> (accessed April 17, 2023).

rulemaking], with at least one public hearing or workshop.”³ However, for these proposed standards, the Department of Energy initially established an abbreviated, 60-day comment period.

The Agency’s justification for this initial timeline was that it was relying on “many of the same analytical assumptions and approaches as used in the September 2016 [supplemental notice of proposed rulemaking] and December 2020 [notice of proposed determination].”⁴ While this may be true, it was not grounds for the DOE to ignore its statutory requirements.

Given the highly technical nature of this rule, its numerous supporting documents, the multitude of other comments on adjacent issues due on or around April 3rd,⁵ and following numerous requests for extension, the Agency did finally extend the comment period to meet the 75-day minimum.⁶

While this gives the public additional, valuable time to submit comments on this highly technical and sweeping proposed rule, the Agency should have met these statutory requirements when it initially published its proposed standards in the Federal Register.⁷

2) The Proposed Standards Are Not “Technologically Feasible”

When evaluating new energy efficiency standards, EPCA requires the DOE to determine whether proposed standards are “technologically feasible.”⁸ For this rulemaking, the DOE has concluded that its proposed standards meet this criterion.

The DOE is proposing for gas cooktops to meet the “max-tech,” or highest measured efficiency that the Secretary of Energy has deemed “feasible.”⁹ We are unable to find a precedent for this, which would make this the first time the DOE is proposing to set “max-tech” as the standard.¹⁰ When DOE reviewed efficiency standards in 1998, 2009, and 2020, it ultimately determined it would not set new standards beyond the design criteria banning constant burning pilot lights.¹¹

³ *Federal Register*, Vol. 88, No. 21 (February 1, 2023), p. 6826, <https://www.govinfo.gov/content/pkg/FR-2023-02-01/pdf/2023-00610.pdf> (accessed April 17, 2023).

⁴ *Federal Register*, Vol. 88, No. 21 (February 1, 2023), p. 6827.

⁵ See e.g. *Federal Register*, Vol. 88, No. 22 (February 2, 2023), <https://www.govinfo.gov/content/pkg/FR-2023-02-02/pdf/2023-01282.pdf> (accessed April 17, 2023); *Federal Register*, Vol. 88, No. 33 (February 17, 2023), <https://www.govinfo.gov/content/pkg/FR-2023-02-17/pdf/2023-03021.pdf> (accessed April 17, 2023); and News Release, “EPA Opens Public Comment Period for Indoor airPlus Program Update,” U.S. Environmental Protection Agency, February 1, 2023, <https://www.epa.gov/newsreleases/epa-opens-public-comment-period-indoor-airplus-program-update> (accessed April 17, 2023).

⁶ *Federal Register*, Vol. 88, No. 61 (March 30, 2023), p. 19122, <https://www.govinfo.gov/content/pkg/FR-2023-03-30/pdf/2023-06486.pdf> (accessed April 17, 2023).

⁷ *Federal Register*, Vol. 88, No. 21 (February 1, 2023), p. 6820.

⁸ 42 U.S. Code § 6295 (n)(B).

⁹ *Federal Register*, Vol. 88, No. 21 (February 1, 2023), p. 6845.

¹⁰ *Federal Register*, Vol. 88, No. 21 (February 1, 2023), p. 6820.

¹¹ Congress of the United States, letter to Secretary Jennifer M. Granholm, March 20, 2023, p. 2, [EERE-2014-BT-STD-0005-0765 attachment 1 \(2\).pdf](https://www.eere.doe.gov/sites/default/files/2023-03/EERE-2014-BT-STD-0005-0765_attachment_1(2).pdf) (accessed April 17, 2023).

To achieve “max tech,” the Agency is proposing for the maximum integrated annual energy consumption (IAEC) standard for gas cooktops to be set at 1,204 kBtu/year,¹² a 32 percent reduction¹³ from the current baseline of 1,775 kBtu/year.¹⁴ For comparison, electric open coil cooktops received no reduction from the baseline and electric smooth element cooktops received a 17 percent reduction from the baseline.

