



January 14, 2019

VIA ELECTRONIC SUBMISSION

Environmental Protection Agency

Attn: Office of Air Quality Planning and Standards, Environmental Protection Agency

Re: Standards of Performance for New Residential Wood Heaters, New Residential Hydronic Heaters and Forced-Air Furnaces, 83 Fed. Reg. 61,574 (proposed Nov. 30, 2018)

Docket ID: EPA-HQ-OAR-2018-0195

The Institute for Policy Integrity (“Policy Integrity”) at New York University School of Law¹ respectfully submits the following comments to the Environmental Protection Agency (“EPA”) regarding a proposed rule that would amend the 2015 New Source Performance Standards (“2015 NSPS”) for certain categories of residential wood heating devices by adding a two-year “sell through” period, which allows retailers to sell non-compliant heaters for two years past the May 2020 compliance date (“Proposed Rule”).² Policy Integrity is a non-partisan think tank dedicated to improving the quality of government decisionmaking through advocacy and scholarship in the fields of administrative law, economics, and public policy.

We write to make the following comments:

- Finalizing the Proposed Rule would be arbitrary and capricious as it would, even by EPA’s own flawed economic analysis, impose net costs on society.
- EPA has failed to provide a reasoned explanation for delaying the Step 2 compliance deadline established under the 2015 NSPS.
- EPA underestimates the societal costs of the Proposed Rule by:
 - Calculating forgone emission reductions over a truncated three year period instead of over the lifetime use of wood heating devices;
 - Calculating health costs using three years of forgone emissions data to produce a four-year average;
 - Assuming, without support, that manufacturers will not increase production of Step 1 heaters in response to the Proposed Rule.

¹ This document does not purport to present New York University School of Law’s views, if any.

² Standards of Performance for New Residential Wood Heaters, New Residential Hydronic Heaters and Forced-Air Furnaces, 83 Fed. Reg. 61,574 (proposed Nov. 30, 2018).

Background

Section 111(b) of the Clean Air Act requires EPA to establish standards of performance for new stationary sources of air pollution. In accordance with this mandate, EPA announced in 2009 that it was undertaking a review of the New Source Performance Standards that had last been established for wood heating devices in 1988. After several years of review, EPA determined that the “current body of evidence strongly supports revision of the 1988 NSPS to capture the technology improvements and enhanced performance of such units... and to expand the applicability of these standards to include additional wood-burning residential heating devices that are available today” and issued the 2015 NSPS.³ The 2015 NSPS updated existing performance standards for several types of residential wood heaters listed in subpart AAA of 40 CFR part 60, including wood stoves. In addition, the agency added two new categories of wood heating devices, both listed in subpart QQQQ: hydronic heaters and forced-air furnaces.

In order to reduce the regulatory burden on the small business manufacturers and retailers of wood heating devices, EPA implemented a “stepped compliance approach” in the 2015 NSPS.⁴ Under this approach, Step 1 compliance levels were immediately effective upon the rule’s effective date. Retailers were, however, provided a seven month “sell-through” period allowing them to sell existing (non-compliant) inventory through December 31, 2015.⁵ More stringent compliance levels, classified as Step 2, were to become effective five years later, in 2020. Step 2 compliance was set five years in the future “in order to allow manufacturers lead time to develop, test, field evaluate and certify current technologies across their consumer product lines.”⁶

EPA now proposes to amend the 2015 NSPS by adding an additional two year “sell-through” period to that five-year timeline for Step 2 heaters, thus delaying that 2020 compliance date for an additional two years for subpart QQQQ heaters (hydronic heaters and forced-air furnaces) manufactured or imported before the May 2020 Step 2 compliance date. The agency explained that this proposed action is in response to reports that demand for Step 1-compliant (that is, Step 2 non-compliant) heaters is declining in advance of the 2020 compliance date because retailers fear being left with unsellable inventory. According to the agency, this is problematic because “some manufacturers” have communicated that they will need until May 2020 to develop, test, and certify new Step 2 compliant models and thus presumably fear they will not have an alternative product to sell.⁷

³ Standards of Performance for New Residential Wood Heaters, New Residential Hydronic Heaters and Forced-Air Furnaces, 80 Fed. Reg. 13,672, 13,673 (Mar. 16, 2015).

