Comments of the Attorneys General of New York, Arizona, California, Colorado, Connecticut, Delaware, Hawaii, Illinois, Maine, Maryland, Massachusetts, Michigan, Minnesota, New Jersey, New Mexico, North Carolina, Oregon, Rhode Island, Vermont, Washington, Wisconsin, and the District of Columbia, and the Chief Legal Officers of the City and County of Denver, and the Cities of Boulder, Chicago, and New York, and the California Air Resources Board

on

the U.S. Environmental Protection Agency's Proposed Repeal of Greenhouse Gas Emission Standards for Fossil Fuel-Fired Electric Generating Units,
90 Fed. Reg. 25,752 (June 17, 2025)
EPA-HQ-OAR-2025-0124

August 7, 2025

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INTRODUCTION

The Attorneys General of New York, Arizona, California, Colorado, Connecticut, Delaware, Hawaii, Illinois, Maine, Maryland, Massachusetts, Michigan, Minnesota, New Jersey, New Mexico, North Carolina, Oregon, Rhode Island, Vermont, Washington, Wisconsin, and the District of Columbia, and the chief legal officers of the City and County of Denver, and the Cities of Boulder, Chicago, and New York, and the California Air Resources Board (together, States and Cities) submit these comments on the Environmental Protection Agency's proposed Repeal of Greenhouse Gas Emission Standards for Fossil Fuel-Fired Electric Generating Units, 90 Fed. Reg. 25,752 (June 17, 2025) (Proposed Rule or Proposal).

In 2011, the Supreme Court held that section 111 of the Clean Air Act (CAA or Clean Air Act) "speaks directly" to regulation of greenhouse gas emissions from power plants. *Am. Elec. Power Co. v. Connecticut*, 564 U.S. 410, 424 (2011). Four years later, the Environmental Protection Agency (EPA) determined that greenhouse gas emissions from fossil fuel-fired power plants contribute significantly to air pollution that endangers public health and welfare. Standards of Performance for Greenhouse Gas Emissions from New, Modified, and Reconstructed Stationary Sources: Electric Utility Generating Units, 80 Fed. Reg. 64,510, 64,531 (Oct. 23, 2015). This was not a close call by any means. U.S. fossil fuel-fired power plants are one of the largest sources of greenhouse gas emissions in the world; indeed, if these power plants were a country, they would be the *sixth-highest emitter on the planet*. Since EPA's finding in 2015, climate change harms have grown more severe. Just last year, EPA found that climate change is resulting in lethal heatwaves, deadly wildfires, and catastrophic flooding, among other harms. New Source Performance Standards for Greenhouse Gas Emissions from New, Modified, and Reconstructed Fossil Fuel-Fired Electric Generating Units; Emission Guidelines for Greenhouse Gas Emissions from Existing Fossil Fuel-Fired Electric Generating Units; and Repeal of the Affordable Clean Energy Rule, 89 Fed. Reg. 39,798, 39,807–10 (May 9, 2024) (the Carbon Pollution Standards).

Yet, in the Proposed Rule, EPA would respond to this worsening crisis by eliminating *all* greenhouse gas limits on these plants under section 111 of the Clean Air Act, based on the nonsensical notion that greenhouse gas emissions from power plants do not "contribute significantly" to air pollution that endangers public health and welfare. The Proposed Rule has no basis in fact or law, would result in large-scale emission increases that will harm our States and Cities, and is an unlawful abdication of EPA's responsibility under the Clean Air Act to protect public health and welfare. It must be withdrawn.

Section I of these comments discusses recent scientific reports demonstrating that human activity—primarily the burning of fossil fuels—is exacerbating climate change, and it highlights climate-related harms suffered by the States and Cities in recent years, including in overburdened communities. This Section also explains how many of the States and Cities have sought to address climate change harms by reducing greenhouse gas pollution from power plants and

demonstrates how these actions have resulted in substantial carbon dioxide (CO_2) emission reductions while maintaining grid reliability and promoting affordable electricity.

Section II explains that EPA's primary proposal—to conclude that fossil fuel-fired power plants "do not contribute significantly to dangerous air pollution," 90 Fed. Reg. at 25,762—is unlawful. EPA proposes to depart from its decades-long interpretation that section 111 of the Clean Air Act is triggered by a source category-specific contribution finding and instead argues that section 111 requires a pollutant-specific contribution finding. But nothing in the statutory text or structure of the Clean Air Act supports EPA's novel interpretation. Rather, the best reading of section 111 is EPA's longstanding one: EPA first determines which source categories to list, and the Agency then has discretion—within defined statutory limits—to determine which pollutants from the source categories to regulate.

Section II also explains that EPA's attempt to imbue the phrase "contributes significantly" with the President's current policy goals, such as "continued and increasing reliance on fossil fuels," 90 Fed. Reg. at 25,766, is foreclosed by Supreme Court and D.C. Circuit precedent and would turn the statute on its head by requiring EPA to ignore significant sources of dangerous air pollution that impose massive harms on the American people. Rather, the "best reading" of the phrase "contributes significantly"—which is the same one EPA has maintained for decades until this rulemaking—focuses on the amount (i.e., the quantity or degree) of a source category's emissions of air pollution that may reasonably be anticipated to endanger public health and welfare.

Section III demonstrates that EPA's alternative proposal, consisting of a narrower repeal of the Carbon Pollution Standards, is also unlawful because it fails to consider alternatives to full recission of the existing standards and it ignores the substantial record demonstrating the viability of best systems of emission reduction (BSER) in the Carbon Pollution Standards. As this Section explains, EPA has a statutory obligation to regulate harmful air pollution from listed source categories—including fossil fuel-fired power plants—and EPA's proposed reversal of prior BSER determinations is not enough to justify returning to a legal landscape of non-regulation. Instead, EPA is statutorily obligated to adopt new source performance standards for combustion turbines and emission guidelines for existing steam generating units and combustion turbines based on another system of emission reduction—that is, EPA *must* consider options between the Carbon Pollution Standards and full repeal.

Section IV explains that the Proposed Rule is arbitrary and capricious in numerous respects. First, the Proposed Rule represents a dramatic reversal in EPA's longstanding statutory interpretations and findings, but EPA has not provided adequately detailed reasons for its new "pollutant-specific" contribution finding, its new interpretation of "contributes significantly," or its finding that power plant greenhouse gas emissions do not significantly contribute to the endangerment of public health or welfare. Second, the Proposed Rule omits any evidence-based

consideration of its impact on electric grid reliability or electricity affordability. Third, EPA arbitrarily and unlawfully predetermined the outcome of the Proposal. Administrator Zeldin's intemperate, unequivocal statements against *any* greenhouse gas regulations for power plants—coupled with EPA's reliance on several Executive Orders that predetermine factual and legal issues—indicate an unlawfully prejudged political conclusion. Further, the content of the proposal and the context provided by the contemporaneous administrative actions indicate that the proposal is a pretext to favor the Administration's promotion of fossil fuels.

Section V explains why the Proposed Rule is procedurally flawed. Specifically, EPA failed to provide the public with a meaningful opportunity for comment, providing a comment period of just 51 days and artificially constraining public input in the hearing process by holding a single virtual public hearing. The Proposal is also procedurally flawed because EPA failed to disclose or explain the use of power-sector modeling to project the effects of the Proposal on the power sector, or the use of artificial intelligence (AI) in the decisionmaking process.

Finally, Section VI demonstrates that EPA's cost-benefit analysis is arbitrary and capricious in many respects. First, EPA utterly failed to consider the cost of greenhouse gas emissions in its Regulatory Impact Analysis, and instead assigned the value of zero, conclusorily claiming that there are "significant uncertainties" concerning the monetization of greenhouse gases. But EPA ignores its own rigorous, peer-reviewed, and established methodologies for determining costs—methodologies that EPA specifically designed to address such uncertainties head on. Moreover, many of our States have incorporated the social cost of greenhouse gases into our own regulatory decisionmaking, demonstrating the reasonableness and validity of doing so. And strikingly, EPA's own Regulatory Impact Analysis shows that the benefits of pollution reduction—even omitting the significant benefits from the reduction of greenhouse gases—substantially outweigh the Proposal's compliance cost savings, but EPA neglects to confront this key aspect of the record. Second, EPA did not provide an updated baseline, nor did EPA consider the joint effects of multiple concurrent deregulatory actions, making it impossible for the Agency or commenters to understand the real-world impact of the Proposal. And third, EPA failed to include the value of tax credits in its estimates of the costs of controls, rendering its cost-benefit analysis arbitrary and capricious.

For these reasons, described in detail below, EPA must abandon its unlawful and misguided Proposal.

I. BACKGROUND

In comments filed in 2023 on EPA's proposed Carbon Pollution Standards, many of the undersigned States and Cities noted that the emission standards and guidelines for fossil fuel-fired power plants came at a critical time given the adverse impacts of climate change occurring

on a daily basis.[1] In its 2023 Sixth Assessment Synthesis Report, the Intergovernmental Panel on Climate Change (IPCC) stated that "it is unequivocal that human influence has warmed the atmosphere, ocean and land."[2] Since then, 2024 became the warmest year since the start of global temperature records in 1850, with global mean temperature exceeding 1.5°C above the pre-industrial level for the first time.[3] The 10 hottest years in the historical record have now occurred in the last decade (2015–2024).[4]

Recent scientific research affirms that human activity—primarily burning fossil fuels—is exacerbating climate change, harming public health and the environment across the United States. Extreme summer heat resulting from climate change is leading to increased rates of heat-related illness and death, particularly among vulnerable populations, including children, the elderly, low-income individuals, and workers.[5] Wildfires, which are fueled by hotter, drier conditions, are becoming one of the deadliest and most costly climate-related threats in the country. A 2025 study found that particulate pollution ($PM_{2.5}$) from wildfires caused approximately 15,000 premature deaths in the United States from 2006 to 2020, disproportionately impacting communities in the West and Midwest.[6] The study also found that

[1] Comments of Attorneys General of New York, Arizona, California, Connecticut, Hawaii, Illinois, Maine, Maryland, Massachusetts, Michigan, Minnesota, New Mexico, North Carolina, Oregon, Pennsylvania, Rhode Island, Vermont, Washington, Wisconsin, and the District of Columbia, and the Chief Legal Officers of the City and County of Denver, and the Cities of Boulder (CO), Chicago, Los Angeles, New York, and Philadelphia, Doc. ID No. EPA-HQ-OAR-2023-0072-0748 (Aug. 8, 2023) at 1 (States' 2023 Comments) (attached hereto as Exhibit A).

[2] Intergovernmental Panel on Climate Change (IPCC), Climate Change 2023: Synthesis Report. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change 1, 5 (2023), https://www.ipcc.ch/report/ar6/syr/downloads/report/IPCC_AR6_SYR_SPM.pdf [hereinafter 2023 IPCC Synthesis Report].

[3] Press Release, NOAA, 2024 Was the World's Warmest Year on Record (Jan. 10, 2025), https://www.noaa.gov/news/2024-was-worlds-warmest-year-on-record; Press Release, World Meteorological Org., WMO Confirms 2024 as Warmest Year on Record at About 1.55°C Above Pre-Industrial Level (Jan. 10, 2025), https://wmo.int/news/media-centre/wmo-confirms-2024-warmest-year-record-about-155degc-above-pre-industrial-level.

[4] Rebecca Lindsey & Luann Dahlman, *Climate Change: Global Temperature*, NOAA (May 29, 2025), https://www.climate.gov/news-features/understanding-climate/climate-change-global-temperature.

[5] Marina Romanello et al., *The 2024 Report of the Lancet Countdown on Health and Climate Change: Facing Record-Breaking Threats from Delayed Action*, 404 The Lancet 1847–96 (2024), https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(24)01822-1/abstract.

[6] Beverly E. Law et al., *Anthropogenic Climate Change Contributes to Wildfire Particulate Matter and Related Mortality in the United States*, 6 Comms. Earth & Env't, 1, 2 (2025), https://www.nature.com/articles/s43247-025-02314-0.

the cumulative economic burden of climate change-related wildfire $PM_{2.5}$ mortality was $160 billion.[7]

Other climate change-related disasters, such as hurricanes, floods, and prolonged droughts, are straining infrastructure, degrading air and water quality, and worsening environmental injustices.[8] In 2024 alone, there were 27 extreme weather events in the United States—including droughts, fires, tornado outbreaks, and floods—that each caused over $1 billion in damages.[9] The year 2025 has already been punctuated by catastrophic extreme rainfall events, with large parts of the country east of the Rockies receiving at least 50% more precipitation than normal from mid-April through mid-July.[10] As of late July 2025, the National Weather Service has issued more than 3,600 flash flood warnings, well on its way to surpassing its annual average of 4,000 warnings.[11]

Attribution science makes clear that climate change is affecting the intensity, frequency, and impact of these weather extremes. In November 2024, Carbon Brief analyzed 612 peer-reviewed studies of 735 extreme weather events and trends across the world and found that 83% of the specific events and trends were influenced by human-caused climate change and 74% were made more likely or severe.[12] Likewise, 70% of peer-reviewed studies of specific extreme weather events in the United States have found that climate change increased the likelihood or severity of the event in question.[13]

A. Climate Change Harms to States and Cities

The 2023 Fifth National Climate Assessment determined that the effects of climate change—including changes in temperature, precipitation, and sea level rise—are apparent in

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[7] *Id*.

[8] Allison R. Crimmins et al., U.S. Glob. Change Rsch. Program, Fifth National Climate Assessment, Ch. 1, at 1-16–1-17, 1-46–1-47 (2023), https://repository.library.noaa.gov/view/noaa/61592.

[9] *Billion-Dollar Weather and Climate Disasters: Overview*, NOAA: Nat'l Ctrs. For Env't Info., https://www.ncei.noaa.gov/access/billions/ (last visited July 31, 2025). From 1980 to 2024, the United States sustained 403 extreme weather events where overall damages reached or exceeded $1 billion (including CPI adjustment to 2024). In total, these 403 events caused over $2.915 trillion in damages. *Id*.

[10] *See* Jeffrey Basara, *Why 2025 Became the Summer of Flash Flooding in America*, The Conversation (July 24, 2025, 8:45 AM EDT), https://theconversation.com/why-2025-became-the-summer-of-flash-flooding-in-america-261650 (citing NOAA: Nat'l Water Prediction Serv., https://water.noaa.gov/).

[11] *Id*. (citing *NWS Data*, Iowa Env't Mesonet, Iowa State Univ., https://mesonet.agron.iastate.edu/vtec/search.php?mode=list).

[12] *See Mapped: How Climate Change Affects Extreme Weather Around the World*, CarbonBrief (Nov. 18, 2024), https://interactive.carbonbrief.org/attribution-studies/.

[13] *See United States of America*, CarbonBrief, https://interactive.carbonbrief.org/attribution-studies/USA/index.html (last visited July 31, 2025).

every region of the United States.[14] Attached to these comments as ***Appendix 1*** is a detailed discussion of the range and breadth of climate change impacts to our States and Cities. This subsection highlights just a few examples of these harms:

- In late September 2024, Hurricane Helene brought torrential rain to Western North Carolina, exceeding previous records for rainfall in the region and causing catastrophic and unprecedented damage.[15] North Carolina experienced over 30 inches of rainfall in some locations, and more than a thousand landslides.[16] As of June 17, 2025, there were 108 verified deaths in North Carolina due to Helene.[17] NOAA's National Centers for Environmental Information estimates that Helene has caused $78.7 billion in damage.[18] *See* App. 1 at 85–86.

- In August 2023, wind-driven wildfires on the island of Maui destroyed more than 2,200 structures and caused about $5.5 billion in damages. The most significantly impacted area was the historic district of Lahaina, where more than 100 people were killed. The Maui wildfires were the worst natural disaster in the history of Hawai'i. *See* App. 1 at 43–44.

- In January 2025, California experienced two of the most destructive fires in state history, the Palisades Fire and the Eaton Fire, both in Los Angeles County, with over 37,469 acres damaged, 30 deaths, multiple first responders injured, and over 16,251 structures destroyed.[19] More than 200,000 residents received evacuation notices and warnings[20] as Los Angeles County—with a population approaching 10 million people—was "encircled

[14] Crimmins et al., *supra* note 8, at 1-6–1-7, fig. 1.1.

[15] Andrew B. Hagen et al., NOAA Nat'l Hurricane Ctr., National Hurricane Center Tropical Cyclone Report: Hurricane Helene (AL092024) 24-27 September 2024 1, 14–17, 22–26 (Apr. 8, 2025), https://www.nhc.noaa.gov/data/tcr/AL092024_Helene.pdf.

[16] *Id*. at 14, 22–24.

[17] *Hurricane Helene Storm Related Fatalities*, N.C. Dep't of Health & Human Servs., https://www.ncdhhs.gov/assistance/hurricane-helene-recovery-resources/hurricane-helene-storm-related-fatalities (last visited July 31, 2025).

[18] Hagen et al., *supra* note 15, at 19.

[19] *Palisades Fire*, Cal. Dep't of Forestry & Fire Prot., https://www.fire.ca.gov/incidents/2025/1/7/palisades-fire (last updated May 20, 2025, 11:56 AM); *Eaton Fire*, Cal. Dep't of Forestry & Fire Prot., https://www.fire.ca.gov/incidents/2025/1/7/eaton-fire (last updated May 20, 2025, 11:57 AM).

[20] *See Landsat 9 Image of the Greater Los Angeles Fires—January 14, 2025 (During)*, U.S. Geological Surv. (Jan. 14, 2025), https://www.usgs.gov/media/images/landsat-9-image-greater-los-angeles-fires-january-14-2025-during.

by fire,"[21] a "monster inferno."[22] The fires were exacerbated by wet winters in the prior two years that increased vegetation growth, exceptionally dry conditions during the fall, and strong Santa Ana wind gusts approaching 100 miles per hour. [23] The fires have left behind a "toxic soup" of carcinogens in surrounding soil and air.[24] The capital losses and property damage alone are estimated to be "between $76 billion and $131 billion."[25] *See* App. 1 at 16–18.

- In June 2023, smoke from wildfires burning in Canada blanketed the Midwest, pushing Chicago's air quality index as high as 228, which indicates "very unhealthy" air.[26] In June 2025, Canadian wildfire smoke caused Chicago's air quality to be among the worst in the world.[27] *See* App. 1 at 116–17.

- Between June 26 and July 2, 2021, the Pacific Northwest experienced a "once-in-a-millennium" heat wave that caused at least 102 heat-related deaths in Oregon and 138

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[21] Carol Mimbs Nyce, *Waking Up to Fire in Los Angeles*, New Yorker: The Daily (Jan. 8, 2025), https://www.newyorker.com/newsletter/the-daily/waking-up-to-los-angeles-on-fire?_sp=6a9f4a18-30fc-468d-8728-a04c0cb6b758.1744655221942.

[22] Jude Sheerin & John Sudworth, *LA Firefighters Battle to Contain Monster Inferno as Death Toll Rises*, BBC News (Jan. 11, 2025), https://www.bbc.com/news/articles/c897l7wyzj5o.

[23] *See Drought Status Update for California-Nevada*, NOAA: Nat'l Integrated Drought Info. Sys. (Jan. 16, 2025), https://www.drought.gov/drought-status-updates/drought-status-update-california-nevada-2025-01-16; Rebecca Lindsey, *The Weather and Climate Influences on the January 2025 Fires Around Los Angeles*, NOAA Climate.gov (Feb. 19, 2025), https://www.climate.gov/news-features/event-tracker/weather-and-climate-influences-january-2025-fires-around-los-angeles; Haroula D. Baliaka et al., *Notes from the Field: Elevated Atmospheric Lead Levels During the Los Angeles Urban Fires—California, January 2025*, 74 CDC Morbidity & Mortality Wkly. Rep. 69, 69 (Feb. 20, 2025), https://www.cdc.gov/mmwr/volumes/74/wr/mm7405a4.htm?s_cid=mm7405a4_w.

[24] Brendan Borrell, *After Wildfires, L.A.'s Clear Skies Conceal a 'Toxic Soup'*, N.Y. Times (Mar. 12, 2025, updated Mar. 24, 2025), https://www.nytimes.com/2025/03/12/well/los-angeles-fires-health.html.

[25] Zhiyun Li & William Yu, *Economic Impact of the Los Angeles Wildfires*, UCLA Anderson Sch. of Mgmt. (Mar. 3, 2025), https://www.anderson.ucla.edu/about/centers/ucla-anderson-forecast/economic-impact-los-angeles-wildfires.

[26] Caitlin O'Kane, *Chicago Has the Worst Air Quality in the World due to Canadian Wildfire Smoke*, CBS News (June 27, 2023, 7:51 PM EDT), https://www.cbsnews.com/news/chicago-worst-air-quality-canadian-wildfire-smoke-june-27-2023/.

[27] Mohammad Samra et al., *Chicago's Air Quality Ranked Among Worst in the World due to Canadian Wildfire Smoke*, Chi. Sun Times (June 5, 2025, 2:21 PM EDT), https://chicago.suntimes.com/weather/2025/06/05/air-quality-alert-issued-throughout-chicago-area-due-to-canadian-wildfire-smoke.

heat-related deaths in Washington State.[28] In the summer of 2021, 67% of heat deaths in Washington State were in people over the age of 65.[29] In addition to the human death toll, the heat was so intense that hundreds of millions of shellfish baked to death in the Puget Sound.[30] This event likely impacted the health of all shellfish reproduced around this time, and it will take years to examine the full scale impact of this event on aquatic life, cultural connections, and fisheries.[31] *See* App. 1 at 90–91, 108–09.

- In 2024, Phoenix, Arizona experienced a record-breaking 70 days with temperatures at or above 110°F, and the city reached 100°F for 113 consecutive days, another record.[32] *See* App. 1 at 1.

- Since the 2010s, when Tropical Storm Lee, Hurricane Irene, and Hurricane Sandy, collectively killed over 50 people and caused billions of dollars in damage, New York has continued to experience an increase in the intensity, duration, and frequency of hurricanes and tropical storm events. Among the most severe storms were Tropical Storm Henri and Hurricane Ida, which occurred within two weeks of each other in 2021. Tropical Storm Henri broke several meteorological records in New York City, including the most rain measured within an hour, with 1.94 inches recorded in Central Park; the most rain in a day with 4.45 inches total; and the biggest two-day rainfall event since Hurricane Irene, with 7.04 inches total.[33] Eight days later, Hurricane Ida shattered many

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[28] *See* Or. Health Auth. Pub. Health Div., Climate and Health in Oregon: 2021–2022 Report 12 (2023), https://www.oregon.gov/oha/PH/HEALTHYENVIRONMENTS/CLIMATECHANGE/Documents/le-105251_23.pdf; Nicholas Turner, *Window Shades, Ventilation and Other Key Lessons from the 2021 Pacific Northwest Heat Wave*, Seattle Times (June 25, 2022, 6:00 AM), https://www.seattletimes.com/seattle-news/environment/window-shades-ventilation-and-other-key-lessons-from-the-2021-pacific-northwest-heat-wave/; *Heat Wave 2021*, Wash. State Dep't of Health, https://doh.wa.gov/emergencies/be-prepared-be-safe/severe-weather-and-natural-disasters/extreme-heat/hot-weather-precautions/heat-wave-2021 (last visited July 31, 2025) [hereinafter *Heat Wave 2021*].

[29] *See Heat Wave 2021*, *supra* note 28.

[30] *See* John Ryan, *Extreme Heat Cooks Shellfish Alive on Puget Sound Beaches*, KUOW: Puget Sound Pub. Radio (June 23, 2022, 3:47 PM), https://www.kuow.org/stories/extreme-heat-wave-cooked-many-shellfish-spared-others-study-finds.

[31] Wendel W. Raymond et al., *Assessment of the Impacts of an Unprecedented Heatwave on Intertidal Shellfish of the Salish Sea*, 103 Ecological Soc'y of Am. 3798, 1–7 (2022), https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9786359/.

[32] Hayleigh Evans, *Arizona Weather Wrapped: A Broken Record of Broken Records in Phoenix During 2024*, Ariz. Republic (Dec. 21, 2024, 6:02 AM MT), https://www.azcentral.com/story/news/local/arizona-weather/2024/12/21/phoenix-az-weather-breaks-records-2024/77089660007/.

[33] Andy Newman & Ellen Barry, *Tropical Storm Henri Brings Power Outages and Record Rain to Northeast*, N.Y. Times (Aug. 22, 2021, updated Oct. 28, 2021), https://www.nytimes.com/2021/08/22/nyregion/tropical-storm-henri.html?searchResultPosition=1.

of these records. Some parts of the City experienced 3.15 inches of rainfall in one hour, and the National Weather Service issued the first ever flash flood emergency for New York City.[34] In total, Hurricane Ida caused 17 deaths in New York and 7.5 billion dollars' worth of damage, including flood damage to 11,000 homes.[35] *See* App. 1 at 81, 118.

- On July 10–11, 2024, the remnants of tropical cyclone Beryl converged with a stationary front, leading to heavy localized rainfall and riverine and flash flooding across northeastern and northwestern Vermont.[36] Rainfall exceeded 7 inches, with heavy thunderstorms resulting in heavy winds and large hail up to 1.5 inches in diameter. On July 11, there were nearly 700 reports of damage related to flooding. Numerous roads and bridges were impacted, or in some cases washed out, and more than 100 evacuations were conducted by local first responders or teams from Vermont Swift Water Rescue. At least two deaths are believed to have been caused by the flooding.[37] Exactly one year prior, on July 10–11, 2023, a storm dumped as much as 9 inches of rain on Vermont, at a time when rivers were high and soils were saturated from prior storms.[38] That storm caused catastrophic flooding in downtown Montpelier, the state's capital, and numerous other cities and towns. *See* App. 1 at 100–01.

- Illinois experienced 12 weather and climate disasters in 2024 that caused over a billion dollars of damage each—the most in Illinois since NOAA's record keeping began in 1980.[39] Nine of these disasters were severe storm events, also the most since 1980. These storms included a July 15, 2024 "derecho" that produced 100 mile-per-hour winds and 48

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[34] Jesus Jiménez, *New York City Faces the First 'Flash Flood Emergency' in Its History*, N.Y. Times (Sept. 2, 2021, updated Nov. 12, 2021), https://www.nytimes.com/2021/09/02/nyregion/new-york-city-faces-the-first-flash-flood-emergency-in-its-history.html.

[35] Press Release, Kathy Hochul, N.Y. State Governor, Governor Hochul Announces Hurricane Ida Recovery Action Plan to Assist New Yorkers Impacted by Deadly Storm (Aug. 29, 2022), https://www.governor.ny.gov/news/governor-hochul-announces-hurricane-ida-recovery-action-plan-assist-new-yorkers-impacted.

[36] John Goff et al., *The Significant Flooding and Severe Weather Event of 10-11 July 2024*, NOAA Nat'l Weather Serv.: Burlington, Vt. Weather Forecast Off. (Aug. 10, 2024, 9:45 PM), https://www.weather.gov/btv/The-Significant-Flooding-and-Severe-Weather-Event-of-10-11-July-2024.

[37] Jenna Russell, *Flash Flooding Leads to Evacuations and Rescues in Central Vermont*, N.Y. Times (July 11, 2024), https://www.nytimes.com/2024/07/11/us/vermont-flood.html.

[38] Seven Days Staff, *'Historic and Catastrophic': Unrelenting Rain Swamped Vermont's Cities, Towns and Hamlets. The Recovery is Just Beginning*, Seven Days (July 13, 2023, 10:44 PM, updated July 19, 2023, 9:56 AM), https://www.sevendaysvt.com/vermont/historic-and-catastrophic-unrelenting-rain-swamped-vermonts-cities-towns-and-hamlets-the-recovery-is-just-beginning/Content?oid=38643810.

[39] *Billion-Dollar Weather and Climate Disasters: Illinois Summary,* NOAA: Nat'l Ctrs. for Env't Info., https://www.ncei.noaa.gov/access/billions/state-summary/IL (last visited July 31, 2025). Notably, the current Administration will cease recording billion-dollar weather incidents.

separate tornados.[40] In the Chicago area alone, the derecho produced 32 tornados, breaking the previous records set by the July 2014 "double derecho" and March 2023 storm.[41] *See* App. 1 at 47.

- Since 2000, the Southwest has experienced a "megadrought"—defined as "an episode of intense aridity that persists for multiple decades"—that is recognized as the driest two decades in 1,200 years.[42] This drought has "drastically shrunk the Colorado River, which provides water for drinking and irrigation" for over 40 million people in seven states, 30 tribes, and Mexico.[43] *See* App. 1 at 27, 75.

- In California, a September 2022 heatwave broke temperature records in thousands of places across the state,[44] including in Sacramento, which reached 116°F on September 6th.[45] Researchers described the 10-day heatwave as "mind-blowing" and "extraordinary in almost every dimension,"[46] and the heatwave was connected with at least 395 deaths.[47] *See* App. 1 at 8.

As discussed below, Section II.C.3, *infra*, the Proposed Rule would result in hundreds of millions of metric tons more of CO_2 annually, exacerbating these harms to our States and Cities.

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[40] *July 15, 2024: Derecho Produces Widespread Wind Damage and Numerous Tornadoes,* NOAA Nat'l Weather Serv.: Chi., Ill. Weather Forecast Off., https://www.weather.gov/lot/2024_07_15_Derecho (last visited July 31, 2025); *see also* David Struett, *Tornado Record Broken with 27 Chicago Area Twisters July 15—Spawned by 'Ring of Fire'*, WBEZ: Chi. Pub. Media (July 24, 2024, 8:34 AM EDT), https://www.wbez.org/weather/2024/07/24/chicago-weather-tornado-record-derecho-july-15.

[41] *Id.*

[42] A. Park Williams et al., *Rapid Intensification of the Emerging Southwestern North American Megadrought in 2020–2021*, 12 (3) Nature Climate Change 232–34 (Feb. 2022) https://doi.org/10.1038/s41558-022-01290-z.

[43] Jennifer Weeks, *The Colorado River Drought Crisis: 5 Essential Reads,* The Conversation (Apr. 13, 2023, 8:26 AM EDT), https://theconversation.com/the-colorado-river-drought-crisis-5-essential-reads-203651; *"Mega-drought" Takes Dramatic Toll on Colorado River System that Provides Water to 40 Million People*, CBS News (June 9, 2021, 7:05 AM EDT), https://www.cbsnews.com/news/mega-drought-colorado-river-system-water-system/; *National Conditions: Colorado*, NOAA Nat'l Integrated Drought Info. Sys., https://www.drought.gov/states/colorado (last visited July 31, 2025).

[44] Meredith Milet et al, Cal. Dep't of Pub. Health Off. of Health Equity, Excess Mortality During the September 2022 Heat Wave in California 4 (Aug. 2023), https://www.cdph.ca.gov/Programs/OHE/CDPH%20Document%20Library/Climate-Health-Equity/CDPH-2022-Heat-Wave-Excess-Mortality-Report.pdf.

[45] Jill Cowan, *Historic Heat Pushes California to the Brink*, N.Y. Times (Sept. 7, 2022), https://www.nytimes.com/2022/09/07/us/historic-heat-california-power.html.

[46] *Id.*

[47] Milet et al., *supra* note 44, at 3.

Appendix 1 demonstrates that no region of the United States will be immune to these harms. But such harms will be especially pronounced in communities with environmental justice concerns that already bear a disproportionate burden of environmental harms and adverse health outcomes from both climate change exacerbated by power plant greenhouse gas emissions and other harmful pollution emitted by power plants.[48] Evidence-based studies and residents' lived experiences demonstrate that certain communities most commonly and acutely experience the impacts of both environmental injustice and the harms associated with climate change: communities of color;[49] Indigenous people and Tribal nations;[50] low-income,[51] rural, [52] and unincorporated communities;[53] communities in which a high proportion of residents speak a

[48] Yuqiang Zhang et al., *Co-benefits of Global, Domestic, and Sectoral Greenhouse Gas Mitigation for US Air Quality and Human Health in 2050*, 12 Env't Rsch. Letters 114033, 1, 2 (2017), https://iopscience.iop.org/article/10.1088/1748-9326/aa8f76 ("Many studies have also investigated the co-benefits of greenhouse gas (GHG) mitigation for air quality and avoided premature mortality, as actions to reduce GHG emissions also tend to reduce co-emitted air pollutants." (citations omitted)); *see also* Andy Haines et al., *Public Health Benefits of Strategies to Reduce Greenhouse-Gas Emissions: Overview and Implications for Policy Makers*, 374 The Lancet 2104–14 (Dec. 19, 2009), https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(09)61759-1/abstract; N.Y.C. Mayor's Off. of Climate & Env't Just., EJNYC: A Study of Environmental Justice Issues in New York City 81–83 (2024), https://climate.cityofnewyork.us/wp-content/uploads/2025/04/EJNYC_Report.pdf.

[49] Christopher W. Tessum et al., *$PM_{2.5}$ Polluters Disproportionately and Systemically Affect People of Color in the United States*, 7 Sci. Advances 18 (Apr. 28, 2021), https://www.science.org/doi/10.1126/sciadv.abf4491; *see also* United Church of Christ Comm'n for Racial Just., Toxic Wastes and Race in the United States: A National Report on the Racial and Socio-Economic Characteristics of Communities with Hazardous Waste Sites (1987), https://ia801402.us.archive.org/21/items/toxicwastesrace/toxicwastesrace_text.pdf; United Church of Christ Just. & Witness Ministries, Toxic Wastes and Race at Twenty, 1987–2007 (2007), https://www.ucc.org/wp-content/uploads/2021/03/toxic-wastes-and-race-at-twenty-1987-2007.pdf.

[50] U.N. Special Rapporteur, End of Mission Statement by the United Nations Special Rapporteur on the Rights of Indigenous Peoples, Victoria Tauli-Corpuz of Her Visit to the United States of America (Mar. 3, 2017), https://www.ohchr.org/en/NewsEvents/Pages/DisplayNews.aspx?NewsID=21274&LangID=E.

[51] Ihab Mikati et al., *Disparities in Distribution of Particulate Matter Emission Sources by Race and Poverty Status*, Am. J. Pub. Health (Mar. 7, 2018), https://ajph.aphapublications.org/doi/10.2105/AJPH.2017.304297; Qian Di et al., *Air Pollution and Mortality in the Medicare Population*, 36 New Eng. J. Med. 26 (June 29, 2017), https://www.nejm.org/doi/full/10.1056/NEJMoa1702747.

[52] Monica Sanders, *Understanding Environmental Justice in Rural Communities*, Forbes (Aug. 26, 2024, 9:30 AM EDT) https://www.forbes.com/sites/monicasanders/2024/04/26/understanding-environmental-justice-in-rural-communities/.

[53] Cristina Gomez-Vidal & Anu Manchikanti Gomez, *Invisible and Unequal: Unincorporated Community Status as a Structural Determinant of Health*, 285 Soc. Sci. & Med. 114292 (2021), https://www.sciencedirect.com/science/article/pii/S0277953621006249.

language other than English;[54] people with disabilities;[55] and LGBTQ+ people.[56] These impacts impede these communities' ability to recover from the historic and ongoing disproportionate

[54] Kelvin C. Fong, *The Intersection of Immigrant and Environmental Health: A Scoping Review of Observational Population Exposure and Epidemiologic Studies*, 130 (9) Env't Health Perspectives 096001 (Sept. 2, 2022), https://doi.org/10.1289/EHP9855; Yoshira Ornelas Van Horne, et al., *Toward Language Justice in Environmental Health Sciences in the United States: A Case for Spanish as a Language of Science*, Env't Health Perspectives (Aug. 23, 2023), https://doi.org/10.1289/EHP12306.

[55] Jayajit Chakraborty, *Disparities in Exposure to Fine Particulate Air Pollution for People with Disabilities in the US*, 842 Sci. of the Total Env't 1 (2022), https://doi.org/10.1016/j.scitotenv.2022.156791; Nat'l Acads. Of Scis., Eng'g & Med., *Constructing Valid Geospatial Tools for Environmental Justice* 38–39 (2024), https://nap.nationalacademies.org/catalog/27317/constructing-valid-geospatial-tools-for-environmental-justice; Cadeyrn J. Gaskin et al*., Factors Associated with the Climate Change Vulnerability and the Adaptive Capacity of People with Disability: A Systematic Review*, 9 Weather, Climate & Soc'y 801 (Oct. 1, 2017), https://doi.org/10.1175/wcas-d-16-0126.1.

[56] Timothy W. Collins et al., *Environmental Injustice and Sexual Minority Health Disparities: A National Study of Inequitable Health Risks from Air Pollution Among Same-Sex Partners*, 191 Soc. Sci. & Med. 38 (Oct. 2017), https://pmc.ncbi.nlm.nih.gov/articles/PMC5623125/ (Finding that some health disparities experienced by LGBT populations (e.g., cancer, asthma) may be compounded by environmental exposures).

siting of pollution sources,[57] underinvestment,[58] and lack of access to essential goods and services,[59] including food access,[60] clean water,[61] and healthcare.[62]

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[57] Landfills and incinerators, industrial facilities, concentrated agricultural operations, and other pollution sources have been and continue to be concentrated in communities of color, low-income communities, and Indigenous communities. *See* Ana Isabel Baptista et al., Tishman Env't & Design Ctr. at The New Sch., U.S. Municipal Solid Waste Incinerators: An Industry in Decline 13–16 (May 2019), https://static1.squarespace.com/static/5d14dab43967cc000179f3d2/t/5d5c4bea0d59ad00012d220e/1566329840732/CR_GaiaReportFinal_05.21.pdf; Robert D. Bullard et al., *Toxic Wastes and Race at Twenty: Why Race Still Matters After All of These Years*, 38 Env't L. 371 (2008), https://www.jstor.org/stable/43267204; Jill Johnson & Lara Cushing, *Chemical Exposures, Health, and Environmental Justice in Communities Living on the Fenceline of Industry*, 7 Current Env't Health Rep. 48 (2020), https://pmc.ncbi.nlm.nih.gov/articles/PMC7035204/; *see also* Ctr. for Sustainable Syst., Univ. of Mich., Pub. No. CSS17-16, U.S. Environmental Justice Factsheet 1 (Oct. 2024), https://css.umich.edu/sites/default/files/2024-10/Environmental%20Justice_CSS17-16.pdf.

[58] Neighborhoods formerly subject to explicitly racist federal housing policy known as "redlining," which made it difficult or impossible for Black and immigrant families to obtain mortgages and become homeowners, have less green space, higher impervious ground cover, and are subject to greater urban heat island effects. *See* David J. Novak et al., *The Disparity in Tree Cover and Ecosystem Service Values Among Redlining Classes in the United States*, 221 (104370) Landscape & Urb. Planning 1 (2022), https://doi.org/10.1016/j.landurbplan.2022.104370; *see also* Ctr. for Sustainable Systems, U.S. Environmental Justice Factsheet, *supra* note 57, at 1.

[59] Am. Council for an Energy-Efficient Econ. (ACEEE), Toward Affordable Energy Access: Approaches to Reducing Energy Unaffordability, Arrearages, and Shutoffs 1, 2 (Oct. 2023), https://www.aceee.org/sites/default/files/pdfs/toward_affordable_energy_access_-_approaches_to_reducing_energy_unaffordability_arrearages_and_shutoffs_-_encrypt.pdf ("Researchers estimate that over four million utility shutoffs occurred between January and October 2022 alone, and more than one in four households in the United States struggled to meet their energy needs in 2020. These problems disproportionately affect groups that have experienced disinvestment and marginalization, such as households with low incomes, households of color, households with older adults, and indigenous households." (emphasis omitted)); Robert D. Bullard, *Addressing Urban Transportation Equity in the United States*, 31 Fordham Urb. L. J. 1183, 1183–84 (2003), https://ir.lawnet.fordham.edu/ulj/vol31/iss5/2.