The justification for the DOE’s technological feasibility determination is that commercially available products and/or working prototypes exist that already meet the DOE’s proposed standard.¹⁵ However, during its testing procedures, the Agency initially tested 21 gas stove models and only one was able to meet the proposed standard.¹⁶ While the Agency argues publicly that this data is being misconstrued,¹⁷ it acknowledges in the proposed rule that “96 percent of gas cooking tops will need to be redesigned to meet standards set at max-tech by the estimated compliance date.”¹⁸ The proposed compliance date for this standard is 2027,¹⁹ giving industry less than four years to completely redesign, test, manufacture, and distribute products that comply with the proposed efficiency level.

A proposed rulemaking that requires nearly 100 percent of gas cooking top manufacturers to redesign products in fewer than 4 years is the exact opposite of technologically feasible. In addition, previous proposed rulemakings that utilized similar assumptions and approaches were dismissed because they did not meet technological feasibility measures,²⁰ which highlights how the DOE is ignoring its statutory obligations under EPCA in the proposed rule.

3) The Proposed Standard Will “Lessen Utility”

As the Agency has noted, to meet compliance, gas cooktop manufacturers will have to redesign their products. The DOE discusses that design “optimizations” will be necessary for gas cooktops to meet compliance.²¹

In the TSD accompanying the rule, the Agency lists a series of features that manufacturers and consumers have indicated as enhancing performance and utility, such as high input rate (HIR) burners with large diameters; HIR burners with high levels of flame controllability; spacing between the gas flame, grate, and cookware; and heavy, cast-iron grates.²² However, the DOE chooses to dismiss industry and consumer preferences by claiming it “is not aware of a clear

¹² *Federal Register*, Vol. 88, No. 21 (February 1, 2023), p. 6894.

¹³ Benjamin Nussdorf, Vice President, Regulatory Affairs and Industry Affairs, National Propane Gas Association et al., letter to Dr. Carl Shapiro, March 20, 2023, p. 3 (accessed April 17, 2023).

¹⁴ *Federal Register*, Vol. 88, No. 21 (February 1, 2023), p.6844.

¹⁵ *Federal Register*, Vol. 88, No. 21 (February 1, 2023), p. 6843.

¹⁶ U.S. Department of Energy, “Technical Support Document: Energy Efficiency Program for Consumer Products and Commercial and Industrial Equipment: Consumer Conventional Cooking Products,” December 2022, p. 5-33, (accessed April 17, 2023).

¹⁷ Brian Dabbs, “DOE Rule May Block 50% of Current Gas Stove Models,” E&E News, February 24, 2023, <https://www.eenews.net/articles/doe-rule-may-block-50-of-new-gas-stoves/> (accessed April 17, 2023).

¹⁸ *Federal Register*, Vol. 88, No. 21 (February 1, 2023), pg. 6886.

¹⁹ *Federal Register*, Vol. 88, No. 21 (February 1, 2023), pg. 6883.

²⁰ *Federal Register*, Vol. 88, No. 21 (February 1, 2023), pg. 6832.

²¹ *Federal Register*, Vol. 88, No. 21 (February 1, 2023), pg. 6886.

²² U.S. Department of Energy, “Technical Support Document,” p. 3-4.

design delineation and corresponding utility provided by commercial-style gas cooking tops as compared to residential style gas cooking tops.”²³

These are some of the same features that the DOE is proposing to alter. For example, the Agency acknowledges that it tested design optimizations such as altering flame angle, distance from burner to cookware, and grate weight as viable options for meeting compliance.²⁴

EPCA statutorily requires the DOE to consider, “any lessening of the utility or the performance of the covered products likely to result from the imposition of the standard.”²⁵ Therefore, by requiring these types of design alterations, DOE is proposing to implement a standard that runs in direct opposition to this requirement.

4) The Proposed Standards Are Not “Economically Justified”

In addition to the rule’s technological infeasibility, the Agency’s stringent standards will also burden both manufacturers and consumers.