⁴ 80 Fed. Reg. at 13,676.

⁵ *Id.* at 13,685.

⁶ *Id.* at 13,676.

⁷ 83 Fed. Reg. at 61,578-79.

Executive Order 12,866, “the primary governing [Executive Order] regarding regulatory planning and review,”⁸ requires agencies to assess the costs and benefits of any economically significant regulatory action. Pursuant to that order, EPA prepared a Supplemental Regulatory Impact Analysis (“Supplemental RIA”) to assess the impacts of the Proposed Rule.⁹ The Supplemental RIA relies upon and amends the original Regulatory Impact Analysis (“RIA”) that accompanied the 2015 NSPS.¹⁰

A. Finalizing the Proposed Rule Would Be Arbitrary and Capricious as it Would, Even by EPA’s Own Flawed Economic Analysis, Impose Net Costs on Society in a Way that Ignores the Agency’s Statutory Mandate as well as Longstanding Agency Guidance

The analysis performed by the agency in the Supplemental RIA significantly underestimates the costs of the Proposed Rule; these deficits are discussed in detail in Section C below. Yet even under EPA’s faulty analysis, it is clear that the Proposed Rule will generate societal costs that outweigh its benefits,¹¹ which both violates the Clean Air Act’s statutory mandate and Executive Order 12,866’s agency guidance.

The Step 2 emissions limits imposed by the 2015 NSPS are expected to greatly reduce human exposure to ambient fine particulate matter (PM_{2.5}). PM_{2.5} exposure contributes to a number of detrimental health effects, including heart attacks, strokes, asthma exacerbation, and an array of other respiratory problems.¹² Both short and long term exposure to PM_{2.5} increases the risk of premature death. EPA estimates that the Proposed Rule would increase PM_{2.5} emissions between 7,740 and 11,640 tons over the 20-year model life of wood heaters as compared to the compliance schedule established by the 2015 NSPS.¹³ EPA estimates that the costs to human health from these forgone emissions reductions would be between \$250 million and \$860 million in the first three years of the Proposed

⁸ Memorandum: Implementing Executive Order 13,771, Titled “Reducing Regulation and Controlling Regulatory Costs” (Apr. 5, 2017), available at <https://www.whitehouse.gov/the-press-office/2017/04/05/memorandum-implementing-executive-order-13771-titled-reducing-regulation> (“Guidance on Executive Order 13,771”).

⁹ Exec. Order No. 12,866, 58 Fed. Reg. 51,735 (Oct. 4, 1993); EPA, Supplemental Regulatory Impact Analysis (RIA) for “Standards of Performance for New Residential Wood Heaters, New Residential Hydronic Heaters and Forced-Air Furnaces” (Nov. 20, 2018) [hereinafter “Supplemental RIA”].

¹⁰ EPA, Regulatory Impact Analysis (RIA) for Residential Wood Heaters NSPS Revision: Final Report, EPA-452/R-15-001 (2015) [hereinafter “2015 NSPS RIA”].

¹¹ 83 Fed. Reg. at 61,583 (noting that “the estimated costs are greater than the benefits, leading to a negative net benefit (or net cost)”).

¹² 2015 NSPS RIA at 7-3, Table 7-1 Human Health Effects of Ambient PM_{2.5}.

¹³ Supplemental RIA at 9, Table 6 & note 7.