[60] *See* Mari Gallagher Rsch. & Consulting Grp., Good Food: Examining the Impact of Food Deserts on Public Health in Chicago: Executive Summary 2, 4 (2006), https://marigallagher.com/wp-content/uploads/2024/11/2006-Chicago-Food-Desert-Ex-Sum-copy.pdf; Philip J. Landrigan et al., *Environmental Justice and the Health of Children*, 77 Mt. Sinai J. of Med. 178, 179 (2010), https://doi.org/10.1002/msj.20173.

[61] DigDeep Right to Water Project, & U.S. Water All., Closing the Water Access Gap in the United States: A National Action Plan 20–25 (2019), https://uswateralliance.org/wp-content/uploads/2023/09/Closing-the-Water-Access-Gap-in-the-United-States_DIGITAL.pdf.

[62] Michael Gochfeld & Joanna Burger, *Disproportionate Exposures in Environmental Justice and Other Populations: The Importance of Outliers*, 101 Am. J. Pub. Health S53 (2011), https://pmc.ncbi.nlm.nih.gov/articles/PMC3222496/pdf/S53.pdf ("Disparities in access to health information and health care are important aspects of the disproportionate burden faced by environmental justice communities. Poor access to health information and health care means less health promotion, less

Communities suffering from these environmental injustices are particularly vulnerable to a variety of climate change impacts. As described above, climate change will continue to increase the frequency and severity of extreme temperature events,[63] but EPA has projected that heat-related mortality will increase even more in communities with environmental justice concerns.[64] Low-income households and households of color are less likely to have good insulation and efficient indoor climate control,[65] and so are more likely to face energy affordability challenges,[66] forego necessities such as food and healthcare to afford their energy bills,[67] and keep their homes at unsafe temperatures,[68] which has associated adverse health outcomes.[69] People with disabilities and seniors are also more likely experience energy

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risk avoidance, a less healthy diet, and more adverse conditions that increase susceptibility to exposure."); Landrigan et al., *supra* note 60.

[63] 2023 IPCC Synthesis Report, *supra* note 2, at 12, 14; Intergovernmental Panel on Climate Change (IPCC), Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change at 9, 13 (2022), https://www.ipcc.ch/report/ar6/wg2/downloads/report/IPCC_AR6_WGII_SummaryForPolicymakers.pdf.

[64] EPA, Climate Change and Social Vulnerability in the United States 35 (Sept. 2021), https://www.epa.gov/system/files/documents/2021-09/climate-vulnerability_september-2021_508.pdf ("In the cities analyzed, minorities and those with low income are more likely than non-minorities and those with higher income to currently live in areas with the highest projected increases in temperature mortality from climate-driven changes in extreme temperatures.").

[65] *See* Luling Huang et al., *Inequalities Across Cooling and Heating in Households: Energy Equity Gaps*, 182 Energy Pol'y 1, 10 (Nov. 2023), https://www.sciencedirect.com/science/article/pii/S0301421523003336.

[66] *See* Claire McKenna et al., *Heating with Justice: Barriers and Solutions to a Just Energy Transition in Cold Climates* 9 (Feb. 7, 2024) (unpublished manuscript) (on file with Elsevier Inc., SSRN), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4719571; Marilyn Ann Brown et al., Oak Ridge Nat'l Lab'y, U.S. Dep't of Energy, *Low-Income Energy Affordability: Conclusions from a Literature Review* (March 2020), https://doi.org/10.2172/1607178; Sanya Carley et al., Ind. Univ. Energy Just. Lab, Household Energy Insecurity Survey, Winter 2021–2022 (2022), https://energyjustice.indiana.edu/doc/ejl-energy-insecurity-report-winter-2022.pdf

[67] Shuchen Cong et al., *Unveiling Hidden Energy Poverty Using the Energy Equity Gap*, 13 Nature Commc'ns 22 (May 4, 2022), https://doi.org/10.1038/s41467-022-30146-5; N.Y.C. Mayor's Off. of Sustainability & N.Y.C. Mayor's Off. for Econ. Opportunity, Understanding and Alleviating Energy Cost Burden in New York City (Aug. 2019), https://www.nyc.gov/assets/sustainability/downloads/pdf/publications/EnergyCost.pdf.

[68] Cong et al., *supra* note 67, at 2 ("As the effects of climate change manifest themselves in heatwaves and deep freezes, communities will need to adapt (i.e., reduce their risk of illness and death) by creating comfortable indoor temperatures within their homes. However . . . many vulnerable households who limit their energy consumption, potentially putting themselves at risk of heatstroke or hypothermia, may not qualify for energy poverty alleviation under current programs." (citations omitted)).

[69] Limiting cooling usage puts people at risk of heat stroke and heat illness and limiting heat in cold temperatures may cause increased incidence of illness. *See*, *e.g.*, Sally Ann Iverson et al., *Heat-Associated Mortality in a Hot Climate: Maricopa County, Arizona, 2006-2016*, 135 Pub. Health Reps. 631–39

insecurity, as they may lack the resources to address greater risks from extreme temperatures and a lack of electricity.[70] The increasing frequency and intensity of extreme temperatures are also projected to cause labor disruptions in sectors where people work outdoors or in indoor environments without air conditioning, leading to lost wages for already low-income populations and forcing workers to choose between losing essential pay and working in unsafe conditions.[71] Those same workers (and their families) are less likely to have access to quality healthcare, rendering them even more vulnerable to health risks from heat exposure.[72]

As discussed in ***Appendix 1***, climate change also will continue to cause an increase in the frequency and severity of extreme weather events and natural disasters in every region of the United States.[73] But communities with environmental justice concerns—such as communities of color and low-income communities—are disproportionately vulnerable to such events,[74] and

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(2020), https://journals.sagepub.com/doi/full/10.1177/0033354920938006; Alan Barreca et al., *Adapting to Climate Change: The Remarkable Decline in the US Temperature-Mortality Relationship over the Twentieth Century*, 124 J. Pol. Econ. 1 (Feb. 2016), https://www.journals.uchicago.edu/doi/full/10.1086/684582; APPRISE, Inc. & Nat'l Energy Assistance Dirs.' Ass'n, 2005 National Energy Assistance Survey: Final Report (Sept. 2005), https://neada.org/wp-content/uploads/2013/03/survey2005.pdf.

[70] Carli Friedman, *Unsafe Temperatures, Going Without Necessities, and Unpayable Bills: Energy Insecurity of People with Disabilities in the United States During the COVID-19 Pandemic*, 92 (102806) Energy Rsch. & Soc. Sci 1 (2022), https://www.sciencedirect.com/science/article/pii/S2214629622003097; Marquisha Johns et al., *Protecting Older Adults From the Growing Threats of Extreme Heat*, Ctr. for Am. Progress (Aug. 22, 2024), https://www.americanprogress.org/article/protecting-older-adults-from-the-growing-threats-of-extreme-heat/.

[71] EPA, Climate Change and Social Vulnerability in the United States, *supra* note 64, at 38.

[72] *Id.*

[73] 2023 IPCC Synthesis Report, *supra* note 2, at 5, 13–17 ("Between 2010 and 2020, human mortality from floods, droughts and storms was 15 times higher in highly vulnerable regions, compared to regions with very low vulnerability.").

[74] Janet L. Gamble et al., U.S. Glob. Change Rsch. Program, The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment, Ch. 9: Populations of Concern 253 (2016) https://www.academia.edu/31063777/Chapter_9_Populations_of_Concern_THE_IMPACTS_OF_CLIMATE_CHANGE_ON_HUMAN_HEALTH_IN_THE_UNITED_STATES_A_Scientific_Assessment ("Given the relatively higher rates of cardiovascular and respiratory diseases in low-income urban populations, these populations are more sensitive to degraded air quality, resulting in increases in illness, hospitalization, and premature death. In addition, climate change can contribute to increases in aeroallergens, which exacerbate asthma, an illness that is relatively more common among some communities of color and low-income groups." (citations omitted)); Emanuele Massetti et al., Oak Ridge Nat'l Lab'y, U.S. Dep't of Energy, Environmental Quality and the U.S. Power Sector: Air Quality, Water Quality, Land Use and Environmental Justice 83 (Jan. 4, 2017), https://info.ornl.gov/sites/publications/files/Pub60561.pdf ("[U]nderlying health disparities can contribute to biological sensitivity and are more prevalent in low-income populations and some communities of color. For example, African American populations have higher rates of chronic conditions such as

they are less equipped to recover.[75] Climate change also will lead to an increased threat from infectious diseases,[76] and threaten food and water safety and security for Indigenous populations, many of which rely "on the environment for sustenance or [] live in geographically isolated or impoverished communities" and so will "experience greater exposure and lower resilience to climate related health effects."[77] The impacts of climate change are particularly stark for people with disabilities, who face disproportionate health risks,[78] are often not fully considered in disaster planning, and are far more likely to be displaced by extreme weather events.[79] The climate change-fueled increase in extreme precipitation events will lead to increased exposure to water-born pollutants and illnesses,[80] to which communities with environmental justice concerns are also particularly vulnerable.[81]

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asthma, decreased lung function, and cardiovascular issues, which are known to increase sensitivity to health effects of air pollution from power plants.").

[75] Massetti et al., *supra* note 74, at 83 ("People with limited economic resources living in areas with deteriorating infrastructure are more likely to experience disproportionate impacts and are less able to recover following extreme events, increasing their vulnerability to climate-related health effects."); *see also* David R. Reidmiller et al., U.S. Glob. Change Rsch. Program, Fourth National Climate Assessment, Volume II at 1314 (2016), https://repository.library.noaa.gov/view/noaa/19487; Patrick Boyle, *Rural Americans Find Little Escape from Climate Change*, Ass'n of Am. Med. Colls. (July 13, 2023), https://www.aamc.org/news/rural-americans-find-little-escape-climate-change; Gamble et al., *supra* note 77 at 249–250 ("For example, people with limited economic resources living in areas with deteriorating infrastructure are more likely to experience disproportionate impacts and are less able to recover following extreme events, increasing their vulnerability to climate-related health effects[.]").

[76] 2023 IPCC Synthesis Report, *supra* note 2, at 6–7, 15; Gamble et al., *supra* note 74, at 253 (describing the impacts of climate change on vector-borne diseases and water-related illness).

[77] Gamble et al., *supra* note 74, at 253.

[78] Nakyung Rhim et al., *Adverse Health Effects of Climate Change and Air Pollution in People with Disabilities: A Systematic Review*, 46 Epidemiology & Health (2024), https://pubmed.ncbi.nlm.nih.gov/39363605/.

[79] Ash Reynolds, *Disability Amid Disaster: People with Disabilities Are Disproportionately Impacted by Natural Disasters*, NBC News (Feb. 23, 2025, 7:00 AM EST, updated Feb. 23, 2025, 3:10 PM EST) https://www.nbcnews.com/data-graphics/people-disabilities-are-disproportionately-impacted-natural-disasters-rcna192577.

[80] Juli Trtanj et al., U.S. Glob. Change Rsch. Program, The Impacts of Climate Change on Human Health in the United States: A Scientific Assessment: Chapter 6: Climate Impacts on Water-Related Illnesses 158 (2016), https://www.researchgate.net/publication/299865503_Ch_6_Climate_Impacts_on_Water-Related_Illness.

[81] *Id.* at 170 ("Climate change impacts on the drinking water exposure pathway . . . will act as an additional stressor on top of existing exposure disparities in the United States. Lack of consistent access to potable drinking water ..disproportionately affects the following populations: tribes and Alaska Natives . . . , residents of low-income rural subdivisions known as colonias along the U.S.-Mexico border; migrant farm workers; the homeless; and low-income communities not served by public water utilities . . . some of which are predominantly Hispanic or Latino and Black or African American communities in certain regions of the country." (citations omitted)).

In addition, power plants emit particulate matter (PM), carbon monoxide, mercury, sulfur dioxide (SO_2), and nitrous oxides (NO_X),[82] which contribute to the formation of ground-level ozone, acid rain, and fine particulate matter.[83] These pollutants are associated with adverse health consequences for nearby communities, such as respiratory and cardiovascular diseases.[84] And the communities in close proximity to power plants are disproportionately communities with environmental justice concerns, including communities of color[85] and Indigenous communities.[86] These harmful effects are reduced when actions are taken to cut greenhouse gas emissions.[87] The failure to mitigate greenhouse gas emissions and the associated co-pollutants

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[82] *Power Plants and Neighboring Communities*, EPA, https://www.epa.gov/power-sector/power-plants-and-neighboring-communities (last updated Mar. 19, 2025); Juan Declet-Barreto & Andrew A. Rosenberg, *Environmental Justice and Power Plant Emissions in the Regional Greenhouse Gas Initiative States* 17 (7) PLoS ONE e0271026, 2 (July 20, 2022), https://doi.org/10.1371/journal.pone.0271026 ("Electricity generation constitutes 64 percent of SO_2 emissions, 14 percent of NO ("Electricity generation constitutes 64 percent of SO_2 emissions, 14 percent of NO_X emissions, 3.4 percent of $PM_{2.5}$ emissions, and 1.4 percent of PM_{10} emissions in the U.S.").emissions, 3.4 percent of $PM_{2.5}$ emissions, and 1.4 percent of PM_{10} emissions in the U.S.").

[83] *Electric Power Sector Basics*, EPA, https://www.epa.gov/power-sector/electric-power-sector-basics#publichealthenvironmentalimpacts (last updated Mar. 24, 2025).

[84] *Id*.; *see also* Gamble et al., *supra* note 74, at 253; Massetti et al., *supra* note 74, at 84 ("Power plants are the largest U.S. source of several harmful pollutants. . . . At sufficient levels of exposure, these pollutants can cause a range of health effects including cancer; irritation of the lungs, skin, and mucous membranes; effects on the central nervous system such as memory and IQ loss and learning disabilities; damage to the kidneys; and other acute health disorders. Additionally, power plants are significant sources of criteria air pollutants, which cause premature mortality for adults, chronic and acute bronchitis, childhood asthma attacks, and exacerbate other respiratory and cardiovascular diseases." (citations omitted)).

[85] Massetti et al., *supra* note 74, at 84 ("The minority share of the population living within a three-mile buffer is higher than the national average by 12 percentage points, or 37%. In these same areas, the percent of the population below the poverty line is also higher than the national average by 4 percentage points, or 17%.") (citations omitted); Declet-Barreto & Rosenberg, *supra* note 82, at 1 ("We find that in RGGI states the percentage of people of color that live within 0-6.2 miles from power plants is up to 23.5% higher than the percentage of the white population that lives within those same distance bands, and the percentage of people living in poverty that live within 0–5 miles from power plants is up to 15.3 percent higher than the percent of the population not living in poverty within those same distance bands.").

[86] *See*, *e.g.*, Ary Sanchez-Amaya et al., UCLA Inst. of the Env't & Sustainability & WildEarth Guardians, *Impacts of Oil and Gas Drilling on Indigenous Communities in New Mexico's Greater Chaco Landscape* (2020) https://www.ioes.ucla.edu/wp-content/uploads/2020/09/ucla-ioes-practicum-impacts-of-oil-and-gas-on-indigenous-communities-in-new-mexico-final-report-9-2020.pdf; *see also* Elizabeth Hoover et al., *Indigenous Peoples of North America: Environmental Exposures and Reproductive Justice*, 120 (12) Env't Health Perspectives 1645, 1647 (Dec. 2012), https://ehp.niehs.nih.gov/doi/epdf/10.1289/ehp.1205422.

[87] Zhang et al., *supra* note 48, at 2; Haines et al., *supra* note 48, at 2104–05; Sarah Whitmee et al., *Pathways to a Healthy Net-Zero Future*, 403 The Lancet Comm'ns 67, 67 (Jan. 6, 2024), https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(23)02466-2/abstract.

therefore perpetuates the disproportionate impact that these pollutants have on communities with environmental justice concerns.

Moreover, the adverse health consequences associated with these emissions will increase in severity as the warming climate exacerbates many of the factors that render communities with environmental justice concerns more vulnerable. For example, increasing heat will further degrade air quality in historically redlined neighborhoods, leading to an increase in heat-related deaths, higher asthma levels, and more lost wages.[88] These health challenges are compounded by lower access to healthcare, good nutrition, affordable energy, and clean drinking water, each of which are also predicted to become harder for communities with environmental justice concerns to access as a result of climate change.[89] The rescission of the Carbon Pollution Standards would therefore result in substantial harms to communities with environmental justice concerns, as a combined result of the deleterious effects of more severe climate change and the air quality impacts of higher power plant emissions.

As further discussed below, Section I.B.2., climate change is likely adversely impacting electric grid reliability and energy affordability in our States and Cities. As temperatures rise, so too do the threats to energy infrastructure and reliability in affected regions. For example, in August 2024, two of Arizona's electricity suppliers set new energy demand records due to the demand for air conditioning, when temperatures reached 116 degrees.[90] *See* App. 1 at 3 n.13. Additionally, droughts in the Pacific Northwest have caused significant decreases in hydropower capacity, with Washington and Oregon generating historically low amounts of hydropower in 2022 and 2023.[91] Damages sustained from increasingly common extreme weather events, like those described above, have caused widespread blackouts and billions of dollars of damage to power infrastructure. For example, in North Carolina, Hurricane Helene knocked out power to 1.18 million people, in some places for more than two weeks, and caused over $1 billion in

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[88] EPA, Climate Change and Social Vulnerability in the United States, *supra* note 64, at 21.

[89] Gochfeld & Burger, *supra* note 62, at S53 ("Disparities in access to health information and health care are important aspects of the disproportionate burden faced by environmental justice communities. Poor access to health information and health care means less health promotion, less risk avoidance, a less healthy diet, and more adverse conditions that increase susceptibility to exposure. Delayed recognition of exposure, diagnosis, and treatment allows affects to accumulate. . . . Limited access to medical care . . . adds to their already disproportionate risk of exposure to chemicals."); Gamble et al., *supra* note 74, at 249–50, 253–54; Massetti et al., *supra* note 74, at 83; Reidmiller et al., *supra* note 75, at 1314; Landrigan et al., *supra* note 60, at 2; Mari Gallagher Rsch. & Consulting Grp., *supra* note 60, at 2, 4.

[90] Nick Karmia, *Like SRP, APS Also Broke Peak Electricity Demand Record on 116-Degree Day*, KJZZ: Phoenix (Aug. 8, 2024, 3:22 PM MST), https://www.kjzz.org/kjzz-news/2024-08-08/like-srp-aps-also-broke-peak-electricity-demand-record-on-nearly-116-degree-day.

[91] *Western U.S. Hydropower Generation Fell to a 22-Year Low Last Year*, U.S. Energy Info. Admin. (Mar. 26, 2024), https://www.eia.gov/todayinenergy/detail.php?id=61645.

damage to the power grid.[92] *See* App. 1 at 85–86. During the Lahaina Fire in Hawai'i, many utility poles caught on fire, with 29 ultimately falling to the ground, while winds caused by the fire compromised numerous transmission lines.[93] And, in 2012, Superstorm Sandy also left millions of customers without power for weeks in New Jersey, New York, and Connecticut.[94] *See* App. 1 at 32, 73–74, 118. Even minor storms can cause outages and damages, however, and almost every state reports that they have been forced to spend billions on infrastructure repair in recent years after hurricanes, wildfires, floods, nor'easters, and other extreme weather events made more frequent and severe by climate change.

B. Power Plant Greenhouse Gas Emissions

1. State and municipal advocacy for federal standards to limit power plant greenhouse gas emissions

To protect their residents, infrastructure, and natural resources, the States and Cities have for decades advocated for federal standards limiting emissions of greenhouse gases from the largest sources of those emissions. In 2003, several of the States and Cities, as well as other parties, sued EPA to compel regulation of greenhouse gas emissions from new motor vehicles under section 202 of the Clean Air Act. The Supreme Court held that the Act's broad definition of "air pollutant" unambiguously covers greenhouse gases, and that EPA was accordingly obliged "to regulate emissions of the deleterious pollutant" if it found that greenhouse gas emissions endanger public health or welfare. *Massachusetts v. EPA*, 549 U.S. 497, 528–29, 533 (2007). EPA subsequently found that greenhouse gases, including carbon dioxide, endanger public health and welfare by causing more intense, frequent, and long-lasting heat waves; worse smog in cities; longer and more severe droughts; more intense storms, hurricanes, and floods; the spread of disease; and a dramatic rise in sea levels. 74 Fed. Reg. at 66,496, 66,497, 66,524–25, 66,532–33 (the 2009 Endangerment Finding). The D.C. Circuit upheld the 2009 Endangerment Finding, and the Supreme Court declined review. *Coal. for Responsible Regul., Inc. v. EPA*, 684 F.3d 102, 120–21 (D.C. Cir. 2012) (per curiam), *cert. granted in part on other grounds*, 134 S.

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[92] Hagen et al., *supra* note 15, at 19, 23; N.C. Off. of State Budget & Mgmt., Hurricane Helene Recovery: Revised Damage and Needs Assessment at 47 (Dec. 13, 2024), https://www.osbm.nc.gov/hurricane-helene-dna/open.

[93] Steve Kerber & Derek Alkonis, UL Rsch. Insts., Lahaina Fire Incident Analysis Report 96–97 (Sept. 13, 2024), https://doi.org/10.60752/102376.26858962.

[94] *Remembering Superstorm Sandy*, N.J. Dep't of Env't Prot., https://dep.nj.gov/sandy-10/ (last visited Aug. 2, 2025); John Burgeson & Genevieve Reilly, *Rising Above the Tide: 5 Years Since Sandy (Print Title: A Radical Rebuild; As Communities Continue to Shore Up, Future Superstorms Loom)*, CTPost (updated Oct. 28, 2017, 10:21 AM), https://www.ctpost.com/local/article/Rising-above-the-tide-5-years-since-Sandy-12313727.php.

Ct. 418 (2013), *aff'd in part, rev'd in part, Util. Air Regulatory Grp. v. EPA*, 134 S. Ct. 2427 (2014). The 2009 Endangerment Finding remains in effect and is not at issue here.[95]

To spur EPA to regulate greenhouse gas emissions from the largest stationary sources of such emissions, some of the States and Cities, as well as nonprofit organizations, sued EPA for failing to establish emission standards and guidelines for carbon dioxide from new and existing power plants under section 111 of the Act. *See New York v. EPA*, No. 06-1322 (D.C. Cir., filed Sept. 13, 2006). After the Supreme Court decided *Massachusetts*, the D.C. Circuit remanded *New York* to the agency for further proceedings in light of that case. Per Curiam Order, *id.*, ECF No. 1068502 (Sept. 24, 2007). In 2010, the parties settled *New York* after EPA agreed to proceed with rulemaking under section 111 by May 2012. Proposed Settlement Agreement, Clean Air Act Citizen Suit, 75 Fed. Reg. 82,392, 82,393 (Dec. 30, 2010).

EPA's rulemaking process culminated—more than three years after the agreed-upon deadline—in the 2015 New Source Performance Standards Rule (2015 NSPS Rule) for new power plants, Standards of Performance for Greenhouse Gas Emissions from New, Modified, and Reconstructed Stationary Sources: Electric Utility Generating Units, 80 Fed. Reg. 64,510 (Oct. 23, 2015), and the Clean Power Plan emission guidelines for existing power plants, Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 80 Fed. Reg. 64,662 (Oct. 23, 2015). In the 2015 NSPS Rule, EPA reaffirmed that greenhouse gas "air pollution may reasonably be anticipated to endanger public health or welfare," 80 Fed. Reg. at 64,530, and emphasized that power plants "are by far the largest emitters" of greenhouse gases among stationary sources in the United States, *id.* at 64,522. That 2015 "endangerment finding provided the essential factual foundation—and triggered a statutory mandate—for the EPA to regulate greenhouse gas emission from both new and existing power plants." *Am. Lung Ass'n v. EPA*, 985 F.3d 914, 935–36 (D.C. Cir. 2021) (overruled on other grounds in *West Virginia v. EPA*, 597 U.S. 697 (2022)).

Although the 2015 NSPS Rule has remained in effect, the Clean Power Plan never took effect after being stayed by the Supreme Court. Nonetheless, through rulemaking comments and litigation, the States and Cities continued to advocate for meaningful federal limits on greenhouse gas emissions from fossil fuel-fired power plants. These efforts included challenging EPA's actions during the first Trump Administration to repeal and replace the Clean Power Plan with the Affordable Clean Energy (ACE) Rule, Repeal of the Clean Power Plan; Emission

[95] Indeed, EPA acknowledges in its recently proposed reconsideration of the 2009 Endangerment Finding that it considers the two rulemakings to be separate. *See* Reconsideration of 2009 Endangerment Finding and Greenhouse Gas Vehicle Standards, 90 Fed. Reg. 36,288, 36,293 (Aug. 1, 2025). ("As discussed elsewhere in this preamble, the EPA is reconsidering additional endangerment findings and GHG emission standards issued under distinct provisions of the CAA in separate rulemakings and is not reopening or proposing to modify those additional findings and standards in this proceeding.").

Guidelines for Greenhouse Gas Emissions from Existing Electric Utility Generating Units; Revisions to Emission Guidelines Implementing Regulations, 84 Fed. Reg. 32,520 (July 8, 2019). In the ACE Rule, "EPA expressly acknowledged its continued adherence to the 2015 endangerment finding." *Am. Lung Ass'n*, 985 F.3d at 935 (citing 84 Fed. Reg. at 32,533). Nonetheless, EPA declined in the ACE Rule to set meaningful standards to limit emissions from existing power plants.

In 2021, the D.C. Circuit vacated the ACE Rule, including its repeal of the Clean Power Plan. *See id.* at 914. In 2022, the U.S. Supreme Court reversed the D.C. Circuit's vacatur of EPA's repeal of the Clean Power Plan. *West Virginia v. EPA*, 597 U.S. 697 (2022). After an extensive rulemaking process, EPA then finalized in 2024—with significant input and support from the States and Cities—the Carbon Pollution Standards that EPA now seeks to repeal. 89 Fed. Reg. at 39,798. Many of the States and Cities supported those Standards, in comments and in litigation.[96] And both the D.C. Circuit and Supreme Court rejected attempts to stay the Standards, attempts many of the States and Cities opposed.[97]

The States and Cities rely on robust federal regulation of greenhouse gas pollution from power plants, the largest domestic category of stationary-source emissions, to help protect against climate harms. Although the States and Cities have taken significant steps to limit these emissions, national emission standards are necessary. In ruling that the significant greenhouse gas pollution caused by fossil fired power plants is subject to regulation under section 111 of the Clean Air Act, the Supreme Court determined EPA to be "best suited to serve as primary regulator of greenhouse gas emissions". *Am. Elec. Power Co.*, 564 U.S. at 428. In *American Electric Power*, several states, New York City, and land trust organizations brought federal common-law public nuisance claims directly against power plants, seeking reductions in the greenhouse gas pollution harming the health and welfare of their citizens. Citing EPA's commitment at that time to proceed with rulemaking (which culminated in the Clean Power Plan), the Supreme Court rejected plaintiffs' federal common-law claims, holding that the Clean

[96] *See, e.g.*, States' 2023 Comments, *supra* note 1 (Exhibit A); Brief of Intervenor-Respondents New York, Arizona, Colorado, Connecticut, Delaware, Hawai'i, Illinois, Maine, Maryland, Massachusetts, Michigan, Minnesota, New Jersey, New Mexico, North Carolina, Oregon, Pennsylvania, Rhode Island, Vermont, Washington, Wisconsin, District of Columbia, Boulder, Chicago, Denver, New York City and California Air Resources Board, No. 24-1120 (Oct. 18, 2024) (State Interv. Br.) (Exhibit D).

[97] Brief for State and Municipal Respondents in Opposition to Application for Stays of Administrative Action, Nos. 24A95, 24A96, 24A97, 24A105, 24A106, 24A116, 24A117 (Aug. 19, 2024) (Exhibit E); Opposition of Intervenor-Respondents New York, Arizona, Colorado, Connecticut, Delaware, Hawai'i, Illinois, Maine, Maryland, Massachusetts, Michigan, Minnesota, New Jersey, New Mexico, North Carolina, Oregon, Pennsylvania, Rhode Island, Vermont, Washington, Wisconsin, District of Columbia, Boulder, Chicago, Denver, New York City and California Air Resources Board to Petitioners' Stay Motions, No. 24-1155 (D.C. Cir. June 11, 2024) (Exhibit F); *see also* Declarations Accompanying State and Municipal Intervenor-Respondents' Opposition to Petitioners' Stay Motions, No. 24-1120 (D.C. Cir. 2024) (Exhibit G).

Air Act "directly" authorized EPA to regulate greenhouse gases from power plants under section 111(d). *Id*. at 424 (quotation marks omitted). Because of this statutory mandate, "the Clean Air Act and the EPA actions it authorizes displace any federal common-law right to seek abatement of carbon-dioxide emissions from fossil-fuel fired powerplants." *Id.* Although the Supreme Court's decision left open the possibility that parties could use state law common law nuisance actions against power companies to compel reductions in carbon pollution, there is no question that, in order to best ensure meaningful reductions from this immense source of greenhouse gas emissions, EPA must use its authority under the Clean Air Act to require emission limits nationwide.

2. State efforts to reduce power plant greenhouse gas emissions while maintaining grid reliability and promoting affordable electricity

As detailed in ***Appendix 2*** to these comments, one of the ways the States and Cities have sought to address climate change harms to our residents is by reducing power plant carbon pollution. These actions have resulted in substantial CO_2 emission reductions while maintaining grid reliability and promoting affordable electricity. Highlighted below are some of those efforts:

- *Arizona.* Arizona has increased clean and renewable energy while maintaining a reliable electric grid. In 2024, about 46% of in-state electricity generation came from solar, nuclear, hydroelectric, and wind. Based upon recent data, Arizona ranked third in the country in installed battery storage capacity and fourth in solar generation. Pursuant to the state's clean energy standards, its utilities have reduced greenhouse gas emissions, saved more than 76,000 gigawatt hours of energy statewide and eliminated the need for more than 1,700 megawatts of additional capacity. And despite Arizona's reliance on electricity to improve quality of life in repeated record-breaking extreme heat seasons, power outages in the state due to extreme weather are well below the national average. Furthermore, Arizona's strong reliability metrics indicate the state is well-positioned to continue decarbonizing its electric grid. *See* App. 2 at 2–6.

- *California*. California has successfully operated its Cap-and-Trade Program for over a decade as an effective greenhouse gas-reduction tool, and in the electricity sector, the Program's carbon price signal supports the dispatch of lower- or zero-carbon resources and supports procurement of those resources. In 2022—the most recent year for which California has published its Greenhouse Gas Emission Inventory—over half of the State's total electricity came from zero- or almost-zero greenhouse gas emissions resources, and 61% of California's retail electricity sales came from zero-carbon emissions sources. California has also succeeded in reducing its greenhouse gas emissions while continuing to grow its economy. Between 2000 and 2022, California's gross state product increased by 77.5% while California's economy's carbon intensity declined by 54.8%. California's efforts to reduce

greenhouse gas emissions to 40% below 1990 levels by 2030 have also yielded economic benefits for the state. Clean energy is one of the fastest growing sectors of California's economy: in 2023, jobs in clean energy grew four times faster than the rest of California's economy. *See* App. 2 at 6–9.

- *Colorado.* As one of the state's strategies to meet its greenhouse gas reduction targets, including reducing emissions by 65% from 2005 levels by 2035, Colorado is successfully working with its electric utilities to increase the use of clean energy resources. While in 2010, 68% of Colorado's electricity came from coal-fired generation, in 2023 renewable energy was the leading source, providing just under 40% of the state's generation. Colorado uses electric resource plans and clean energy plans to facilitate the orderly transition to clean energy resources while maintaining energy affordability and reliability. For residential customers, Colorado has lower energy costs than the national average. Further, with respect to reliability, the region encompassing the state is anticipated to stay above the reference reserve margin in summer 2025. *See* App. 2 at 10–12.

- *Massachusetts*. Massachusetts has invested heavily in growing its clean energy sector by incentivizing clean energy generation through, *inter alia*, several portfolio standards, and its efforts have paid off. Since 2008, all of Massachusetts's 1,662 megawatts of coal generation capacity has been retired, and the Commonwealth has reduced its greenhouse gas emissions by 28%. Massachusetts is home to the first large, commercial-scale offshore wind project in the United States, which will generate electricity sufficient to power over 400,000 homes when it is fully operational in 2025. In the past five years, Massachusetts has also developed solar at a rate of about 0.67 gigawatts per year, resulting in 3.85 gigawatts of solar capacity installed around the state between January 2018 and March 2025. In 2024 alone, 17,000 solar projects were installed in Massachusetts, adding 695-megawatt $_{AC}$ of capacity. Additionally, Massachusetts utilities purchase 9.55 million megawatt-hours of electricity from Hydro-Quebec each year. In the coming years, the Commonwealth will be investing in energy storage resources with the aim of procuring 5,000 megawatts to support its growing solar and wind industries. Alongside its efforts to increase its renewable capacity, Massachusetts also has been a leader in reducing its energy use through efficiency programs. As a result, between 2010 and 2023, Massachusetts reduced its annual electricity consumption to end uses in the buildings and transportation sector from 50,026,093 MWh to 43,282,378 MWh, a decline of 13.5%. *See* App. 2 at 25–29.

- *Minnesota.* Minnesota's electricity generation sector is decarbonizing faster than any other part of Minnesota's economy. Since 2005, primarily by switching from coal to

cleaner energy sources, electricity-related emissions have plummeted by 50%. Over the past two decades, renewable resources, including wind, solar, biomass, and hydropower, generated the largest share of Minnesota's electricity in 2023. In 2023, wind energy accounted for more than three-fourths of the state's renewable generation and 25% of the state's total net generation. An example of Minnesota's progress is the planned retirement of the coal-fired Sherburne County Generating Station, the state's largest power plant by capacity. Part of the plant's coal-fired generating capacity will be replaced with the largest solar farm in the Midwest, which will have 460 megawatts of capacity and will be built next to the plant. *See* App. 2 at 32–34.

- *New Mexico*. In 2024, renewable energy was the largest source of New Mexico's total in-state electricity generation, supplying about half of in-state generation, with wind power alone accounting for 37% of that total. New Mexico has passed multiple laws aimed at increasing the share of the state's electricity generated by renewables, as well as using green energy sources to improve grid reliability and lower consumer costs. Most recently, recognizing that renewable sources of electricity are essential to grid reliability, earlier this year the Legislature passed a law that requires utilities to incorporate renewable energy sources into all grid improvement plans. All of New Mexico's planned additions to electricity generating capacity are focused on solar photovoltaic, wind, natural gas, and battery installations. Additionally, renewable energy is expected to be the largest growth area for commercial leasing of state trust lands, providing an increase in revenue for state public schools, universities, and hospitals. *See* App. 2 at 37–38.

- *New York.* Since 2010, New York and the other states that participate in the Regional Greenhouse Gas Initiative (RGGI), including Connecticut, Delaware, Maine, Maryland, Massachusetts, New Jersey, Rhode Island, and Vermont, have reduced greenhouse gas emissions from the power sector by 50%. By investing its proceeds from auctioned carbon pollution allowances in energy efficiency and renewable energy programs, New York reduced the demand for electricity and helped promote energy affordability. Investment of these proceeds will provide over $11 billion in energy bill savings to program participants. Beyond these direct effects, the RGGI program also incentivizes improved efficiency and investment in new technologies across the energy sector. Through these efforts and others, New York has maintained grid reliability while reducing emissions. New York's clean energy sector has also been an area of substantial job growth and now employs more than 178,000 workers. As an example of this sector's success, more than 6 gigawatts of distributed solar (e.g., rooftop solar panels) have already been installed, improving affordability and powering more than one million homes and businesses. *See* App. 2 at 38–40.

- *Washington*. Washington has passed multiple laws aimed at transitioning its power sector away from fossil fuels, including a renewable portfolio standard that requires all retail electric power sold in Washington to be 100% renewable by 2045. Washington is third in the nation in the percentage of utility-scale electricity generation from renewable resources, with hydroelectric power accounting for 59% of Washington's electricity generation in 2024. Almost 3,400 megawatts of installed capacity make wind energy the second largest contributor to the state's renewable generation. Overall, renewable resources accounted for 80% of Washington's total overall energy production in 2022. Washington's one coal-fired power plant is scheduled to phase out the use of coal, with one boiler retired in 2020 and the other scheduled to retire in 2025. *See* App. 2 at 46–50.

- *Wisconsin*. Wisconsin's Clean Energy Plan aims to achieve 100% carbon-free electricity consumption within the state by 2050. In conjunction with coal plant retirements, utilities plan to add more than 4,200 megawatts of new solar energy capacity, as well as 900 megawatts of battery storage capacity. In addition to renewable energy, the state reduces demand for energy through energy efficiency programs to help low-income households reduce their energy bills. This includes programs that have helped customers achieve energy savings equivalent to the amount of energy needed to power more than 1.4 million typical Wisconsin homes for a year, thereby reducing CO_2 emissions by 15.7 million tons in 2021 and 2022 combined. *See* App. 2 at 50–51.

3. Proposed Rule

EPA proposes to repeal all greenhouse gas emission standards for fossil fuel-fired power plants under section 111 of the Clean Air Act, including both the 2015 NSPS Rule and the Carbon Pollution Standards. In the Proposed Rule, EPA argues that section 111 is best read to require, or at least authorize EPA to require, a pollutant-specific finding that "an air pollutant emitted by a source category causes, or contributes significantly to, air pollution which may reasonably be anticipated to endanger public health or welfare" before EPA can establish emission standards for that pollutant. 90 Fed. Reg. at 25,755, 25,762. EPA also proposes to find that greenhouse gas emissions from fossil fuel-fired power plants "do not contribute significantly to dangerous air pollution," and thus, do not warrant regulation. *Id*. at 25,762. To justify this conclusion, EPA intends to rely not on the quantitative amount of greenhouse gases emitted by power plants, but on "the impacts and effects of statutory policy considerations," arguing that the words "significantly" and "judgment" in section 111(b) give EPA discretion to consider the administration's "policies that would inform the resulting regulation." *Id*. at 25,755.

Under this approach, EPA proposes to find that any regulation of greenhouse gas emissions from domestic fossil fuel-fired power plants "would not have a significant effect on GHG air pollution and the public health or welfare impacts attributed to such pollution"—and thus, EPA need not regulate those emissions. *Id*. at 25,755. In support of this conclusion, EPA proffers three non-statutory justifications, none of which independently supports repeal. First, EPA argues that greenhouse gas emissions from fossil fuel-fired power plants "are a small and decreasing part of global emissions," and "only extraordinary emissions reductions on a global scale would have any impact on the potential endangerment of public health and welfare in this context." *Id*. at 25,755, 25,766. Second, EPA claims that "cost-effective control measures are not reasonably available," adding that "it is likely that the Agency may be unable to develop a BSER that would result in any meaningful, cost-reasonable GHG emission reductions." *Id*. at 25,755, 25,766. Third, citing several recent executive orders, EPA argues that "this Administration's priority is to promote the public health or welfare through energy dominance and independence secured by using fossil fuels to generate power." *Id*. at 25,755. EPA adds that "energy production is essential to the public welfare," which "entails continued and increasing reliance on fossil fuels to meet increasing demands for electricity generation, including to power AI and related technologies with critical implications for national security and economic growth." *Id*. at 25,766.