The Department of Energy estimates that manufacturers will spend over \$183 million, or over 60 million per year for the next 3 years, to comply with the proposed standards by 2027.²⁶ While electric cooktops will foot a portion of this bill, the costs will primarily fall on gas cooktop manufacturers, seeing as only 4 percent of these appliances currently meet the DOE’s proposed standards.²⁷

There are also concerns about how the proposed standards will impact small businesses. The DOE analyzed 15 small businesses, six of which exclusively produce gas cooktops.²⁸ The average total conversion and testing costs for these six manufacturers exceed \$3.4 million.²⁹ One business in particular, according to the DOE, is estimated to spend \$2.23 million to comply with the proposed standards against its annual revenue of \$2.73 million.³⁰ That amounts to over 80 percent of its annual revenue, and 27 percent of its revenue over the course of 3 years.

Additionally, manufacturers tend to pass production costs onto the consumer in the form of higher prices,³¹ and the DOE acknowledges that the proposed rule will result in higher upfront costs for appliances. Specifically, the Agency estimates that the proposed standards will raise equipment costs by more than \$32 million per year for consumers.³² These costs are considerable

²³ Ibid., p. 3-5.

²⁴ U.S. Department of Energy, “Technical Support Document,” pg. 3-38.

²⁵ 42 U.S. Code § 6295, (o)(2)(B)(IV).

²⁶ *Federal Register*, Vol. 88, No. 21 (February 1, 2023), pg. 6821.

²⁷ *Federal Register*, Vol. 88, No. 21 (February 1, 2023), pg. 6893.

²⁸ U.S. Department of Energy, “Technical Support Document,” p. 3-4.

²⁹ Based on author calculations in U.S. Department of Energy, “Technical Support Document,” p. 12-24, Table 12.5.2.

³⁰ U.S. Department of Energy, “Technical Support Document,” p. 12-24.

³¹ Salim Furth, “Costly Mistakes: How Bad Policies Raise the Cost of Living,” The Heritage Foundation, November 23, 2015, <https://www.heritage.org/government-regulation/report/costly-mistakes-how-bad-policies-raise-the-cost-living> (accessed April 17, 2023).

³² *Federal Register*, Vol. 88, No. 21 (February 1, 2023), pg. 6822.

given that over 40 million American families,³³ nearly 40 percent of U.S. households,³⁴ cook on gas stoves.

The DOE claims that the operating cost savings in the long-term will make up for these price increases upfront and includes an assessment of annualized cost savings per product class. However, the calculus used to determine these cost savings is not specified in the text of the proposed rule or in the accompanying technical support document. The Agency should release its methodology and specify how it determined consumer operating cost savings, especially considering the low-cost savings estimates for gas cooktops. For context, the DOE estimates that over the course of 14.5 years, which is the average life expectancy for gas cooktops, its standards will save consumers merely \$22 in operating costs.³⁵ That amounts to about \$1.50 per year or 12 cents per month.³⁶

The manufacturing and consumer costs coupled with the meager lifetime consumer operating costs savings does not warrant the DOE's proposed standard as economically justifiable, and therefore the proposed rule does not meet one of EPCA's minimum requirements.

The DOE's standards also clearly target gas cook tops, and such a rule has the potential to eliminate these products from the market or at least significantly affect competition.³⁷

EPCA specifically calls for the DOE to consider the impact of lessening competition,³⁸ and prevents the Secretary from implementing or amending a standard if it is "likely to result in the unavailability in the United States in any covered product type (or class) of performance characteristics (including reliability), features, sizes, capacities, and volumes that are substantially in the same as those generally available in the United States."³⁹

Again, a rule that targets nearly 100 percent of a specific class of appliances would more than likely greatly impact its market availability, and therefore impact competition.

We have seen this happen in the past with energy efficiency standards for lightbulbs. The Energy Independence and Security Act of 2007 introduced stringent efficiency standards for incandescent lightbulbs.⁴⁰ This misguided proposal was primarily driven by climate concerns and claims that moving away from incandescent bulbs would save consumers money. Ultimately,

³³ U.S. Energy Information Administration, State Appliances Data Series, "Highlights for Appliances in U.S. Homes by State, 2020," <https://www.eia.gov/consumption/residential/data/2020/state/pdf/State%20Appliances.pdf> (accessed April 17, 2023).