Rule's implementation alone.¹⁴ Taking the compliance costs into account, on net, the rule will impose in present value terms societal costs of between \$70 million and \$310 million on society in the form of increased morbidity and premature death due to human exposure to particulate emissions from wood heaters.¹⁵

But the statutory purpose of the NSPS emissions limits is to “promote the public health and welfare.”¹⁶ A regulation that “does significantly more harm than good” cannot be consistent with this mandate.¹⁷ While EPA has some discretion in its implementation of the Clean Air Act's Section 111 mandate, that discretion must be exercised in a reasonable manner and be grounded in the agency's statutory authority.¹⁸ Yet EPA has pointed to nothing in the Clean Air Act that would support the view that the agency has discretion to impose public health and environmental harms on society, as the Proposed Rule would.

Moreover, Executive Order 12,866 mandates that agencies select the regulatory approach “that maximize[s] net benefits (including potential economic, environmental, public health and safety [impacts])” unless a specific approach is statutorily prescribed.¹⁹ Further, each agency is directed to “tailor its regulations to impose the least burden on society.”²⁰ The agency clearly violates this guidance here. Even when the cost savings to industry from delayed compliance are subtracted from the value of forgone health benefits, the Proposed Rule remains net costly to society – on the order of tens to hundreds of millions of dollars in just three years.²¹ Executive Order 12,866 further advises that when agencies calculate

¹⁴ *Id.* at 12, Table 9, “Present Value of the Foregone Benefits of Scenarios 2 & 3 discounted to 2016 (2016\$, millions).”

¹⁵ In the Proposed Rule's preamble, EPA reports this range as \$70 million to \$200 million. However, the upper range of these costs, according to EPA's own calculations contained in the Supplemental RIA and accompanying spreadsheet, PV_EAVs-forgonebenefits+costsavings_RWHproposalfinal.xls (hereinafter “Foregone Benefits Spreadsheet,” publicly available in docket) are represented by the forgone benefits of manufacturer response modeled under Scenario 3. Under this scenario, forgone benefits range from \$109 million to \$313 million.

¹⁶ Clean Air Act, 42 U.S.C. § 7401 (2012).

¹⁷ *Michigan v. EPA*, 135 S. Ct. 2699, 2707 (2015) (“No regulation is ‘appropriate’ if it does significantly more harm than good.”)

¹⁸ *Chevron v. NRDC*, 467 U.S. 837, 844 (1984) (“a court may not substitute its own construction of a statutory [provision] for a reasonable interpretation made by the administrator of an agency”); *Util. Air Regulatory Grp. v. EPA*, 134 S. Ct. 2427, 2442 (2014) (“Even under Chevron's deferential framework, agencies must operate within the bounds of reasonable interpretation.” (internal quotation marks omitted)); see also *North Carolina v. EPA*, 531 F.3d 896, 906 (D.C. Cir. 2008) (evaluating the reasonableness of an agency's discretionary interpretation under the familiar “arbitrary and capricious” framework of *Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983), including that the agency “relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed to a difference in view or the product of agency expertise”).

¹⁹ Exec. Order No. 12,866, 58 Fed. Reg. at 51,735.

²⁰ *Id.* at 51,736.

²¹ 83 Fed. Reg. at 61,583.

the costs and benefits of a contemplated action they should also consider “the alternative of not regulating.”²² EPA could spare the imposition of massive health costs on the American people by declining to finalize this Proposed Rule. The agency has provided no rational explanation for declining the no-regulation alternative.

B. EPA Has Failed to Provide a Reasoned Explanation for Delaying the Step 2 Compliance Deadline Established Under the 2015 NSPS

In order to avoid arbitrary and capricious rulemaking under the Administrative Procedure Act (“APA”), an agency must “examine the relevant data” and “articulate a satisfactory explanation for its action including a rational connection between the facts found and the choice made.”²³ When delaying the implementation of a preexisting rule, agencies must “cogently explain” the reasoning behind the suspension.²⁴ The suspension of a rule represents a reversal, for which the agency must provide a “reasoned explanation” for dismissing the “facts and circumstances that underlay” the original rule.²⁵ In issuing the Proposed Rule, EPA failed to meet these basic requirements. The agency makes no attempt to explain what circumstances have changed since the 2015 NSPS was finalized that now necessitate a revision of the 2020 compliance date. Nor does it make any effort to demonstrate the extent of the alleged problem of stranded heater inventory.