As an alternative to this primary proposal, EPA is also proposing to repeal the bulk of the Carbon Pollution Standards, based largely on EPA's assertion that carbon capture and sequestration/storage (CCS) and natural gas co-firing are not adequately demonstrated and would not result in achievable emission limits. *Id*. at 25,755, 25,768. Specifically, for existing long-term and coal-fired power plants, EPA proposes that 90% CCS should not be considered the best system of emission reduction because "[it] has *not* been adequately demonstrated and its costs are *not* reasonable." *Id*. at 25,755 (emphasis in original). Second, EPA proposes that for existing medium-term coal-fired power plants, 40% natural gas co-firing is not BSER because it would negatively impact the energy system, is an inefficient use of natural gas, and constitutes "impermissible generation shifting" under *West Virginia v. EPA*. *Id*. at 25,756, 25,766. Third, for new gas-fired power plants, EPA argues that CCS should not be considered BSER because it is "neither adequately demonstrated nor cost-reasonable for new base load combustion turbines." *Id*. at 25,756. Finally, for existing oil- and gas-fired power plants, EPA claims that the implementation of state plans would be an inefficient use of state resources because such plants "comprise a relatively small part of the source category and would result in few or no emission reductions under the existing emission guidelines." *Id*.

In its alternative proposal, EPA does not consider less stringent standards or longer compliance timeframes as an alternative to the proposed full repeal of greenhouse gas standards. EPA deems these "outside the scope" of the Proposed Rule. *Id.* at 25,773. Nor does the Agency explain, or attempt to explain, that less stringent standards would not be feasible.

EPA also prepared a Regulatory Impact Analysis (RIA) estimating the economic impacts of the repeal. EPA, EPA-452/R-25-002, Regulatory Impact Analysis for the Proposed Repeal of Greenhouse Gas Emissions Standards for Fossil Fuel-Fired Electric Generating Units (June 2025). The RIA reuses modeling from the Carbon Pollution Standards, treating the repeal as the policy case. *Id*. at 2-2–2-3. EPA conducted no updated modeling, and instead reused prior cost and emissions projections, presenting the Proposed Rule's effect as a reversal of the anticipated outcomes under Carbon Pollution Standards. *Id*.

Based on EPA's own analysis, the Proposed Rule would result in large-scale emission increases of both greenhouse gases and other pollutants. For example, EPA estimates that in 2035, carbon dioxide emissions would be 123 million metric tons more than if the 2015 and 2024 rules remained in place. *Id*. at 1-3, tbl. 1-2. That is the equivalent to the annual emissions of 26.7 million gasoline-powered passenger cars.[98] In addition, EPA's analysis further shows that the Proposed Rule would result in many more premature deaths due to increased fine particulate matter and ozone pollution. In 2035, for example, that would mean up to 1,100 more premature deaths from exposure to fine particulate matter and up to 120 additional deaths as a result on ozone pollution. *Id*. at 4-5, tbl. 4-1.

Despite these impacts, EPA makes no attempt to consider the costs of greenhouse gas emissions or climate-related impacts in the RIA, conclusorily claiming that "[t]here are significant uncertainties related to the monetization of greenhouse gases." *Id*. at 6-6–6-7. EPA also cites Executive Order No. 14154 as the reason for excluding such metrics, stating that federal agencies are no longer directed to rely on the social cost of carbon estimates in benefit-cost analysis. *Id*. at 4-1. While the RIA includes estimates of the foregone public health benefits resulting from increased $PM_{2.5}$ and ozone pollution, they are not included in the primary cost-benefit accounting. *Id*. at 6–7.

II. EPA'S PRIMARY PROPOSAL IS UNLAWFUL

EPA primarily proposes to conclude that fossil fuel-fired power plants—despite representing 25% of carbon dioxide emissions in the U.S. (and 4% of worldwide emissions)[99]—"do not contribute significantly to dangerous air pollution." 90 Fed. Reg. at 25,762. The Proposal

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[98] A typical passenger vehicle emits about 4.6 metric tons of CO_2 per year. *See* EPA, EPA-420-F-23-014, Tailpipe Greenhouse Gas Emissions from a Typical Passenger Vehicle (June 2023), https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P1017FP5.pdf.

[99] According to data from the International Energy Agency, global CO_2 emissions from energy combustion and industrial processes were 37.3 Gt in 2023, while total U.S. emissions for the year were 4.6 Gt. *See* Int'l Energy Agency, Global Energy Review: CO_2 Emissions (2025), https://www.iea.org/reports/global-energy-review-2025/co2-emissions. Specifically, power plants in the U.S. emitted 1,471 million metric tons of CO_2 based on the Greenhouse Gas Reporting Program, which account for approximately 4% of global CO_2 emissions (1,471 / 37,300). *See 2023 Greenhouse Gas Emissions from Large Facilities*, EPA, https://ghgdata.epa.gov/ghgp/main.do (last visited Aug. 4, 2025).

is dead wrong. As the Supreme Court has held, "emissions of carbon dioxide qualify as air pollution subject to regulation under the [Clean Air] Act," and it is "equally plain that the Act speaks directly to emissions of carbon dioxide from [power] plants." *Am. Elec. Power Co.*, 564 U.S. at 424. Fossil fuel-fired power plants in the United States are one of the largest global sources of carbon dioxide—and the Proposal does not contest that the resulting air pollution is destabilizing our climate, with extremely serious implications for public health and welfare. Instead, EPA puts forward statutory interpretations that are either irrelevant or would completely pervert the statute and conflict with settled precedent of the Supreme Court and D.C. Circuit Court of Appeals and decades of administrative precedent.

A. The best reading of section 111 is that it regulates by source category, not on a pollutant-specific basis.

Against EPA's decades-long interpretation that section 111 regulation is triggered by a source category-specific "contribution" finding, the Proposal argues that EPA erred in the 2015 NSPS Rule when it combined the combustion turbine and steam generating unit categories because EPA now believes that section 111 requires a pollutant-specific "contribution" finding. 90 Fed. Reg. at 25,762–65. Ultimately, whether the agency must make a source category-specific or a pollutant-specific finding, that finding must be made in the affirmative, as the agency has consistently recognized. But the "best reading" of section 111 is EPA's longstanding one: the finding is made on a source category basis.

Section 111 provides in relevant part:

> The Administrator shall, within 90 days after December 31, 1970, publish (and from time to time thereafter shall revise) a list of categories of stationary sources. He shall include a category of sources in such list if in his judgment *it* causes, or contributes significantly to, air pollution which may reasonably be anticipated to endanger public health or welfare.

42 U.S.C. § 7411(b)(1)(A) (emphasis added). The grammatically straightforward reading of this statutory text is the one that EPA has historically adopted: the "it" that must "cause or contribute significantly to, air pollution which may reasonably be anticipated to endanger public health or welfare" is "a category of sources." *See*, *e.g.*, *Barnhart v. Thomas*, 540 U.S. 20, 26–27 (2003) (explaining the rule of the last antecedent). The "category of sources" is the only conceivable referent for "it." And it makes sense that Congress would draft section 111 this way: at the listing stage, the Clean Air Act is focused on capturing the world of categories of sources that are significantly contributing to harmful air pollution. Later statutory provisions address regulation of specific pollutants from those categories of sources. From the beginning of its implementation of section 111, EPA recognized that one source category listing might yield regulations of multiple air pollutants within the source category. *See* Section II.B, *infra*.

The Proposal does not present a credible argument that Congress did not mean what it said in section 111(b)(1)(A). As an initial matter, the Proposal appears to argue that EPA erred in combining the combustion turbine and steam generating unit categories in 2015 without making a new significant contribution finding. That contention makes little sense. EPA had already concluded that both steam generating units and combustion turbines significantly contributed to air pollution that may be reasonably anticipated to endanger public health and welfare. *See* Air Pollution Prevention and Control, List of Hazardous Air Pollutants and List of Categories of Stationary Sources, 36 Fed. Reg. 5931 (March 31, 1971); Air Pollution Prevention and Control, Addition to the List of Categories of Stationary Sources, 42 Fed. Reg. 53,657 (Oct. 3, 1977). Combining the two source categories for the purposes of regulation would only increase the contribution of these sets of units—by definition, the combined emissions of these sets would significantly contribute. At any rate, EPA did conclude in the 2015 NSPS Rule that the greenhouse gas emissions from this combined source category would significantly contribute to air pollution that may be reasonably anticipated to endanger public health or welfare; so, to the extent that was a requirement, EPA fulfilled it. 80 Fed. Reg. at 64,531.

Citing to the 2009 Endangerment Finding, the Proposal argues in a footnote that "'causes' generally refers to emissions that are the sole part of the air pollution problem." 90 Fed. Reg. at 25,763 n.91 (citing 74 Fed. Reg. 66,506 (Dec. 15, 2009)). The passage quoted from the 2009 Endangerment Finding correctly interpreted the word "contribute," and the Proposal does not appear to disagree with that interpretation. *See* 74 Fed. Reg. 66,506 ("[B]y instructing the Administrator to consider whether emissions of an air pollutant cause or contribute to air pollution, the statute is clear that she need not find that emissions from any one sector or group of sources are the sole or even the major part of an air pollution problem. The use of the term 'contribute' clearly indicates a lower threshold than the sole or major cause."). But the conclusion that the Proposal draws—that "cause" must then be limited to "the sole part"—does not necessarily follow.

EPA argues that its pollutant-specific significant contribution finding interpretation harmonizes section 111(b)(1)(A) with section 111(b)(1)(B), the latter of which requires EPA to promulgate "standards of performance" for new sources in a listed source category. 90 Fed. Reg. at 25,763. Because section 111(a)(1) defines "standards of performance" as "a standard for emissions of air pollutants," EPA argues that Congress meant to import a pollutant-specific inquiry into section 111(b)(1)(A). Even setting aside that the plain language of section 111(b)(1)(A) does not support that interpretation, as discussed above, EPA's reasoning is flawed. It is entirely sensible for Congress to direct EPA to *list* source categories that significantly contribute to dangerous pollution, but then to *regulate* on a pollutant-by-pollutant basis. After all, the listing stage is intended to capture the world of sources to be regulated; but at the standard-setting stage, Congress focused on identifying the best systems to reduce dangerous emissions—systems that will generally be applicable on a pollutant-by-pollutant basis (though may address multiple pollutants). *See* 42 U.S.C. § 7411(a)(1) (standards for emission reduction must "reflect[]

the degree of emission limitation achievable through application of the best system of emission reduction which … the Administrator determines has been adequately demonstrated").

Where Congress wanted to refer specifically to pollutants in the Clean Air Act, rather than source categories, it did. In section 111(d), Congress carved out from existing-source regulation "any air pollutant" that is regulated under the National Ambient Air Quality Standards program or the Hazardous Air Pollutant program. 42 U.S.C. § 7411(d); *see Am. Lung Ass'n v. EPA*, 985 F.3d at 980–83 (D.C. Cir. 2021) (explaining how the statutory language functions to exclude regulation of certain pollutants, not of certain source categories) (overruled on other grounds by *West Virginia v. EPA*, 597 U.S. 697 (2022)). The Proposal's citations to sections 111(b)(3) and 111(h), both of which reference "air pollutants," do not support the Proposal's new pollutant-specific significant contribution finding interpretation. Both of those provisions relate to particular control techniques used at the *regulatory* phase of section 111, *not* the listing phase. 90 Fed. Reg. at 25,764. Indeed, while putting forward a new interpretation, the Proposal's language appears to support EPA's decades-long interpretation of these distinct two steps:

> EPA exercises "judgment" in determining which source categories to list for regulation under CAA section 111(b)(1)(A)); after listing a source category, the EPA has discretion in determining which pollutants to regulate; and once the EPA has determined to regulate a particular air pollutant, it has discretion in determining the type of emission controls (BSER) that serve as the basis for the regulation under CAA section 111(a)(1).

90 Fed. Reg. at 25,764. This statement is entirely consistent with EPA's longstanding interpretation of section 111. EPA first lists source categories that, in its judgment, cause or contribute significantly to air pollution that may be reasonably anticipated to endanger public health or welfare. And then it has discretion (within defined statutory limits, as explained in Section II.B, *infra*) in determining which pollutants from that source category it should regulate (and how to regulate them), subject to the arbitrary and capricious standard.

Further, EPA fails to square its effort to import a pollutant-specific inquiry into section 111(b)(1)(A) with either a 2021 joint resolution of Congress, S.J. Res. 14, enacted under the Congressional Review Act, or the agency's contemporaneous and consistent interpretation of that resolution. That resolution disapproved a 2020 rule promulgated under section 111, Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources Review, 85 Fed. Reg. 57,018 (Sept. 14, 2020) (2020 Methane Rule), which adopted the same statutory interpretation that EPA proposes here: "that CAA section 111 requires, or at least authorizes the Administrator to require, a pollutant-specific significant contribution finding as a predicate for promulgating a standard of performance for that air pollutant." 85 Fed. Reg. at 57,034. Indeed, this statutory interpretation was the principal basis of the 2020 Methane Rule.

President Biden signed into law the joint resolution disapproving the 2020 Methane Rule on June 30, 2021. A few months later, as part of its section 111 rulemaking for oil and gas

facilities, EPA interpreted the resolution as being "explicit that . . . section 111 of the CAA, by its plain language, does not require or authorize the EPA to require, as a prerequisite for promulgating [standards of performance] for a particular air pollutant from a listed source category, a separate finding by the EPA that emissions of the pollutant from the source category contribute significantly to dangerous air pollution." Standards of Performance for New, Reconstructed, and Modified Sources and Emission Guidelines for Existing Sources: Oil and Natural Gas Sector Climate Review, 86 Fed. Reg. 63,110, 63,150 (Nov. 15, 2021) (citing H.R. Rep. 117-64 at 10 (This provision ''does not require the EPA to make a SCF for individual air pollutants emitted from the source category, nor does it even mention individual air pollutants.")); *see also* Senate Statement at S2283 ("we do not intend that section 111 of [the] CAA requires EPA to make a pollutant-specific significant contribution finding before regulating emissions of a new pollutant from a listed source category. . . .''); *accord* Standards of Performance for New, Reconstructed, and Modified Sources and Emissions Guidelines for Existing Sources: Oil and Natural Gas Section Climate Review, 89 Fed. Reg. 16,820, 16,859 (Mar. 8, 2024). "Given that the statute is not ambiguous, the EPA cannot interpret section 111 to authorize the EPA to exercise discretion to require . . . a pollutant-specific SCF as a predicate for promulgating a [NSPS] for the pollutant.'' 86 Fed. Reg. at 63,150 (citing H.R. Rep. 117-64 at 10). EPA now proposes to resurrect the requirement for a pollutant-specific significant contribution finding. But EPA was right in 2021, and then again in 2024, and is wrong now. At the very least, EPA must acknowledge and explain its about-face and address the implications of Congress's disapproval of the 2020 Methane Rule. *See* Section IV.A, *infra*.

Nor does the Proposal's reading find support in the discussion in *Utility Air Regulatory Group v. EPA*, 573 U.S. 302, 316 (2014), of "air pollutant," a term that does not even appear in section 111(b)(1)(A), the subparagraph at issue here. 90 Fed. Reg. at 25,764. That "air pollutant" might have different meanings in different parts of the Act depending on context—notably, an argument the Proposal does not even advance with respect to section 111—does not bear on the question of whether Congress intended EPA to list source categories on a source-category or pollutant-specific basis. If anything, *Utility Air Regulatory Group* supports EPA's decades-old interpretation. Congress defined "air pollutant" to include "any air pollution agent or combination of such agents, including any physical, chemical, biological, radioactive … substance or matter which is emitted into or otherwise enters the ambient air." 42 U.S.C. § 7602(g). As the Supreme Court has explained, "greenhouse gases fit well within the Clean Air Act's capacious definition of "air pollutant." *Massachusetts*, 549 U.S. at 532. In *Utility Air Regulatory Group*, the Supreme Court recognized that while the statute's definition of "air pollutant" is capacious, EPA had "routinely given it a narrower, context-appropriate meaning." 573 U.S. at 316.

But here, there is nothing about the context to suggest anything less than the plain, capacious meaning of the term "air pollutant." Specifically, in section 111(b)(1)(A), Congress directed EPA to list *source categories* that contribute significantly to any type of air pollution

that may reasonably be anticipated to endanger public health or welfare. By contrast, in section 111(b)(1)(B), Congress directed EPA to establish standards of performance, which it defines as "a standard for emissions of air pollutants." The context thus supports the conclusion that Congress intended EPA to *list* source categories that significantly contribute to any kind of dangerous air pollution and then establish standards of performance necessary to address any air pollutants from those source categories that are causing the harms that section 111 seeks to prevent. From the beginning of its implementation of section 111, EPA recognized that one source category listing might yield regulations of multiple air pollutants within the source category. *See* Section II.B, *infra*. Indeed, the statute's use of the word "significantly" in section 111(b)(1)(A) with regard to the *source category* would appear to reflect Congress's understanding that any particular source category might emit multiple pollutants that, together, make the source category a significant contributor. In other words, Congress intended to bring source categories within the ambit of regulation even if, with respect to any particular pollutant, the source category might make a contribution that is less than significant. It would be illogical to conclude that Congress intended to restrict EPA's ability to address a larger problem—curbing "air pollution" that endangers public health—because a source category emits many individual pollutants that may each contribute less to the problem than the collective contribution of multiple pollutants emitted by the source category.

Nor has EPA's longstanding interpretation opened the floodgates to the regulation of any pollutant emitted by a listed source category. The Clean Air Act's judicial review provision states that EPA's actions are subject to arbitrary and capricious review. It is that review standard that precludes the Proposal's straw man that once a source category is listed, EPA must regulate every pollutant emitted by those sources. *See* 90 Fed. Reg. at 25,763. The Administrator cannot (and has never even tried to) set a standard of performance within a listed source category for a pollutant that the Administrator did not reasonably anticipate would endanger public health or welfare. Such a standard would be arbitrary and capricious. *See* 42 U.S.C. § 7607(d)(9).[100] But the threshold finding required for *listing* under section 111 is quite plainly a finding that the "*category of sources* … causes or contributes … to air pollution which may reasonably be anticipated to endanger public health and welfare." 42 U.S.C. § 7411(b)(1)(A) (emphasis added).

The Proposal erroneously suggests there would be something anomalous about retaining EPA's decades-old interpretation. 90 Fed. Reg. at 25,764–65. EPA argues that unless it conducts

[100] Indeed, where EPA has concluded in the past that a particular pollutant from a listed source category should not be regulated because regulating the listed source for the particular pollutant would have little impact, it has simply not promulgated standards for that pollutant (and, as just discussed, it would be arbitrary and capricious for it to do so). *See* 90 Fed. Reg. at 25,764 (citing *National Lime* for the proposition that EPA did not promulgate standards for oxides of nitrogen, sulfur dioxide and carbon monoxide from lime plants due to limited amounts of emissions). That only goes to show that a pollutant-specific significant contribution finding requirement is unnecessary to address the scenario where a listed source category might emit a particular pollutant in insignificant quantities. *See Nat'l Lime Ass'n v. EPA*, 627 F.2d 416, 426 & n.27 (D.C. Cir. 1980).

a separate significant contribution analysis for each pollutant emitted by the source, EPA could list the source category on the ground that a combination of pollutants significantly contributed, but then be forced to regulate each pollutant on an individual basis. These individual pollutants, the Proposal suggests, might have a *de minimis* effect on the pollution for which the source category was listed.

But the Clean Air Act prevents EPA from promulgating pollutant-specific regulations that are arbitrary and capricious. *See* 42 U.S.C. § 7607(d)(9)(A). The Proposal does not point to any actual problem in the almost 50 years the agency has been administering this provision. Indeed, a 1978 document demonstrates that EPA was well aware that in prioritizing source categories for section 111(b) listing and development of performance standards, some sources would have more than one pollutant of concern regulated under that section.[101] Moreover, in 1979, soon after the enactment of section 111's listing requirement, when EPA made a general finding that 59 source categories significantly contributed to dangerous air pollution and therefore listed all those source categories under section 111(b)(1)(A), it did not identify the individual pollutants causing the significant contribution for each source category.[102] In 1985, EPA issued section 111(b) standards for the oil and natural gas source category in two separate rulemakings, three months apart—one for VOCs and one for sulfur dioxide—neither of which analyzed nor even mentioned whether one, both individually, and/or a combination of those two pollutants significantly contributed to harmful air pollution.[103] EPA has several times added emission standards for new pollutants under existing source categories without making additional, pollutant-specific significant contribution findings.[104] If EPA were to finalize a new interpretation, that would mark a radical departure from the listing process EPA has used for

[101] EPA, Priorities for New Source Performance Standards Under the Clean Air Act Amendments of 1977, EPA-450/3-78-019 at 111 (Apr. 1978) ("It was assumed that whenever a standard was set for a pollutant from a source category, the standards for all other pollutants from that source were also set. To account for the additional work required to develop standards for other pollutants, it was assumed that a 25% increase in effort would be required for each additional pollutant. Thus, a source emitting 5 pollutants would require as much effort as 2 sources emitting only one pollutant each.") (Doc. ID EPA-HQ-OAR-2017-0757-0009, attach. 1).

[102] Priority List and Additions to the List of Categories of Stationary Sources, 44 Fed. Reg. 49,222, 49,225 (Aug. 21, 1979); *see also* Oil and Natural Gas Sector: Emission Standards for New, Reconstructed, and Modified Sources Review, 84 Fed. Reg. at 50,262 (acknowledging that "the SCFs for the source categories did not identify the air pollutants").

[103] Standards of Performance for New Stationary Sources; Equipment Leaks of VOC from Onshore Natural Gas Processing Plants, 50 Fed. Reg. 26,122, 26,124 (June 24, 1985); Standards of Performance for New Stationary Sources; Onshore Natural Gas Processing, SO_2 Emissions, 50 Fed. Reg. 40,158, 40,160 (Oct. 1, 1985).

[104] Standards of Performance for Petroleum Refineries, 73 Fed. Reg. 35,838, 35,859 (June 24, 2008); Standards of Performance for Coal Preparation and Processing Plants, 74 Fed. Reg. 51,950, 51,957 (Oct. 8, 2009).

decades, for dozens of source categories. That abrupt departure would create a raft of uncertainty for the States and Cities, the regulated community, and the general public.

In the same vein, EPA seeks comment on whether its proposed interpretation requiring a pollutant-specific endangerment finding is necessary to avoid implicating the major questions doctrine. 90 Fed. Reg. at 25,765. It is not. The major questions doctrine is reserved for "extraordinary cases in which the history and breadth of the authority that the agency has asserted, and the economic and political significance of that assertion, provide a reason to hesitate before concluding that Congress meant to confer such authority." *West Virginia*, 597 U.S. at 721 (internal punctuation removed). As an initial matter, there is no regulation before a court right now that deploys EPA's traditional interpretation to claim any unprecedented or economically and politically significant authority. Indeed, the history of EPA's interpretation of section 111 to require a source-category finding of significant contribution belies any assertion that the interpretation would ever fit into this small set of "extraordinary" cases. EPA has never claimed authority to regulate a source category's pollutants that do not endanger public health and welfare, much less in a manner that would be economically or politically significant. In any event, the clarity of the statutory text here renders the major questions doctrine irrelevant to the interpretive question here.

The Proposal does not (and cannot) dispute that if the significant contribution finding is made on a source-category basis, it has been appropriately made here. Fossil fuel-fired power plants emit a range of dangerous pollution, and EPA first listed them as a source category under section 111 in the 1970s. 36 Fed. Reg. 5931 (Mar. 31, 1971) (steam generating units), 42 Fed. Reg. 53,657 (Oct. 3, 1977) (stationary combustion turbines). Nor does the Proposal argue that it would be arbitrary and capricious to regulate greenhouse gas emissions from fossil fuel-fired power plants. In fact, as discussed in more detail in Section II.C, *infra*, it would be irrational to decide *not* to regulate power plants' greenhouse gas emissions.

At any rate, as explained in detail in Section II.C, *infra*, even if a pollutant-specific significant contribution were a prerequisite to listing under section 111(b)(1)(A), power plants significantly contribute to greenhouse gas pollution that may reasonably be anticipated to endanger public health or welfare.

B. The Proposal's construction of the phrase "contributes significantly" is foreclosed by Supreme Court and D.C. Circuit precedent, is contrary to decades of administrative precedent, and turns the Clean Air Act upside down.

Section 111 requires the EPA Administrator to list a source category if "in his judgment it causes, or contributes significantly to, air pollution which may reasonably be anticipated to endanger public health or welfare." 42 U.S.C. § 7411(b)(1)(A). Under *Loper Bright Enterprises v. Raimondo*, 603 U.S. 369 (2024), the agency normally does not receive deference to adopt merely "permissible" interpretations of statutory terms: "In the business of statutory

interpretation, if it is not the best, it is not permissible." *Id.* at 400. Here, the statute does not "expressly delegate to [EPA] the authority to give meaning to a particular statutory term." *Id*. at 394. So while EPA has discretion to exercise "judgment" in weighing the facts to determine whether a particular source category contributes significantly to air pollution that may reasonably be anticipated to endanger public health or welfare, the agency does not get any deference on its interpretation of the meaning of the relevant statutory terms—most importantly, "contributes" and "significantly." With respect to those terms, EPA must implement the "best reading" as discerned from traditional tools of statutory interpretation, not its "policy preferences." *Id*. at 403–04; *see also Am. Elec. Power Co.*, 564 U.S. at 427 ("The use of the word 'judgment' … is not a roving license to ignore the statutory text. It is but a direction to exercise discretion within defined statutory limits." (internal quotation marks and citations omitted)).

The Proposal posits an interpretation of "significantly" that frees up the agency to consider any policies (and policy preferences) that it asserts can inform the subsequent regulation—in particular, the Trump Administration's goal of "continued and increasing reliance on fossil fuels"—in determining whether a source category's contribution to air pollution is significant. 90 Fed. Reg. at 25,766. Because, the Proposal asserts, controlling pollution from fossil fuel-fired power plants will impose costs on continued use and construction of such plants, EPA is proposing to determine that greenhouse gas emissions from fossil fuel-fired power plants do not contribute significantly to dangerous air pollution. *Id.*

The Proposal's new statutory interpretation of the term "significantly"—imbuing that term with the President's current policy goals—is foreclosed by judicial precedent interpreting the Clean Air Act. Indeed, interpreting a similar authority under section 202(a) of the Act, the Supreme Court held that a basis for EPA's decision not to regulate greenhouse gases there—"that it would be unwise to do so at this time—rest[ed] on reasoning divorced from the statutory text." *Massachusetts*, 549 U.S. at 532. As the Court explained:

> While the statute does condition the exercise of EPA's authority on its formation of a "judgment," that judgment must relate to whether an air pollutant "causes, or contributes to, air pollution which may reasonably be anticipated to endanger public health or welfare[.]"… [EPA's] reasons for action or inaction must conform to the authorizing statute. Under the clear terms of the Clean Air Act, EPA can avoid taking further action only if it determines that greenhouse gases do not contribute to climate change or if it provides some reasonable explanation as to why it cannot or will not exercise its discretion to determine whether they do. ***To the extent that this constrains agency discretion to pursue other priorities of the Administrator or the President, this is the Congressional design.***

Id. at 532–33 (internal citations omitted, emphasis added).

The Court went on to explain that the "policy judgments" EPA had put forward to explain why it declined to regulate (including those related to the President's "broad

authority in foreign affairs") "have nothing to do with whether greenhouse gas emissions contribute to climate change. Still less do they amount to a reasoned justification for declining to form a *scientific judgment*." *Id.* at 533–34 (emphasis added). The Court did not reach the question "whether policy concerns can inform EPA's actions *in the event that* it makes such a finding." *Id*. at 434–35 (emphasis in original).

On this point of statutory interpretation, the dissenting Justices in *Massachusetts* agreed. The dissent wrote:

> The Court dismisses [EPA's reasons for declining to regulate] as "resting on reasoning divorced from the statutory text. While the statute does condition the exercise of EPA's authority on its formation of a "judgment," that judgment must relate to whether an air pollutant 'causes or contributes to, air pollution which may reasonably be anticipated to endanger public health or welfare." True, but irrelevant. When the Administrator *makes* a judgment whether to regulate greenhouse gases, that judgment must relate to whether they are air pollutants that "cause, or contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare." 42 U.S.C. § 7521(a)(1). But the statute says nothing at all about the reasons for which the Administrator may defer making a judgment—the permissible reasons for deciding not to grapple with the issue at the present time.

Id. at 552 (Scalia, J., dissenting). Thus, *all* of the Justices in *Massachusetts* agreed that when, as in EPA's main proposal here, the Administrator is making a judgment about *whether* to regulate greenhouse gases, that judgment is a scientific one, not a policy one.

A few years later in the very context of regulating power plant greenhouse gas emissions under section 111, Justice Ginsburg, writing for the Court, and joined by all the dissenters in *Massachusetts*, reiterated: "The use of the word 'judgment' … is not a roving license to ignore the statutory text. It is but a direction to exercise discretion within defined statutory limits." *Am. Elec. Power Co.*, 564 U.S. at 427 (internal quotation marks and citations omitted). "EPA may not decline to regulate carbon-dioxide emissions from power plants if refusal to act would be 'arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law.'" *Id.* (quoting 42 U.S.C. § 7607(d)(9)(A)). For this reason, the word "judgment" does not justify EPA's new interpretation. *E.g.*, 90 Fed. Reg. at 25,763–64,

The Court's interpretation—requiring scientific, not policy, judgment—reflects the "best reading of the statute." *Loper Bright*, 603 U.S. at 400. In *Massachusetts*, the Supreme Court did not grant *Chevron* deference to EPA. To the contrary, it held that EPA's then-interpretation was impermissible and precluded by the plain text of the statute. It was the Court, not EPA, who authoritatively interpreted the statute in *Massachusetts*. The Court has since explained in *Loper Bright* that there is only one "best reading" of statutory text; that reading cannot be changed based on a new Administration's policy preferences. EPA must follow the path laid out in the

Supreme Court's opinion in *Massachusetts*. *See Trump v. CASA*, 145 S. Ct. 2540, 2561 n.18 (2025) (documenting Solicitor General's commitment to "respect both the judgments and the opinions of this Court."); *see also Seminole Tribe of Fla. v. Florida*, 517 U.S. 44, 67 (1996) ("When an opinion issues for the Court, it is not only the result but also those portions of the opinion necessary to that result by which we are bound.").

Moreover, the D.C. Circuit recognized the constraints the Supreme Court had put on the threshold inquiry under section 202(a) when, several years later, entities challenged EPA's 2009 Endangerment Finding. There, industry petitioners contended that EPA improperly interpreted the Clean Air Act to restrict the finding to a "science-based judgment devoid of considerations of policy concerns and regulatory consequences." *Coal. for Responsible Regul. v. EPA*, 684 F.3d at 117. "These contentions," the D.C. Circuit explained, "are foreclosed by the language of the statute and the Supreme Court's decision in *Massachusetts v. EPA*." *Id.* Analyzing the language of the relevant statutory provision, the D.C. Circuit held:

> This language requires that the endangerment evaluation relate to whether an air pollutant causes or contributes to air pollution which may reasonably be anticipated to endanger public health or welfare, . . . and whether motor-vehicle emissions cause or contribute to that endangerment. These questions require a scientific judgment about the potential risks greenhouse gas emissions pose to public health or welfare—not policy discussions.

Id. at 117–18 (internal quotation marks and citations omitted). A "laundry list of reasons not to regulate simply has nothing to do with whether greenhouse gas emissions contribute to climate change," and such reasons "do not inform the scientific judgment" the statute requires. *Id.* at 118 (internal quotations and citations omitted). This plainly includes the many reasons included in the Proposal that are disconnected from the question whether greenhouse gases contribute to pollution that is reasonably anticipated to endanger public health and welfare. The Proposal's assertion that the statute "confers discretion to consider policy issues inherent in the statutory structure including effectiveness of emissions reduction controls, cost-reasonableness of those controls, and impacts on the affected industry," 90 Fed. Reg. at 25,765, is firmly precluded by Supreme Court and D.C. Circuit precedent that has already explicitly determined the "best reading" of the statutory language.

The additional word "significantly" in section 111 does not change the analysis. *Contra* 90 Fed. Reg. at 25,765. The finding required by section 111—that, "in [the EPA Administrator's] judgment," a category of sources "causes, or contributes significantly to, air pollution which may reasonably be anticipated to endanger public health or welfare"—is no less a scientific judgment than the analogous finding required by section 202 and discussed in *Massachusetts* and *Coalition for Responsible Regulation*. In context, the addition of the adverb "significantly," which modifies the "contribution" of "air pollution which may reasonably be anticipated to endanger public health or welfare," plainly refers to the amount or degree of that

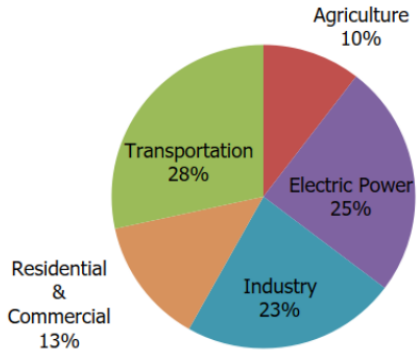
contribution.[105] It makes sense for Congress to have required a finding that a source category "contributes [a meaningful amount] to air pollution" that may be reasonably anticipated to endanger public health or welfare. Conversely, it makes no sense at all for Congress to have required a finding that a source category "contributes [in an important manner such that regulation would not conflict with the current Administration's policy goal of increasing reliance on fossil fuels] to air pollution" that may be reasonably anticipated to endanger public health or welfare. Context matters: "Words that can have more than one meaning are given content … by their surroundings, and in the context of [section 111(b)(1)] this second definition makes no sense." *Whitman v. Am. Trucking Ass'ns*, 531 U.S. 457, 466 (2001) (citing *FDA v. Brown & Williamson Tobacco Corp.,* 529 U.S. 120, 132–133 (2000)). "Congress . . . does not alter the fundamental details of a regulatory scheme in vague terms or ancillary provisions—it does not, one might say, hide elephants in mouseholes." *Id.* at 468. Yet what EPA proposes would, through the word "significantly," improperly transform a scientific finding into a roving license not to regulate based on the current Administration's policy preferences in support of fossil fuels.

Indeed, looking at power plant regulation under section 111 in *American Electric Power*, the Supreme Court specifically connected any lawful consideration of how to account for "our Nation's energy needs" to the "appropriate *amount* of regulation," not *whether* to regulate in the first place. 564 U.S. at 427–28 (emphasis added) (explaining that the "complex balancing" of costs and nonair quality health and environmental impact and energy requirements is done in setting standards of performance). The Proposal's conflation of the two pervades its reasoning. The Proposal injects into the *listing* stage all manner of considerations that (to the extent they are permissible at all) are plainly left by the Act to the *regulatory* stage, like what controls are available and the scale of emissions reductions that are possible via technologies. 90 Fed. Reg. at 25,766. Of course, even at the *regulatory* stage, the Supreme Court has restricted EPA's consideration of the nation's energy needs. In *West Virginia*, the Court disagreed with the notion that EPA, under the CAA, could "balance[e] the many vital considerations of national policy implicated in the basic regulation of how Americans get their energy." 597 U.S. at 729. There, the Court found it "highly unlikely that Congress would leave to agency discretion the decision of how much coal-based generation there should be over the coming decades." *Id.* at 730 (internal punctuation removed). So too here, EPA is precluded from using its section 111 authority to set national energy policy and determine which types of energy should be promoted, rather than to determine how to reduce emissions from polluting energy sources. *Contra* 90 Fed. Reg. at 25,765–66 (asserting that "if regulating emissions would not be useful, taking into account, *inter alia*, the impacts on, and the Administration's policies concerning, the source category, that source category's contribution air pollution is not significant. . . . As such, the significance analysis is informed by this Administration's national policy that energy production

[105] *See*, *e.g.*, Webster's Third New International Dictionary of the English Language, Unabridged (1976) (defining "significantly" as "in a significant manner," or "to a significant degree"); The Random House Dictionary of the English Language (1968) (defining significantly" as "momentous, weighty").

is essential to the public welfare. This entails continued and increasing reliance on fossil fuels to meet increasing demands for electricity generation").

Moreover, the Proposal's use of the interpretation of "significantly" to cut out the largest stationary source of greenhouse gas pollution from regulation under section 111 would fundamentally undermine the statutory scheme enacted by Congress. Here, power plants contribute 58% of greenhouse gases from stationary sources[106] (and 25% from all sources, as reflected in the chart below).[107]



Total U.S. Greenhouse Gas Emissions by Economic Sector

If that threshold for significance were applied across the board—i.e., if 25% or 58% contribution is not "significant"—then EPA would be prevented from eliminating the kinds of endangerment that section 111 seeks to address, and its past standards could be called into question.

The analysis is not changed by the Proposal's interpretation of the language "contribute significantly to nonattainment" in section 110(a)(2)(D) (the "Good Neighbor Provision"), which allows consideration of costs in apportioning responsibility to reduce emissions of pollutants that travel across state borders; or by the Supreme Court's decision upholding that interpretation in *EPA v. EME Homer City*, 572 U.S. 489 (2014). *Contra* 90 Fed. Reg. at 25,766. First, the statutory language is different. "[C]ontribute significantly to *air pollution which may be reasonably anticipated to endanger*" is, as discussed above, quite plainly an exclusively scientific inquiry. By contrast, "contribute significantly to *nonattainment*" "calls upon the Agency to address a thorny causation problem: How should EPA allocate among multiple

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[106] In 2023, U.S. power plants emitted 1,471 million metric tons of CO_2, representing about 58% (1,471 / 2,578) of total reported emissions from stationary sources to GHGRP (power plants, petroleum and natural gas systems, refineries, chemicals, minerals, waste, metals, and pulp and paper facilities). *See 2023 Greenhouse Gas Emissions from Large Facilities*, *supra* note 99.

[107] *Sources of Greenhouse Gas Emissions*, EPA, https://www.epa.gov/ghgemissions/sources-greenhouse-gas-emissions (last updated Mar. 31, 2025).

contributing upwind States responsibility for a downwind State's excess pollution?" *EME Homer City*, 572 U.S. at 513–14 (emphasis in original). Second, the context is different. Under section 111, significant contribution is a threshold finding triggering a process to regulate, and that process (as explained above) explicitly allows consideration of costs. Section 111(b)(1)(A)'s listing requirement is aimed identifying the world of sources that should be subject to regulation because of their contribution to dangerous air pollution—not actually determining the requisite emissions reductions from those sources. By contrast, a determination of significant contribution under section 110(a)(2)(D) is aimed at ascertaining the "amount" of air pollution that one State must eliminate in order to protect a downwind State's ability to comply with the CAA's health-based air quality standards—in other words, the determination is aimed at requiring emissions reductions. 42 U.S.C. § 7410(a)(2)(D). In that context, and particularly where "the nonattainment of downwind States results from the collective and interwoven contributions of multiple upwind States," it makes eminent sense to consider how much a particular upwind State has already done to reduce its own pollution and level the costs between upwind contributors. *EME Homer City*, 572 U.S. at 514–20.

Unlike EPA's interpretation of section 110(a)(2)(D), the Proposal's interpretation of section 111(b)(1)(A) runs afoul of the Supreme Court's decision in *Whitman*, 531 U.S. 457. Like the threshold finding in section 109(b)(1) considered in *Whitman*, "it [is] fairly clear that th[e] text [of section 111(b)(1)] does not permit the EPA to consider costs" or other non-public-health-and-welfare factors. 531 U.S. at 465. "Nowhere are the costs of achieving such a standard made part of that initial calculation." *Id.* To the contrary, Congress explicitly authorized EPA to consider costs and other factors, including energy requirements, in establishing standards of performance for listed source categories. 42 U.S.C. § 7411(a)(1), (b)(1)(A) (requiring EPA to "tak[e] into account the cost of achieving such reduction and any nonair quality health and environmental impact and energy requirements" in setting standards of performance). This explicit command and discretion to consider costs at the *regulatory* phase in section 111 provides another distinction from the interpretation of section 110 upheld in *EME Homer City,* and from the latitude to consider costs that the Supreme Court identified in *Michigan v. EPA*, 576 U.S. 743 (2015). In both *EME Homer City* and *Michigan*, the initial findings triggered regulation that EPA had significantly less discretion to shape. Section 110(a)(2)(D), the provision at issue in *EME Homer City*, requires the significant contribution identified at the initial step to be "prohibited," and the statute does not specifically authorize consideration of costs. 42 U.S.C. § 7410(a)(2)(D). Likewise, in section 112, the provision at issue in *Michigan*, once EPA concluded that it was appropriate to regulate power plants, it was required to regulate to a minimum threshold without consideration of costs. 42 U.S.C. § 7412(d). By contrast, the text of section 111 lays out a two-step process, and the statute specifically includes consideration of costs at the second (regulatory) step.