³⁴ U.S. Energy Information Administration, "In 2020, Most U.S. Households Prepared at Least One Hot Meal a Day at Home," Today in Energy, <https://www.eia.gov/todayinenergy/detail.php?id=53439#:~:text=About%2038%25%20of%20U.S.%20households%20use%20natural%20gas%20for%20cooking> (accessed April 17, 2023).

³⁵ *Federal Register*, Vol. 88, No. 21 (February 1, 2023), pg. 6820.

³⁶ Congress of the United States, letter to Secretary Jennifer M. Granholm, March 20, 2023, p. 2, [EERE-2014-BT-STD-0005-0765_attachment_1\(2\).pdf](#) (accessed April 7, 2023).

³⁷ *Federal Register*, Vol. 88, No. 21 (February 1, 2023), pg. 6825.

³⁸ *Federal Register*, Vol. 88, No. 21 (February 1, 2023), pg. 6834.

³⁹ *Federal Register*, Vol. 88, No. 21 (February 1, 2023), pg. 6825.

⁴⁰ Nick Loris, "Government's Light Bulb Ban Is Just Plain Destructive," Heritage Foundation *WebMemo* No. 3024, September 23, 2010, http://thf_media.s3.amazonaws.com/2010/pdf/wm3024.pdf (accessed April 17, 2023).

these standards artificially distorted the market, and as of 2020 (most recent data available) only about 15 percent of households primarily used incandescent bulbs, a 53 percent reduction from when the updated standards were implemented.⁴¹ The DOE’s proposal for gas cooking tops is predicated on similar assumptions.

The DOE’s proposed standards would undoubtedly affect competition, and by nature degrade consumer choice. These standards make all kinds of presumptions about Americans’ preferences in order to justify them, including that Americans undervalue efficiency. However, research shows that consumers care about energy efficiency—even before the government tells them to. According to a 2019 Environmental Protection Agency survey on the national awareness of Energy Star, which is a voluntary program for identifying energy-efficient products and practices, over 50% of participants knowingly purchased an Energy Star-labeled appliance.⁴²

It also indicates that nearly 50% of participants did not buy Energy Star-labeled appliances. This is not some mistake on the part of consumers. These are freely made choices based on many other considerations, because consumers care about a lot of other factors, too—such as features, safety, convenience, and durability—when choosing what appliances to put in their homes.⁴³

So, by regulating based on one or two characteristics, and by prioritizing energy efficiency over other compelling factors, the government is stifling the free market, hindering broader innovation, and discouraging the production of products that consumers actually want to buy.⁴⁴

It’s also important to remember who fares the worst when consumers have fewer options. Research indicates that energy efficiency regulations adversely affect lower-income consumers, which is a consumer subgroup that the DOE targets as part of its analysis in the proposed rule.⁴⁵ Lower-income Americans already spend a greater portion of their after-tax income on basic necessities, and at a time when inflation remains consistently high across virtually all sectors of the economy, the last thing these families need are higher prices and more limited choices in terms of home appliances.

Based on precedent, the evidence that these proposed standards will have a disproportionate impact on almost an entire class of appliances, in turn harming consumer choice, the DOE should throw out its proposed standards as they have the potential to substantially impact competition and availability of products while yielding incredibly small savings on operating costs. In short, the proposed rule is not economically justified.

⁴¹ U.S. Energy Information Administration, “Nearly Half of U.S. Households Use LED Bulbs for All or Most of Their Indoor Lighting,” <https://www.eia.gov/todayinenergy/detail.php?id=51858> (accessed April 17, 2023).

⁴² Energy Star, “National Awareness of ENERGY STAR for 2019, Analysis of CEE Household Survey,” pg. 3, https://www.energystar.gov/sites/default/files/asset/document/National_Awareness_of_ENERGY_STAR_2019_DN_VGL_050120_508.pdf (accessed April 17, 2023).

⁴³ Nimrod Moyal, “How Consumers Choose Appliances,” ADK Insights, <https://adk-insights.com/how-consumers-choose-appliances/> (accessed April 17, 2023).