The stepped compliance approach established by EPA in the 2015 NSPS was specifically designed to give manufacturers and retailers the advance notice required to smoothly transition to more stringent emissions limits. In setting the 2020 date for Step 2 compliance, EPA relied upon comments submitted by manufacturers indicating that it could take one to two years to develop new models of wood heaters.²⁶ Taking this information into account and allowing for a substantial amount of additional time for manufacturers to “develop, test, field evaluate and certify current technologies across their consumer product lines,” EPA set the Step 2 compliance five years in the future.²⁷

²² Exec. Order No. 12,866, 58 Fed. Reg. at 51,735.

²³ *State Farm*, 463 U.S. at 43 (internal quotation marks omitted).

²⁴ *Pub. Citizen v. Steed*, 733 F.2d 93, 98 (D.C. Cir. 1984) (quoting *State Farm*, 463 U.S. at 48); accord *Air Alliance Houston v. Environmental Protection Agency*, 906 F.3d 1049, 1066 (D.C. Cir. 2018) (reviewing a delay under the *State Farm* standard).

²⁵ See *F.C.C. v. Fox Television Stations, Inc.*, 556 U.S. 502, 515 (2009); *Encino Motorcars, LLC v. Navarro*, 136 S. Ct. 2117, 2126 (2016).

²⁶ 2015 NSPS RIA at 5-10 citing James E. Houck & Paul Tiegs, *There's a Freight Train Comin'*, HEARTH AND HOME, Dec. 2009 (indicating that “development time is 12 to 14 months for non-catalytic heaters and 10 to 12 months for catalytic heaters”) and Comments from United States Stove Company, Small Entity Representative, July 13, 2010 (indicating development costs over “over an 8- to 12-month schedule or a relatively uncomplicated Product”) and NSPS Review/Revision, and Impact on Our Companies: A Manufacturer’s Position Statement. Prepared by Stove Builder International and United States Stove Company, June 2010 (indicating that “a 14- to 18-month timeframe is required to develop a new Firebox”).

²⁷ *Id.* at 13,676.

EPA does not now claim that the Step 2 compliance standards are infeasible in a way that was unforeseen in 2015. Indeed, when EPA finalized the 2015 NSPS it noted that 9 out of 50 existing hydronic heaters models in the U.S. market already met the Step 2 compliance standards and that an additional 100 European manufacturers were already making models that would be Step 2 compliant.²⁸ Now, four years later, there are certainly already Step 2 compliant alternatives to Step 1 heaters available on the market.

Instead, EPA claims that it recently learned that a “substantial number of retailers are already reducing or even ending their purchases of Step 1-certified wood heating devices from the manufacturers because they are concerned that they will not be able to sell these devices before the May 2020 Step 2 compliance date and will be left with unsaleable inventory.”²⁹ For support, the agency cites to four letters from industry representatives indicating that retailers are anticipated to reduce, or are already reducing, their demand for Step 1 compliant devices.³⁰ EPA additionally explains that “manufacturers have indicated that they will need until May 2020 to develop, test, and certify wood heating devices to meet the 2020 Step 2 standards.”³¹ But the agency does not provide any citation to support this assertion. Indeed, the only mention of Step 2 preparedness in the citation to manufacturer concerns states that “our company and others may demonstrate compliance in advance of May 15, 2020.”³² EPA claims that manufacturers’ fear of revenue shortfalls and stranded inventory necessitates the Proposed Rule’s compliance date extension, but the agency fails to provide any concrete information to demonstrate that these manufacturer concerns are valid or supported.³³ For example, EPA makes no attempt to quantify the actual revenue shortfalls or the number of wood heaters that would be left as stranded inventory in the absence of a sell-through period. EPA’s conclusory and unsupported assertions are insufficient to justify the proposal.³⁴

Further, the agency has failed to demonstrate that this decline in demand for Step-1 compliant devices prior to 2020 was unanticipated by the 2015 NSPS. Manufacturers and distributors in the industry are well aware of the purchasing practices of retailers in their industry. It cannot be a surprise to them that retailers are preparing for the 2020 compliance date, and the agency has provided no evidence of this surprise. Built into the

²⁸ 2015 NSPS RIA at 4-5.