To support the Proposal's interpretation, EPA must "show a textual commitment of authority to the EPA to consider costs" in making an endangerment finding, and no such

commitment is found in the word "significantly." *Whitman*, 531 U.S. at 468. Just as the terms "adequate margin" and "requisite" did not confer such authority in *Whitman*, so the term "significantly" does not do so here. It is simply "implausible that Congress would give to the EPA through th[is] modest word[] the power to determine whether implementation costs should moderate" EPA's scientific judgment as to whether a source category significantly contributes to dangerous air pollution. *See id*. The factor EPA proposes to consider here—the current President's policy preference to not only continue but expand reliance on fossil fuels—"is *both* so indirectly related to public health *and* so full of potential for canceling the conclusions drawn from direct health effects that it would surely have been expressly mentioned … had Congress meant it to be considered." *Id.* at 469 (emphases in original).

Nor is the Proposal's new interpretation owed the respect it might get had it been "issued roughly contemporaneously with the enactment of the statute and remained consistent over time." *See Loper Bright*, 603 U.S. at 386. EPA's proposed interpretation is not in line with "the longstanding practice of the government[.]" *Id.* (internal quotation marks omitted). And while there are circumstances where a court may resort to the interpretations of an agency for guidance, those "depend upon the thoroughness evident in [the agency's] consideration, the validity of its reasoning, [and] its consistency with earlier and later pronouncements." *Id.* at 388 (quoting *Skidmore v. Swift & Co.*, 323 U.S. 134, 140 (1944)). All of those hallmarks are absent here. First, the Proposal's interpretation is being issued a half century after the enactment of the statute and is *inconsistent* with almost two decades of agency interpretation and five decades of agency practice. Nor is there any "thoroughness evidence in [EPA's] consideration"—to the contrary, the new Administration rushed out a proposed rule with little analysis and significantly circumscribed public comment by providing an unusually and unlawfully short comment period. *See* Section V.A, *infra.* And, as explained in detail above, the Proposal's reasoning conflicts with Supreme Court and D.C. Circuit precedent.

The Proposal's other arguments for why this Administration may transform a statute aimed at reducing pollution and protecting public health into one aimed at benefitting preferred, polluting sources likewise fail. The Proposal puts the cart before the horse in considering the *effectiveness* of future regulation in determining whether power plants significantly contribute. 90 Fed. Reg. at 25,765–66 ("Because it is likely that the Agency may be unable to develop a BSER that would result in any meaningful, cost-reasonable GHG emission reductions, the contribution of this source category to GHG air pollution is not significant."). This question is plainly one for the regulatory stage. And, as explained *infra* Section III.B, the Proposal utterly fails to show that regulation would be ineffective, declaring consideration of alternative regulatory schemes "beyond the scope" of this rulemaking. *Id.* at 25,773. The Proposal cannot at the same time conclude a lack of significance because EPA *may not* be able to develop a meaningful BSER when it gets to the regulatory stage *and* refuse to consider alternative BSERs. The Proposal's tentative phraseology ("it is likely," "may be unable") reveals this fatal flaw.

Similarly, the Proposal's "broad understanding" of the term "welfare" does not support its conclusions. 90 Fed. Reg. at 25,766–67 (citing 42 U.S.C. § 7602(h)). Interpreting that term to encompass the current Administration's policy view that more air pollution from power plants is preferable to less would turn the Act on its head, contrary to decades of administrative practice and judicial precedent. *Cf. Whitman*, 531 U.S. at 469. Moreover, the statute directs EPA to list source categories that contribute to "air pollution which may reasonably be anticipated to endanger public health and welfare." 42 U.S.C. § 7411(b)(1). The best (and only plausible) reading of this language is that it is the *air pollution* that must be anticipated to endanger public health and welfare, not the *regulation* of air pollution. *See Massachusetts*, 549 U.S. at 532 (majority opinion); 552 (dissenting opinion). Even if a pollutant-specific significant contribution finding is needed, the *air pollution* at issue here—greenhouse gases—plainly has endangering "effects on climate," an effect specifically called out in the Clean Air Act's definition of "welfare." 42 U.S.C. § 7602(h). This air pollution also effects "soils, water, crops, vegetation, manmade materials, animals, wildlife, weather, visibility, … damage to and deterioration of property, and hazards to transportation," all of which the statute specifically lists as relevant effects. *Id.* And greenhouse gases have "effects on economic values and on personal comfort and well-being," the part of the statutory definition that the Proposal cites. 90 Fed. Reg. at 25,766. But far from grappling with these endangering effects to welfare of greenhouse gases, the Proposal arbitrarily assigns these effects zero value. *See infra* Section VI.A. Finally, as the Supreme Court made clear in *American Electric Power*, discussed *supra*, any lawful consideration of energy needs is explicitly left to the regulatory, standard-setting stage.

Finally, the Proposal turns to concepts of "proximate cause," 90 Fed. Reg. at 25,767, but this argument fails for many of the reasons already stated. The argument that the "global scale of the analysis" and "attenuated chain of causation" render greenhouse gases unfit for regulation under section 111 flies in the face of the Supreme Court's precedents in both *Massachusetts* and *American Electric Power*. If global pollutants cannot be said to significantly contribute to air pollution, then the Clean Air Act cannot have "sp[oken] directly" to them in section 111. *Am. Elec. Power Co.*, 564 U.S. at 424. The Proposal suggests that "a greater volume and percentage of contribution" is needed. 90 Fed. Reg. at 25,767. But as explained *infra* Section II.C, EPA, including under the Trump Administration, has concluded that the contribution to greenhouse gas air pollution from U.S. power plants is significant by any measure. The Proposal's argument also fails to give independent meaning to the two separate statutory triggers—"cause *or* contribute significantly"—instead imbuing both with a gloss of proximate causation absent from the text. As footnote 91 of the Proposal appears to recognize, it cannot be that *both* these separate and disjunctive causal triggers embody the same causality standard.

In addition, the Proposal ignores the regulatory mechanism in section 111: the "best system of emissions reduction." Unlike other Clean Air Act provisions, section 111 does not require EPA to strive to prohibit or eliminate pollution, or even to reach a healthy level of pollution. Rather, it directs EPA to require sources to use the "best" system of emission

reduction available, after considering the statutory factors. Section 111 does not require that the pollution problem be solvable by regulation of a source category (or multiple source categories) alone. As explained more fully in Section II.C, *infra*, the danger greenhouse gases pose to public health and welfare cannot be addressed *without* regulating meaningful contributors of greenhouse gas emissions—including the U.S. power sector. As with many pollution problems, the air pollution caused or contributed to by the power sector's greenhouse gas emissions is the result of a collective-action problem, and the resultant harm can only be addressed fully through reductions in emissions from a wide range of sources. As such, the Proposal's interpretation would fundamentally undermine the goals of the Clean Air Act to prevent such endangerment. The fact that regulation of any one category of sources will not solve the entirety of the problem in one fell regulatory swoop hardly justifies not taking regulatory action that is necessary (but not sufficient) to fully address the endangerment that may reasonably be anticipated.

Loper Bright concluded that the APA was meant to address precisely the type of flawed agency action reflected by the Proposal, describing the Act as "a check upon administrative agencies whose zeal might otherwise have carried them to excesses not contemplated in legislation creating their offices." 603 U.S. at 391. Here, EPA's Proposal effectively attempts to repeal and amend the Clean Air Act to incorporate the President's current policy preferences, but without bicameralism and presentment, or even any hint of Congressional support. But "the President does not become the interchangeable stand-in for Congress as domestic policy maker simply because he is also elected." Cynthia R. Farina, *Statutory Interpretation and the Balance of Power in the Administrative State*, 89 Colum. L. Rev. 452, 514–15 (1989); *see also* Michael W. McConnell, *The Rule of Law and the Role of the Solicitor General*, 21 Loy. L.A. L. Rev. 1105, 1113 (1987). EPA's proposed statutory interpretation would subvert the separation of powers and Congress's role as lawmaker. Even before *Chevron* was overruled, when agencies presumptively had discretion to adopt "permissible" interpretations in the face of ambiguous language, the D.C. Circuit made plain that EPA cannot "avoid the Congressional intent clearly expressed in the text simply by asserting that its preferred approach would be better policy." *Engine Mfrs. Ass'n v. EPA*, 88 F.3d 1075, 1089 (D.C. Cir. 1996); *see also Sierra Club v. EPA*, 479 F.3d 875, 884 (D.C. Cir. 2007) ("If the Environmental Protection Agency disagrees with the Clean Air Act's requirements for setting emission standards, it should take its concerns to Congress."); *Friends of the Earth v. EPA*, 446 F.3d 140, 142–44 (D.C. Cir. 2006); *New York v. EPA*, 443 F.3d 880, 887 (D.C. Cir. 2006).

C. Fossil fuel-fired power plants' contribution to climate pollution is significant under the best interpretation of section 111; concluding otherwise is inconsistent with the statutory text and decades of EPA precedent.

The best reading of the phrase "contributes significantly" in section 111(b)(1)(A), the same one EPA has consistently maintained for decades until now, focuses on the amount—meaning, the quantity or degree—of a source category's emissions of air pollution that may reasonably be anticipated to endanger public health and welfare. The EPA Administrator may

use his "judgment" and has some discretion in making the scientific finding whether a source category significantly contributes to air pollution which may reasonably be anticipated to endanger public health and welfare. It would be a clear abuse of that discretion—and contrary to decades of administrative precedent—to conclude power plants fail that test. Power plants represent a whopping 58% of stationary source emissions of greenhouse gases and 25% of total greenhouse gas emissions in the United States. *See* Section II.B, *supra*. The D.C. Circuit, presented with this precise question in *American Lung Association v. EPA*, concluded that even if a pollutant-specific finding was necessary, EPA had "sensibly" found the question "not even close," reasoning that "[b]ecause of their substantial contribution of greenhouse gases, 'under any reasonable threshold or definition,' carbon dioxide from fossil fuel-fired power plants represents 'a significant contribution' to air pollution." 985 F.3d at 975–77. Against this backdrop of precedent and longstanding agency interpretation, including EPA's consistent conclusion that power plant greenhouse gases significantly contribute, EPA's policy arguments fail. Indeed, the current Administration's policies encouraging fossil fuel use, including in the electric generating sector, further undermine EPA's lack-of-significant-contribution theory.

Under *Loper Bright*, EPA must adopt the "best reading" of the statute. As noted *supra* Section II.B, the best reading of section 111(b)(1)(A)'s text is that the finding that must be made to list a source category is a scientific finding, and that "significant" refers to the amount of emissions. And as discussed just below, EPA has long recognized that even relatively small contributions may be significant. That statutory interpretation is the best reading of the statute both because it follows the plain reading of the statutory text, *see supra* Section II.B, and because it is necessary to effectuate the statute's purpose—reducing emissions that are significantly contributing to air pollution that endangers public health and welfare. *See*, *e.g.*, *County of Maui, Haw. v. Haw. Wildlife Fund*, 590 U.S. 165, 184 (2020) ("The object in a given scenario will be to advance, in a manner consistent with the statute's language, the statutory purposes that Congress sought to achieve.").

Here, as EPA has long recognized, the facts dictate that the finding must be made in the affirmative—whether EPA focuses on the source category or the specific pollutant from the source category. The amount of carbon dioxide emitted by U.S. fossil fuel-fired power plants far exceeds the amount of other contributions that EPA has long deemed to satisfy the "significantly contribute" requirement; the contribution of U.S. fossil fuel-fired power plants to the greenhouse gases that are fueling climate change is significant by any metric. That makes perfect sense, as the endangerment from climate change cannot be addressed without reducing or eliminating power plants' contribution to greenhouse gas pollution. EPA and the courts have consistently recognized this for the last decade, including under the first Trump Administration.

1. EPA's prior interpretation of significance based on the amount of a pollutant is longstanding and reflects the best reading of section 111(b)(1)(A).

Over the last 50 years, under both Republican and Democratic administrations, EPA has issued dozens of New Source Performance Standards under section 111. When assessing significance under section 111, EPA has considered the total amount of dangerous air pollution emitted by the source category as well as the percentage of nationwide or sector emissions that amount of pollution represents. EPA has found consistently that even modest contributions (expressed as a percentage) are significant.

For example, in 1973, EPA issued standards for emissions of hydrocarbons from petroleum liquid storage vessels, which represented approximately 3% of total national hydrocarbons, concluding that emissions for those vessels "are significant." Standards of Performance for New Stationary Sources, Proposed Standards for Seven Source Categories, 38 Fed. Reg. 15,406, 15,406 (June 11, 1973) (citing EPA, Background Information for Proposed New Source Performance Standards, vol. 1 at 34 (June 1973)). A few years later, EPA issued standards for lime manufacturing plants, without noting the percentage of emissions that these plants constituted, but ranking them twenty-fifth on a list of 112 domestic stationary sources of particulate matter. Standards of Performance for New Stationary Sources, Lime Manufacturing Plants, 42 Fed. Reg. 22,506, 22,507 (May 3, 1977). That same year, EPA issued standards for stationary gas turbines, which emitted approximately 2.5% of the total oxides of nitrogen emissions from stationary sources in 1972 and ranked sixteenth in stationary sources of controllable oxides of nitrogen. Stationary Gas Turbines, Standards of Performance for New Stationary Sources, 42 Fed. Reg. 53,782, 53,783 (Oct. 3, 1977). A couple of years later, when EPA issued a priority list of categories of stationary sources, it included organic solvent cleaners, which represented approximately 5% of stationary source volatile organic compounds, though each individual facility typically emitted less than 100 tons per year of such compounds. 44 Fed. Reg. at 49,223–24 (Aug. 21, 1979). In 1982, EPA issued standards for lead-acid battery manufacturing despite the fact that they emitted only 0.32% of industrial lead emissions, or 0.014% of total nationwide lead emissions. EPA acknowledged that this "account[ed] for a relatively small share of total nationwide atmospheric lead emissions," but found the source category to contribute significantly given that individual sources were typically in urban areas where ambient lead levels were already high. Standards of Performance for New Stationary Sources; Lead-Acid Battery Manufacture, 47 Fed. Reg. 16,564, 16,570 (Apr. 16, 1982). About a decade later, EPA promulgated standards of performance for municipal solid waste landfills, finding a significant contribution from approximately 1% of the non-methane organic compound emissions from stationary sources, totaling approximately 283,000 tons per year. Standards of

Performance for New Stationary Sources and Guidelines for Control of Existing Sources: Municipal Solid Waste Landfills, 56 Fed. Reg. 24,468, 24,473 (proposed May 30, 1991).[108]

The D.C. Circuit upheld this approach to significant contribution in *National Asphalt Pavement Association v. Train*, 539 F.2d 775, 785 (D.C. Cir. 1976). There, an industry association challenged EPA's addition of asphalt concrete plants to its list of significant contributors to air pollution. The court rejected that challenge, noting that the Administrator had examined "the rate of emissions of particulate matter from uncontrolled plants, the stringency of existing state and local regulations limiting emissions from these plants, the number of existing plants, and the expected rate of growth in the number of plants." *Id.* at 784. The court rejected the industry's argument that the Administrator erred by relying on a study ranking the asphalt concrete industry as one of the top twenty contributors to national particulate matter pollution. *Id.*

Here, these considerations dictate the conclusion that greenhouse gas emissions from power plants significantly contribute to air pollution that may be reasonably anticipated to endanger public health or welfare. Indeed, as discussed in the next section, EPA consistently took that position until the Proposed Rule.

2. EPA on multiple occasions has recognized the power plant sector as a significant contributor to air pollution that endangers public health and welfare.

For the past decade, until the Proposal, EPA has consistently found that power plant greenhouse gas emissions contribute significantly to pollution that endangers public health and welfare. In its 2015 NSPS Rule, EPA stated:

> [F]ossil fuel-fired EGUs [electric generating units] are very large emitters of CO_2. All told, these fossil fuel-fired EGUs emit almost one-third of all U.S. GHG emissions, and are responsible for almost three times as much as the emissions from the next ten stationary source categories combined. The CO_2 emissions from even a single new coal-fired power plant may amount to millions of tons each year, and the CO_2 emissions from even a single NGCC unit may amount to one million or

[108] EPA has similarly administered section 213 of the CAA, enacted in 1990, which requires the agency to conduct a one-time study of emissions from nonroad sources to determine "if such emissions cause, or significantly contribute to, air pollution which may reasonably be anticipated to endanger public health or welfare." 42 U.S.C. § 7547. With regard to that provision, the Senate report noted that nonroad sources made up a "significant portion of pollution," and that "[e]missions inventories from EPA estimate that farm and construction equipment emit 3.7 percent of [carbon monoxide] nationwide, four percent of nationwide [oxides of nitrogen] and 1.3 percent of total hydrocarbons." Control of Air Pollution; Emissions of Oxides of Nitrogen and Smoke from New Nonroad Compression-Ignition Engines at or Above 50 Horsepower, 58 Fed. Reg. 28,809, 28,811 (proposed May 17, 1993) (citing S. Rep. No. 101-228, at 104 (1989)). In its 1993 proposed significant contribution finding for nonroad engines, the agency stated that it was "reasonable to conclude that comparable or greater emissions contributions from a class or category of nonroad engines or vehicles … would also be significant." *Id.* at 28,812.

> more tons per year. . . . *[U]nder any reasonable threshold or definition, the emissions from combustion turbines and steam generators are a significant contribution*. Indeed, these emissions far exceed in magnitude the emissions from motor vehicles, which have already been held to contribute to the endangerment.

80 Fed. Reg. at 64,510, 64,531 (emphasis added) (citing *Coal. for Responsible Regul.*, 684 F.3d at 121).

In 2018, EPA proposed a rule to revise its standards for greenhouse gas emissions from new power plants. EPA proposed to retain the statutory interpretation it outlined in its 2015 NSPS Rule, though EPA never finalized the proposed revisions. Review of Standards of Performance for Greenhouse Gas Emissions from New, Modified, and Reconstructed Stationary Sources: Electric Utility Generating Units, 83 Fed. Reg. 65,424, 65,432 n.25 (Dec. 20, 2018). In its 2019 ACE Rule, EPA reiterated the finding it had made in its 2015 NSPS Rule and explained that Rule "continues to provide the requisite predicate for" the ACE Rule. 84 Fed. Reg. at 32,533 (describing predicate finding in 2015 NSPS Rule).

A year and a half later, in the waning days of the first Trump Administration, EPA issued a rule "finalizing a significant contribution finding (SCF) for purposes of regulating source categories for greenhouse gas (GHG) emissions, under section 111(b) of the Clean Air Act (CAA) for electric generating units (EGUs), and in doing so, reaffirming that [power plants] remain a listed source category." Pollutant-Specific Significant Contribution Finding for Greenhouse Gas Emissions from New, Modified, and Reconstructed Stationary Sources: Electric Utility Generating Units, and Process for Determining Significance of Other New Source Performance Standards Source Categories, 86 Fed. Reg. 2542 (Jan. 13, 2021).[109] Through this rulemaking, EPA analyzed power plant emissions under two frameworks, both of which "demonstrated the propriety of the" significant contribution finding. *Id*. at 2543. As to the first criterion, EPA stated:

> The primary criterion in determining whether to make a SCF is the magnitude of GHG emissions from a given source category. It is readily apparent that EGUs emit a uniquely large amount of GHGs compared to all other categories of stationary sources. The EPA made this clear in the 2015 Rule, quoted above, and reiterated it in the 2020 Oil & Gas Rule. . . . Because EGUs represent by far the largest stationary source of GHGs from combustion of fossil fuels, the EPA believes that this is the most appropriate place for the EPA, states, and sources to devote

[109] This rule was vacated by the D.C. Circuit after the government conceded that it had failed to provide any public notice or opportunity for comment on the central elements of the rule. Order, *California v. EPA*, No. 21-1035 (D.C. Cir. Apr. 5, 2021), ECF No. 1893155; *see also id.* Respondent EPA's Unopposed Motion for Voluntary Vacatur and Remand, No. 21-1035 (D.C. Cir. Mar. 17, 2021), ECF No. 1890321. It was, nevertheless, EPA's position at the time and supports the continuity of EPA's conclusion that fossil fuel-fired power plants significantly contribute.

> resources to reducing GHGs from stationary sources. . . . It is noteworthy that GHG emissions from EGUs are approximately an order of magnitude greater than the estimated emissions of the second largest stationary source category of GHGs attributed to combustion, industrial boilers. Because the magnitude of GHG emissions from EGUs is large compared to other stationary sources, this makes them clearly significant even without detailed consideration of other factors.

86 Fed. Reg. at 2555–56; *see also id*. (describing power plant contribution in 2018). EPA explained fossil fuel-fired power plants would also meet its secondary criterion for significance because (1) they "are projected to remain the single largest stationary source of GHG emissions" and "are expected to continue to … emit significant GHG emissions for the foreseeable future;" and (2) "U.S. EGUs make up a sizeable portion (13 percent of the emissions) from EGUs worldwide." *Id.* at 2556–57.

Finally, in its Carbon Pollution Standards, EPA stated:

> In 2021, the power sector was the largest stationary source of GHGs in the United States, emitting 25 percent of overall domestic emissions. In 2021, existing fossil fuel-fired steam generating units accounted for 65 percent of the GHG emissions from the sector, but only accounted for 23 percent of the total electricity generation. Because of its outsized contributions to overall emissions, reducing emissions from the power sector is essential to addressing the challenge of climate change[.] . . . Fossil fuel-fired EGUs are by far the largest stationary source emitters of GHGs in the nation.

89 Fed. Reg. at 39,800, 39,812; *see also id*. (describing power plant contribution in 2021–2022). In the Carbon Pollution Standards, EPA reiterated the findings and conclusions it had made in 2015 and stated that it was "not reopening and did not solicit comment on any of those determinations in the 2015 NSPS concerning its rational basis to regulate GHG emissions from EGUs or its alternative finding that GHG emissions from EGUs contribute significantly to dangerous air pollution." *Id.* at 39,825.

As EPA's consistent, repeated findings make clear, the question of whether power plant greenhouse gas emissions significantly contribute is "not even close." *Am. Lung Ass'n*, 985 F.3d at 976. As the D.C. Circuit explained, "[g]iven that the United States, at the time of the [2009] endangerment finding, was the second-largest emitter of greenhouse gases in the world, it was not arbitrary or capricious for the EPA to conclude that the source of close to one-third of those emissions is a significant contributor to air pollution by any measure." *Id.* at 977 (internal citation omitted). Moreover, "a holding that greenhouse gas emissions by fossil-fuel-fired power plants are not significant would make it nigh impossible for any source of greenhouse gas pollution to cross that statutory threshold." *Id.* (internal citations omitted). The D.C. Circuit further reasoned that EPA could base its finding on empirical data and scientific evidence and need not set a "'precise numeric value' that defines the threshold at which air pollution

endangers the public health and welfare." *Id.* at 976. Indeed, the D.C. Circuit found that approach is particularly apt in the greenhouse gas regulation context as it "is a function of the precautionary thrust of the [CAA] and the multivariate and sometimes uncertain nature of climate science, not a sign of arbitrary or capricious decision-making." *Id*. Here, all of the evidence and EPA's past statements belie the Proposal's assertion that greenhouse gas pollution from U.S. power plants is not significantly contributing to air pollution that may be reasonably anticipated to endanger public health and welfare. Thus, even if a pollutant-specific significant contribution finding is required, greenhouse gas emissions from fossil fuel-fired power plants readily satisfy that test.

That conclusion also aligns with the Clean Air Act's ultimate goal to mitigate harm caused by dangerous air pollution. For some types of pollutants—greenhouse gases included, but also pollutants like lead and asbestos—endangerment is caused by emissions from many different types of sources, is abated by reducing emissions from any of those sources, and can only be eliminated by addressing all significant sources of the pollution. Contrary to the Proposal's unsupported assertion, it is not feasible to effectively mitigate the harm threatened by climate change—or to mitigate the risk of catastrophic climate change—without limiting emissions from the U.S. power sector, one of the largest of those sources. As the Intergovernmental Panel on Climate Change concluded, "[d]eep, rapid, and sustained reductions in greenhouse gas emissions" are necessary to address climate harms:

> Every increment of global warming will intensify multiple and concurrent hazards . . . [C]ontinued emissions will further affect all major climate system components. With every additional increment of warming, changes in extremes continue to become larger. Continued global warming is projected to further intensify the global water cycle, including its variability, global monsoon precipitation, and very wet and very dry weather. . . . With further warming, every region is projected to increasingly experience concurrent and multiple changes in climatic impact-drivers. … High risks are now assessed to occur at lower global warming levels. … Some future changes are unavoidable and/or irreversible but can be limited by deep and sustained global greenhouse gas emissions reductions. The likelihood of abrupt and/or irreversible changes increases with higher global warming levels. Similarly, the probability of low-likelihood outcomes associated with potentially very large adverse impacts increases with higher global warming levels.… Cumulative carbon emissions until the time of reaching net zero CO_2 emissions and the level of greenhouse gas emission reductions this decade largely determine whether warming can be limited to 1.5°C or 2°C.[110]

[110] 2023 IPCC Synthesis Report, *supra* note 2, at 12–13, 17–19.

Because climate change is caused by the accumulation of greenhouse gas emissions in the atmosphere, mitigating emissions from the largest contributors is particularly important in reducing overall accumulation, which directly reduces overall harm. Further, decarbonizing sectors now—before the world reaches peak emissions—reduces the risk that the accumulation will trigger a tipping point in the climate system and catastrophic climate damages.[111]

Several analyses attribute damages to greenhouse gas emissions from the power sector specifically (though this sort of attribution is not required to find significant contribution or endangerment). For example, a recent analysis of U.S. power sector emissions from 1973–2023 calculated climate damages to the United States that have already occurred from such emissions totaling $78 billion (in 2015 dollars 95% confidence interval of $41 billion–$128 billion).[112] A recent study extending this analysis to include projected power sector emissions from 2025–2035 under the current tax code and without implementation of the Carbon Pollution Standards projects that the United States will experience $95 billion in damages by 2035, with $11.1 billion (in 2024 dollars) in cumulative domestic damages just from the expected 2025–2035 U.S. power plant emissions. Rick Duke, *Calculating Near-Term U.S. Damages from U.S. Greenhouse Gas Power Sector Emissions from 2025-2035*, Gigaton Strategies (Aug. 6, 2025), https://climateattribution.org/resources/analysis-calculating-near-term-u-s-damages-from-u-s-greenhouse-gas-power-sector-emissions-from-2025-2035/ (Exhibit I). This estimate of future damages only includes damages from U.S. power plant emissions predicted to occur by 2035. Future damages (beyond 2035) from those emissions (including those that would remain in the atmosphere for thousands to hundreds of thousands of years)[113] are not included in this estimate, nor are damages from U.S. power sector emissions beyond 2035 should they remain unabated. Finally, this damage estimate includes only a subset of climate damages from such emissions, and excludes large sources of damages such as morbidity, deaths from hurricanes and wildfire

[111] Intergovernmental Panel on Climate Change (IPCC), Climate Change 2021: The Physical Science Basis: Contribution of Working Group I to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change 27 (2021), https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_FullReport.pdf [hereinafter IPCC, Climate Change 2021: The Physical Science Basis] ("The probability of low-likelihood, high-impact outcomes increases with higher global warming levels (high confidence).") *See also* 2023 IPCC Synthesis Report, *supra* note 2, at 182 ("At sustained warming levels between 2°C and 3°C, the Greenland and West Antarctic ice sheets will be lost almost completely and irreversibly over multiple millenia, causing several metres of sea level rise. … Due to deep uncertainty linked to ice-sheet processes, global mean sea levels above the *likely* range – approaching 2 m by 2100 and in excess of 15 m under the very high GHG emissions scenario … cannot be excluded.").

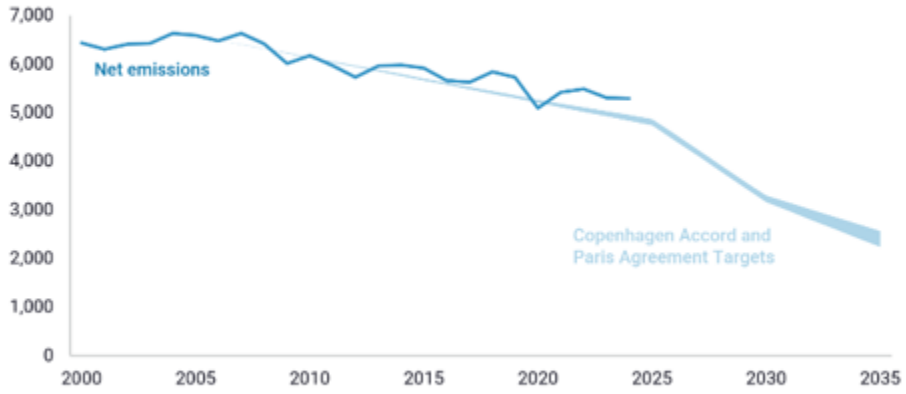
[112] Justin Mankin et al., *Climate Damages to the U.S. Economy from U.S. Power Sector Emissions* (June 2025), https://climateattribution.org/resources/climate-damages-to-the-u-s-economy-from-u-s-power-sector-emissions/ (Exhibit H).

[113] IPCC, Climate Change 2021: The Physical Science Basis, *supra* note 111, at 2237.

smoke, smog exposure, and macroeconomic impacts.[114] It also does not include the costs of measures to adapt to climate change.

Even setting aside the net zero CO_2 emissions target that is necessary to constrain global warming, as illustrated in Figure 7 below, to meet its still-in-force Paris Agreement target of a 50–52% reduction in emissions by 2030, the United States must sustain a 7.6% annual reduction in emissions from 2025–2030.[115] Decarbonizing the power sector is critical by either metric.

FIGURE 7
Net US GHG emissions relative to near-term international commitments
Million metric tons CO_2-equivalent



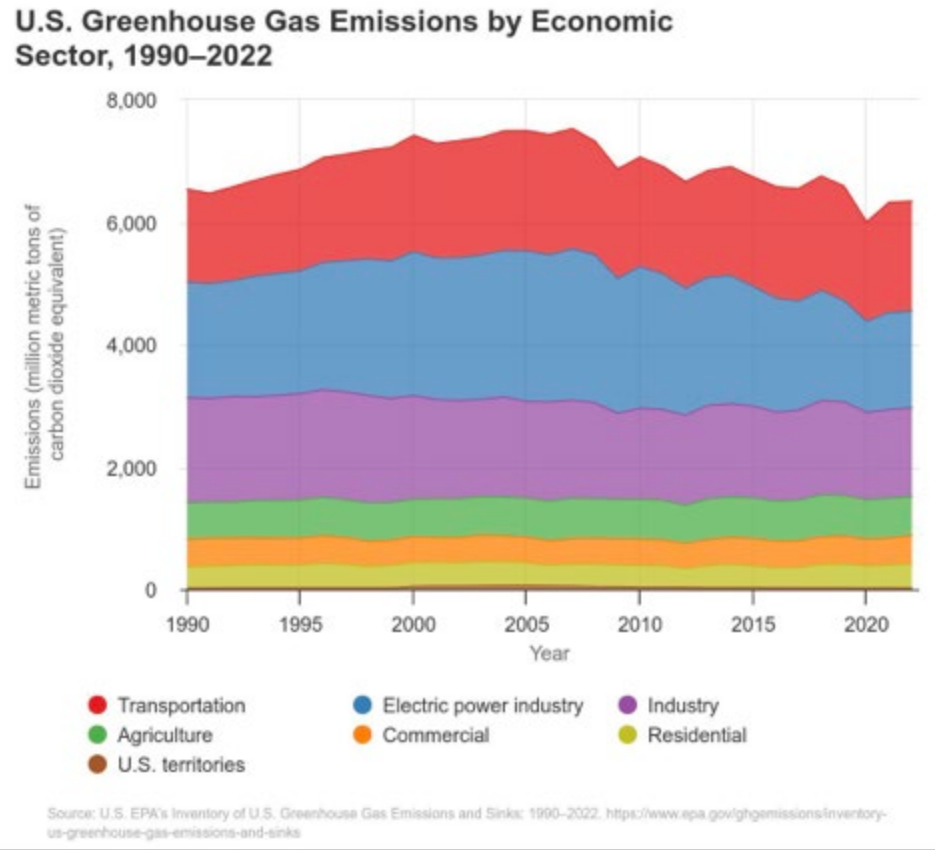
Source: Rhodium Group, EPA

Moreover, U.S. power sector emissions have been one of if not the largest contributor to total U.S. emissions for many years (see figure below).[116]

[114] Solomon Hsiang et al., *Estimating Economic Damage from Climate Change in the United States*, 365 Sci. 1362 (June 30, 2017), https://www.science.org/doi/10.1126/science.aal4369.

[115] Michael Gaffney et al., Rhodium Grp., Preliminary US Greenhouse Gas Estimates for 2024 1 (Jan. 9, 2025), https://rhg.com/research/preliminary-us-greenhouse-gas-estimates-for-2024/.

[116] EPA, Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990–2022 (Apr. 2024), https://www.epa.gov/system/files/documents/2024-04/us-ghg-inventory-2024-main-text_04-18-2024.pdf; *see also Inventory of U.S. Greenhouse Gas Emissions and Sinks*, EPA, https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks (last updated July 1, 2025).



While U.S. power sector emissions decreased by 15.8% between 1990 and 2022, and the carbon intensity of the power sector decreased by 27.6%, to 25% of total U.S. greenhouse gas emissions, during that same time frame,[117] these decreases are no longer expected to continue. U.S. power sector CO_2 emissions constituted 1,427 million metric tons in 2024 (30% of total U.S. energy-related carbon dioxide), a slight *increase* from 2023 levels, and are expected to remain at high levels going forward given recent policy changes, as discussed below.[118]

In short, U.S. power sector CO_2 emissions are significant because they represent an enormous quantity of CO_2 emissions by both total quantity and as a percentage. The damage they are causing only serves to underscore their significance. Greater accumulation of emissions in the atmosphere causes greater warming, greater damages, and greater risks of triggering tipping points in the climate system and catastrophic climate harms. "The global temperature will stabilize when carbon dioxide emissions reach net zero."[119] In other words, to limit global

[117] EPA, Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990–2022, *supra* note 116, at ES-11.

[118] *U.S. Energy-Related Carbon Dioxide Emissions, 2024*, U.S. Energy Info. Admin. (May 29, 2025), https://www.eia.gov/environment/emissions/carbon/; Gaffney et al., *supra* note 115.

[119] Press Release, IPCC, The Evidence Is Clear: The Time for Action Is Now. We Can Halve Emissions by 2030 (Apr. 4, 2022), https://www.ipcc.ch/2022/04/04/ipcc-ar6-wgiii-pressrelease/.

warming we must stop adding more greenhouse gases to the atmosphere than natural sinks can remove[120]—which means we must control emissions from the power sector (and other sectors).

EPA contends that the decreasing share of U.S. power plant greenhouse gas emissions compared to global greenhouse gas emissions supports its conclusion that the source category does not contribute significantly. 90 Fed. Reg. at 25,767–78. As discussed above, however, the U.S. power sector emits massive amounts of carbon dioxide every year (1.53 billion metric tons in 2022), more than all but a handful of countries. That the U.S. power sector's global share has decreased does not change the fact that U.S. power sector emissions are massive or support altering the conclusion that EPA has repeatedly made—including under the first Trump Administration—that those emissions contribute significantly to dangerous air pollution. *See Massachusetts*, 549 U.S. at 524 (1.7 billion metric tons of greenhouse gases from transportation sector constitutes an "enormous" amount that made a "meaningful contribution" to greenhouse gas concentrations). *Cf. Sw. Elec. Power Co. v. EPA*, 920 F.3d 999, 1032 (5th Cir. 2019) ("very small portion" of total water pollution can constitute a "gargantuan" source on its own terms). Indeed, *Massachusetts* rejected a similar argument that because other countries like China and India were poised to substantially increase greenhouse gas emissions, regulating greenhouse gases from the U.S. transportation sector would not redress plaintiffs' injuries. 549 U.S. at 525–26. Reducing the sector's emissions would slow the pace of global warming, the Court explained, no matter what happened in other countries. *See id*. Thus, regardless of whether the U.S. power sector's share of global greenhouse gas emissions has decreased or is projected to do so in the future, fossil fuel-fired power plants are and will remain a significant contributor—both domestically and globally—to air pollution that is endangering public health and welfare.

3. <u>President Trump's push to encourage fossil fuel use, including from fossil fuel-fired power plants, further undercuts EPA's proposed finding that power plants do not significantly contribute to air pollution endangering public health and welfare.</u>

Furthermore, the additional actions that the Trump Administration is taking that, if successful, will result in more power plant greenhouse emissions, would further increase the sector's significant contribution to climate change harms. These include actions to encourage more fossil fuel use through curtailed environmental review, prolong the operating lives of fossil fuel-fired plants, discriminate against non-fossil–fuel-fired sources of power generation, and increase energy usage.

First, one of this Administration's core missions is to expand the use of fossil fuels relative to other resources. For example, in Executive Order 14261, *Reinvigorating America's Beautiful Clean Coal Industry and Amending Executive Order 14241*, 90 Fed. Reg. 15,517

[120] "Under scenarios with increasing CO_2 emissions, the ocean and land carbon sinks are projected to be less effective at slowing the accumulation of CO_2 in the atmosphere. … This is projected to result in a higher proportion of emitted CO_2 remaining in the atmosphere (high confidence)." IPCC, Climate Change 2021: The Physical Science Basis, *supra* note 111, at 19–20.

(Apr. 14, 2025) (*Beautiful Clean Coal* EO), the Administration seeks to skew the economics toward more coal use by, *inter alia*, "removing Federal regulatory barriers that undermine coal production," directing EPA and other federal agencies to consider rescinding any regulations "that seek to transition the Nation away from coal production and electricity generation," favoring use of coal-fired generation to meet increased demand from AI use, and designating coal as a critical mineral. *See id.* at 15,517–19; *see also* Executive Order No. 14154, *Unleashing American Energy*, 90 Fed. Reg. 8353 (Jan. 29, 2025) (*Unleashing* EO) (instructing federal agencies to consider revising or rescinding rules that unduly burden the development of fossil fuels, including coal). Not surprisingly, therefore, EPA takes the position in the Proposed Rule that it expects coal-fired plants "will continue to comprise a substantial portion of the nation's electricity supply." 90 Fed. Reg. at 25,774; *see also id.* at 25,772 ("EPA believes that coal-fired steam generating units are now more likely to operate longer than they will be able to claim the tax credit."). EPA has cited this Executive Order in proposing to rescind or weaken other regulations that will likewise result in greater pollution. *See e.g.*, National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units, 90 Fed. Reg. 25,535, 25,538 (June 17, 2025) (proposing to rescind hazardous air pollutant standards for coal-fired power plants).[121]

And in his Executive Order *Declaring a National Energy Emergency*, President Trump included fossil fuels—but not zero-emitting solar and wind—as domestic energy sources to be prioritized in addressing the alleged emergency. *See* Exec. Order No. 14,156, 90 Fed. Reg. 8433, 8436 (Jan. 29, 2025) (wind or solar not included in the definition of "energy" or "energy resources"). The Executive Order also directed federal agencies to use all lawful emergency or other authorities available to them to facilitate the supply, refining, and transportation of the Administration's preferred sources of energy. *Id.* at 8434. Federal agencies including the U.S. Army Corps of Engineers and the Department of Interior have begun to use their emergency authorities to do so. *See* Complaint, *Washington, et al. v. Trump*, No. 2:25-cv-00869 (W.D. Wash. May 9, 2025), ECF No. 1 (lawsuit against Army Corps and other federal defendants for using emergency permitting to implement Executive Order); Press Release, U.S. Dep't of Interior, Department of the Interior Implements Emergency Permitting Procedures to Strengthen Domestic Energy Supply (Apr. 23, 2025, updated June 4, 2025), https://www.doi.gov/pressreleases/department-interior-implements-emergency-permitting-procedures-strengthen-domestic (announcing expedited permitting for a range of fossil-fuel projects, pledging to complete reviews under NEPA and the National Historic Preservation Act, and consultation under the Endangered Species Act within 28 days) (Exhibit J).