⁴⁴ Rachael Wilfong, “The Inefficiency of the Left’s ‘Energy Efficiency’ Mandates,” The Daily Signal, February 18, 2023, <https://www.dailysignal.com/2023/02/17/biden-said-no-to-outright-gas-stove-ban-is-willing-to-price-them-out-of-existence-instead/> (accessed April 17, 2023).

⁴⁵ *Federal Register*, Vol. 88, No. 21 (February 1, 2023), pg. 6860.

5) The Proposed Standards Do Not Result in “Significant” Energy Savings

In addition to technological feasibility and economic justification, EPCA requires that the DOE’s proposed standards must result in “significant” energy savings.”⁴⁶

Congress did not define “significant,” and historically, “significance” has been determined on a case-by-case basis.⁴⁷ However, in 2020, the DOE’s Office of Energy Efficiency and Renewable Energy (EERE) finalized a rule that established a threshold.⁴⁸ That threshold required energy conservation standards to result in either a reduction of 0.30 quadrillion BTUs (quads) or a 10 percent reduction in site energy use over a 30 year period.⁴⁹

For this rulemaking, the DOE estimates its proposed standards will result in energy use savings of approximately 0.46 quads or a 3.4 percent reduction in site energy use over a 30-year period.⁵⁰ Therefore, the proposed rule does meet the quad reduction standard, while falling short of the 10 percent reduction target.

It is important to mention that the DOE has considered previous rulemakings and determined that the standards do not meet the criteria as previously established. For example, in a 2020 notice of proposed determination (NOPD), the DOE evaluated a proposed standard that would result in a 0.57 quad reduction, well above the EERE’s quad reduction target, but expressed concerns that this level could result in the unavailability of certain commercial cooktops.⁵¹

The DOE’s max tech level proposal clearly does not meet the EERE’s site energy reduction target, and the 0.46 quad reduction target is inching toward the 2020 NOPD quad reduction target that was determined to potentially impact product availability.

Therefore, the DOE’s determination that its proposed standard for gas cooktops would result in “significant” energy savings is a misguided, overestimation.

6) The Proposed Standards Overestimate Climate Impacts

In addition to claiming that the proposed standards will result in substantial operating cost savings, the DOE also quantifies potential health and climate-related impacts of the proposed standards.

The rule references Executive Order 13990 as the basis for pursuing a climate-related assessment as part of its rulemaking. This is problematic because, as has been the case since day one, the Biden Administration has been on a regulatory crusade against conventional fuels. Not only has the President expressly mentioned his commitment to eliminating fossil fuels from America’s

⁴⁶ 42 U.S. Code § 6295, (o)(3)(B).

⁴⁷ *Federal Register*, Vol. 88, No. 21 (February 1, 2023), pg.6827.

⁴⁸ *Federal Register*, Vol. 88, No. 21 (February 1, 2023), pg. 6827.

⁴⁹ *Federal Register*, Vol. 88, No. 21 (February 1, 2023), pg. 6827.

⁵⁰ *Federal Register*, Vol. 85, No. 31 (February 14, 2020), pg. 6821.

⁵¹ *Federal Register*, Vol. 88, No. 21 (February 1, 2023), pg. 6827.

energy portfolio,⁵² but other Administration actions have made it clear that eliminating gas stoves is one of the means to achieve that end.

Most recently, the Consumer Product Safety Commission (CPSC) came under fire when a commissioner made claims that the CPSC would be considering a nationwide ban on gas stoves.⁵³ While this has not come to fruition,⁵⁴ in early March the CPSC approved a request for information regarding the potential link between gas appliances and certain health and climate impacts.⁵⁵

In this request, the Commission notes: “If technologies to improve the performance of gas stoves are not commercially viable or not demonstrated to be safe, what options remain?”⁵⁶ This language, especially when coupled with the DOE’s proposed energy efficiency standards that target gas cooktops, reads like the perfect set up for an eventual ban, or at least costly regulations that would make gas stoves less affordable.⁵⁷

While this obvious connection between the President’s position on conventional fuels and the DOE’s decision to consider climate impacts as a main justification for this rulemaking is cause for concern, there are also problems with the metrics the Agency uses to quantify climate impacts.