²⁹ 83 Fed. Reg. at 61,578.

³⁰ *Id.* at 61,578-79, note 3.

³¹ *Id.* at 61,579.

³² *Id.* at 61,579, note 3.

³³ *Id.*

³⁴ *NetCoalition v. SEC*, 615 F.3d 525, 539 (D.C. Cir. 2013).

modeling of the 2015 RIA (and reflected in the Supplemental RIA's Scenario 1³⁵) was the expectation that it was within manufacturers' responsibility and capability to have Step 2 compliant models ready for sale to retailers prior to the 2020 compliance date. This effect is entirely consistent with the desired outcome of the 2015 NSPS. And manufacturers were given a significant amount of time -- five years -- to prepare for that eventuality. Step 1 heaters are meant to be phased out and replaced by Step 2 heaters. The agency has not identified anything that was unforeseen about retailer demand for Step 1 heaters ramping down as the compliance deadline neared, which could justify the addition of a sell-through period.

Through this proposal, the agency plans to reward unprepared industry members at the expense of those manufacturers who have been timely adjusting their business plans for transitioning to Step 2 compliance. But the standards of rational rulemaking required by the APA and Executive Order 12,866 exist, in part, to ensure the credibility of agency commitments so as to create a measure of regulatory certainty.³⁶ When an agency sets a compliance deadline, the regulated entities must believe with sufficient certainty that they will suffer consequences if they do not sufficiently prepare to meet that deadline. Without that, the agency is fostering an environment of regulatory uncertainty, which can harm innovation, dampen investment, and ultimately thwart statutory goals like the protection of health and welfare.

C. EPA Underestimates the Societal Health Costs of the Forgone Emissions Reductions Resulting from the Proposed Rule

Executive Order 12,866 instructs that the assessment of a regulation's costs and benefits should be made "on the best reasonably obtainable scientific, technical, economic, and other information," and effects should be quantified "to the extent feasible."³⁷ Courts have held that "when an agency decides to rely on a cost-benefit analysis as part of its rulemaking, a serious flaw undermining that analysis can render the rule unreasonable."³⁸

³⁵ Supplemental RIA at 3 (describing the 2015 NSPS outcome as predicated on manufacturers and retailers acting with "perfect foresight").

³⁶ See Jonathan Masur, *Judicial Deference and the Credibility of Agency Commitments*, 60 VAND. L. REV. 1021 (2007) (arguing that effective agency regulation depends upon the stability of regulations and the ability of industry to rely with certainty on future commitments); Aaron L. Nielson, *Sticky Regulations*, 85 U. CHI. L. REV. 85, 116 (2018) (explaining how the rules governing regulatory change make such change more difficult and thus promote regulatory certainty, innovation, and investment).

³⁷ Exec. Order No. 12,866, 58 Fed. Reg. at 51,736. Long-standing guidance on regulatory analysis from the Office of Management and Budget ("OMB") also instructs agencies that a "good regulatory analysis" will include an evaluation of the "quantitative and qualitative" benefits and costs of a proposed action and its identified alternatives. OFFICE OF MGMT. & BUDGET, EXEC. OFFICE OF THE PRESIDENT, OMB CIRCULAR A-4, REGULATORY ANALYSIS 2 (2003).

³⁸ *Nat'l Ass'n of Home Builders v. EPA*, 682 F.3d 1032, 1040 (D.C. Cir. 2012); see also *State Farm*, 463 U.S. at 43 (arbitrary and capricious standard requires agency to "examine the relevant data and articulate a satisfactory

In its assessment of the Proposed Rule's costs and benefits EPA has made at least three serious errors, each of which contribute to an underestimation of the Rule's costs.