[121] *See also* Press Release, EPA, Administrator Zeldin Releases Statement on POTUS' New Energy-Related EO Signed Today (Apr. 8, 2025), https://www.epa.gov/newsreleases/administrator-zeldin-releases-statement-potus-new-energy-related-eo-signed-today (describing actions EPA will take to promote coal) [hereinafter April 8 Zeldin Beautiful Clean Coal Statement].

Second, Executive Order 14262, *Strengthening the Reliability and Security of the National Electric Grid*, 90 Fed. Reg. 15,521 (Apr. 14, 2025), seeks to pave the way for fossil fuel-fired energy-generation resources to remain online beyond their retirement dates through expanded use of the Department of Energy's (DOE) emergency authority under section 202(c) of the Federal Power Act. DOE has historically limited its use of this authority to situations in which grid reliability was in jeopardy.[122] But spurred on by the Executive Order, DOE cited its authority under section 202(c) to order a coal-fired power plant in Michigan that was scheduled to retire on May 31, 2025, to remain online.[123] DOE issued this order despite the position of the Midcontinent Independent System Operator (MISO) that the plant was *not* needed for grid reliability, and that the retirement had been approved by the state's public utility commission.[124] The plant's retirement and replacement with more efficient generation was expected to save $600 million for ratepayers and reduce pollution. The Michigan Attorney General and a group of local utility regulators have filed petitions for rehearing, and the Michigan Attorney General has also filed a petition for review with the U.S. Court of Appeals for the D.C. Circuit.[125]

Third, the Trump Administration has halted approvals of a clean energy source—wind energy—that would have replaced fossil-fuel generation in many of our States. Specifically, President Trump issued a memorandum on Day 1 of the Administration, categorically and indefinitely halting all federal approvals necessary for development of offshore- and onshore-wind energy, pending an extra-statutory review of unknown duration. *See* Presidential Memorandum of January 20, 2025, 90 Fed. Reg. 8363 (Jan. 29, 2025). The federal agencies' implementation of that directive has resulted in the delay and likely cancellation of wind energy projects that many of our States were counting on, *inter alia*, to reduce greenhouse gas emissions by replacing fossil fuel-fired power plants with zero-emitting generation. *See* Amended

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[122] *See, e.g.*, Ashley J. Lawson, Cong. Rsch. Serv., Federal Power Act: The Department of Energy's Emergency Authority Version 4 (R48568) at 2 (updated July 1, 2025), https://www.congress.gov/crs_external_products/R/PDF/R48568/R48568.4.pdf.

[123] *See* U.S. Dep't of Energy, Order No. 202-25-3 (May 23, 2025), https://www.energy.gov/sites/default/files/2025-05/Midcontinent%20Independent%20System%20Operator%20%28MISO%29%20202%28c%29%20Order_1.pdf (Exhibit K).

[124] *See* Midcontinent Indep. Sys. Operator, Inc., Petition to Intervene and Request for Rehearing, Order No. 202-25-3 (June 23, 2025), https://www.misostates.org/images/stories/Filings/DOE/2025/OMS_Intervention_and_Rehearing_Request_-_DOE_202c_Order.pdf.

[125] *See* Request for Rehearing by Michigan Attorney Gen. Dana Nessel before the United States Department of Energy, Order No. 202-25-3 (June 18, 2025), https://stateimpactcenter.org/files/AG-Actions-MI-Request-for-Rehearing-J.H.-Campbell-coal_06.18.2025.pdf (Exhibit L); Petition for Review by Michigan Attorney General Dana Nessel before the United States Court of Appeals for the District of Columbia Circuit, DOE Order No. 202-25-3 (July 24, 2025), https://www.michigan.gov/ag/-/media/Project/Websites/AG/releases/2025/July/Petition-for-Review--COA-DC-SOM-v-USDOE-DOE-Order-No-202253-002.pdf.

Complaint ¶ 8, *New York, et al. v. Trump*, No. 1:25-cv-11221 (D. Mass.), ECF No. 141. And the Secretary of the Interior has established an extraordinary process requiring his personal approval of any Department action in furtherance of solar or wind energy development on federal lands.[126]

Fourth, the Administration has taken related actions that will result in greater energy usage, leading to increased emissions of greenhouse gases and other pollutants when that electricity is generated by fossil fuel-fired power plants. For example, DOE has proposed to rescind or weaken energy efficiency standards for 16 appliance categories. *See* Energy Conservation Program: Exempt Power Supplies Under the EPS Service Parts Act of 2014, 90 Fed. Reg. 20,831 (May 16, 2025); Energy Conservation Program: Proposed Withdrawal of Determination of Air Cleaners as a Covered Consumer Product, 90 Fed. Reg. 20,835 (May 16, 2025). If finalized, those rollbacks together would increase greenhouse gas emissions by approximately 365 million metric tons over the lifetime of these appliances.[127]

As discussed in Section II.B, *supra*, EPA is interpreting the term "contribute significantly" in furtherance of the Administration's policies promoting fossil fuel-fired generation. *See also* 90 Fed. Reg. at 25,765 ("[I]f regulating emissions would not be useful, taking into account, *inter alia*, the impacts on, and the Administration's policies concerning, the source category, that source category's contribution to the air pollution is not significant"). The Administration's actions to encourage fossil fuel development and use could result in substantial increases in greenhouse gas emissions. Analysts project that the pollution standard rollbacks the Trump Administration has announced and a rapid termination of the clean energy tax credits from the Inflation Reduction Act would result in greenhouse gas emission levels that are 24–36% higher in 2035 than they would have been without these actions (along with a 6–15% increase in gas prices, increased reliance on imported crude oil, and an increase in average household energy costs of as much as $489 a year in 2035).[128] The power sector is projected to be the largest driver of emission increases, responsible for 53–59% of the overall increase.[129] An independent analysis projects that, with the Trump Administration's policies, U.S. power sector CO_2 emissions will be 199 million metric tons higher in 2035 than they otherwise would have been—

[126] See U.S. Dep't of Interior, Memorandum on Departmental Review Procedures for Decisions, Actions, Consultations, and Other Undertakings Relating to Wind and Solar Energy Facilities (July 15, 2025), https://www.doi.gov/media/document/departmental-review-procedures-decisions-actions-consultations-and-other (Exhibit M).

[127] This figure was derived by calculating the CO_2 emissions savings previously projected by DOE to occur that would be foregone as a result of DOE's current rollback proposals. *See* Joanna Mauer, Appliance Standards Awareness Project, Potential Lost Savings from DOE's Proposed Rollback of Efficiency Standards (Aug. 2025), https://appliance-standards.org/sites/default/files/Potential_lost_savings_from_proposed_rollbacks.pdf (Exhibit P).

[128] Ben King et al., Trump 2.0: What's in Store for US Energy and Climate?, Rhodium Grp. (Dec. 17, 2024), https://rhg.com/research/trump-2-0-whats-in-store-for-us-energy-and-climate/ (Exhibit N).

[129] *Id*.

with 1,140 million metric tons (1.14 Gt) of CO_2 emissions in 2035.[130] If U.S. power sector emissions continue unabated (as projected under current tax law and without the Carbon Pollution Standards), between 2025 and 2050, U.S. power sector emissions will constitute 18.7% of the total global carbon budget remaining to have a 50% likelihood of limiting global warming to 1.5°C. Across temperature rise limitation targets (1.5 to 2.0°C) and associated likelihoods of remaining below those targets (50% to 83%), projected U.S. power emissions from 2025–2050 would constitute 3.1% to 126% of the remaining carbon budget.[131]

These combined actions taken by the Trump Administration—even if only partially successful—will result in a substantial increase in power plant greenhouse gas emissions. Such an increase would further undercut EPA's contention that greenhouse gas emissions from the U.S. power sector do not significantly contribute to air pollution that may reasonably be anticipated to endanger public health or welfare.

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[130] Jesse Jenkins et al., Princeton Univ. ZERO Lab, Impacts of the One Big Beautiful Bill On The US Energy Transition—Summary Report, Version 4 (July 3, 2025), https://zenodo.org/records/15801701 (Exhibit O); *see also* Princeton Univ. ZERO Lab & Evolve Energy Rsch., Impacts of the One Big Beautiful Bill On The US Energy Transition—Summary Report, Slide 14 (Modeled U.S. Greenhouse Gas Emissions by Sector) (July 2025), REPEAT_OBBB_07-03-25.pdf, https://zenodo.org/records/15801701.

[131] The total remaining carbon budget as of the start of 2023 to stabilize global average temperature increase at 1.5, 1.7, and 2.0 degrees Celsius are modeled as 250, 600, and 1,150 Gt CO_2 respectively at the 50% certainty level; 150, 500, and 950 Gt CO_2 at the 67% certainty level; and 100, 350, and 800 Gt CO_2 at the 83% certainty level. *See* P.M. Forster et al., *Indicators of Global Climate Change 2022: Annual Update of Large-Scale Indicators of the State of the Climate System and Human Influence*, 15 Earth Sys. Sci. Data 2295–2327 (2023), https://doi.org/10.5194/essd-15-2295-2023. Total global fossil fuel and industrial GHG emissions for 2023 and 2024 of 36.8 and 37.4 Gigatons (Gt) respectively are subtracted from these carbon budgets to calculate carbon budgets remaining as of the start of 2025. *See* Pierre Friedlingstein et al., *Global Carbon Budget 2024*, 17 Earth Sys. Sci. Data 965–1039 (2024), https://publications.pik-potsdam.de/rest/items/item_31931_4/component/file_32118/content. Future projections of U.S. power sector emissions were calculated using the National Renewable Energy Laboratory's "Mid-Case, No IRA Tax Credits and No CAA 111" scenario developed as part of the 2024 Standard Scenarios. *See* Pieter Gagnon et al., 2024 Standard Scenarios Report: A U.S. Electricity Sector Outlook, Nat'l Renewable Energy Lab'y (2024) (Tech. Rep. No. NREL/TP-6A40-92256), https://docs.nrel.gov/docs/fy25osti/92256.pdf). Modeled annual emissions for specific years (2026, 2029, 2032, 2035, 2038, 2041, 2044, 2047, and 2050) were downloaded from the online Scenario Viewer tool. *See* Nat'l Renewable Energy Lab'y, Scenario Viewer::Data Downloader, https://scenarioviewer.nrel.gov). Annual emissions for years not modeled were calculated by linearly interpolating between the nearest modeled years. 2025 emissions were assumed to be equivalent to 2026 modeled emissions. The sum of all emissions for all years 2025–2050 was 33.0 Gt CO_2. The projected cumulative U.S. power sector emissions are divided by the global carbon budgets remaining as of 2025 to calculate the fraction of total carbon budgets the U.S. power sector is projected to consume.

III. EPA'S ALTERNATIVE PROPOSAL IS ALSO UNLAWFUL AND ARBITRARY AND CAPRICIOUS

A. EPA has a statutory duty under section 111 to set emission standards and must consider alternatives to full rescission of the current standards.

In its alternative proposal—consisting of repeal of several provisions in the Carbon Pollution Standards—EPA undertook a myopic review of those standards and guidelines. For example, it concludes that "*90 percent* CCS is not an adequately demonstrated system of emission reduction and that the cost of *90 percent* CCS for long-term coal-fired steam generating units is not reasonable," and thus "*90 percent* carbon capture and storage is not BSER for long-term coal-fired steam generating units." 90 Fed. Reg. at 25,773 (emphases added). The Proposal says nothing about whether a different percentage (e.g., 75%) might satisfy the statutory standard, contending instead that "[w]hether CCS with other, lower rates of capture could be the BSER is outside the scope of this repeal action." *Id.* So too with respect to the 40% co-firing BSER for medium-term coal-fired steam generating units. The Proposal simply says: "Whether co-firing at other percentages could be BSER is outside the scope of this action." *Id.* at 25,775. But that conclusion is wrong: the rulemaking's scope must include "alternative[s] within the ambit of the existing standards." *Motor Vehicle Mfrs. Ass'n of the U.S., Inc. v. State Farm Mut. Auto. Ins. Co*., 463 U.S. 29, 51 (1983) (*State Farm*). Ambit means "a sphere of action, expression, or influence: scope."[132] In other words, the rulemaking must consider options between the Carbon Pollution Standards and full repeal. The Proposal's failure to grapple with any alternative systems of emission reduction is unlawful for at least three reasons.

First, the Clean Air Act *requires* EPA to regulate harmful air pollution from listed source categories (which would include fossil fuel-fired power plants under the Proposal's alternative). Specifically, the Act says:

> Within one year after the inclusion of a category of stationary sources in a list under subparagraph (A), the Administrator shall publish proposed regulations, establishing Federal standards of performance for new sources within such category. The Administrator shall afford interested persons an opportunity for written comment on such proposed regulations. After considering such comments, he shall promulgate, within one year after such publication, such standards with such modifications as he deems appropriate.

42 U.S.C. § 7411(b)(1)(B). In turn, section 111(d) directs that the "Administrator shall prescribe regulations which shall establish a procedure … under which each State shall submit to the Administrator a plan which establishes standards of performance for any existing source…" *Id.*

[132] *Ambit*, Webster's New Collegiate Dictionary (1981); *see also* Oxford English Dictionary (1989) (defining "ambit" as the "the extent, compass, sphere, of actions, words, thoughts, etc.").

§ 7411(d); *see also* 40 C.F.R. § 60.22a(a) (draft guidelines to be published "concurrently or after" proposal of section 111(b) standards); *see Am. Elec. Power Co.*, 564 U.S. at 424–25 (EPA is statutorily obligated to regulate carbon dioxide from power plants). When EPA established the Carbon Pollution Standards, it did so pursuant to this statutory obligation to regulate carbon dioxide emissions from new and existing fossil fuel-fired power plants. Indeed, that rule reflected decades of efforts led by several of the States and Cities to compel EPA to address these dangerous emissions.

The alternative proposal rests only on EPA's proposed reversal of prior BSER determinations, which is not enough to justify returning to a legal landscape of non-regulation. Even if EPA does reverse its prior determinations, it remains statutorily bound to adopt new source performance standards for combustion turbines and emission guidelines for existing steam generating units and combustion turbines, based on another system of emission reduction. By repealing the currently applicable standards without replacing them with any new "Federal standards of performance," the Proposal leaves this mandatory statutory duty entirely unfulfilled. The Clean Air Act specifically contemplates that EPA will review and revise standards of performance from stationary sources from time to time, but it does not empower EPA to repeal existing standards leaving its statutory mandate completely unfulfilled. *See* 42 U.S.C. § 7411(b)(1)(B), (g). EPA does not explain why proposing to extend the deadlines is insufficient to address its professed timing concerns. The Proposal, for its part, provides no explanation at all for why the standards must be rescinded before EPA considers alternative standards.

Leaving its statutory mandate unfulfilled is particularly egregious in light of the lengthy history prior to this rulemaking, including years of litigation by many of the States and Cities to compel EPA to perform its statutory duty under section 111 to limit power plant greenhouse gas emissions, as detailed above. *See* Section I.B.1, *supra*. The alternative proposal would erase the States' and Cities' efforts of over two decades and return to the pre-*New York* remand state of affairs by repealing the Carbon Pollution Standards without promulgating any replacement.

Although EPA may change its policy with respect to how to regulate carbon pollution from power plants, it cannot simply announce a policy of non-regulation in contravention of its statutory duties. Rather, the "new policy" must be "permissible under the statute." *FCC v. Fox Television Stations, Inc.*, 556 U.S. 502, 515 (2009). Especially under the alternative proposal, which maintains EPA's prior "significant contribution" finding, and in a posture where EPA is rescinding regulations that are currently in place, eliminating limits altogether on stationary sources that emit the most carbon pollution is not "permissible" under the Clean Air Act. *Id.*; *see also Massachusetts*, 549 U.S. at 533 ("Under the clear terms of the Clean Air Act, EPA can avoid taking further action only if it determines that greenhouse gases do not contribute to climate change or if it provides some reasonable explanation as to why it cannot or will not exercise its discretion to determine whether they do."). Although the current Administration might prefer not to regulate greenhouse gas emissions from stationary sources, "[t]he agency's

policy preferences cannot trump the words of the statute." *Nat'l Treas. Emps. Union v. Chertoff*, 452 F.3d 839, 865 (D.C. Cir. 2006).

Second, and in light of EPA's statutory duty and the regulatory history, it is plainly arbitrary and capricious to deem consideration of alternative systems of emission reduction outside of the scope of this rulemaking. "An agency is required to consider responsible alternatives to its chosen policy and to give a reasoned explanation for its rejection of such alternatives." *Spirit Airlines v. U.S. Dep't of Transp.*, 997 F.3d 1247, 1255 (D.C. Cir. 2021) (quoting *Am. Radio Relay League v. FCC*, 524 F.3d 227, 241 (D.C. Cir. 2008)); *Allied Local & Reg'l Mfrs. Caucus v. EPA*, 215 F.3d 61, 80 (D.C. Cir. 2000) ("To be regarded as rational, an agency must . . . consider significant alternatives to the course it ultimately chooses."). Courts have found agency actions arbitrary and capricious when the agency "fail[ed] . . . to consider obvious alternatives." *Yakima Valley Cablevision v. FCC*, 794 F.2d 737, 746 n.36 (D.C. Cir. 1986). And while an agency need not consider "every alternative," *State Farm*, 463 U.S. at 51, it must consider "significant and viable … alternatives," *10 Ring Precision v. Jones*, 722 F.3d 711, 724 (5th Cir. 2013), and an agency's failure to "consider *any* alternatives" is particularly arbitrary and capricious, *Tik Tok v. Trump*, 507 F. Supp. 3d 92, 111–12 (D.D.C. 2020) (emphasis added). Indeed, it is blackletter law that an agency should consider "alternative[s] within the ambit of the existing standard," short of full repeal. *State Farm*, 463 U.S. at 51; *see also Dep't of Homeland Sec. v. Regents of the Univ. of Cal.*, 591 U.S. 1, 30 (2020) (agency's recission of rule is arbitrary and capricious without considering whether agency should maintain key component of rule that could operate independently).

Here, if it were true that the key problem with the Carbon Pollution Standards is that 90% CCS by 2032 or 40% co-firing by 2030 is too stringent from feasibility, cost, and infrastructure perspectives, then failing to consider whether a lower percentage capture or co-firing and/or a later compliance deadline would be feasible or cost effective both fails the "require[ment] to consider responsible alternatives" and fails to consider an important aspect of the problem. *Spirit Airlines*, 997 F.3d at 1255; *see State Farm*, 463 U.S. at 42, 46–48, 51. Further, EPA has not considered the large and ongoing damages caused by the greenhouse gases that the Proposal would allow and whether there is a standard that would reduce that dangerous pollution while addressing the technical concerns raised by the alternative proposal. Notably, EPA does not need to amass a new technical record to consider alternative systems of emissions reduction—as explained *infra* Section III.B, the current record amply supports a conclusion that there are systems of emissions reductions that would prevent significant amounts of dangerous pollution that are feasible and cost-effective. While the Carbon Pollution Standards rejected capture percentages lower than 90% as the "best" system of emission reduction based on its conclusion that 90% capture was adequately demonstrated and achievable, if the alternative proposal rejects that specific conclusion, EPA must explore (and solicit public comment on) whether lower levels of capture could satisfy its current technical concerns. Similarly, EPA must consider whether co-firing with natural gas—even if lower than 40%—would constitute the BSER for any coal-fired

power plant not subject to a CCS-based standard. Failure to consider an available alternative technology as a basis for regulation is among the "most obvious reason[s]" for finding an agency's rescission of a rule arbitrary and capricious. *State Farm*, 463 U.S. at 46–48. Here, the record compels EPA to consider, at a minimum, the "obvious alternatives" of CCS with less than 90% capture on a longer timeframe, and co-firing at less than 40% as alternative BSERs. *Spirit Airlines*, 997 F.3d at 1255.

Indeed, EPA's own record shows that standards and guidelines based on CCS or co-firing at lower rates are "obvious alternatives." *Spirit Airlines*, 997 F.3d at 1255. As discussed below, and as EPA itself does not dispute, CCS and co-firing are both demonstrated, well-established technologies generally. *See, e.g.*, 89 Fed. Reg. at 39,846 ("[A]ll components of CCS—CO_2 capture, CO_2 transport, and CO_2 sequestration—have been demonstrated concurrently, with each component operating simultaneously and in concert with the other components"); *see* 90 Fed. Reg. at 25,768–73, 25,775–77 (discussing existing and in-development CCS systems installed on coal- and gas-fired power plants). Rather, EPA's alternative proposal disputes only that CCS *at the 90% capture rate* is adequately demonstrated and cost-reasonable. *See id.* at 25,768. But even that position identifies lower rates of capture that, by EPA's new (and unsupported) criteria, are adequately demonstrated. *E.g., id.* at 25,769–70 (Boundary Dam Unit 3 at 63%–83% capture). EPA, however, preemptively excluded any study of CCS at any capture rate below 90%, asserting, "Whether CCS with other, lower rates of capture could be the BSER is outside the scope of this repeal action." *Id.* at 25,773. EPA offers no rational explanation for limiting its proposal in this manner, and its decision to blinker its own analysis is arbitrary. Likewise, EPA's deliberate refusal to study co-firing at rates below 40% irrationally and arbitrarily excludes obvious alternative BSERs. *Id.* at 25,775. By proceeding as if there is no other basis for establishing emission limits other than through the very same BSERs that EPA chose in the Carbon Pollution Standards, the repeal proposal arbitrarily and capriciously ignores and mischaracterizes the record, such that EPA cannot articulate a rational connection between the facts it has found and the conclusions it draws. *See State Farm*, 463 U.S. at 43.

If EPA decides to consider alternatives the Proposal has deemed outside its scope—either those proposed by commenters or others—it must first make those alternatives, and its rationales for adopting or not adopting them, available for public comment. An agency must "identify and make available technical studies and data that it has employed in reaching the decisions to propose particular rules," and failure to "reveal portions of the technical basis for a proposed rule in time to allow for meaningful commentary" constitutes "serious procedural error." *Conn. Light & Power v. NRC*, 673 F.2d 525, 530–31 (D.C. Cir. 1982); *see also* 42 U.S.C. § 7607(d)(3).

B. The best systems of emission reduction in the Carbon Pollution Standards are adequately demonstrated and cost reasonable and the corresponding emission limits are achievable.

In establishing performance standards under section 111(a)(1), EPA must determine the best system of emission reduction that has been adequately demonstrated, taking into account the

cost of reductions, non-air quality health and environmental impacts, and energy requirements. 42 U.S.C. § 7411(a)(1). Once EPA identifies the best system, it must determine the "degree of emission limitation" achievable by application of that system. *Id.* Under section 111, to be "adequately demonstrated," a system must be shown to be reasonably "reliable," "efficient," and "expected to serve the interests of pollution control without becoming exorbitantly costly." *Essex Chem. Corp. v. Ruckelshaus*, 486 F.2d 427, 433 (D.C. Cir. 1973); *see also Portland Cement Ass'n v. Ruckelshaus*, 486 F.2d 375, 391 (D.C. Cir. 1973) (whether a system is adequately demonstrated "cannot be based on a 'crystal ball' inquiry"). Relatedly, an "achievable standard is one which is within the realm of the adequately demonstrated system's efficiency and which, while not at a level that is purely theoretical or experimental, need not be routinely achieved within the industry prior to its adoption." *Essex Chem. Corp.*, 486 F.2d at 433–34.

In the Carbon Pollution Standards, EPA established performance standards for three subcategories of combustion turbines (gas-fired power plants)—base load, intermediate load, and low load—based on utilization relative to potential electricity output. 89 Fed. Reg. at 39,908–09. Base load and intermediate load sources must achieve a standard reflecting the degree of limitation achievable using highly efficient turbine design. *Id.* at 39,917. By 2032, base load units must achieve a second phase standard based on CCS with a 90% capture rate. *Id.* at 39,802. For existing coal-fired power plants, EPA developed emission guidelines for two subcategories based in part on information provided by power plant owners regarding their planned use of these generating units. *See* New Source Performance Standards for Greenhouse Gas Emissions from New, Modified, and Reconstructed Fossil Fuel-Fired Electric Generating Units; Emission Guidelines for Greenhouse Gas Emissions from Existing Fossil Fuel-Fired Electric Generating Units; and Repeal of the Affordable Clean Energy Rule, 88 Fed. Reg. 33,240, 33,343 (May 23, 2023). First, to substantially limit emissions from coal-fired units that will operate long term (beyond 2038) and have more time to recoup control costs, EPA determined that CCS is the best system of emission reduction. *See* 89 Fed. Reg. at 39,801. Beginning in 2032, long-term units must capture 90% of their CO_2 emissions. 40 C.F.R. § 60.5775b(c)(1)(i). Second, for units that will operate for the medium-term (until 2038), EPA set a less-stringent emission limit based on co-firing coal with 40% natural gas as the best system. *Id.* § 60.5775b(c)(2)(i).

1. <u>The Proposed Rule fails to show that the best system of emission reduction for long term coal-fired power plants and new baseload natural gas turbines based on CCS is not adequately demonstrated or that the standards are unachievable.</u>

EPA's determinations in the Carbon Pollution Standards that CCS with a 90% capture rate are adequately demonstrated for long-term coal plants and new baseload combustion turbines was robustly supported by the technical record and consistent with the statutory factors under section 111(a)(1) including, *inter alia*, the amount of pollution reduction, costs, and energy requirements, and EPA further showed that the resulting emission limits are achievable. *See* States' 2023 Comments (Exhibit A) at 47–55. In the Proposed Rule, EPA has failed to show otherwise.

Adequate demonstration. Contrary to the Proposed Rule, 90 Fed. Reg. at 25,769–72, EPA reasonably determined in the Carbon Pollution Standards that CCS was adequately demonstrated for long term coal plants and new baseload combustion turbines based on the long operating history of CCS at coal-fired power plants and other facilities with substantially similar flue gas streams.

- EPA fails to rebut the evidence that multiple plants (e.g., Boundary Dam, Petra Nova) achieved 90%+ capture from the portion of the flue gas sent to their carbon capture units, as described in the record for the Carbon Pollution Standards. The Proposal focuses on captured emissions relative to total produced emissions based on the assumption that capture rates would be different when processing an entire flue gas stream. 90 Fed. Reg. at 25,769–70. EPA fails to explain why higher capacity capture units or use of additional capture units would be unable to achieve 90% carbon capture from entire flue gas streams. Nor has EPA provided empirical support for such a position.
- In seeking to discount its previous findings that the Boundary Dam project established adequate demonstration of 90% capture, EPA ignores key facts concerning the plant's operation at lower capacity, including its improved recent performance and that the plant was not required—or even incentivized—to maximize capture percentage or capture carbon from the full flue stream. In addition, during the first quarter of 2025, the carbon capture unit was available 98.4% of the time (far surpassing the company's target availability of 75%).[133]
- Given the substantial similarity between CCS applied to coal and gas-fired power plants, EPA's claim in the Proposal that CCS is not adequately demonstrated for gas turbines fails for the same reason as for coal plants. Furthermore, EPA documented in the Carbon Pollution Standards multiple examples of carbon capture deployments for gas turbines, demonstrating the ability of carbon capture systems to achieve 90% capture rates at those generating units. 89 Fed, Reg. at 39,926–27; *see* States' 2023 Comments (Exhibit A) at 39–43. EPA's argument in the Proposal that the fact that gas units can ramp up more quickly could create additional challenges for capturing emissions than on coal plants, 90 Fed. Reg. at 25,776, overlooks that EPA previously found methods available to achieve up to 95% capture during startup, s*ee* 89 Fed, Reg. at 39,928.

Cost. Contrary to the Proposal, EPA reasonably determined that CCS is cost reasonable for long term coal plants and new baseload combustion turbines.

- EPA's conclusion in the Proposal that CCS is not cost reasonable, 90 Fed. Reg. at 25,777, rests on flawed assumptions about the operation of coal plants with carbon capture. For example, EPA assumes a capacity factor of 40%, *id*. at 25,772 n.165, based in part on the "limited availability" of the 45Q tax credit. This appears to be referring to the agency's observation about legislation then pending in Congress that would have terminated that

[133] *BD3 Status Update: Q1 2025*, SaskPower Blog, https://saskpower.com/about-us/our-company/blog/2025/bd3-status-update-q1-2025 (May 2, 2025).

credit. *See* 90 Fed. Reg. at 25,773. But the final legislation retained the 45Q tax credit and *increased* the value of the credit in two ways: by implementing a more favorable inflation adjustment, and by allowing taxpayers to claim a higher credit value for captured CO_2 used for enhanced oil recovery.[134] Thus, plants with carbon capture units will have more of an incentive, not less, to run at higher capacity factors.

- EPA is incorrect that in considering cost it should not have assumed the ability of facilities to offset compliance costs by using the 45Q tax credit. *See* 90 Fed. Reg. at 25,772. As EPA explained in the litigation over the Carbon Pollution Standards, the best reading of the statute is to consider such credits in determining pollution reduction costs because section 111(a)(1) refers to "the cost of achieving such reduction." EPA Br. in *West Virginia v. EPA* (D.C. Cir. No. 24-1120), ECF No. 2083166, at 75.

Achievability. Contrary to the Proposed Rule, EPA reasonably determined in the Carbon Pollution Standards that CCS with 90% capture, pipeline, and sequestration infrastructure could be deployed by the compliance date of January 1, 2032.

- EPA documented, using conservative assumptions, how capture equipment could be deployed in time for the compliance date. *See* 89 Fed. Reg. at 39,874–75, 39,938–39. In the Proposal, EPA expresses concern that sequestration infrastructure is limited, 90 Fed. Reg. at 25,773, but provides no data in support. If anything, the evidence shows *increased* achievability of sequestration. For example, EPA has granted or made significant progress toward granting additional states primacy over Class VI injection wells used for sequestration, including West Virginia, Texas, and Arizona.[135]
- Although EPA now expresses concern about a lack of existing pipeline network, 90 Fed. Reg. at 25,773, the record for the Carbon Pollution Standards demonstrated that CO_2 pipelines could be deployed by the compliance deadline given the relatively close proximity of coal power plants to sequestration sites, utilizing shorter, often intrastate pipelines from plants to sequestration sites, without requiring an expansion of the existing, interconnected CO_2 pipeline infrastructure. *See* 89 Fed. Reg. at 39,855–56. Also, EPA explained how the construction of the pipelines in its modeled compliance scenario would require a lower average annual rate of pipeline construction relative to natural gas pipeline construction between 2017 and 2021. *See id.* at 39,856.

[134] H.R. 1, *The One Big Beautiful Bill Act*, § 70522.

[135] EPA, Primary Enforcement Authority for the Underground Injection Control Program, https://www.epa.gov/uic/primary-enforcement-authority-underground-injection-control-program-0 (last updated July 22, 2025).

2. The Proposed Rule fails to show that co-firing with 40% natural gas is not the best system of emission reduction for medium-term coal plants or that the existing emission limits are not achievable.

EPA's proposed reversal regarding co-firing with 40% natural gas as the best system of emission reduction for medium-term coal-fired generating units is erroneous on several grounds. Co-firing is adequately demonstrated and cost effective, and the standards for medium-term coal units are achievable. *See* States' 2023 Comments (Exhibit A) at 55–56; State Interv. Br. (Exhibit D) at 14–19; *see also* the Co-Firing Analysis attached to these comments as ***Appendix 3***. EPA's explanation for this aspect of the Proposal also misreads the Supreme Court's decision in *West Virginia v. EPA.*

Adequate demonstration. In 2024, EPA determined that natural gas co-firing technology is robustly demonstrated. As natural gas prices have declined over the past decade, the quantity of natural gas consumed onsite by coal-fired power plants has increased, with co-firing at higher levels becoming more common. 89 Fed. Reg. at 39,892, 39,894–95. EPA used data on monthly fuel consumption from 2015–2021 to determine that, of the 565 coal-fired electric generating units (EGUs) operating at the end of 2021, 162 had more than one month of natural gas consumption at their boiler and 29 units co-fired at over 40% on an annual heat input basis in at least one year while operating with annual capacity factors greater than 10%. *Id.* at 39,815, 39,892, 39,902. Based on hourly reported CO_2 emission rates from the start of 2015 through the end of 2020, EPA also determined in the Carbon Pollution Standards that 29 coal-fired EGUs co-fired with natural gas at rates at or above 60% of capacity on an hourly basis. *Id*. at 39,892.

Many coal-fired EGUs already have access to natural gas at the site or nearby, even those that do not currently burn natural gas in some form. For example, 107 of the 565 coal-fired EGUs are located at facilities that also operate natural gas EGUs, and so have a ready supply of (typically pipeline-delivered) natural gas. In addition, 172 of the coal-fired EGUs operating at the end of 2021 also reported to the Energy Information Administration via Form 860 an affiliated natural gas local distribution company or pipeline.[136] In combination, a majority (369 of 565) of coal-fired EGUs operating at the end of 2021 had natural gas as a fuel source, are located at a plant with a natural gas generator, and/or are located at a plant with a natural gas pipeline connection.[137] Updated analysis using data for all coal EGUs operating as of the end of 2024 and accounting for recent retirements does not meaningfully change the conclusion: 68 of 378 coal-fired EGUs (18%) are co-located with a natural gas-fired EGU; 155 of 378 coal EGUs

[136] EPA, Greenhouse Gas Mitigation Measures for Steam Generating Units Technical Supporting Document (Apr. 2024), Doc. ID No. EPA-HQ-OAR-2023-0072-9095, file://pdcprmsfrd01/FolderRedirection/mcostell/Downloads/EPA-HQ-OAR-2025-0124-0078_content.pdf.

[137] *Form EIA-860 Detailed Data with Previous Form Data (EIA-860A/860B): 2021 Annual Electric Generator Reports*, U.S. Energy Info. Admin. https://www.eia.gov/electricity/data/eia860/ (last updated June 11, 2025).

(41%) had access to natural gas service; and overall 169 of 378 coal-fired EGUs (45%) either used natural gas as a fuel or for startup, are co-located at a plant with a natural gas EGU, or report having access to natural gas at the plant location.[138]

Cost. Costs associated with adding natural gas co-firing capacity are reasonable. In 2024, EPA calculated the costs of 40% co-firing for the fleet of coal-fired steam generating units that existed in 2021 and that do not have known plans to cease operations or convert to gas by 2032.[139] EPA assumed that each of those units will continue to operate at the same level as it operated over 2017–2021.[140] On average, EPA estimated that the weighted average cost of co-firing with 40% natural gas as the BSER on an annual average basis is approximately $73/ton CO_2 reduced, or $13/MWh. 89 Fed. Reg. at 39,890, 39,894. That calculation included capital costs necessary to modify the boiler, changes to fixed and variable operational costs, and any new natural gas lateral pipeline extensions that were necessary to supply needed natural gas. Those control costs are lower than EPA has previously found to be reasonable.[141]

Achievability. The 40% co-firing standard is achievable by the 2030 compliance deadline. As EPA previously found, and the Proposal does not rebut, any necessary boiler modifications that might be required to achieve natural gas co-firing levels of 40% or greater likely could be completed within three years.[142] This three-year timeframe includes all of the necessary steps from feasibility studies to startup and testing, and was based on a review of recently completed project approvals and constructions for natural gas pipelines.[143] EPA's analysis found that the existing pipeline network, with relatively short lateral pipelines to power plants that are not yet served by gas, would be sufficient to comply with the standard, and nothing in the Proposal rebuts this finding.[144] Nor does the Proposal consider *any* of the compliance flexibilities included in the Carbon Pollution Standards. *See* 89 Fed. Reg. at 39,978–79.

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[138] *Form EIA-860 Detailed Data with Previous Form Data (EIA-860A/860-B), 2024 Annual Electric Generator Reports (Early Release)*, U.S. Energy Info. Admin., https://www.eia.gov/electricity/data/eia860/ (last updated June 11, 2025).

[139] 89 Fed. Reg. at 39,894.

[140] *Id.*

[141] *Id.*

[142] Sargent & Lundy, Natural Gas Co-Firing Memo (Mar. 2023), https://downloads.regulations.gov/EPA-HQ-OAR-2023-0072-0019/content.pdf.

[143] ICF Int'l, Documentation for the Lateral Cost Estimation (Apr. 2024), Attachment to Doc. ID No. EPA-HQ-OAR-2023-0072-9095.

[144] Greenhouse Gas Mitigation Measures for Steam Generating Units Technical Support Document, *supra* note 136.

Contrary to EPA's claim, 90 Fed. Reg. at 25,774, 40% co-firing with natural gas would not adversely impacts energy requirements. The Proposal asserts that the co-firing BSER would result in an inefficient use of natural gas, and that the relevant facts—particularly anticipated retirements of coal-fired power plants—are different now than when EPA finalized the Carbon Pollution Standards. *Id.* But the Proposal does not provide any updated analysis of how many plants are delaying retirement, how much gas would be needed for co-firing under the standard, or the supply that will be available, so its assertions are not supported by facts and analysis. And, indeed, the Administration has touted its plans to increase natural gas production.[145] An updated analysis of coal plant operations and retirement decisions indicates that the amount of gas needed for 40% co-firing at various levels is relatively small. App. 3 at 1–4. This reinforces EPA's original conclusion that the use of this gas for co-firing would not have significant adverse impacts on the energy sector—including that it would not have significant adverse effects on the price of natural gas or the price of electricity. 89 Fed. Reg. at 39,895.

Furthermore, contrary to EPA's new position, 90 Fed. Reg. at 25,774, the 40% co-firing BSER for medium-term coal plants does not constitute impermissible generation shifting. Rather, co-firing natural gas in a coal-boiler is entirely consistent with the Supreme Court's decision in *West Virginia v. EPA*. In *West Virginia*, the Court described favorably EPA's "consistent" historical approach of designing a "technology-based standard [which] is one that focuses on improving the emissions performance of individual sources," such as "fuel switching." 597 U.S. at 726–27. In the Carbon Pollution Standards, EPA found that close to half of coal plants already burn natural gas as a fuel or start up source and that any modifications required to enable co-firing at plants not already doing so are modest, and "typically involve[] the installation of new gas burners and related boiler modifications," including, for example, new fuel supply lines and modifications to existing gas ducts." 89 Fed. Reg. at 39,892.

In the Proposal, EPA cites the need for these modifications when changing from coal to gas—as opposed to switching between the same type of fuel (e.g., high sulfur to low sulfur coal)—as rendering co-firing with natural gas outside of scope of "fuel switching" endorsed in *West Virginia* and instead generation shifting it precluded. *See* 90 Fed. Reg. at 25,774. As discussed in the States and Cities' brief in the litigation over the Carbon Pollution Standards, however, boiler modifications *would* be required if switching from burning high sulfur coal to low sulfur coal, *see* State Interv. Br. (Exhibit D) at 15–16 (citing EPA, *Technological Problems of Burning Low-Sulfur Western Coal* 6 (Dec. 31, 1975)),[146] so EPA's distinction does not hold

[145] *See*, *e.g.*, Press Release, U.S. Dep't of Interior, Secretaries Burgum, Wright Join JERA and U.S. LNG Producers to Finalize Agreements Expected to Add over $200 Billion to U.S. GDP (June 11, 2025), https://www.doi.gov/pressreleases/secretaries-burgum-wright-join-jera-and-us-lng-producers.