Specifically, the DOE references its use of the Social Cost of Carbon (SCC) as one of the primary measures for determining the value of the proposed standards’ climate benefits.⁵⁸

The SCC is an estimate in present-day dollars of the cumulative long-term damage caused by one CO₂ emitted in a specific year. That number also represents an estimate of the benefit of avoiding or reducing one ton of CO₂ emissions. The SCC is estimated by Integrated Assessment Models (IAMs), which have been used in the past by the federal government as a basis for regulatory policy. For example, the Obama administration’s Interagency Working Group (IWG) had drawn upon three models—abbreviated as DICE, FUND, and PAGE—to estimate the

⁵² Thomas Phippen, “Biden Keeping His Promise to ‘End Fossil Fuel’ Increased Gas Prices, RSC Memo Shows,” Fox Business, March 28, 2022, <https://www.foxbusiness.com/politics/biden-fossil-fuel-gas-prices-promise-republican-study-committee-memo> (accessed April 17, 2023).

⁵³ Ari Natter, “US Safety Agency to Consider Ban on Gas Stoves Amid Health Fears,” Bloomberg, January 9, 2023, <https://www.bloomberg.com/news/articles/2023-01-09/us-safety-agency-to-consider-ban-on-gas-stoves-amid-health-fears?srnd=green&sref=KgEBWdKh&leadSource=uverify%20wall> (accessed April 17, 2023).

⁵⁴ News Release, “Statement of Chair Alexander Hoehn-Saric Regarding Gas Stoves,” United States Consumer Product Safety Commission, January 11, 2023, <https://www.cpsc.gov/About-CPSC/Chairman/Alexander-Hoehn-Saric/Statement/Statement-of-Chair-Alexander-Hoehn-Saric-Regarding-Gas-Stoves> (accessed April 17, 2023).

⁵⁵ News Release, “CPSC Approves Request for Information on Gas Stove Hazards and Potential Solutions” United States Consumer Product Safety Commission, March 1, 2023, <https://www.cpsc.gov/About-CPSC/Commissioner/Richard-Trumka/Statement/CPSC-Approves-Request-for-Information-on-Gas-Stove-Hazards-and-Potential-Solutions>, (accessed April 17, 2023).

⁵⁶ Ibid.

⁵⁷ Rachael Wilfong, “This Action Moves Biden’s Heat on Natural Gas to Front Burner,” The Daily Signal, March 17, 2023, <https://www.heritage.org/coal-oil-natural-gas/commentary/action-moves-bidens-heat-natural-gas-front-burner> (accessed April 17, 2023).

⁵⁸ *Federal Register*, Vol. 88, No. 21 (February 1, 2023), pg. 6821.

SCC.^{59,60} It appears that the Biden Administration has begun using a series of new statistical models to estimate the SCC namely DSCIM, GIVE, and metanalysis model discussed in Howard and Sterner (2017).⁶¹

Any model is only as good as the assumptions from which it is composed, and over the last several years, researchers at The Heritage Foundation have tested these models' sensitivity to a variety of important and reasonable assumptions. Heritage research found that under very reasonable assumptions, these models can offer a plethora of different estimates of the SCC, ranging from extreme damages to overall benefits.⁶²

This research makes it apparent that the vast potential estimates of the SCC suggest that the economic impact of climate change is highly questionable, and therefore understanding of climate-related risks is quite uncertain. The variability in the SCC that is used to justify this rule renders the rule as arbitrary and capricious and should therefore be rescinded.

For this rulemaking, the DOE estimates that its proposed standards will result in a reduction of 19.6 million metric tons of CO₂ at trial standard level 2 (TSL 2) between 2027-2056,⁶³ which is what the DOE is proposing for the updated standard.⁶⁴ To estimate the impact of the proposed rule on global temperatures, we assumed these reduction levels in climate simulations using the Model for the Assessment of Greenhouse Gas Induced Climate Change, developed by researchers at the EPA. We found that assuming a climate sensitivity of 5.0 degrees Celsius (the upper bound of the IPCC's climate sensitivity estimates), the DOE's estimated reduction in CO₂

⁵⁹ IWG, Technical Support Document: - Technical Update of the Social Cost of Carbon for Regulatory Impact Analysis - Under Executive Order 12866, August 2016, p. 4, https://www.epa.gov/sites/default/files/2016-12/documents/sc_co2_tsd_august_2016.pdf (accessed April 17, 2023).