1. *EPA Underestimates the Forgone Benefits by Assuming, Without Support, that Manufacturers Will Not Increase Production of Step 1 Heaters in Response to the Proposed Rule*

EPA underestimates the number of Step 2 non-compliant wood heating devices that will be brought to market as a result of the Proposed Rule. In order to calculate the increase in emissions that would result from the implementation of the two-year sell through period, EPA analyzed the effects of the Proposed Rule in the Supplemental RIA under three different scenarios.³⁹ The agency designates Scenario 2 as the "primary" scenario that is "most representative of the impacts of the sell-through extension."⁴⁰ Only this scenario is presented in the Proposed Rule itself.

In Scenario 2, manufacturers produce the same number of wood heaters as assumed under the 2015 RIA, but they are allowed to sell inventory "that would otherwise have been stranded" until 2022.⁴¹ In this scenario, emissions are expected to increase as a result of sales of Step 2 non-compliant models in 2020-2022.

But the agency provides no explanation for why it chooses to ignore a separate scenario, labeled Scenario 3, in which manufacturers are assumed to respond to the extension of the Step 2 compliance date by increasing their production of Step 1 compliant heaters beginning in 2019. In this scenario, emissions increase as a result of increased sales of Step 1 compliant heaters in 2020-2022 and forgone benefits would even higher than under Scenario 2.⁴² No mention of this manufacturer response, or the societal harms generated, are made in the preamble of the Proposed Rule published in the Federal Register. This is in spite of the fact that it is a very predictable outcome that manufacturers would ramp up production of Step 1 compliant devices in response to the two-year extension of the compliance date. Nevertheless, EPA fails to mention the possibility of this increase in production and lists only "Scenario 2" projected forgone benefits.⁴³ By ignoring this relevant factor, EPA has "inconsistently and opportunistically framed" the economic impacts of the Proposed Rule in a way that renders the proposal arbitrary and capricious.⁴⁴

explanation for its action including a rational connection between the facts found and the choice made" (internal quotation marks omitted)).

³⁹ Supplemental RIA at 3.

⁴⁰ Supplemental RIA at 19.

⁴¹ *Id.*

⁴² *Id.* at 9, Table 6.

⁴³ 83 Fed. Reg. at 61,583.

⁴⁴ *Bus. Roundtable v. SEC*, 647 F.3d 1144, 1148-49 (D.C. Cir. 2011).

2. *EPA Irrationally Ignores the Lifetime Emissions of Step 1 Heaters and Presents Instead a Flawed Analysis of “Truncated” Forgone Emissions Over Only Three Years*

EPA has calculated the forgone emissions reductions that will result from additional sales of Step 2 non-compliant wood heating devices over a truncated three-year period rather than over the lifetime use of these devices.⁴⁵ But each Step 1 heater that is sold in the place of a Step 2 heater emits higher levels of PM_{2.5} over the lifetime of the product than the Step 2 heater would. In conducting the RIA for the 2015 NSPS, EPA assumed that wood heating devices typically have a 20 year use lifespan.⁴⁶ In the original rule, benefits from emissions reductions were therefore calculated over this period: “our analysis assumes that a stove shipped in 2015 will emit in homes for 20 years – or until 2034.”⁴⁷ EPA now only provides three years’ worth of those emissions reductions when calculating the forgone emissions. But by ignoring the later years, EPA has ignored a significant category of forgone benefits, rendering this proposed rule misleading and arbitrary and capricious. EPA notes this departure from “typical” lifetime emissions analysis in the Supplemental RIA, but a similar acknowledgement that lifetime emissions have been ignored does not appear in the Proposed Rule’s preamble.