[146] *See also* U.S. Energy Info. Admin., Electric Utility Phase I Acid Rain Compliance Strategies for the Clean Air Act Amendments of 1990 at 18–20 (Mar. 1994) (discussing need for boiler modifications due to coal ash impacts on components when switching from high sulfur to low sulfur coal), https://www.eia.gov/electricity/archive/0582.pdf (Exhibit Q).

weight. EPA further contends that 40% co-firing is generation shifting because "it is an attempt to dictate the market share of coal versus natural gas." 90 Fed. Reg. at 25,774. But EPA explained that the 40% co-firing determination was based on considerations of cost, non-greenhouse gas emission impacts, and energy requirements, not market share. *See* 89 Fed. Reg. at 39,894–95.[147]

In short, 40% co-firing involves non-extensive and cost-reasonable modifications at the source, already commonly deployed by industry, that reduce pollution at the source. It is entirely consistent with the at-the-source pollution reduction technologies that EPA has historically identified as the basis for pollution standards under the Clean Air Act.[148] The standards have no effect on any plant other than the regulated plant, except through the usual effects on plant economics of internalizing the externality cost of pollution to society that underlies the CAA and that the Court explicitly found permissible.[149] The coal plant continues to burn coal and to generate electricity. The standard "allow[s] regulated entities to produce as much of a particular good as they desire provided that they do so through an appropriately clean (or low-emitting) process." *Id.* at 725 (citing 80 Fed. Reg. at 64,738, describing EPA's traditional approach prior to the Clean Power Plan).[150]

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[147] It is noteworthy that the repeal proposal itself distinguishes fuel switching from generation shifting. "CPP was based on generation shifting as BSER, ACE was based on HRI as BSER, and [Carbon Pollution Standards were] based on co-firing and CCS as BSERs." 90 Fed. Reg. at 25,766 n.109.

[148] At oral argument in the Supreme Court, the parties challenging the legality of the Clean Power Plan distinguished a permissible standard of performance from an impermissible one based on whether the plant itself become cleaner in its operations: Mr. Roth: "So the way I like to think about it is, is this a measure that would reduce the emissions rate from this source's operations? If it is, then it's within the scope of the statute. … So, Your Honor, there absolutely could be incidental effects of a regulation that is a valid regulation, right, that have the effect of causing some generation shifting. That's not what we're objecting to here. I mean, there always could be incidental effects of regulation." Transcript of Oral Argument at 41–43, *West Virginia v. EPA*, 597 U.S. 697 (2022) (No. 20-1530), https://www.supremecourt.gov/oral_arguments/argument_transcripts/2021/20-1530_758b.pdf.

[149] *West Virginia*, 597 U.S. at 731 n.4 ("But there is an obvious difference between (1) issuing a rule that may end up causing an incidental loss of coal's market share, and (2) simply announcing what the market share of coal, natural gas, wind, and solar must be, and then requiring plants to reduce operations or subsidize their competitors to get there.").

[150] If anything, it is EPA's approach in the Proposed Rule that is inconsistent with *West Virginia*. The Proposal rejects natural gas co-firing as the BSER partly on the grounds that "natural gas co-firing is an inefficient use of that natural gas, and natural gas is also an important and limited resource necessary to public welfare." 90 Fed. Reg. at 25,766, 25,774. But as with EPA's improper attempt to smuggle policy considerations into the determination of whether power plant greenhouse emissions contribute significantly to endangerment, *see supra* Section II.B, EPA's task in determining the BSER is not to focus on the most efficient use of fossil fuels, but to limit pollution through application of the best system.

C. EPA's proposed repeal of emission guidelines for oil- and gas-fired steam-generating units based on the burden of preparing state plans is unlawful.

EPA's proposed repeal of emission guidelines for natural gas-fired and oil-fired steam generating units on the grounds that "it would be imprudent to require States to develop State plans solely for these units," 90 Fed. Reg. at 25,775, would also be unlawful. EPA's proposed action is based on the flawed premise that because the CO_2 emission limits for existing coal-fired plants must be repealed, only gas-fired and oil-fired plants would be subject to the section 111(d) state plan requirement. *See* 90 Fed. Reg. at 25,775. As discussed above, EPA has failed to provide a reasoned basis for repealing the limits for existing coal plants or to consider obvious alternatives. *See* Section III.B.1, *supra*.

But even if the agency had proposed to repeal the guidelines for gas-fired and oil-fired plants independently, it would lack the authority to do so. Section 111(d) requires standards of performance for any existing source of non-criteria and non-hazardous air pollutants (including CO_2) "to which a standard of performance would apply if such existing source were a new source." 42 U.S.C. § 7411(d); 40 C.F.R. § 60.22a(a) (draft guidelines to be published "concurrently or after" proposal of section 111(b) standards). Here, standards for CO_2 exist for new gas-fired and oil-fired steam generating units. *See* 40 C.F.R. Part TTTT; 40 C.F.R. § 60.5509(a). In addition, EPA does not even dispute that its prior BSER determination or presumptive standards are appropriate for these sources. *See* 90 Fed. Reg. at 25,775. Although the Clean Air Act specifically contemplates that EPA will review and revise standards of performance from stationary sources from time to time, *see* 42 U.S.C. § 7411(b)(1)(B), (g), it does not empower EPA to repeal the existing guidelines under section 111(d) without replacing them. *See id.* § 7411(d)(1), Section III.A, *supra*. As with the emission guidelines for existing coal plants, EPA therefore lacks the authority to repeal the emission guidelines for gas-fired and oil-fired plants without replacing them. *See* Section III.A, *supra*.

Indeed, EPA cites no legal basis for rescinding regulations of these sources under section 111(d) based on the agency's position that it would be "imprudent" to require their control. Although the agency makes the factual assertion that it would be unduly burdensome for states to prepare plans to regulate these sources, 90 Fed. Reg. at 25,775, it has not provided any analysis supporting that proposition. As purported evidence of undue burden, EPA cites to an information collection request that was prepared as part of the rulemaking for the Carbon Pollution Standards in 2023, *id.* at 27,775 n.192, but those materials contain no breakdown for oil- and gas-fired steam units, just aggregate estimated costs for state plans for the source category. *See* EPA, Supporting Statement: Emission Guidelines for Greenhouse Gas Emissions from Existing Fossil Fuel-Fired Electric Generating Units, Information Collection Request, Doc. ID No. EPA-HQ-OAR-2023-0072-8836. Given that EPA's rationale that repealing emission guidelines for these sources is warranted because they represent a "very small portion" of the source category, *see* 90 Fed. Reg. at 25,775, EPA cannot just rely on these aggregate numbers for a reasoned explanation. *See ANR Storage Co. v. FERC*, 904 F.3d 1020, 1026–28 (D.C. Cir. 2018) (holding

agency action to be arbitrary and capricious because its "analysis . . . was internally inconsistent").

Additionally, although several commenting States have these power plants operating in their jurisdictions, it is their experience that the burden of preparing state plans to regulate these sources is not in fact significant. For example, Maine has only one affected EGU (the Wyman Power Station in Yarmouth, Units 1–4), yet the Maine Department of Environmental Protection does not consider it an inefficient use of resources to develop and submit a state plan to ensure that the Wyman Station complies with emissions guidelines in the Carbon Pollution Standards. The Michigan Department of the Environment, Great Lakes, and Energy does not anticipate that developing a plan for the handful of affected EGUs in Michigan will be a significant burden. And the New Mexico Environment Department already issues air quality-related permits under the CAA to affected plants, which contain maintenance requirements similar to those in EPA emissions guidelines in the Carbon Pollution Standards, and preparing a state plan for these requirements is a minimal and efficient use of NMED resources.

IV. THE PROPOSED RULE IS ARBITRARY AND CAPRICIOUS

A final EPA action taken under the Clean Air Act will be vacated if it is "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law," or if it was promulgated "without observance of procedure required by law." 42 U.S.C. § 7607(d)(9)(A), (D); *see Util. Air Regul. Grp. v. EPA*, 744 F.3d 741, 747 (D.C. Cir. 2014). An agency action is arbitrary or capricious where it is not "reasonable and reasonably explained." *FCC v. Prometheus Radio Project*, 592 U.S. 414, 423 (2021). An agency must provide "a satisfactory explanation for its action, including a rational connection between the facts found and the choice made." *State Farm*, 463 U.S. at 43 (internal citation and quotation marks omitted). The requirement is satisfied when the agency's explanation is clear enough that its "'path may reasonably be discerned.'" *Id*. (citing *Bowman Transp., Inc. v. Arkansas-Best Freight Sys., Inc*., 419 U.S. 281, 286 (1974)). "But where the agency has failed to provide even that minimal level of analysis, its action is arbitrary and capricious and so cannot carry the force of law." *Encino Motorcars, LLC v. Navarro*, 579 U.S. 211, 221 (2016).

Agencies must also provide a reasoned explanation for changes in existing policies. *See id.* An agency seeking to change existing policy "must at least display awareness that it is changing position and show that there are good reasons for the new policy." *Id.* (internal quotation marks and citation omitted). "An agency may not . . . depart from a prior policy *sub silentio* or simply disregard rules that are still on the books." *Fox*, 556 U.S. at 515. Further, where, a new policy rests on factual or legal determinations that contradict those underlying the agency's prior policy, the agency must provide a more detailed explanation for its policy. *Fox*, 556 U.S. at 515–16. "Unexplained inconsistency" in agency policy is "a reason for holding an interpretation to be an arbitrary and capricious change from agency practice." *Nat'l Cable & Telecomms. Ass'n v. Brand X Internet Servs.*, 545 U.S. 967, 981 (2005); *see also Encino*

Motocars, 579 U.S. at 222. An arbitrary and capricious regulation of this sort is itself unlawful and receives no deference. *Encino Motorcars*, 579 U.S. at 222. Agencies also must provide a more detailed justification "when [their] prior policy has engendered serious reliance interests that must be taken into account." *Fox*, 556 U.S. at 515.

Here, if finalized, the Proposed Rule would be arbitrary and capricious in multiple respects: First, EPA has failed to sufficiently explain its new position that power plant greenhouse gas emissions need not be regulated under section 111 of the Clean Air Act, which is a complete reversal of its longstanding position and has engendered serious reliance interests by the States and Cities. Second, EPA did not adequately consider the impacts of the Proposed Rule on grid reliability and affordable electricity. Third, EPA has prejudged the outcome of the rulemaking.

A. EPA failed to adequately explain its change in position or to consider serious reliance interests.

EPA's proposed repeal of all greenhouse gas emission standards and emission guidelines for the power sector fails basic tenets of rational decision-making and is arbitrary and capricious. As the Supreme Court has explained, "[o]ne of the basic procedural requirements of administrative rulemaking is that an agency must give adequate reasons for its decisions." *Encino Motorcars*, 579 U.S. at 221.

Here, EPA's Proposal represents a reversal of EPA's "former views as to the proper course." *See Pub. Citizen v. Steed*, 733 F.2d 93, 98 (D.C. Cir. 1984). Accordingly, EPA must: "display awareness that it is changing position"; show that "the new policy is permissible under the statute"; "believe[]" the new policy is better; and provide "good reasons for the new policy." *Fox*, 556 U.S. at 515; *see also Lone Mountain Processing, Inc. v. Secretary of Interior*, 709 F.3d 1161, 1164 (D.C. Cir. 2013) ("[A]n agency changing its course must supply a reasoned analysis indicating that prior policies and standards are being deliberately changed, not casually ignored. Failing to supply such analysis renders the agency's action arbitrary and capricious."). EPA has not met any of these requirements. First, as discussed above in Section II, EPA has not demonstrated, and cannot demonstrate, that its new interpretations of section 111 of the Clean Air Act reflect the best reading of the statutory language. Additionally, EPA has not provided adequately detailed or "good reasons" for: (i) its new interpretation of the statute to require a pollutant-specific significant contribution finding; (ii) its new interpretation of "significantly contributes;" or (iii) its finding that power plant greenhouse gas emissions do not significantly contribute to endangerment of public health or welfare. And EPA has entirely ignored the serious reliance interests engendered by its regulation of greenhouse gas emissions from power plants under section 111, as detailed above in Section I.B.1.

With regard to EPA's new statutory interpretation to require a pollutant-specific significant contribution finding, EPA in fails to acknowledge the joint resolution of Congress, S.J. Res. 14, enacted under the Congressional Review Act, detailed above in Section II.A., which

directly rejected that interpretation. EPA has also failed to square its new interpretation with the agency's contemporaneous and consistent interpretation of that resolution in the 2020 Methane Rule, which is still on the books. EPA's failure to acknowledge and explain this inconsistency is arbitrary and capricious. *Fox*, 556 U.S. at 515; *Encino Motorcars*, 579 U.S. at 222.

Also, as discussed in detail in Sections II.B. and II.C., the Proposal's new statutory interpretation of the term "significantly"—imbuing that term with non-scientific policy judgments and background legal principles of proximate cause—directly contradicts EPA's historic interpretation of that language. As explained above, EPA has for almost two decades consistently interpreted its significant contribution finding as almost exclusively focused on the amount or extent of a source category's contribution to air pollution that may be reasonably anticipated to endanger public health and welfare. EPA fails to fully acknowledge its change of position from its past findings or adequately explain the inconsistency between its prior position and the Proposal. *Compare, e.g.*, 86 Fed. Reg. at 2556 (concluding that the "primary criteria" for determining significance under section 111(b) (and indeed the only criteria relevant to power plants given their "uniquely large GHG emissions"), is the amount of greenhouse gas emissions from a source category). Such failure renders the Proposal arbitrary and capricious. *See Nat'l Cable & Telecomms. Ass'n*, 545 U.S. at 981.

EPA also has not shown "good reasons" for its change in policy. *Fox*, 556 U.S. at 515. EPA attempts to justify its new interpretation as necessary to account for the potential downstream cost and energy production impacts of regulating power plant greenhouse gas emissions. *See* 90 Fed. Reg. at 25,766–67. In addition to being contrary to the statutory language and structure, as explained above, EPA's justification is counter-factual and inadequate. EPA fails to explain how the agency's prior approach, which considers regulatory costs and energy requirements at the regulatory stage when establishing standards of performance under section 111(b)(1)(B), rather than as part of the significant contribution finding stage under section 111(b)(1)(A), is inadequate. The sole example EPA provides is the Carbon Pollution Standards, which EPA estimated would result in significant coal retirements and lower amounts of generation from new natural gas plants. *See id.* at 25,766–67 (citing Carbon Pollution Standards RIA, Doc. ID No. EPA-HQ-OAR-2023-0072-8913 (May 2024), at 3-28). But other than being contrary to the President's policy goal of favoring increased reliance on fossil fuel-fired electricity generation, EPA fails to explain how the retirement of dirtier fossil fuel-fired power plants in favor of cleaner generation sources, would negatively impact public health and welfare. Rather, the Proposal's collapsing of considerations relevant to the regulatory stage into the listing stage is an arbitrary and capricious departure from historic EPA policy and practice.

Relatedly, it was arbitrary and capricious for EPA not to consider the likely results of its policies promoting fossil fuel use and opposing clean energy, *see* Section II.C.3 *supra*, on the magnitude of emissions from power plants for purposes of its significant contribution finding. *See Ctr. for Biological Diversity v. EPA*, No. 23-1177, 2025 WL 1717319, at *17 (D.C. Cir. June 20, 2025) ("Because FWS failed to engage with the results of those models or, in the alternative,

identify why they did not constitute the best available science and data, it 'entirely failed to consider an important aspect of the problem.'" (quoting *State Farm*, 463 U.S. at 43)); *Comcast Corp. v. FCC*, 579 F.3d 1, 8 (D.C. Cir. 2009) ("[W]e have not hesitated to vacate a rule when the agency has not responded to empirical data or to an argument inconsistent with its conclusion."); *Farmers Union Cent. Exch., Inc. v. FERC*, 734 F.2d 1486, 1520 (D.C. Cir. 1984) ("self-contradictory . . . logic does not constitute an adequate explanation").

In addition to being inconsistent with the statutory text, as explained in Section II.B *supra*, EPA has also failed to adequately explain or justify its new interpretation to incorporate proximate cause principles into its significant contribution finding and to require a heightened showing for global pollutants such as greenhouse gases based on a supposed "attenuated causal chain." 90 Fed. Reg. at 25,767. EPA's new argument contradicts its prior significant contribution findings for power plant greenhouse gas emissions, including a rulemaking under the first Trump Administration where EPA acknowledged that greenhouse gas emissions are the "best" indicator of "significance" because "the quantity of emissions from a source category correlates directly with impacts." 86 Fed. Reg. at 2551. Contrary to its new finding that there are too may purported "uncertainties" and "extrapolations" to connect power plant greenhouse gas emissions with adverse effects in the United States from climate change, 90 Fed. Reg. at 25,767, EPA has consistently had no prior difficulty in drawing such connections. *See, e.g.*, 86 Fed. Reg. at 2551 (citing scientific models and peer reviewed scientific publications showing the direct correlation between reducing emissions from a source category such as power plants and projected temperature changes). EPA's failure to acknowledge or explain this contradiction renders the Proposal arbitrary and capricious. *See Nat'l Cable & Telecomms. Ass'n*, 545 U.S. at 981.

EPA's reliance on a downward trend in the share of U.S. power plant greenhouse gas emissions to global greenhouse gas concentrations as part of its basis for finding such emissions to be insignificant is another unexplained departure from prior EPA policy. For instance, in its 2021 rulemaking, EPA specifically found such considerations to be irrelevant to a determination of significance for power plants given their uniquely large greenhouse gas emissions and the fact that U.S. power plants continue to make up a sizeable portion of emissions from power plants worldwide. 86 Fed. Reg. at 2556–57. Relatedly, EPA has failed to justify its assumption that its continued regulation of power plant greenhouse gas emissions will simply result in other countries increasing their own greenhouse gas emissions. 90 Fed. Reg. at 25,768. There is growing evidence that other countries may be just as likely (if not more likely) to reciprocally reduce their emissions in response to U.S. policies limiting greenhouse gas emissions. There are several factors supporting that conclusion, including that other countries benefit from research and development efforts in the United States regarding cost effective limits on greenhouse gas emissions.[151] Despite this evidence, EPA just assumed that other countries would respond to the

[151] *See* Inst. for Pol'y Integrity, *The Scale of Significance: Power Plants* 5–6 (May 2025) (citing technological spillover, policy diffusion, and tit-for-tat dynamics as factors for reciprocal reductions),

agency's leaving the 2015 NSPS Rule and Carbon Pollution Standards in place by increasing their own emissions. EPA's failure to examine whether the evidence supported its underlying assumptions was arbitrary and capricious. *See Inteliquent, Inc. v. FCC*, 35 F.4th 797, 802 (D.C. Cir. 2022) (agency "cannot ignore evidence that undercuts its judgment" (citation omitted)); *Nat. Res. Def. Council v. EPA*, 755 F.3d 1010, 1023 (D.C. Cir. 2014) ("EPA retains a duty to examine key assumptions as part of its affirmative burden of promulgating and explaining a nonarbitrary, non-capricious rule . . . ." (quotation marks omitted)).

Finally, EPA fails to acknowledge or consider the serious reliance interests of the States and Cities on EPA's federal regulation of power plant greenhouse gas emissions under the Clean Air Act. *See* Section I.B.1, *supra*. EPA has regulated such emissions over the past 10 years, displacing States' authority to pursue claims under federal common law. *See Am. Elec. Power Co.*, 564 U.S. at 428. EPA is best positioned to effectively and efficiently regulate such emissions on a nationwide basis, to the benefit of the States and Cities, and fails to offer any good reasons for abdicating its statutory role. *Fox*, 556 U.S. at 515.

In sum, EPA fails to provide any explanation, let alone the required detailed or reasoned one, for "disregarding facts and circumstances that underlay or were engendered by [its] prior policy." *Id*. at 516. EPA has consistently found that power plant greenhouse gas emissions significantly contribute to endangerment of public health and welfare. In proposing to repeal all greenhouse gas emission standards and emission guidelines for the power sector, EPA fails to acknowledge or explain crucial inconsistencies between its prior position and its new position, which is based on a fundamental misconstruction of the Clean Air Act. The agency's interpretation in the proposed repeal is also completely devoid of any recognition of the dire threat posed by climate change, the interconnected nature of power plant generation of electricity and pollution, and the nature of carbon dioxide as a long-lived and widely disbursed pollutant.

B. EPA failed to consider impacts of the Proposed Rule on grid reliability or electricity affordability.

The Proposed Rule is also arbitrary and capricious because it omits any evidence-based consideration of the Proposed Rule's impact on electric grid reliability or electricity affordability. EPA has failed to provide any analysis or data to support its glancing, conclusory statement that the coal resources "unleashed" by the Proposed Rule "will be critical to meeting the rise in electricity demand . . . increasing 'energy supply,' lowering 'electricity costs,' [and] stabilizing the power grid." 90 Fed. Reg. at 25,755 (quoting Executive Order 14261). Conversely, EPA has failed to address the Proposed Rule's significant negative impacts on electricity affordability and reliability, which EPA recognized in the 2024 Carbon Pollution

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https://policyintegrity.org/files/publications/Power_Sector_GHG_Contribution_Issue_Brief_vF.pdf (Exhibit R)

Standards, thus failing to consider an important aspect of the problem and to address prior contradictory findings. *See State Farm*, 463 U.S. at 43–46.

3. EPA has not provided any relevant data to support any grid reliability and affordability rationale for the Proposed Rule.

To the extent EPA attempts to justify the Proposed Rule by assuming that more coal-fired power will improve grid reliability and affordability, it must provide and assess relevant data and methods supporting the rationale, and subject those data and methods to public comment. *Fox*, 556 U.S. at 513–16; *State Farm*, 463 U.S. at 42–43; *see also* 42 U.S.C. § 7607(d)(3)(A), (B). EPA has failed to do so here.

EPA's Proposed Rule offers only a few passing references to its impact on grid reliability and electricity affordability and simply assumes—without providing any relevant data, findings, or analysis—that eliminating the Carbon Pollution Standards and increasing reliance on fossil fuel-fired power plants would benefit grid reliability and affordability.[152] Instead, EPA merely declares that it "considered . . . whether possible controls would create risks to the reliability of the electricity system." 90 Fed. Reg. at 25,758. But the Proposed Rule does not include or describe any data informing either its purported considerations or its conclusions. And nothing else in the Proposed Rule suggests that EPA attempted to support its assumption that increasing coal-fired power generation will produce a more reliable and affordable electricity system. *Nat. Res. Def. Council v. EPA*, 755 F.3d at 1023.

Nor can EPA belatedly invoke DOE's July 2025 Resource Adequacy Report to justify any final rule based on a reliability rationale.[153] Several States have filed an administrative petition for rehearing that details the myriad problems with this DOE report, and the arguments therein are incorporated here by reference as reasons why EPA cannot rely on the report. Motion to Intervene and Protective Request for Rehearing by the Attorneys General of Maryland, Washington, Illinois, Michigan, Minnesota, Arizona, Colorado, Connecticut, and New York, *In re: Resource Adequacy Report: Evaluating the Reliability and Security of the United States Electric Grid, July 2025* (submitted to DOE on Aug. 6, 2025) (Exhibit S). As an initial matter, if EPA intends to rely on the report, it must initiate a new comment period to make the report—and the nature and extent of the agency's reliance on it—available for public comment. *See* 42

[152] 90 Fed. Reg. at 25,755; *see also id.* at 25,766 ("[T]he significance analysis is informed by this Administration's national policy that energy production is essential to the public welfare. This entails continued and increasing reliance on fossil fuels to meet increasing demands for electricity generation, including to power artificial intelligence (AI) and related technologies with critical implications for national security and economic growth.").

[153] U.S. Dep't of Energy, Resource Adequacy Report: Evaluating the Reliability and Security of the United States Electric Grid (July 2025), https://www.energy.gov/sites/default/files/2025-07/DOE%20Final%20EO%20Report%20%28FINAL%20JULY%207%29.pdf [hereinafter DOE Resource Adequacy Report].

U.S.C. § 7607(d)(3)(A), (B); *Conn. Light & Power*, 673 F.2d at 530–31 (agency must "identify and make available technical studies and data that it has employed in reaching the decisions to propose particular rules;" failure to "reveal portions of the technical basis for a proposed rule in time to allow for meaningful commentary" constitutes "serious procedural error"); *cf. Am. Radio Relay League, Inc. v. FCC.*, 524 F.3d 227, 236 (D.C. Cir. 2008) (APA section 553 "require[s] agencies to release for comment the technical studies and data or staff reports on which they rely during a rulemaking" (internal citation and quotation marks omitted)). This is particularly relevant here because DOE's report was issued without any opportunity for comment or peer review, notwithstanding its clear methodological flaws, explained briefly here, that would have benefited from such input. Additionally, the report's conclusions rest on fundamentally flawed assumptions regarding load growth, retirements, and capacity additions.

First, the report inexplicably assumes 50 gigawatts (GW) of inflexible data-center load growth, but that load growth is highly uncertain[154] and, moreover, typically can be served with existing capacity[155] or addressed through industry efforts[156] and new state laws and policies.[157] Second, the report assumes 104 GW of retirements by 2030, but the June 2025 Energy Information Administration data project that only half of this capacity will retire by then, and the report fails to account for potential reductions in retirements occasioned by this Administration's

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[154] London Econ. Int'l LLC & S. Poverty L. Ctr., Uncertainty and Upward Bias Are Inherent in Data Center Electricity Demand Projections (July 7, 2025), https://www.selc.org/wp-content/uploads/2025/07/LEI-Data-Center-Final-Report-07072025-2.pdf; Brian Martucci, *A Fraction of Proposed Data Centers Will Get Built. Utilities Are Wising Up*, Utility Dive (May 15, 2025), https://www.utilitydive.com/news/a-fraction-of-proposed-data-centers-will-get-built-utilities-are-wising-up/748214/ ("… Even seasoned data center customers like Microsoft, Meta, Amazon and Google propose several times more projects than they're likely to need due to uncertainty around power availability and permitting at any given site. . . . Less sophisticated developers abandon proposed projects at an even higher rate…).

[155] *See* Tyler H. Norris et al., Nicholas Inst. for Energy, Env't & Sustainability, Duke Univ., Rethinking Load Growth: Assessing the Potential for Integration of Large Flexible Loads in US Power Systems 3 (2025), https://hdl.handle.net/10161/32077 ("US power system's existing headroom, resulting from intentional planning decisions to maintain sizable reserves during infrequent peak demand events, is sufficient to accommodate significant constant new loads, provided such loads can be safely scaled back during some hours of the year.").

[156] *See* Elec. Power Rsch. Inst., *DCFlex Initiative Overview,* https://dcflex.epri.com; Ingrid Lunden, *Alphabet Spin-Off SIP Launches Verrus, A Data Center Concept Built Around Battery 'Microgrids,'* TechCrunch: Enterprise (March 11, 2024, 7:45 AM PDT) https://techcrunch.com/2024/03/11/sip-verrus-data-center/ ("Verrus incorporates "microgrids" based on advanced, high-power batteries with software to understand and allocate energy to specific tasks and applications, and it is designed to address some of the power challenges posed by modern computing needs . . . that the first three data centers designed using Verrus' architecture . . . [the] aim is to have these operational in 2026 or 2027.")

[157] *See* Brian Martucci, *Texas Law Gives Grid Operator Power to Disconnect Data Centers During Crisis*, Utility Dive: Dive Brief (June 25, 2025), https://www.utilitydive.com/news/texas-law-gives-grid-operator-power-to-disconnect-data-centers-during-crisi/751587/.

own policies.[158] Third, the report assumes only 210 GW of new capacity, including only 22 GW of new "firm" baseload capacity (which it arbitrarily limits to gas), and only includes in its capacity projections "Tier 1" resources, i.e., those projects that have a very high likelihood of success. The report also projects only minimal capacity additions after 2026.[159] But the Energy Information Administration Annual Energy Outlook 2025 modeled total additions (planned and unplanned) at 301 GW through 2030, including 120 GW from "firm" sources.[160] Additionally, the report's (unfounded) load growth assumptions undermine its exclusion of Tier 2 resources: if there were higher demand for electricity, then projects in the Tier 2 category would be more likely to move toward completion. The report makes no attempt to reconcile those projections. Indeed, the report itself acknowledges its limitations: "the resource adequacy analysis that was performed in support of this study could benefit greatly from the in-depth engineering assessments which occur at the regional and utility level.[161] These and other flaws in the July 2025 Resource Adequacy Report undercut its conclusions and make it wholly unhelpful to EPA in assessing reliability impacts of the Proposed Rule here.

In sum, EPA's failure to offer any support for its passing grid reliability and energy affordability claims renders the Proposed Rule arbitrary and capricious. *See Delaware Dep't of Nat. Res. & Env't Control v. EPA*, 785 F.3d 1, 15 (D.C. Cir. 2015), as amended (July 21, 2015) (finding EPA's final rule arbitrary and capricious for failure to address rule's impact on grid reliability where agency sought to justify rule based on reliability benefits).

4. EPA has failed to adequately consider electricity reliability or affordability impacts, or to contend with its prior findings and relevant data regarding reliability and affordability impacts.

EPA not only has failed to support its feeble reliability references, but it also has failed to meaningfully assess the significant negative reliability and affordability impacts of the Proposed Rule. As the Supreme Court has explained, the "requirements" imposed by relevant statutes are an "important aspect of the problem" that an agency must consider. *Little Sisters of the Poor Saints Peter & Paul Home v. Pennsylvania*, 591 U.S. 657, 682 (2020). In this context, section 111(a)(1) requires that EPA take into account "energy requirements" when determining a BSER; yet, in rescinding its BSER determinations, EPA has failed to adequately consider such requirements by altogether ignoring actual energy reliability and affordability impacts and prior findings about those impacts. 42 U.S.C. § 7411(a)(1); 90 Fed. Reg. at 25,758. In fact, relevant

[158] *Form EIA-860*, U.S. Energy Info. Admin., *supra* note 138.

[159] DOE Resource Adequacy Report, *supra* note 153, at A-5.

[160] *Annual Energy Outlook 2025, Table 9 – Electricity Generating Capacity*, U.S. Energy Info. Admin. (Apr. 15, 2025), https://www.eia.gov/outlooks/aeo/data/browser/#/?id=9-AEO2025&cases=ref2025&sourcekey=0; *see also Form EIA-860*, U.S. Energy Info. Admin., *supra* note 138 (2024 early release data project 35 GW of gas additions and 53 GW in battery storage by 2030).

[161] DOE Resource Adequacy Report, *supra* note 153, at i.

data support EPA's 2024 findings that increased coal generation and the attendant increase in greenhouse gas emissions will actually raise energy costs and impair grid reliability over the short- and long-term. EPA's failure to contend with the contradictory data and findings in the Proposed Rule further demonstrates that the proposal is arbitrary and capricious. *See Fox*, 556 U.S. at 515–16; *State Farm*, 463 U.S. at 43; *see also* 42 U.S.C. § 7617(g) (inadequacy of assessment of, among other things, consumer costs and energy impacts in a proposed rule under section 111 "may be taken into consideration" by a court deciding whether EPA's final rule is lawful).

a. EPA fails to assess reliability impacts.

In promulgating the Carbon Pollution Standards, EPA specifically sought public comments about the effect of the proposed rules on grid reliability. New Source Performance Standards for Greenhouse Gas Emissions from New, Modified, and Reconstructed Fossil Fuel-Fired Electric Generating Units; Emission Guidelines for Greenhouse Gas Emissions From Existing Fossil Fuel-Fired Electric Generating Units; and Repeal of the Affordable Clean Energy Rule, 88 Fed. Reg. 80,682, 80,683 (Nov. 20, 2023). EPA made several changes in the 2024 final rule to accommodate those concerns and after extensive analysis concluded that the 2024 rule "will not interfere with grid operators' ability to continue delivering reliable power." 89 Fed. Reg. at 40,013. Moreover, in the 2024 rule, EPA acknowledged that "climate change affects all aspects of the energy-system supply, delivery, and demand through the increased frequency, intensity, and duration of extreme events and through changing climate trends." 89 Fed. Reg. at 39,809. In the Proposed Rule, however, EPA fails to acknowledge or address those prior findings—which contradict the proposal's passing reliability claims—regarding impacts of climate change on grid reliability or the ample data demonstrating those impacts. 90 Fed. Reg. at 25,755, 25,766–67. Those failures are fatal here. *See Nat'l Cable & Telecomms. Ass'n*, 545 U.S. at 981; *cf. Nat'l Ass'n of Mfrs. v. U.S. Sec. & Exch. Comm'n*, 105 F.4th 802, 812 (5th Cir. 2024) (concluding that rule was arbitrary and capricious where findings contradicted previous risk assessment, yet agency "did not engage in any analysis of its prior finding regarding the level of risk or explain *why* it had changed its mind") (emphasis in original).

Nor could EPA justify its departure from its past findings, as the data show that more frequent and extreme weather events caused by climate change exacerbated by the Proposed Rule pose significant threats to electricity infrastructure. In 2023, the Federal Energy Regulatory Commission (FERC) found that "region-wide heat waves, cold snaps, hurricanes, and wildfires have resulted in outages or other significant reliability impacts, often while contributing to substantial consumer costs," due to "the difficulty in preparing for extreme weather patterns that increasingly diverge from historical trends," "the need for potentially lifesaving energy when it is most difficult for the bulk-power system to deliver it," and the billions of dollars of damage

caused to electrical infrastructure during destructive weather events like wildfires and hurricanes.[162]

Even when extreme weather is not an immediate threat to a region, hotter average temperatures still harm reliability by contributing to prolonged periods of high electricity demand from cooling needs and decreased generation and transmission capacity.[163] For example, droughts in the Pacific Northwest have already caused significantly decreased output at hydropower units in Washington and Oregon.[164] Thermoelectric plants that rely on water for cooling and other essential operations also face reduced efficiency and capacity as a result of droughts and rising water temperatures.[165] Moreover, warmer temperatures stress powerlines, decreasing transmission capacity, and cause infrastructure like transformers to deteriorate faster.[166] EPA has not attempted to explain why it disregarded its previous findings or failed to analyze relevant data about the significant impacts of climate change on the grid.

b. EPA fails to assess affordability impacts.

In the Proposed Rule, EPA also briefly asserts (again, without support) that coal-fired power is essential to meeting the country's increasing demand for affordable electricity. 90 Fed. Reg. at 25,755. Yet, in the Carbon Pollution Standards, EPA found that the nation's aging fleet of coal-fired plants was already struggling to compete economically against newer, cheaper, and more efficient generating technologies—such as natural gas, wind, and solar—and that market

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[162] One-Time Informational Reports on Extreme Weather Vulnerability Assessments Climate Change, Extreme Weather, and Electric System Reliability, 88 Fed. Reg. 41,477, 41,479–80 (June 27, 2023); *see also Electricity Grid Resilience: Climate Change is Expected to Have Far-reaching Effects and DOE and FERC Should Take Actions, Testimony Before the S. Comm. on Env't & Pub. Works,* 117th Cong. 3 (Mar. 20, 2021) (statement of Frank Rusco, Director, Nat. Res. & Env't, Gov't Accountability Off.), https://www.gao.gov/assets/gao-21-423t.pdf ("Climate change is expected to have far-reaching effects on the electricity grid that could cost billions and affect every aspect of the electricity grid, from generation, transmission, and distribution to end-user demand.").

[163] Melissa R. Allen-Dumas et al., Oak Ridge Nat'l Lab'y, U.S. Dep't of Energy, *Extreme Weather and Climate Vulnerabilities of the Electric Grid: A Summary of Environmental Sensitivity Quantification Methods* 9, 12 (Aug. 16, 2019), https://doi.org/10.2172/1558514.

[164] Nathalie Voisin et al., *Impact of Climate Change on Water Availability and Its Propagation Through the Western U.S. Power Grid*, 276 (115467) Applied Energy (Oct. 15, 2020), https://doi.org/10.1016/j.apenergy.2020.115467; *Western U.S. Hydropower Generation Fell to a 22-Year Low Last Year*, *supra* note 91; S.W.D. Turner et al., *Compound Climate Events Transform Electrical Power Shortfall Risk in the Pacific Northwest*, 10 (8) Nature Commc'ns 2 (Jan. 2, 2019), https://doi.org/10.1038/s41467-018-07894-4; 88 Fed. Reg. at 41,480.

[165] Allen-Dumas et al., *supra* note 163, at 11; Ariel Miara et al., *Climate and Water Resource Change Impacts and Adaptation Potential for US Power Supply*, 7 Nature Climate Change 793 (Oct. 30, 2017), https://doi.org/10.1038/nclimate3417; Sean W.D. Turner et al., *A Multi-Reservoir Model for Projecting Drought Impacts on Thermoelectric Disruption Risk Across the Texas Power Grid*, 231 (120892) Energy (Sept. 15, 2021), https://doi.org/10.1016/j.energy.2021.120892.

[166] Allen-Dumas et al., *supra* note 163, at 12.

forces likely would continue to expand the price gap between coal and renewable technologies. 89 Fed. Reg. at 39,817–18, 39,822. That is, in part, because coal-fired plants lose efficiency as they age, and they often require more expensive and frequent maintenance, raising the cost of coal-fired electricity on average. 89 Fed. Reg. at 39,823.[167] Meanwhile, as natural gas and renewable energy sources have become cheaper and more widely available, they have simply outcompeted coal-fired generation.[168] *Id.* at 39,822. EPA offers no explanation in the Proposed Rule for disregarding those previous findings. *See Fox*, 556 U.S. at 515–16; *Nat'l Cable & Telecomms. Ass'n*, 545 U.S. at 981.

Nor could it, as recent data confirm the 2024 findings. By 2030, more than 28,000 MW of currently operating coal-fired capacity will be at least 50 years old, and will experience sharply rising operation and maintenance costs.[169] Increasing transportation and mining costs in certain areas of the country are also driving up the wholesale price of coal-generated electricity.[170] In fact, between 2021 and 2025, the average cost of coal-fired power generation rose by 28% (from $36/MWh to $46/MWh), and 95% of remaining coal plants are operating at a higher cost today than they were in 2021.[171] As a result, many coal-fired power plants have been closed or are scheduled to be closed or converted in the coming years due to poor economic viability.[172]

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[167] *See also* Dennis Wamsted & Seth Feaster, *Nowhere to Go but Down for U.S. Coal Capacity, Generation*, Inst. for Energy Econ. & Fin. Analysis (IEEFA) (Oct. 24, 2024), https://ieefa.org/resources/nowhere-go-down-us-coal-capacity-generation; U.S. Energy Info. Admin., Generating Unit Annual Capital and Life Extension Costs Analysis 29, 60–63 (Dec. 2019), https://www.eia.gov/analysis/studies/powerplants/generationcost/pdf/full_report.pdf.

[168] *See also* Samantha Gross, *Why There's No Bringing Coal Back*, Brookings Inst. (Jan. 16, 2019), https://www.brookings.edu/articles/why-theres-no-bringing-coal-back/; Kenneth Dubin, *U.S. Coal Plant Retirements Linked to Plants with Higher Operating Costs*, U.S. Energy Info. Admin.: Today in Energy (Dec. 3, 2019), https://www.eia.gov/todayinenergy/detail.php?id=42155; Wamsted & Feaster, *supra* note 167.

[169] Wamsted & Feaster, *supra* note 167.