⁶⁰ For the DICE (Dynamic Integrated Climate and Economy) model, see William D. Nordhaus, "DICE/RICE Models," <https://williamnordhaus.com/dicerice-models>. For the FUND (Framework for Uncertainty, Negotiation, and Distribution) model, see "FUND Model, <http://fund-model.org> (accessed April 17, 2023). For the PAGE (Policy Analysis for the Greenhouse Effect) model, see Climate CoLab, "PAGE," <https://www.climatecolab.org/wiki/PAGE> (accessed April 17, 2023).

⁶¹ Nicholas Depsky et al, "DSCIM-Coastal v1.0: An Open-Source Modeling Platform for Global Impacts of Sea Level Rise," *EGUsphere*, May 6, 2022, <https://egusphere.copernicus.org/preprints/2022/egusphere-2022-198/> (accessed April 17, 2023); Kevin Rennert et al, "Comprehensive evidence implies a higher social cost of CO₂," *Nature*, September 1, 2022, <https://www.nature.com/articles/s41586-022-05224-9> (accessed April 17, 2023); and Peter Howard and Thomas Sterner, "Few and Not So Far Between: A Meta-analysis of Climate Damage Estimates," June 9, 2017, <https://link.springer.com/article/10.1007/s10640-017-0166-z> (accessed April 17, 2023).

⁶² See e.g. Kevin Dayaratna and David Kreutzer, *Loaded DICE: An EPA Model Not Ready for the Big Game*, Backgrounder No. 2860, The Heritage Foundation, November 21, 2013, <https://www.heritage.org/environment/report/loaded-dice-epa-model-not-ready-the-big-game> (accessed April 17, 2023); Kevin Dayaratna and David Kreutzer, "Unfounded FUND: Yet Another EPA Model Not Ready for the Big Game," Backgrounder No. 2897, April 29, 2014, http://thf_media.s3.amazonaws.com/2014/pdf/BG2897.pdf (accessed April 17, 2023); Kevin Dayaratna, Ross McKittrick, and David Kreutzer, "Empirically Constrained Climate Sensitivity and the Social Cost of Carbon," *Climate Change Economics*, Vol. 8, No. 2 (2017), p. 1750006-1-1750006-12, <https://www.worldscientific.com/doi/abs/10.1142/S2010007817500063> (accessed April 17, 2023); and Kevin Dayaratna, Ross McKittrick, and Patrick Michaels, "Climate sensitivity, agricultural productivity and the social cost of carbon in FUND," *Environmental Economics and Policy Studies*, 22: 433-448 (2020), <https://link.springer.com/article/10.1007/s10018-020-00263-w> (accessed April 17, 2023).

⁶³ *Federal Register*, Vol. 88, No. 21 (February 1, 2023), pg. 6887, Table V.46.

⁶⁴ *Federal Register*, Vol. 88, No. 21 (February 1, 2023), pg. 6897.

would result in a global temperature mitigation of 0.0004 degrees Celsius by 2050 and 0.0009 degrees Celsius by 2100.⁶⁵

Thus, even upon assuming the climate has the highest sensitivity to CO₂ emissions under the variety of possibilities envisioned by the IPCC, these standards do not have any tangible impacts on global temperatures, and therefore the DOE should refrain from considering environmental impacts in its assessment of the proposed standards. Moreover, this fact almost surely indicates that the DOE's projected, annualized climate benefits of \$67 million, or \$1.17 billion over the course of nearly 30 years, is significantly overestimated. As a result, the proposed rule is arbitrary and capricious and therefore should be rescinded.

7) The Proposed Standards Do Not Meaningfully Fulfil the Intent of EPCA

EPCA outlines seven statutory factors to consider when pursuing updated standards, including “other factors the Secretary considers relevant.”⁶⁶

One factor we believe the Secretary should consider is: How does the proposed standard meaningfully advance EPCA's intent given the abundant energy sources that the United States enjoys today that were not contemplated in 1975?