It is no solution for the agency to provide these estimates in a finalized rule delaying Step 2 compliance.⁴⁸ To comply with the APA, EPA is required to provide the public with “general notice of proposed rulemaking”⁴⁹ in enough detail to afford the public with a meaningful opportunity to comment on the proposed rule.⁵⁰ In complying with this requirement, the agency must “make its views known . . . in a concrete and focused form so as to make criticism or formulation of alternatives possible.”⁵¹ Failing to provide analysis disclosing the majority of the Proposed Rule’s forgone benefits does not satisfy this standard. If the agency intends to move forward, the agency should re-propose the rule with the adequate calculations.

3. *EPA Deceptively Calculates Forgone Emissions Benefits Based on a Four-Year Average that Includes a Year Prior to the Proposed Rule Taking Effect*

⁴⁵ Supplemental RIA at 2-4.

⁴⁶ 2015 NSPS RIA at 4-14 (noting that “most wood heaters in consumer homes emit for at least 20 years and often much longer”).

⁴⁷ 2015 NSPS RIA at 4-15.

⁴⁸ Supplemental RIA at 2.

⁴⁹ 5 U.S.C. § 553(b).

⁵⁰ *Prometheus Radio Project v. FCC*, 652 F.3d 431, 453 (3rd Cir. 2011).

⁵¹ *Home Box Office, Inc. v. FCC*, 567 F.2d 9, 36 (D.C. Cir. 1977).

EPA presents its calculation of “monetized net forgone benefits” in Table 3 of the Proposed Rule. The agency reports that the costs of the Proposed Rule, in the form of forgone benefits, range between \$0.1 and \$0.23 billion at a 3% discount rate and between \$0.09 billion and \$0.21 billion at a 7% discount rate.⁵² The agency generated these values by first calculating the value of forgone emissions in each year between 2019 and 2022, and then averaging these values over all four years.⁵³ However, the agency’s inclusion of 2019 in their annual average of emissions reductions is misleading. Under the agency’s own analysis, the Proposed Rule’s sole impact is to delay the 2020 compliance date, and so generates no forgone emissions until 2020. The year 2019 has no forgone benefits and should not be included in the average. By including 2019 in its calculation of average impacts, EPA significantly dilutes its estimates of annual forgone emissions, essentially dividing by four instead of by three. Had the agency properly omitted 2019, the average annual forgone emissions benefits would have been approximately \$30 to \$80 million higher, ranging between \$0.14 billion and \$0.31 billion at a 3% discount rate and \$0.12 billion and \$0.28 billion for a 7% discount rate.

The agency’s calculations of estimated present values and equivalent annualized values (presented in Table 4 of the Proposed Rule) suffer from this same flaw.⁵⁴ In each case, the values are calculated over the four-year time span 2019 to 2022, where 2019 has no forgone emissions benefits because the Proposed Rule has not yet had an effect on emissions.⁵⁵ Compliance with the APA requires that “[n]ot only must an agency’s decreed result be within the scope of its lawful authority, but the process by which it reaches that result must be logical and rational.”⁵⁶ The illogical dilution of average annual forgone emissions reductions fails to meet this standard.

Conclusion

Finalizing the Proposed Rule would be arbitrary and capricious.

Respectfully,

Madison Condon
Bethany Davis Noll

⁵² 83 Fed. Reg. at 61,583.

⁵³ See Supplemental RIA at 11; Forgone Benefits Spreadsheet, tab ForgoneBenefits (Scenarios 2&3).

⁵⁴ 83 Fed. Reg. at 61584, Table 4.

⁵⁵ The Equivalent Annualized Values in Table 4 of the Proposed Rule come from Table 9 of the Supplemental RIA. The calculations behind this table are available in the accompanying excel file in the docket and show that the agency included 2019’s zero forgone emissions benefits, see Forgone Benefits Spreadsheet, tab PV_EAV_results (Scenarios 2&3).

⁵⁶ *Allentown Mack Sales & Service, Inc. v. NLRB*, 522 U.S. 359, 374 (1998).