[170] *Coal Explained: Coal Prices and Outlook*, U.S. Energy Info. Admin., https://www.eia.gov/energyexplained/coal/prices-and-outlook.php (last updated Apr. 17, 2024); *see also* Brief for State and Municipal Respondents in Opposition to Application for Stays of Administrative Action, *supra* note 97, at n.7 (detailing the increasing reliability problems experienced by coal plants due to inadequate or disrupted coal supply and the related costs being borne by ratepayers to keep them operating in West Virginia, Utah, and Arkansas) (Exhibit E).

[171] Energy Innovation Pol'y & Tech. LLC, Coal Power 28 Percent More Expensive in 2024 than in 2021 at 3 (2025), https://energyinnovation.org/wp-content/uploads/Coal-Cost-Update.pdf.

[172] Off. of Energy Stats. Staff, *Planned Retirements of U.S. Coal-Fired Electric-Generating Capacity to Increase in 2025*, U.S. Energy Info. Admin.: Today in Energy (Feb. 25, 2025), https://www.eia.gov/todayinenergy/detail.php?id=64604.

Relevant data also show that the move away from coal-fired generation resulted in a lower and less volatile average wholesale electricity price in 2024 than in previous years.[173] At the same time, coal-fired power plants that have delayed their scheduled closures are costing ratepayers billions of dollars.[174] For example, the Department of Energy's recent order requiring the 63-year old J.H. Campbell coal-fired power plant in Michigan to operate beyond its planned retirement date, *see* Section II.C.3 *supra*, is estimated to cost ratepayers between tens of millions of dollars to $100 million, while closing the plant was expected to save customers more than $600 million, and Ohioans have already paid around $679 million to subsidize two unprofitable coal-fired power plants in their state.[175] Indeed, it is estimated that it would be cheaper to replace every coal-fired power plant in the country with nearby renewable energy sources than it would be to continue operating geriatric coal-fired electric generating units.[176] These data points directly contradict EPA's new, unsupported tagline that "unleashing" coal-fired power generation is essential to lowering electricity costs and thus further demonstrate that the agency's rationale is arbitrary and capricious.

In sum, the agency's failure to grapple with the overwhelming evidence that continued greenhouse gas emissions will have far-reaching and devastating impacts on the reliability and affordability of our electric system renders the Proposed Rule arbitrary and capricious as well. *See State Farm*, 463 U.S. at 42.

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[173] Lori Aniti, *U.S. Wholesale Electricity Prices Were Lower and Less Volatile in 2024*, U.S. Energy Info. Admin. (Jan. 16, 2025), https://www.eia.gov/todayinenergy/detail.php?id=64284 ("Average wholesale electricity prices at major trading hubs in the Lower 48 states were lower in 2024 than in 2023. In addition, prices were much less volatile than they have been over the last few years. Lower and more stable electricity prices in 2024 were mostly driven by low natural gas prices, as well as increases in generation for some lower cost renewable energy sources and new battery storage capacity.").

[174] Silvio Marcacci, *Coal Power Costs Soar 28% Since 2021, Rising Faster than Inflation*, Forbes (June 8, 2025), https://www.forbes.com/sites/energyinnovation/2025/06/08/coal-power-costs-soar-28-since-2021-rising-faster-than-inflation/.

[175] *Id.*; Garret Ellison, *Consumers Energy Agrees to Retire Full Campbell Plant, End Coal by 2025*, Mich. Live (Apr. 20, 2022, 4:34 PM, updated Apr. 20, 4:36 PM), https://www.mlive.com/public-interest/2022/04/consumers-energy-agrees-to-retire-full-campbell-plant-end-coal-by-2025.html; Ella Nilsen, *The Trump Admin Ordered a Coal Power Plant to Stay On Past Retirement. Customers in 15 States Will Foot the Bill*, CNN (June 6, 2025), https://www.cnn.com/2025/06/06/climate/michigan-coal-plant-energy-cost-wright; Jake Zuckerman, *Ohioans Have Spent $679 Million over a Decade to Bail out Two Coal Plants*, Cleveland Plain Dealer (Cleveland.com) (Feb. 19, 2025, 3:05 PM, updated Feb. 19, 2025, 3:12 PM), https://www.cleveland.com/open/2025/02/ohioans-have-spent-679-million-over-a-decade-to-bail-out-two-coal-plants.html.

[176] *See* Michelle Solomon et al., Energy Innovation Pol'y & Tech. LLC, Coal Cost Crossover 3.0: Local Renewables Plus Storage Create New Opportunities for Customer Savings and Community Reinvestment 6, 30 (Jan. 2023), https://energyinnovation.org/wp-content/uploads/Coal-Cost-Crossover-3.0-2.pdf.

C. EPA has arbitrarily and unlawfully predetermined the outcome of the repeal and provided pretextual justifications for its Proposal.

Administrator Zeldin has demonstrated an "unalterably closed mind on matters critical to the disposition of th[is] proceeding," and therefore, either the Administrator must be disqualified from the rulemaking, or the Agency must withdraw this current proposed rule and begin a new rulemaking process that is untainted by the Administrator's prejudgment. *Ass'n of Nat'l Advertisers v. FTC*, 627 F.2d 1151, 1170 (D.C. Cir. 1979); *Nehemiah Corp. of Am. v. Jackson*, 546 F. Supp. 2d 830, 847 (E.D. Cal. 2008) (describing appropriate remedies when an agency official has prejudged the outcome of a particular matter).

A showing of prejudgment requires more than "mere discussion of policy or advocacy on a legal question." *Nat'l Advertisers*, 627 F.2d at 1171. An administrator "test[ing] his own views on different audiences" or "express[ing an] opinion prior to the issuance of a proposed rulemaking" does not show he "is unwilling or unable to consider rationally argument" from affected parties contrary to his position. *Id.* at 1173–74. It is permissible for a regulator to "ma[ke] his intention known so that interested parties can contribute to the debate," provided that the regulator in question remains open to an alternative course of action despite their initial intention. *Hous. Study Grp. v. Kemp*, 736 F. Supp. 321, 333 (D.D.C. 1990).

Nonetheless, an administrator's statements and actions may show he is "unable to consider meaningfully" the evidence presented in a rulemaking. *Nat'l Advertisers*, 627 F.2d at 1170. In such cases, "[a]llowing the public to submit comments to an agency that has already made its decision is no different from prohibiting comments altogether." *Nehemiah Corp.*, 546 F. Supp. 2d at 847. Indeed, "[t]here is no doubt that the purpose of [rulemaking proceedings] would be frustrated if [agency officials] had reached an irrevocable decision on whether a rule should be issued prior to … final action." *Nat'l Advertisers*, 627 F.2d at 1170.

Several patterns of behavior or statements may indicate an administrator is indeed unable to meaningfully consider the public's comments: (1) a senior political official's definitive and unequivocal announcement of a "dramatic change" in the agency's position, prior to the conclusion of administrative proceeding" *Int'l Snowmobile Mfrs. Ass'n v. Norton*, 340 F. Supp. 2d 1249, 1260–61 (D. Wyo. 2004); (2) an official's statement that his agency "would approve the new rule even in the face of critical comments," *Nehemiah Corp.*, 546 F. Supp. 2d at 847–48; and (3) a preexisting internal directive to reach a particular result, *Nat'l Advertisers*, 627 F.2d at 1172. Administrator Zeldin's conduct, both before and after he announced the Proposed Rule, exemplifies each of these disqualifying courses of conduct.

First, Administrator Zeldin's intemperate, unequivocal statements against any greenhouse gas regulations for power plants indicate a prejudged political conclusion. *See Int'l Snowmobile*, 340 F. Supp. 2d at 1260–61 (predetermined political decision to ban snowmobiles shown by statements that "there will be no future for these antiquated polluting vehicles in the National Park System").

In announcing EPA's reconsideration of several climate change-related rules, including the power plant standards at issue here, Administrator Zeldin consistently characterized the *announcement itself* as marking a dramatic change in course, styling March 11, 2025, the date of that announcement, as "the *Greatest Day* of Deregulation in American History."[177] In Administrator Zeldin's press release accompanying the announced reconsideration proceedings, he once more asserted, "*today is* the greatest day of deregulation our nation has seen."[178] Multiple press releases reiterate March 11th is "the greatest and most consequential *day* of deregulation in U.S. history."[179] On March 12, 2025, Administrator's *Wall Street Journal* opinion piece declared, "*Yesterday was* the most consequential day of deregulation in American history."[180] Administrator Zeldin repeatedly identified the *announcement* of reconsideration proceedings as the operative action. *See, e.g.*, March 12 EPA "Deregulation Day" Press Release ("*As a result of these announcements*, the cost of living for American families will decrease.").[181] When announcing his proposed rule, Administrator Zeldin stated that the days of climate regulations promulgated by Biden and Obama "are over."[182] This statement, like the Administrator's comment in *Int'l Snowmobile* that snowmobiles have "no future," indicates that prior to receiving any comments, Administrator Zeldin has already made a definitive decision about whether he will repeal Obama- and Biden-era climate change regulations.

Administrator Zeldin's commentary indicates not just a precommitment to *a* change as of March 11, but also a commitment to a particular *type* of regulatory change, prior to receiving any public comments at all. In declaring "the largest deregulatory announcement in US history,"

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[177] EPA, *EPA Administrator Lee Zeldin Launches the Greatest Day of Deregulation in American History*, YouTube (Mar. 12, 2025), https://www.youtube.com/watch?v=qae9bhymH50 (emphasis added) [hereinafter March 12 Zeldin 'Deregulation Day' Speech].

[178] Press Release, EPA, EPA Launches Biggest Deregulatory Action in U.S. History (Mar. 12, 2025), https://www.epa.gov/newsreleases/epa-launches-biggest-deregulatory-action-us-history (emphasis added) [hereinafter March 12 EPA 'Deregulation Day' Press Release]

[179] *See id*. (emphasis added); *see also* Press Release, EPA, Trump EPA Announces Reconsideration of Biden-Harris Rule, "Clean Power Plan 2.0", That Prioritized Shutting Down Power Plants While Raising Costs on American Families (Mar. 12, 2025), https://www.epa.gov/newsreleases/trump-epa-announces-reconsideration-biden-harris-rule-clean-power-plan-20-prioritized (emphasis added) [hereinafter March 12 EPA 'Clean Power Plan 2.0' Press Release].

[180] Lee Zeldin, *EPA Ends the 'Green New Deal,'* Wall St. J.: Opinion (Mar. 12, 2025, 1:31 PM ET), https://www.wsj.com/opinion/lee-zeldin-epa-ends-the-green-new-deal-aa81de06 (emphasis added) [hereinafter March 12 Zeldin WSJ Op-Ed].

[181] March 12 EPA 'Deregulation Day' Press Release, *supra* note 178.

[182] EPA, *EPA Proposes Repeal of Biden-Harris EPA Regulations for Power Plants*, YouTube (June 11, 2025, 2:00 PM), https://www.youtube.com/watch?v=BO2vpKZJGqQ [hereinafter June 11 Zeldin Carbon Pollution Standards Repeal Speech].

Administrator Zeldin indicated unequivocally that EPA's actions would be *deregulatory,*[183] committing EPA to an extreme scale of deregulation before any consideration of the public's input. And that superlative statement demonstrates a pre-determined decision to go further than even the first Trump administration—which relaxed power plant greenhouse gas regulation to virtually meaningless standards—and eliminate standards for power plants altogether, as EPA has now proposed.

Administrator Zeldin included other "gratuitous (but prejudicial)" statements, *Int'l Snowmobile*, 340 F. Supp. 2d at 1260, that confirm contempt for the protective purpose of greenhouse gas regulation and indicating he cannot or will not consider evidence in favor of such regulation. Twice, in both a Press Release and an Op-Ed, Administrator Zeldin asserted that the EPA was "driving a dagger straight into the heart of the climate change religion."[184] While announcing the proposed rule, he escalated his derogatory language even further, mockingly referring to the "climate change cult," and suggesting previous EPA decisions lacked "sanity."[185] Administrator Zeldin repeatedly characterized climate change prevention efforts as the "Green New Scam," both before and after announcing his proposed rule,[186] and asserted on March 12 that "[t]oday marks the death of the Green New Scam."[187] Administrator Zeldin leveled wild aspersions against the motive behind and nature of climate change regulations, accusing the decision to enact greenhouse gas regulations in general of being a "quest to destroy the American economy in the name of climate change"[188] and regulations on power plants in specific of representing a "war" on "US domestic energy supply" that was "enacted seeking to suffocate our economy in order to protect the environment."[189] He accused the Biden administration of "intend[ing]" to "reduce access to energy" and "decimat[e] communities" with power plant regulations—specifically alleging that "making it harder for Americans to afford to survive" was "not the unintended consequences" of Biden's rule, but rather, the "intended" consequences.[190]

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[183] March 12 Zeldin 'Deregulation Day' Speech, *supra* note 177; *see also* March 12 EPA 'Clean Power Plan 2.0' Press Release, *supra* note 179; March 12 Zeldin WSJ Op-Ed, *supra* note 180.

[184] March 12 EPA 'Deregulation Day' Press Release, *supra* note 178; March 12 Zeldin WSJ Op-Ed, *supra* note 180.

[185] June 11 Zeldin Carbon Pollution Standards Repeal Speech, *supra* note 182.

[186] March 12 Zeldin WSJ Op-Ed, *supra* note 180; June 11 Zeldin Carbon Pollution Standards Repeal Speech, *supra* note 182.

[187] March 12 Zeldin WSJ Op-Ed, *supra* note 180.

[188] Lisa Friedman, *How Lee Zeldin Went from Environmental Moderate to Dismantling the E.P.A.*, N.Y. Times (Mar. 29, 2025, updated Mar. 30, 2025), https://www.nytimes.com/2025/03/29/climate/lee-zeldin-epa.html.

[189] June 11 Zeldin Carbon Pollution Standards Repeal Speech, *supra* note 182.

[190] *Id*.

These absolutist and inflammatory statements more than overcome the contemporary, pro forma statements Administrator Zeldin and EPA made disclaiming any prejudgment of the outcome. Much like so-called "savings clauses" directing agencies to proceed "consistent with applicable law," these statements "are read in their context" and cannot overcome "clear and specific language" that shows exactly the prejudgment these statements disclaim. *See City & Cnty. of San Francisco v. Trump*, 897 F.3d 1225, 1233, 1239 (9th Cir. 2018); *HIAS, Inc. v. Trump*, 985 F.3d 309, 325 (4th Cir. 2021).

Second, an official's statement that his agency "would approve the new rule even in the face of critical comments" may indicate prejudgment and disqualify him from participating in rulemaking proceedings on remand in *Nehemiah Corp.*, 546 F. Supp. 2d at 847–48. Furthermore, beyond merely indicating prejudgment, agency conduct that creates a public perception that comments will be summarily disregarded may have a "chilling effect that causes the public to refrain from submitting comments as an initial matter." *Id.* at 847.

Here, Administrator Zeldin has made multiple comments similar to those made by the administrator in *Nehemiah Corp*, which evince a serious hostility to criticism and disinterest in genuinely considering public comments in opposition to his proposed rule. In announcing the proposal, Administrator Zeldin asserted, "[w]e will continue to unapologetically course correct" and "[w]e will use coal for power generation, to mine for critical minerals, and to export to our allies."[191] In response to critical questions on the EPA's rationale for the proposed rule, Administrator Zeldin did not respond to the substance of the question, and instead twice, rhetorically, asked "[h]ow do you justify not doing this action?" and "[h]ow do you possibly justify not taking this action?"[192] Such language clearly indicates Administrator Zeldin "is unwilling or unable to consider rationally" contrary evidence and public comment. *Nat'l Advertisers*, 627 F.2d at 1174.

Third, a preexisting internal directive to reach a particular result is strong evidence that the official is not "free, both in theory and in reality, to change his mind" in the agency proceedings. *Id.* at 1172; *see Int'l Snowmobile*, 340 F. Supp. 2d at 1260 (citing Assistant Secretary's memorandum, prior to the conclusion of environmental review, "directing the agency to prohibit snowmobile access in national park units" and providing "a sweeping condemnation of all recreational snowmobile use in the National Park System"). Here, the President's executive orders and Administrator Zeldin's commentary on these orders confirm the Administrator has already made up his mind on critical legal and factual issues.

Although general political or ideological stances are not enough to show prejudgment, *Nat'l Advertisers*, 627 F.2d at 1170, President Trump's executive orders on fossil fuels and coal-powered generation are specific and binding. Thus, Administrator Zeldin's comment that

[191] *Id.*

[192] *Id.*

"President Trump is the biggest supporter of clean, beautiful coal" [193] would not, on its own, be enough to show a predetermining internal directive. Yet President Trump's agenda is not merely an interest in permitting additional coal power, but, according to the Administrator, a specific promise to "kill" Biden-era pollution standards for fossil power plants.[194] President Trump's executive orders and Administrator Zeldin's embrace of those directives reflect an unshakable, predetermined commitment to the specific policy actions Administrator Zeldin proposed here to remove pollution abatement obligations from fossil fuel-fired power plants and thereby advantage them.

Administrator Zeldin tied the power plant Carbon Pollution Standard reconsideration to the *Unleashing* EO[195] and the *Beautiful Clean Coal* EO.[196] These executive orders show that the President has directed EPA to take specific positions that exceed EPA's authority and to pre-determine certain key factual or legal matters prior to opening any proposal for public comment. Section 3 of the *Unleashing* EO, for example, directs federal agencies to "suspend, revise, or rescind" existing regulations that "impose an undue burden on the identification, development, or use of domestic energy resources—with particular attention to oil, natural gas, [and] coal … resources." Exec. Order No. 14,154, § 3, 90 Fed. Reg. at 8354. Section 2 of the *Beautiful Clean Coal* EO similarly directs EPA to revise its regulations to encourage the utilization of a specific fuel: coal. Exec. Order No. 14,261, § 2, 90 Fed. Reg. at 15,517 ("It is a national priority to support the domestic coal industry by . . . *encouraging the utilization of coal to meet growing domestic energy demands*."). Likewise, Administrator Zeldin, in his announcement of the Proposed Rule, stated that the United States "*will use* coal"—not merely that the United States would be *able* to use coal, or that coal could continue to comprise part of the American energy generating fleet.[197] Enacting policies designed to shift the nation's generation fleet *toward* coal, oil, or natural gas exceeds EPA's authority as much as any rule that requires it to shift *away from* coal, oil, or natural gas, *West Virginia*, 597 U.S. at 728; but here, the defect is double, because the directive to "substantially restructure the American energy market", *id.* at 724, is predetermined by executive fiat. *Cf. id.* at 753 (Gorsuch, J., concurring) (decrying use of "pen-and phone regulations" to substitute for lawmaking).

President Trump's executive orders further instructed EPA to predetermine certain factual issues, without public input. The *Beautiful Clean Coal* EO thus required EPA to identify by late February, and without any public input, which rules "seek to transition the Nation away from coal production and electricity generation." Exec. Order No. 14,261, 90 Fed. Reg. at 15,518. Administrator Zeldin, in accordance with this executive order, and prior to any public

[193] *Id*.

[194] March 12 EPA 'Clean Power Plan 2.0' Press Release, *supra* note 179.

[195] *Id*. (citing "President Trump's Day One executive orders").

[196] April 8 Zeldin Beautiful Clean Coal Statement, *supra* note 121.

[197] June 11 Zeldin Carbon Pollution Standards Repeal Speech, *supra* note 182 (emphasis added).

input, predetermined a key factual issue—that the Carbon Pollution Standards "seek[] to transition the Nation away from coal production and electricity generation." *Id.* Indeed, Administrator Zeldin reiterated claims by litigants opposing the Carbon Pollution Standards that they operate as a "Clean Power Plan 2.0."[198] The Administrator uses the "Clean Power Plan 2.0" shorthand to argue that, like the Clean Power Plan, the Carbon Pollution Standards will require generation-shifting (which requires a factual determination that regulated plants will not, in fact, install pollution controls and continue to operate), and has similarly asserted that that rule sought to "regulate [coal plants] out of existence," and that the "intention of the government" in enacting the Carbon Pollution Standards was to spur "utility scale power plants [to] retire[]."[199] He has further concluded that the Carbon Pollution Standards are therefore "illegal" [200] and "unlawful," [201] and amount to re-enacting a plan that already "los[t] at the Supreme Court" [202] and "ran afoul of Supreme Court Case law."[203] Administrator Zeldin's commentary clearly indicates, however, that he has already reached this conclusion prior to receiving any public comment, and he has not indicated any earnest commitment to reconsidering his stance. A closed mind on "narrow, detailed facts" relevant to a proceeding, such as this factual and legal determination, is one warning sign indicating an administrator has prejudged the issue. *Nat'l Advertisers*, 627 F.2d at 1172.

President Trump's *Unleashing* EO similarly required the Administrator to preemptively determine specific, contested factual matters, without first seeking public input. That order required EPA to "identify those agency actions that impose an undue burden on the identification, development, or use of domestic energy resources—with particular attention to oil, natural gas, [and] coal … resources." Exec. Order No. 14,154, 90 Fed. Reg. at 8354. The above-cited statements show that the Administrator identified the Carbon Pollution Standards as such an agency action. In the section 111 context, a preexisting finding that the Standards unduly burden the use of domestic energy resources prejudices the Administrator's BSER determination, which by statute must take into account "cost" and "energy requirements." 42 U.S.C. § 7411(a). The *Unleashing* EO also required Administrator Zeldin to, within 30 days, "develop and begin implementing action plans to suspend, revise, or rescind all agency actions identified as unduly burdensome." Exec. Order 14,154, 90 Fed. Reg. at 8354. The Administrator thus committed EPA

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[198] March 12 Zeldin WSJ Op-Ed, *supra* note 180; June 11 Zeldin Carbon Pollution Standards Repeal Speech, *supra* note 182 (emphasis added). Administrator Zeldin similarly argued, when announcing the Proposed Rule, that the EPA has tried to enact generation-shifting rules "twice." June 11 Zeldin Carbon Pollution Standards Repeal Speech, *supra* note 182.

[199] March 12 Zeldin WSJ Op-Ed, *supra* note 180; June 11 Zeldin Carbon Pollution Standards Repeal Speech, *supra* note 182 (emphasis added).

[200] March 12 Zeldin WSJ Op-Ed, *supra* note 182.

[201] June 11 Zeldin Carbon Pollution Standards Repeal Speech, *supra* note 182 (emphasis added).

[202] *Id*.

[203] April 8 Zeldin Beautiful Clean Coal Statement, *supra* note 121.

to a plan to suspend, revise, or rescind the Carbon Pollution Standards prior to notice and comment or other opportunities for public participation.

Similarly, pursuant to preexisting internal directives, Administrator Zeldin has plainly predetermined that the dangers of carbon emissions from power plants either do not exist or are impossible to quantify. President Trump and the White House's Office of Management and Budget (OMB) have mandated that executive agencies should adopt the premise that calculations identifying harms from greenhouse gas emissions are inaccurate and uncertain. The *Unleashing* EO thus asserts, without evidence, that calculating the costs from a given unit of carbon emissions (the social cost of carbon) "is marked by logical deficiencies" and "a poor basis in empirical science." Exec. Order No. 14,154, 90 Fed. Reg. at 8356. OMB subsequently asserted that agencies "should not monetize the impacts from [carbon] emissions" because, allegedly, "the uncertainties in performing monetized impacts qualifications are too great." [204] These "uncertainties" include "[w]hether and to what degree any supposed changes in the climate are actually occurring as a consequence of anthropogenic greenhouse gas emissions" and "[h]ow to assess the relationship between verified anthropogenic changes in climate and the resulting environmental and economic impacts."[205] These directives effectively instruct EPA to reach only one conclusion: to discard the social cost of carbon, just as Administrator Zeldin has done in the Proposal.

Administrator Zeldin adopted the same "uncertainty" rhetoric in proposing to find that greenhouse gas emissions "do not contribute significantly to dangerous air pollution." 90 Fed. Reg. at 25,768. In his June 11 press release, Administrator Zeldin identified the premises this proposal relies upon: "any potential public health harms [from carbon emissions] have not been accurately attributed to emissions from the U.S. power sector" because the greenhouse gas emissions are "global in nature."[206] The Administrator decided "[i]n light of this [premise]" to propose a finding that "greenhouse gas emissions . . . do not contribute significantly to dangerous air pollution within the meaning of the statute."[207] In the Proposal, EPA likewise refers to the alleged "uncertainties" involved in attributing some of the effects of climate change to U.S.

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[204] Off. of Mgmt. & Budget, Exec. Off. of the President, Guidance Implementing Section 6 of Executive Order 14154 Entitled "Unleashing American Energy" (May 5, 2025), https://www.whitehouse.gov/wp-content/uploads/2025/02/M-25-27-Guidance-Implementing-Section-6-of-Executive-Order-14154-Entitled-Unleashing-American-Energy.pdf [hereinafter OMB M-25-27].

[205] *Id*.

[206] Press Release, EPA, EPA Proposes Repeal of Biden-Harris EPA Regulations for Power Plants, Which, If Finalized, Would Save Americans More than a Billion Dollars a Year (June 11, 2025), https://www.epa.gov/newsreleases/epa-proposes-repeal-biden-harris-epa-regulations-power-plants-which-if-finalized-would [hereinafter June 11 EPA Carbon Pollution Standards Repeal Press Release].

[207] *Id*.

emissions. 90 Fed. Reg. at 25,767.[208] These Presidential directives and Administrator Zeldin's obedient statements strongly indicate that the Administrator does not have a truly open mind on this underlying premise supporting the Proposal, but rather, is adhering to an internal Executive Branch predetermination. In short, EPA unlawfully prejudged the outcome of this proceeding.

This evidence also indicates that the actual motivations for the proposed repeal have been improperly excluded from the administrative record, and that the reasons in the Proposal are pretextual. Perhaps most telling is EPA's unjustified assertion that it is beyond the scope of this action to modify the Carbon Pollution Standards to address any of the feasibility issues EPA now asserts exist, while still complying with the agency's statutory obligations. Not only was EPA's failure to consider alternatives unlawful, *see* Section III.A, *supra*, it provides compelling evidence that EPA's aim in this rulemaking was to put its thumb on the scale of fossil fuel use.

EPA's actual motivation—revealed in the numerous Executive Orders described above as well as others that urge and facilitate greater use of fossil fuels,[209] constrain use of renewable energy,[210] and remove pollution abatement obligations from fossil energy generators,[211]—is to

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[208] Administrator Zeldin's June 11 Carbon Pollution Standards Repeal Press Release more clearly takes issue with the "accuracy" of attributing public health harms to the U.S. power sector than the Proposed Rule, which refers more vaguely to "uncertainty" while arguing (wrongly) that the U.S. power sector's contribution to climate change is negligible. Since the June 11 press release unequivocally identifies the Administrator's reasoning for proposing a particular change, and EPA is obligated to provide clear notice of its reasoning under the Clean Air Act and the APA, this comment assumes the Proposed Rule's reference to "uncertainty" reflects the same arguments raised in the Administrator's press release. If the Proposed Rule does not include this portion of Administrator Zeldin' s underlying reasoning, then the proposal violates the Clean Air Act's notice requirements. 42 U.S.C. § 7607(d)(3) (referring also to 5 U.S.C. § 553(b)).

[209] *See, e.g.,* Exec. Order No. 14,262, 90 Fed. Reg. 15521–22 (discussed above, directing the Secretary of Energy to prevent "critical" generation resources from retiring or converting to a different fuel type, in the context of ongoing coal plant retirements and conversions); Exec. Order No. 14,213, *Establishing the National Energy Dominance Council*, 90 Fed. Reg. 9945 (February 14, 2025) (equating use of fossil fuels with making America energy dominant); Exec. Order No. 14,156, 90 Fed. Reg. 8433 (discussed above, directing agencies to facilitate fossil fuel production).

[210] *See* Exec. Order No. 14,315, *Ending Market Distorting Subsidies for Unreliable, Foreign-Controlled Energy Sources*, 90 Fed. Reg. 30,821 (July 7, 2025) (directing Treasury Department to strictly enforce termination of renewable energy tax credits and restrict their use); Presidential Memorandum of January 20, 2025, *Temporary Withdrawal of All Areas on the Outer Continental Shelf from Offshore Wind Leasing and Review of the Federal Government's Leasing and Permitting Practices for Wind Projects,* 90 Fed. Reg. 8363 (precluding wind leasing on the Outer Continental Shelf, pausing all wind approvals, leases, loans, and rights of way, and putting a moratorium on the Lava Ridge Wind Project).

[211] *See, e.g.,* Proclamation No. 10914, *Regulatory Relief for Certain Stationary Sources to Promote American Energy*, 90 Fed. Reg. 16,777 (Apr. 21, 2025) (providing coal-fired plants two-year compliance exemption from the Mercury and Air Toxics Standards, claiming the standards "place severe burdens" on plants and "through its indirect effects, on the viability of our Nation's coal sector."); Exec. Order No. 14,270, *Zero-Based Regulatory Budgeting to Unleash American Energy*, 90 Fed. Reg. 15,643 (Apr. 15,

reshape the country's energy sector in favor of the resources the Administration prefers,[212] misapplying various federal authorities—including the Clean Air Act—in pursuit of this end. Consistent with these Executive Orders, both EPA[213] and the Department of Energy[214] have tried to intervene to forestall fossil fuel-fired power plant retirements. Although the Administration has claimed that these actions are essential for energy security, the actions are counterproductive to that alleged aim by limiting expansion of generation capacity and distribution. For example, a new analysis, depicted in the graph below, shows that halting wind leasing and permitting and eliminating the clean energy tax credits in the Inflation Reduction Act—combined with the rollbacks of environmental protections that would have curbed dangerous pollution from fossil

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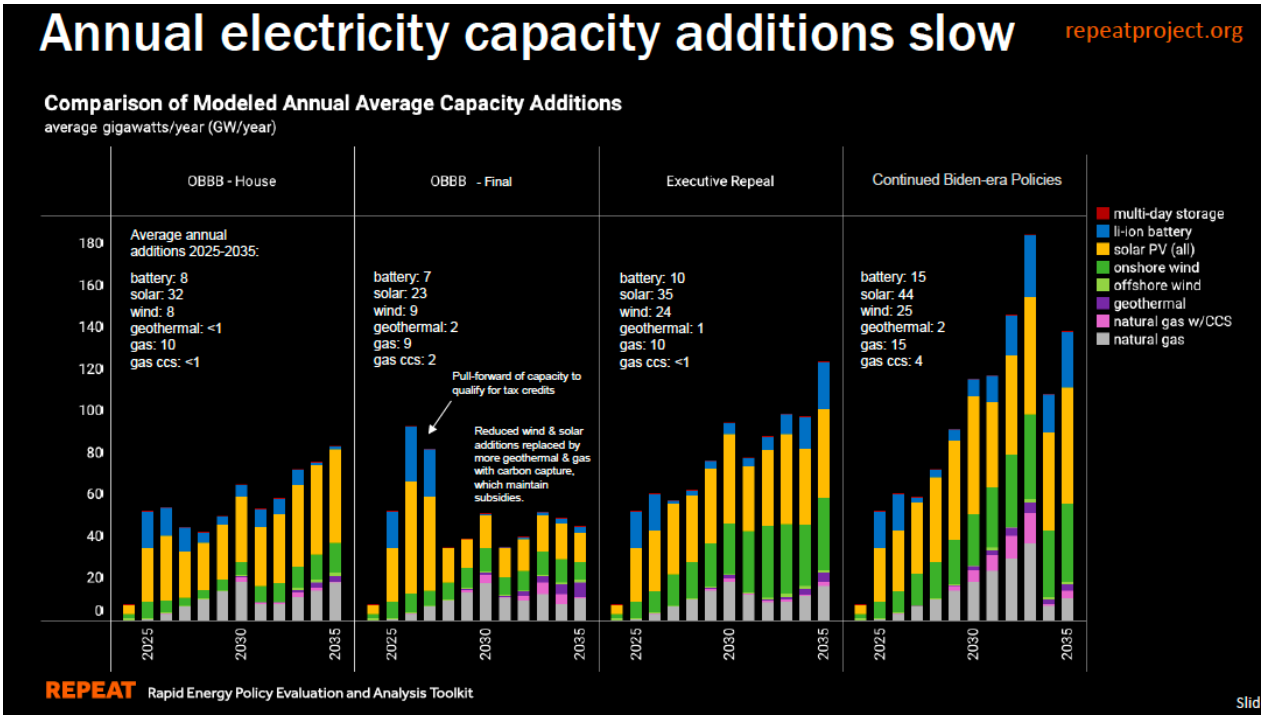
2025) (directs regulatory agencies, including EPA, to issue a rule terminating existing regulations one year after promulgation and prohibiting enforcement thereafter); and Exec. Order 14260, *Protecting American Energy from State Overreach*, 90 Fed. Reg. 15,513 (Apr. 8, 2025) (directing the Attorney General to identify all State and local laws "burdening" production and use of fossil fuels, particularly those addressing climate change or environmental issues. Further, in March 2025, "[t]o advance President Trump's Executive Orders and Power the Great American Comeback, EPA set up an electronic mailbox to allow the regulated community to request a Presidential Exemption under section 112(i)(4) of the Clean Air Act" which allows for an up to 2-year, renewable exemption from pollution standard compliance. *See* https://www.epa.gov/stationary-sources-air-pollution/clean-air-act-section-112-presidential-exemption-information. Although EPA asserts that "[s]ubmitting a request does not entitle a submitter to an exemption," no specific data or demonstration was requested EPA did not indicate what criteria would be applied to make decisions. *Contra* Presidential Memorandum of January 16, 2025, *Orderly Implementation of the Air Toxics Standards for Ethylene Oxide Commercial Sterilizers*, 90 Fed. Reg. 6773 (Jan. 17, 2025).

[212] In signing the first tranche of Executive Orders, President Trump said "We are bringing back an industry that was abandoned. … All those plants that have been closed are going to be reopened." Adam Burke, *Trump Orders Coal Revival, But Market Favors Natural Gas*, Nat'l Pub. Radio (NPR) (Apr. 17, 2025), https://www.npr.org/2025/04/16/nx-s1-5359013/trump-orders-coal-revival-market-favors-natural-gas.

[213] On July 16, 2025, EPA proposed to partially disapprove Colorado's regional haze state implementation plan, contending that, "Colorado did not sufficiently assess the [planned coal plant] closures' impacts on maintaining grid reliability and utilities' ability to meet energy demand." Air Plan Partial Approval and Partial Disapproval; Colorado; Regional Haze Plan for the Second Implementation Period, 90 Fed. Reg. 31,926, 31,938 (July 16, 2025). EPA cited only "information" alleging grid reliability issues submitted by one utility that is lobbying to change the legally mandated retirement date for one of its units. EPA provided no actual data or analysis of the Colorado grid or energy demand and instead asserted that "this Administration has found as a matter of national interest, national security, and energy policy that power generating from coal resources is critical to addressing [the] surging demand" allegedly coming from "the resurgence of domestic manufacturing and the construction of artificial intelligence data processing centers." *Id*. at 31938. EPA then alleged that Colorado had not provided sufficient assurance that the plant closures would not violate the Federal Takings Clause. *Id*.

[214] The Secretary of Energy issued two orders under Section 202(c) of the Federal Power Act determining that emergencies exist in the PJM and MISO grids requiring continued operation of a natural gas plant and coal-fired power plant. Order Nos. 202-25-3 (May 23, 2025) (Exhibit K), 202-25-4 (May 30, 2025).

fuel-fired generating sources—will lead to significantly *lower* total U.S. energy capacity additions.[215]



The proposed repeal also provides conclusory arguments in support of eliminating the pollution standards for fossil fuel-fired power plants. Indeed, beyond the evidence above, a facial comparison of the extent of the analysis in the Proposed Rule to previous rulemakings in this area further supports that the Proposed Rule is based on pretext:

	2023 Carbon Pollution Standards Proposal	2024 Carbon Pollution Standards Final	2019 Affordable Clean Energy Rule	2025 Proposed Rule
Preamble length	181 pages	267 pages	65 pages	30 pages
RIA length	359 pages	405 pages	248 pages	72 pages (reusing data from 2024 RIA)
Preamble BSER discussion	75 pages (33246, 33283–326, 33332–35, 33343–71)	96 pages (39845–902, 39916–55)	27 pages (32523–49)	11 pages (25768–79)
Technical support documents for regulatory action	9 (223 pages of analysis, plus 182 attachments with data and additional analysis)	9 (333 pages of analysis, plus 80 attachments with data and additional analysis)	1 (1 page of analysis)	2 (12 pages of analysis)

[215] Jenkins et al., *supra* note 130 (Exhibit O).

Updated modeling of power sector impacts and costs and benefits	Yes	Yes	Yes	No
Justification for GHG impact monetization approach	Pages 4-2 to 4-18 of the RIA, 48-page Technical Support Document from the Interagency Working Group[216]	170-page EPA report (peer-reviewed)	12 pages in the RIA plus reliance on National Academies report and Interagency Working Group	1 paragraph
Preamble discussion of climate change risks to health and welfare and need to mitigate emissions	~3,000 words	~4,100 words	None (1 page in the RIA, reference to National Climate Assessment)	None
Net benefits	Present value of $85[217] billion discounted at 3% ($2019, proposed standards)	Present value of $370[218] billion discounted at 3% ($2019)	Present value of $3–$8.8[219] billion discounted at 3% ($2016)	Present value of -$110 billion ($2024)

"Reasoned decisionmaking under the Administrative Procedure Act calls for an explanation for agency action," not statements that amount to "more of a distraction." *Dep't of Com. v. New York*, 588 U.S. 752, 785 (2019). Here, far from a genuine concern over the scientific basis of agency authority or the technological feasibility of greenhouse gas controls, the agency's actual motivation appears to be—in service of Executive Orders promoting fossil fuels—to remove an inherent market disadvantage from fossil fuel-fired plants by eliminating pollution control requirements (which the Administration's disfavored generation units, by their

[216] U.S. Gov't Interagency Working Grp. on the Soc. Cost of Greenhouse Gases, Technical Support Document: Social Cost of Carbon, Methane, and Nitrous Oxide: Interim Estimates under Executive Order 13990 (Feb. 2021), https://costofcarbon.org/files/TechnicalSupportDocument_SocialCostofCarbonMethaneNitrousOxide.pdf.

[217] ~$104 billion in $2024, converted using January 2019 to January 2024 comparison and the CPI Inflation Calculator from the U.S. Bureau of Labor Statistics, https://www.bls.gov/data/inflation_calculator.htm.

[218] ~$453 billion in $2024.

[219] ~$5.73-$16.8 billion in $2024, converted using January 2016 to January 2024 comparison and the CPI Inflation Calculator from the U.S. Bureau of Labor Statistics, https://www.bls.gov/data/inflation_calculator.htm.

nature, do not need). In any final agency action, the administrative record—as defined here by 42 U.S.C. § 7607(d)(7)(A)—must be "expanded" to include both internal and external agency communications relevant to the action being taken, including communications with the White House and outside political and industry stakeholders. *Dep't of Commerce*, 588 U.S. at 781. This is because the record must reveal the "genuine justifications" for agency action. *See id.* at 785. These record materials must include any communications directing that EPA to undertake this action, the outcome of the action, the rationales EPA should provide, and any other substance relevant to why or how EPA should take this action, its form and content, and outcome. *See* 42 U.S.C. § 7607(d)(3) (EPA must place in the rulemaking docket by the date of publication of the proposed rule any information or documents on which the proposed rule relies).