Congress clearly placed a high priority on maintaining a robust, competitive market and protecting consumer choice when contemplating EPCA. This is demonstrated throughout the Act, as detailed above, by virtue, among other things, of the factors it put in place for the Secretary to consider when determining efficiency standards. Nonetheless, given fears of energy scarcity, Congress decided to move forward with the Act.

Indeed, the 1975 Energy Policy and Conservation Act was born out of a time of perceived energy scarcity. In justifying the policies that the Act ultimately set in place, President Gerald Ford laid out three broad policy objectives. These included reducing oil imports, ending American vulnerability to economic disruption by foreign suppliers, and developing energy technology and resources to supply a significant share of the free world's energy needs.⁶⁷

In each case, the United States has achieved President Ford's objectives. In 1975, net imports of crude oil exceeded 5 million barrels per day. By 2020, the United States had become a net exporter.⁶⁸ Geopolitical shocks and cartels, specifically the Organization of Petroleum Exporting

⁶⁵ M. Meinshausen, S. C. B. Raper, and T. M. L. Wigley, “Emulating Coupled Atmosphere–Ocean and Carbon Cycle Models with a Simpler Model, MAGICC6– Part 1: Model Description and Calibration,” *Atmospheric Chemistry and Physics*, Vol. 11 (2011), pp. 1417–1456, <https://acp.copernicus.org/articles/11/1417/2011/> (accessed April 17, 2023); and Intergovernmental Panel on Climate Change, “IPCC Sixth Assessment Report: Working Group 1: The Physical Science Basis,” Summary for Policymakers, https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_SPM.pdf (accessed April 17, 2023).

⁶⁶ 42 U.S. Code § 6295, (o)(2)(B)(VII).

⁶⁷ President Gerald R. Ford, Address Before a Joint Session of the Congress Reporting on the State of the Union, Washington, D.C. January 15, 1975, <https://www.presidency.ucsb.edu/documents/address-before-joint-session-the-congress-reporting-the-state-the-union-1> (accessed April 17, 2023).

⁶⁸ U.S. Energy Information Administration, “Oil and Petroleum Products Explained,” updated April 19, 2022, <https://www.eia.gov/energyexplained/oil-and-petroleum-products/> (accessed April 17, 2023).

Countries (OPEC), which produces about 40 percent of the world's crude oil, can still have a near-term impact on American energy prices. However, due to the large amount of energy on global markets, energy disruptions do not present the sort of systemic threat that policy makers feared in the 1970's. The extent to which the United States economy remains vulnerable to energy shocks is more a function of our own energy restriction policies and has less to do with energy efficiency.

And finally, American technologies like fracking and commercial nuclear reactors are helping to power modern economies around the world. Again, to the extent that energy remains scarce is purely a function of policies that restrict access to American resources or prevent the export of peaceful technologies.

Thus, while efficiency certainly remains an important piece of the energy calculation for American consumers, it is no longer something that needs to be imposed at the systemic level. Instead, it is something that Americans should determine for themselves at the household and business levels.

Though EPCA clearly authorizes the Department of Energy to place restrictions on industry and consumer choice at the behest of the Secretary of Energy, the Department should recognize that the environment that gave rise to the Act has changed drastically given advances in technology and energy discovery. While this does not diminish the authority of the Secretary to impose standards, it does dramatically diminish the impact of those standards relative to the overall purpose of the Act, which is to secure adequate energy resources for the American economy.

Put succinctly, the value proposition for energy efficiency has shifted dramatically since 1975 due to the broad availability of energy. Thus, forcing Americans to purchase certain products based on efficiency within an environment of energy abundance no longer has the same impact on energy availability as it did during times of perceived energy scarcity. Thus, the proposed standards do not meaningfully advance the intent of EPCA and do not justify the restrictions the proposed rule will impose on American consumer choice or the increased costs.

CONCLUSION

Thank you for the opportunity to comment on the proposed conventional cooking tops rule. For the foregoing reasons, we urge the Department of Energy not to move forward with a final rule in this matter.

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