For these reasons, EPA has prejudged the outcome of this rulemaking, and its reasons provided are pretextual. Accordingly, the Agency must withdraw this current proposed rule and begin a new rulemaking process that is untainted by the Administrator's prejudgment and that clearly discloses the grounds upon which the agency acted.[220]

V. THE PROPOSED RULE IS PROCEDURALLY FLAWED

Under section 307(d)(9)(D), the court may reverse a rule if that action is taken "without observance of procedure required by law." 42 U.S.C. § 7607(d)(9)(D). Procedural rule reversals are appropriate where the agency's failure to observe procedure is arbitrary and capricious and such failure was raised during the comment period, and the procedural error was "so serious and related to matters of such central relevance to the rule that there is a substantial likelihood that the rule would have been significantly changed if such errors had not been made." *Id.*

A. EPA has not provided a meaningful opportunity for comment.

As more fully discussed in our request to extend the comment period and for additional public hearings (attached as Exhibit B), EPA failed to provide a meaningful opportunity for comment on the Proposed Rule as required by the Clean Air Act. 42 U.S.C. § 7607(d)(9)(D). EPA only provided an abbreviated comment period of 51 days on the Proposed Rule, paling in comparison to the comment periods EPA provided regarding previous power plant greenhouse gas rules, failed to provide fundamental information in the required economic impact analysis, 42 U.S.C. § 7617, and further artificially constrained public input in the hearing process by only holding a single, virtual public hearing.

EPA's failure to adhere to the requirements of the Clean Air Act is arbitrary and capricious. The States and Cities raised EPA's failure during the comment period, and EPA's

[220] EPA's decision to abandon its own state-of-the-art social cost of greenhouse gas estimate and refusal to use any of the other available estimates, or to otherwise grapple with the harms that will be caused by the Proposed Rule, or to provide any justification for why the repeal is warranted given the harms it will cause, *see* Section VI.A, *infra*, is further evidence of pretext.

failure is so serious and of central relevance to the rule such that it is substantially likely that the Proposal would have been significantly changed if EPA had not made such errors. Altogether, EPA failed to "provide a meaningful opportunity for comment" on the Proposed Rule. *N.C. Growers' Ass'n v. United Farm Workers*, 702 F.3d at 755, 770 (4th Cir. 2012); *see also Estate of Smith v. Bowen*, 656 F. Supp. 1093, 1099 (D. Colo. 1987).

B. The Agency must disclose, explain, and subject to public comment the use of power-sector modeling to project the effects of the rule on the power sector.

As the Agency's website continues to state, "EPA uses the Integrated Planning Model (IPM) to analyze the projected impact of environmental policies on the electric power sector." EPA, *Power Sector Modeling*, https://www.epa.gov/power-sector-modeling (last visited Aug. 6, 2025). Except here, inexplicably and despite criticizing a supposed lack of modeling in the prior rule now proposed for repeal, *see* 90 Fed. Reg. at 25,776, EPA made no effort to model the expected effects of its new proposal using the IPM or any other model. Instead, "the analysis presented [in the proposed rule] is based on the model runs conducted as part of the 2024 [Carbon Pollution Standards] RIA, and that the model has not been updated and re-run to account for changes in the energy system that have occurred over the past year." *Id.* at 25,779 n.201; *see also id*. at 25,781. Given the importance to the Proposal's reasoning of recent changes in the energy system, *see, e.g.*, *id.* at 25,755, 25,766, it is arbitrary, capricious, and procedurally improper for EPA not to conduct the analysis—comparable to what it has done historically for section 111 power-sector rulemakings—and subject that analysis to public comment. *See* 42 U.S.C. § 7607(d)(3)(A), (B); *see also id.* § 7617(g). It is insufficient to point at the proposal stage to a prior analysis that the Proposal itself criticizes as outdated, yet never give the public any chance to comment on an as-yet-uncompleted analysis that the Agency itself may deem sufficient to finalize a rule. It mocks the notice-and-comment process, and is unlawful, to use that process to solicit analyses from commenters that the Agency then may cite and point to as the cure for obvious analytical deficiencies in the proposal. Such a process prevents meaningful comment on agency modeling, or any other aspect of the basis for the proposed rule. *Conn. Light & Power*, 673 F.2d at 530–31; *Am. Radio Relay League, Inc.*, 524 F.3d at 240.

C. The Agency must disclose, explain, and subject to public comment the use of artificial intelligence in the decisionmaking process.

"[I]n the informal rulemaking context, … the most critical factual material that is used to support the agency's position on review must have been made public *in the proceeding* and exposed to refutation." *Air Transp. Ass'n of Am. v. FAA*, 169 F.3d 1, 7 (D.C. Cir. 1999) (emphasis in original). Not only the substance of the agency's decision, but also the methods used to reach it, must be made available for public comment. Although agencies may utilize computer models—including artificial-intelligence models—in the course of decisionmaking, that use must be disclosed and subjected to comment. Among other things, "[w]hen an agency uses a computer model, it must explain the assumptions and methodology used in preparing the

model and, if the methodology is challenged, must provide a complete analytic defense." *U.S. Air Tour Ass'n v. FAA*, 298 F.3d 997, 1008 (D.C. Cir. 2002) (cleaned up).[221]

The Proposal and accompanying documents that EPA placed in its rulemaking docket for this rule neither assert nor, insofar as commenters have been able to discern to date, reveal any role of AI or other computer models in the Proposed Rule's formulation (beyond the modeling done for the prior rule, as noted above). If, at any point during the rulemaking process, EPA has used or will use AI or other computer models, the Agency must disclose—and solicit comment on—why a model was used; which model was selected and why, whether, and how the model has been validated; all prompts or inputs to the model (and how and why those prompts or inputs were selected); and how the Agency has considered or may consider the model's outputs or other incidents in decisionmaking. If the outputs or other incidents of a computer program play a substantive role in EPA's decision, then the program itself should be disclosed to commenters. In any instance where the program is not made available to commenters, or its results are not reproducible, EPA must explain why the program's public availability or reproducibility is unnecessary to comply with the Clean Air Act, Information Quality Act, and other pertinent statutes, as well as applicable regulations, policies, and procedures concerning information management, information quality, and peer review. EPA must also disclose any persons and entities not employed by the Agency who developed, modified, provided access to, or used a computer program in the course of the Agency's decisionmaking process.

VI. EPA'S REGULATORY IMPACT ANALYSIS IS ARBITRARY AND CAPRICIOUS

A. EPA's failure to assign any monetary value to greenhouse gas reductions in the RIA is arbitrary and capricious.

EPA's failure to consider the cost of greenhouse gas emissions in its Regulatory Impact Analysis or preamble—and instead, assigning the indisputably incorrect value of zero—renders the Proposed Rule arbitrary and capricious. In arguing that the Agency need not consider the social cost of greenhouse gases because of "significant uncertainties," EPA entirely ignores its own rigorous, peer-reviewed, and established methodologies for monetizing climate-related harms. This omission is especially indefensible in light of the fact that many of our States have incorporated these very costs into our own energy and environmental policies, underscoring the reasonableness and relevance of doing so and the reliance interests our States have developed (and EPA has ignored) on the application of such methodology. Moreover, EPA's own RIA confirms that the Proposed Rule would inflict massive health harms on the American public, with the foregone pollution reduction benefits of the Carbon Pollution Standards far outweighing

[221] *See also* Admin. Conf. of the U.S., Adoption of Recommendations, Statement 20, Agency Use of Artificial Intelligence, 86 Fed. Reg. 6616 (Jan. 22, 2021).

any claimed advantages. The flaws in EPA's RIA are particularly relevant here because EPA explicitly relies in the preamble on an argument that the costs of regulation outweigh the benefits of its preferred proposal. *See*, *e.g.*, 90 Fed. Reg. at 25,766–67 (EPA has proposed "to adopt a statutory interpretation that is centered on the impacts and effects of statutory policy considerations in determining whether a source category's contribution is significant," with an expansive view of "public welfare."). All of these flaws are reviewable because they demonstrate that EPA disregarded or (at best) misapprehended the harms of its actions and failed to consider a central aspect of the problem before it. *See State Farm*, 463 U.S. at 41. These defects cannot be squared with EPA's obligation to engage in reasoned decisionmaking—and EPA should abandon its Proposal.

1. EPA ignores its own well-established methodologies for monetizing climate-related harms.

In the RIA, EPA treats greenhouse gas emissions as causing zero dollars in monetizable damages. This determination is arbitrary and unlawful, especially as EPA itself has developed a state-of-the-art, peer-reviewed methodology for monetizing the harm caused by these emissions.[222] EPA's central estimate of the climate benefits generated by the Carbon Pollution Standards was $270 billion (in 2019 dollars), noting many categories of damages that could not be monetized.[223] These benefits cannot be ignored—and EPA's vague appeal to uncertainty to justify its actions is unavailing and unlawful.

The Supreme Court reaffirmed in *Michigan*, 576 U.S. at 753, that "reasonable regulation ordinarily requires paying attention to the advantages and the disadvantages of agency decisions." Courts have repeatedly held that agency analyses that ignore or give spurious treatment to important considerations are infirm.[224] Further, the fact that something is uncertain—which any effort to project into the future or monetize harms and benefits necessarily is—does not exempt an agency from the obligations to consider relevant factors and reach reasonable conclusions. "The mere fact that the magnitude of [an effect] is *uncertain* is no

[222] EPA, Report on the Social Cost of Greenhouse Gases: Estimates Incorporating Recent Scientific Advances 6–9 (Nov. 2023), https://www.epa.gov/system/files/documents/2023-12/epa_scghg_2023_report_final.pdf [hereafter 2023 Report] (Exhibit C).

[223] EPA, EPA-452/R-24-009, Regulatory Impact Analysis for the New Source Performance Standards for Greenhouse Gas Emissions from New, Modified, and Reconstructed Fossil Fuel-Fired Electric Generating Units; Emission Guidelines for Greenhouse Gas Emissions from Existing Fossil Fuel-Fired Electric Generating Units; and Repeal of the Affordable Clean Energy Rule at ES-11 (Apr. 2024), https://www.epa.gov/system/files/documents/2024-04/utilities_ria_final_111_2024-04.pdf [hereinafter 2024 Carbon Pollution Standards RIA].

[224] *Bus. Roundtable v. SEC*, 647 F.3d 1144, 1148–49 (D.C. Cir. 2011); *Pub. Citizen, Inc. v. Mineta*, 340 F.3d 39, 58 (2d Cir. 2003); *Sierra Club v. Sigler*, 695 F.2d 957, 979 (5th Cir. 1983); *Getty v. Fed. Savs. & Loan Ins. Corp.*, 805 F.2d 1050, 1055, 1057 (D.C. Cir. 1986); *Sierra Club v. U.S. Dep't of Interior*, 899 F.3d 260, 293 (4th Cir. 2018).

justification for *disregarding* the effect entirely." *Pub. Citizen v. Fed. Motor Carrier Safety Admin.*, 374 F.3d 1209, 1219 (D.C. Cir. 2004). "Agencies are often called upon to confront difficult administrative problems armed with imperfect data." *Montana Wilderness Ass'n v. McAllister*, 666 F.3d 549, 559 (9th Cir. 2011). "[T]he proper response to that problem is for the [agency] to do the best it can with the data it has." *Id.*

In fact, the U.S. government has been monetizing costs and benefits since the 1920s, and has been doing so consistently across the entire federal government since 1981.[225] Every monetization exercise involves a multiplicity of entities, complexity, and uncertainty. Nowhere is this more apparent than in national security—but it is also routine in pandemic preparedness, preparing the annual budget, investing in next-generation military and space technologies, and assessing the costs and benefits of agency regulations.[226]

In 2010, the federal government developed a social cost of carbon for use in monetizing the net damages caused by greenhouse gas emissions using an interagency group of experts and relying on state-of-the-art models from the peer-reviewed literature.[227] The history of this process is laid out in more detail in other comments and in EPA's 2023 Report (attached as Exhibit C). The values have been updated at numerous points since then to incorporate advances in science and economics, and have been peer-reviewed, routinely subject to public comment, reviewed by the U.S. Government Accountability Office,[228] and comprehensively evaluated by the National Academies of Science, Engineering, and Medicine in 2016 and 2017.[229] The most recent values,

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[225] Joseph Persky, *Cost-Benefit Analysis and the Classical Creed*, 15 (4) J. of Econ. Persps. 200–01 (2001), https://www.aeaweb.org/articles?id=10.1257/jep.15.4.199; Exec. Order No. 12,291, 46 Fed. Reg. 13,193 (Feb. 19, 1981).

[226] *See, e.g.*, 49 U.S.C. § 32904(a)(2)(B)(iii) (developing the fuel efficiency of alternative fuel vehicles considering "the need of the United States to conserve all forms of energy and the relative scarcity and value to the United States of all fuel"); COVID-19 Vaccination and Testing; Emergency Temporary Standard, 86 Fed. Reg. 61,402, 61,459–78 (evaluating impacts of Dept. of Labor standard encouraging vaccination against COVID 19, despite uncertainty with respect to future pandemic dynamics, company and individual behavior, and labor trends); Defining and Delimiting the Exemptions for Executive, Administrative, Professional, Outside Sales, and Computer Employees, 89 Fed. Reg. 32,842 (2024) (evaluating impacts of formula change for triggering overtime requirements despite uncertainty with regards to worker pay and how employer and employee behavior would change); EPA, Technical Support Document – Estimating the Benefit per Ton of Reducing Directly-Emitted $PM_{2.5}$, $PM_{2.5}$ Precursors and Ozone Precursors from 21 Sectors (Sept. 2023), https://www.epa.gov/system/files/documents/2021-10/source-apportionment-tsd-oct-2021_0.pdf; EPA, Clean Air Tech. Ctr., EPA-456/F-99-006R, Nitrogen Oxides (NO_x), Why and How They Are Controlled (Nov. 1999), https://www3.epa.gov/ttncatc1/dir1/fnoxdoc.pdf.

[227] U.S. Gov't Interagency Working Grp. on the Social Cost of Greenhouse Gases, Technical Support Document: Technical Update of the Social Cost of Carbon for Regulatory Impact Analysis Under Executive Order 12866 (Aug. 2016).

[228] 2023 Report, *supra* note 222, at 8.

[229] *Id*. at 8-10.

developed by EPA, integrate the latest updates in scientific knowledge and economics, address the near-term recommendations of the National Academies (including explicit representation of uncertainty), and produce a social cost of carbon central estimate of $140, $230, and $390/metric ton for 2030 emissions using a near-term discount rate of 2.5%, 2.0%, and 1.5%, respectively.[230]

Here, however, EPA refused to provide monetized estimates of the climate harms caused by its Proposal despite available, peer-reviewed methods for doing so—or to otherwise provide robust consideration of those lost emission reductions and the harm they will cause to human health and welfare. The Agency's entire justification for failing to monetize the value of the lost emission reductions was a single paragraph in the RIA, based on EPA's alleged "significant uncertainties" regarding monetization of the social cost of greenhouse gases. RIA at 6-6–6-7.

But EPA's justification does not explain why any of the robust methodologies used to characterize and incorporate these uncertainties in the 2023 Report are insufficient. EPA's 2023 Report draws on the latest economic and scientific research,[231] was subject to a robust peer review,[232] and fully articulates and addresses the uncertainties involved in calculating the social cost of greenhouse gas—including those now cited by EPA as its justification for not using it. The 2023 Report also explains, in expansive detail, the state-of-the-art methodologies deployed to quantify and address uncertainty, and ensure that the estimates are uncertainty weighted.[233] The approach in the 2023 Report—identifying sources of uncertainty and using techniques like Monte Carlo analysis where the model is run ten thousand times drawing input values from probability distribution functions that reflect the uncertainty associated with those values to characterize uncertainty and develop estimates that are informed by that uncertainty—is rigorous and deploys state-of-the-art methodologies.[234] It results in uncertainty-weighted estimates of the social cost of greenhouse gases that are consistent with other estimates in the peer-reviewed literature derived using alternate methodologies,[235] and it responds to and implements the

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[230] *Id.* at 1, 20–21, 78, 106.

[231] *Id*. at 1–2, 24–25, 35–36, 47–53, 55–59, 64, 67–68.

[232] *Id*. at 10 ("The report "represents a huge advance in estimating the US Social Cost of Carbon (SCC). The estimates reported have successfully incorporated all of the short-term recommendations of the National Research Council (NRC) Committee on Valuing Climate Damages, and some of the longer-term recommendations. The report represents the state-of-the-art in executing the four steps of SCC calculation."); *see also* Press Release, EPA, EPA Releases Responses to External Peer Review Comments on "Report on the Social Cost of Greenhouse Gases: Estimates Incorporating Recent Scientific Advances" (Dec. 2, 2023), https://19january2025snapshot.epa.gov/environmental-economics/scghg-tsd-peer-review/index.html.

[233] 2023 Report, *supra* note 222, at 2, 20–21, 26, 61, 64–65, 67–68, 77–79, 80, 85, 168–70.

[234] *Id*. at 20, 61, 77, 80.

[235] *Id*. at 102–03. Estimates in the 2023 Report are comparable in magnitude to other recent social cost of carbon estimates developed using large expert surveys ($200 per metric ton) and vehicle choice

recommendations of the National Academies of Sciences, after a comprehensive review of the prior federal estimates.[236]

Nor does EPA explain how using the value of zero—which is absolutely the incorrect value—provides decision-makers better information than the estimates in the 2023 Report. *See* 42 U.S.C. § 7607(d)(3) (requiring EPA to set forth in a statement of basis and purpose, the pertinent findings, recommendations, and comments of the National Academy of Sciences, and to explain why the proposal differs in any important respect). Given the known potential for non-linear responses by the climate system to greenhouse gas forcing that could lead to truly catastrophic damages, a reasonable approach would be to use a *higher* social cost estimate rather than a lower one, let alone zero. The estimates in the 2023 Report are, as EPA acknowledged, only partial estimates of the actual damage values due to the many damage categories that are not included,[237] and a recent study incorporating just part of one category of omitted damages—eight tipping points in the climate system—found that it increased the estimated social cost of carbon by 24.5%.[238] Further, the probability distributions for the 2023 estimates themselves show a very significant risk that the "actual" social cost of greenhouse gas value is much higher than the central estimate.[239] In other words, high-end social cost of greenhouse gas values with a 5% or 10% likelihood of being "correct" are dramatically higher than the central estimate, while the low-end social cost of greenhouse gas values with a 5% or 10% likelihood of being "correct" are much closer to the central estimate. The significant risk that the "actual" damage number is significantly higher than the central estimate, the fact that these estimates are underestimates (omitting many damage categories entirely and covering many more partially), and the fact that estimates of the social cost of greenhouse gas have been increasing over time as data and methodologies have improved,[240] make EPA's proposal to use a value of zero even more arbitrary.

EPA also failed to use some other quantitative or qualitative approach to assess the harm caused by the lost emission reductions. EPA did not consider other estimates of the social cost of greenhouse gas available in the peer-reviewed economics literature—such as FrEDI (also a

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experiments of willingness to pay ($236 per metric ton CO_2; $130-$372 per metric ton CO_2). *See also id.* at 98 (discussing total-economy approach, capturing only market effects and deriving a $48 social cost per metric ton of CO_2 estimate).

[236] *Id*. at 1–2, 23, 36, 52–53, 55, 106.

[237] *Id.* at 3, 5, 56, 81–87.

[238] *Id*. at 82 (citing Simon Dietz et al., *Economic Impacts of Tipping Points in the Climate System*, 118 Proceedings of the Nat'l Acad. of Scis. (2021)).

[239] *Id.* at 80, fig. 3.1.1.

[240] *Id*. at 102; *see also* Richard S. J. Tol, *Social Cost of Carbon Estimates Have Increased Over Time*, 13 Nature Climate Change 532 (2023), https://www.nature.com/articles/s41558-023-01680-x.

federal government model)[241] and the 2023 Report's (acknowledged as partial) estimates of physical damages occurring in the United States.[242] Any of these estimates would have been far less arbitrary than zero. And in rulemakings where harms and benefits cannot be monetized—which is *not* the case here—EPA has historically examined the harms and benefits qualitatively, providing a detailed overview of available science on how a pollutant causes harm, the types of harm caused, and the populations most affected. EPA has at its disposal multiple overviews of current climate science and impacts by the Intergovernmental Panel on Climate Change[243] and five National Climate Assessments developed by leading experts through the U.S. Global Change Research Program. Despite these resources, EPA provided no such discussion in the Proposed Rule, nor did EPA appropriately weigh these well-established climate impacts.

Finally, EPA cannot justify its failure to monetize the social cost of greenhouse gas based on OMB M_25-27 (Guidance Implementing Section 6 of *Unleashing EO*), which is similarly scant on analysis, data, or logic (Off. of Mgmt. & Budget, Exec. Off. of the President (May 5, 2025)). OMB Memo 25-27 cites *the Unleashing EO*'s unjustified assertion that U.S. government estimates of the social cost of carbon are "marked by logical deficiencies, a poor basis in empirical science, politicization, and the absence of a foundation in legislation," and directs agencies to "limit their analysis to the minimum consideration required to meet such statutory requirement." *Id.* at 1–2. Reliance on the Executive Order and Memo 25-27 is foreclosed by *Michigan*, 576 U.S. at 753–54, in which the Supreme Court held that "reasonable" regulatory actions "ordinarily" require agencies to evaluate the advantages and disadvantages of their actions, and which reiterated longstanding Court precedents that require agency decision-making to be logical, to consider relevant factors, and to offer explanations that do not run counter to the evidence before the agency. The evidence before the agency is that greenhouse gas emissions cause very significant damages to human health and welfare, robustly and conservatively monetized by EPA itself in the peer-reviewed 2023 Report. Effects on greenhouse gas emissions

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[241] 2023 Report, *supra* note 222, at 96–99. A more recent synthesis of damage estimates specific to U.S. populations found U.S.-specific social cost of carbon estimates ranging from $31 to $85 for 2030 emissions, noting many omitted categories of impacts. Elizabeth Kopits et al., EPA, Nat'l Ctr. for Env't Econ., Economic Damages from Climate Change to U.S. Populations: Integrating Evidence from Recent Studies, Working Paper 25-01 at 30 (Jan. 2025), https://www.epa.gov/environmental-economics/economic-damages-climate-change-us-populations-integrating-evidence-recent.

[242] 2023 Report, *supra* note 222, at 95, 98–99.

[243] The IPCC was created by the World Meteorological Organization (WMO) and the United Nations to assess the science related to climate change. It is an organization of governments that are members of the United Nations or WMO. Experts volunteer their time to evaluate the scientific papers published each year to provide a comprehensive summary of what is known about the drivers of climate change, its impacts and future risks, and how adaptation and mitigation can abate those risks. Authors are selected based on their expertise. Each report is transparently reviewed by additional experts and the member governments. In each report, the IPCC identifies the strength of scientific agreement in different areas and indicates where further research is needed. *See* IPCC, What Is the IPCC? Fact Sheet (revised Jan. 2024), https://www.ipcc.ch/site/assets/uploads/2024/04/IPCCFactSheet_WhatisIPCC.pdf.

are the centrally relevant factor to be considered with respect to a section 111 regulation addressing greenhouse gas emissions.

In sum, EPA's proposed determination that the social cost of greenhouse gas cannot be used because of "uncertainty" is not "logical" or "rational." *Michigan*, 576 U.S. at 750. Against hundreds of pages of rigorous analysis in EPA's 2023 Report, EPA's single paragraph citing "uncertainty"—and EPA's total failure to engage with the record supporting its ability to monetize the costs of greenhouse gas emissions—constitutes a failure to provide a "reasoned explanation [] for disregarding facts and circumstances that underlay" its prior policy. *Fox*, 556 U.S. at 516. It is the epitome of arbitrary and capricious action to ignore billions of dollars of costs in agency decisionmaking.

2. The States' consideration in their own decisionmaking of the costs of greenhouse gas emissions further demonstrates that EPA's failure to consider those costs is arbitrary and capricious.

EPA's failure to consider the costs of greenhouse gas emissions in its RIA is also arbitrary and capricious in light of the widespread use of such metrics by state governments in analogous regulatory contexts. Indeed, numerous states rely on the costs of greenhouse gas emissions to inform decisionmaking with respect to environment, energy, and infrastructure rulemakings, recognizing it as an essential tool for evaluating the full scope of harms.[244] EPA's refusal to consider these costs—even as states rely on them to assess regulatory impacts—marks a departure from reasoned decisionmaking and from EPA's obligation to consider all relevant factors and serious reliance interests.

For example, New York agencies have considered the cost of greenhouse gas emissions in their own decisionmaking for several years. In August 2016, the New York Public Service Commission adopted a Clean Energy Standard and accompanying Zero Emissions Credit to take into account the social cost of carbon in calculating the value of using nuclear power as compared to carbon-emitting fossil fuel generation.[245] New York's Climate Leadership and Community Protection Act directed the New York State Department of Environmental Conservation (NYSDEC) to formally establish a social cost of carbon for use by state agencies, expressed in terms of dollars per ton of carbon dioxide equivalent. N.Y. Env't Conserv. Law § 75-0113. In October 2020, NYSDEC published guidance for state agencies to use to consider

[244] *See The Cost of Climate Pollution: States Using the SC-GHG*, Inst. for Pol'y Integrity, N.Y.U. Sch. of L., https://costofcarbon.org/states (last visited July 18, 2025); *see also* Max Sarinsky, Inst. for Pol'y Integrity, N.Y.U. Sch. of L., The Social Cost of Carbon: Options for Applying a Metric in Flux 1 (Sept. 2023), https://policyintegrity.org/files/publications/SCC_Options_for_Applying_a_Metric_in_Flux_Policy_Brief_v2.pdf.

[245] N.Y. Pub. Serv. Comm'n, Cases 15-E-0302 & 16-E-0270, Order Adopting a Clean Energy Standard (Aug. 1, 2016), https://costofcarbon.org/files/_44C5D5B8-14C3-4F32-8399-F5487D6D8FE8_.pdf.

the social cost of carbon in their decision making.[246] NYSDEC subsequently updated the guidance document by, among other things, revising values for all greenhouse gases to reflect the average values of new models adopted by the EPA.[247] In December 2022, the New York State Climate Action Council published the New York State Climate Action Council Scoping Plan, which used the social cost of greenhouse gases based on NYSDEC's guidance document to calculate the value of avoided greenhouse gas emissions.[248] And in adopting the Advanced Clean Car Standards, NYSDEC considered the social cost of carbon in estimating the monetized benefits of greenhouse gas reductions.[249] Similarly, NYSDEC used EPA's social cost metrics and the department's guidance document to estimate the societal benefits of amended regulations to reduce emissions of HFCs and SF6.[250]

Massachusetts has employed the EPA-issued social-cost of carbon to fully understand and evaluate the impacts of clean energy and energy efficiency programs. As part of its efforts developing Massachusetts' premier energy efficiency program, Mass Save, the state uses EPA-issued social cost of carbon recommendations as part of its Avoided Energy Supply Cost (AESC) study,[251] which is foundational to the Mass Save benefit-cost ratio screening tool that enables many decarbonization and energy efficiency measures to be cost-effective and so able to be included in the programs.[252] Similarly, the EPA social cost of carbon has been critical for the state's greenhouse gas reduction plans, which must "evaluate the total potential costs and economic and noneconomic benefits of various reduction measures to the economy, environment and public health, using the best available economic models, emissions estimation techniques and other scientific methods."[253] The social cost of carbon metrics helped provide decisionmakers and the public with an understanding of the costs and benefits of climate policy.

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[246] N.Y. Dep't of Env't Conserv., Establishing a Value of Carbon: Guidelines for Use by State Agencies (Oct. 2020, last revised Oct. 2021), https://extapps.dec.ny.gov/docs/administration_pdf/vocguidrev.pdf.

[247] N.Y. Dep't of Env't Conserv., Establishing a Value of Carbon: Guidelines for Use by State Agencies 2 (last revised Aug. 2023), https://extapps.dec.ny.gov/docs/administration_pdf/vocguide23final.pdf.

[248] N.Y. Climate Action Council New York State Climate Action Council Scoping Plan 126–27 (Dec. 2022), available at https://climate.ny.gov/resources/scoping-plan/.

[249] N.Y. Dep't of Env't Conserv. Notice of Adoption, Advanced Clean Car (ACC) Standards, XLV (34) N.Y. Reg. 3, 4 (Aug. 23, 2023) (to Amend Parts 200 & 218 of Title 6 NYCRR), https://dos.ny.gov/system/files/documents/2023/08/082323.pdf.

[250] N.Y. Dep't of Env't Conserv. Notice of Adoption, Certain Substances that Contain Hydrofluorocarbons, Highly-Potent Greenhouse Gases, XLVI (52) N.Y. Reg. 21, 22 (Dec. 24, 2024), https://dos.ny.gov/system/files/documents/2024/12/122424.pdf.

[251] Synapse Energy Econ., Inc., *Avoided Energy Supply Costs in New England (AESC)*, https://www.synapse-energy.com/avoided-energy-supply-costs-new-england-aesc (last visited Aug. 3, 2025).

[252] *See* St. 2021, c. 8, An Act Creating a Next-Generation Roadmap for Massachusetts Climate Policy, §§ 16–27.

[253] *See id*. § 10(c).

The Massachusetts Clean Energy and Climate Plan for 2025 and 2030, for example, included an assessment of policies' "employment gains and disruptions, economic contribution to Gross State Product (GSP), and impacts on household energy expenditures."[254]

Similarly, Colorado requires the use of the social cost of carbon dioxide emissions and methane emissions in several circumstances. For instance, the Colorado Public Utilities Commission must annually set a value for the social cost of carbon dioxide and methane, and must require any electric or gas public utility subject to its jurisdiction to consider the social cost of carbon dioxide and methane when determining the cost, benefit, or net present value of various plans the utility is required to file for Commission approval.[255] This includes clean heat plans,[256] electric resource plans/clean energy plans, transportation electrification plans, beneficial electrification plans, renewable energy standards plans, and demand-side management plans.[257] Relatedly, when estimating the social cost of carbon dioxide or methane, the Colorado Energy Office, Department of Transportation, and Department of Public Health and Environment must base their cost estimate on the most recent assessment of the federal government using a discount rate that is 2.5% or less and does not yield a lower estimate of costs.[258]

California also uses the social cost of carbon in a variety of contexts. In 2017, when the California Air Resources Board developed a scoping plan to meet the state's statutory emissions reduction goals, it used the social cost of carbon to quantify the benefits of reducing greenhouse-gas emissions.[259] The State Legislature has also mandated that the Board consider the social costs of emissions of greenhouse gases when adopting rules and regulations related to the California Global Warming Solutions Act.[260] Similarly, in 2019, the California Public Utilities Commission issued a final order requiring the use of the social cost of carbon for evaluating distributed energy resources.[261] Specifically, under the order, utilities must conduct a societal cost test in resource

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[254] Mass. Exec. Off. of Energy & Env't Affs., Massachusetts Clean Energy and Climate Plan for 2025 and 2030 at 103 (June 20, 2022), https://www.mass.gov/doc/clean-energy-and-climate-plan-for-2025-and-2030/download.

[255] Colo. Rev. Stat. § 40-3.2-106(1), (4).

[256] *Id.* § 40-3.2-108(6)(c)(I).

[257] *Id.* §§ 40-3.2-106(1)(a)–(d) & 40-3.2-107(2).

[258] *Id.* § 24-38.5-111.

[259] Cal. Air Res. Bd., California's 2017 Climate Change Scoping Plan 39-40 (Nov. 2017), https://ww2.arb.ca.gov/sites/default/files/classic/cc/scopingplan/scoping_plan_2017.pdf.

[260] Cal. Health & Safety § 38562.5 (2022).

[261] Cal. Pub. Utils. Comm'n, Rulemaking 14-10-003, Decision Adopting Cost-Effectiveness Analysis Framework Policies for All Distributed Energy Resources 15 (May 21, 2019), https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M293/K833/293833387.PDF; *The Cost of Climate Pollution: California PUC Uses SCC to Help Determine Value of DERs*, Inst. for Pol'y Integrity, N.Y.U. Sch. of L., https://costofcarbon.org/states/entry/california-puc-uses-scc-to-help-determine-value-of-ders (last visited Aug. 3, 2025).

planning that is comprised of three parts, one of which is the "avoided social cost of carbon." The final order requires utilities to model the social cost test using two social cost of carbon values, the 3% estimate and high-impact estimate. The California Department of Transportation has also used the social cost of carbon in its cost-benefit analysis of proposed projects such as highways and other infrastructure since 2009.

Still more states use the social cost of greenhouse gases in their regulatory programs. In Maryland, the Climate Solutions Now Act of 2022 requires the Maryland Department of the Environment to adopt regulations for Building Energy Performance Standards, including an option for covered building owners to make an alternative compliance payment greater than or equal to the social cost of greenhouse gases adopted by EPA for emissions above target levels.[262] In Oregon, the Oregon Public Utility Commission commonly asks utilities to undertake scenario runs that include consideration of the social cost of carbon to determine the least cost/least risk options in their proposed integrated resource plans and requests for proposals.[263]

These examples demonstrate that EPA's refusal to consider the social cost of carbon in the RIA ignores a widely accepted and readily available tool for evaluating the consequences of the Proposed Rule. Indeed, the federal government has been using estimates of the social cost of greenhouse gases since 2008 (including during the first Trump Administration) and has been working to improve the rigor of those estimates during the nearly two decades since. By failing to account for the climate costs and harms that will inevitably result from the Proposed Rule, EPA acted arbitrarily and capriciously and failed to account for a crucial aspect of the problem and serious reliance interests on social cost of carbon analyses.

3. EPA's own Regulatory Impact Analysis demonstrates that the benefits of pollution reduction substantially outweigh the costs.

Finally, EPA's own RIA demonstrates that adopting the Proposed Rule would be arbitrary and capricious because the benefits of pollution reduction substantially outweigh the Proposal's massive public health costs. Even with EPA's arbitrary treatment of greenhouse gas emission reductions as having zero value, the RIA shows the Proposed Rule would have net harms to Americans of $110 billion in 2024 dollars (or $6.8 billion annually) using a 3% discount rate, and $67 billion (or $6 billion annually) using a 7% discount rate. RIA at 6-4.

The significant non-climate harms associated with the Proposed Rule stem largely from the loss of substantial reductions in harmful air pollutants—nitrogen oxides (NO_x), sulfur dioxide (SO_2), and fine particulate matter ($PM_{2.5}$)—that the Carbon Pollution Standards would deliver. *See* 89 Fed. Reg. at 40,004–05. The RIA explicitly acknowledges these foregone public health

[262] Md. Code Ann., Env't, § 2-1602.

[263] *See*, *e.g.*, *In the Matter of Pacificorp, dba Pacific Power*, 2021 WL 5014456 (Or. P.U.C. 2021); *In the Matter of Avista Corporation, dba Avista Utilities*, 2021 WL 4923923 (Or. P.U.C. 2021).

benefits, noting that the "$PM_{2.5}$ and ozone-related health benefits quantified in the 2024 [Carbon Pollution Standards RIA] are no longer expected." RIA at 4-1–4-2. That analysis had identified substantial co-benefits, including up to 1,200 avoided premature deaths; 870 avoided hospital and emergency room visits; 1,900 avoided cases of asthma onset; 360,000 avoided cases of asthma symptoms; 48,000 avoided school absence days; and 57,000 lost workdays in 2035 alone.[264] Yet EPA fails to confront this important aspect of its record—or explain how adoption of the Proposed Rule, which will impose substantial and avoidable harm on the American people, is not arbitrary.

B. EPA's failure to update the baseline and to consider joint effects of multiple concurrent actions is arbitrary and capricious.

It is impossible for the EPA or for commenters to understand the actual impact of the Proposed Rule without an accurate baseline. This is particularly true when so many of the material facts regarding the federal government's actions and projections, and the legal landscape, including relevant tax credits, have changed since EPA last set a baseline. EPA would act arbitrarily and capriciously by failing to provide a baseline in its Regulatory Impact Analysis (or preamble) that considers, among other things, the economic realities of tax credits. *See Ctr. for Auto Safety v. Peck*, 751 F.2d 1336, 1391 (D.C. Cir. 1985) (finding arbitrary and capricious use of a "theoretical" baseline instead of the current baseline); *Mayo v. Jarvis*, 177 F. Supp. 3d 91, 138–39 (D.D.C. 2016) ("Without any indication in the record that the FWS adequately considered the environmental baseline as of 2013, the Court must grant summary judgment to Plaintiffs because it appears that the agency failed to consider an 'important aspect of the problem.'"). While EPA "commits to conducting additional analysis that incorporates" changes in the baseline, RIA at 2–3, without making this additional analysis public or providing time for its consideration, EPA is failing to provide the public with an adequate opportunity for comment. But, again, an agency must "identify and make available technical studies and data that it has employed in reaching the decisions to propose particular rules," and failure to "reveal portions of the technical basis for a proposed rule in time to allow for meaningful commentary" constitutes "serious procedural error." *Conn. Light & Power*, 673 F.2d at 530–31; *see also* 42 U.S.C. § 7607(d)(3)(A), (B). An updated RIA—informed by the rapid termination of the clean energy tax credits—would likely show much greater climate harms and similarly greater costs of the Proposed Rule. Because the RIA contains most of the Agency's consideration of the costs and benefits of its proposed action, because the preamble is lacking in such consideration, and because the RIA demonstrates that EPA is failing to appropriately evaluate the impacts of its proposed action, the defects in the RIA itself are reviewable as a part of the Agency's failure to justify its proposed action as reasonable.

EPA's failure to conduct any baseline power sector analysis for the Proposed Rule stands in sharp contrast to its analysis when the Carbon Pollution Standards were finalized. That

[264] 2024 Carbon Pollution Standards RIA, *supra* note 223, at 4-51 tbl. 4-7, 4-56 tbl. 4-12.

analysis included not only an updated analysis of the final rule, but also twelve sensitivity runs exploring different components of the standards in isolation, variations in key inputs such as gas prices and electricity demand, and different policy alternatives that were considered but rejected.[265]

Moreover, as discussed above, the Trump Administration has announced its intent to undertake a wide range of regulatory rollbacks, including many that will increase pollution and the attendant burdens on U.S. communities (and that the Administration claims will have cost and reliability benefits). *E.g.*, Exec. Order No. 14,154, 90 Fed. Reg. 8353; Exec. Order No. 14,192, *Unleashing Prosperity Through Deregulation*, 90 Fed. Reg. 9065 (Feb. 6, 2025); Exec. No. Order 14,261, 90 Fed. Reg. 15,517; Exec. Order No. 14,219, *Ensuring Lawful Governance and Implementing the President's 'Department of Government Efficiency' Deregulatory Initiative,* 90 Fed. Reg. 10,583 (Feb. 25, 2025); *see also* Section II.C.3, *supra*. And Administrator Zeldin has specifically targeted 31 EPA regulations for rescission, including regulations to reduce greenhouse gases, criteria pollution, and hazardous air pollution from polluting sources.[266] The RIA fails to provide any analysis of the effects of these other significant rollbacks of air pollution standards that EPA has announced, which will have very significant effects on both the power sector and emissions of dangerous air pollutants. The real-world effects of this action cannot be understood (or commented on) by the public or the agency without updated baseline analysis.

Because EPA is undertaking these actions simultaneously, the Agency must account for the combined impacts of these rollbacks to public health and welfare. Indeed, in the press release just cited, EPA describes them as a single "action." To ignore those combined impacts in the baseline for the Proposed Rule is a "failure to consider an important aspect of the problem." *State Farm*, 463 U.S. at 42, 46–48, 51; *see also Appalachian Power Co. v. EPA*, 251 F.3d 1026, 1034 (D.C. Cir. 2001) (finding arbitrary and capricious agency's failure to use IPM analysis it had conducted in its baseline without a reasoned explanation); *Ctr. for Auto Safety* , 751 F.2d at 1391; *Mayo*, 177 F. Supp. 3d at 138–39; *accord S. Yuba River Citizens League v. NMFS*, 723 F. Supp. 2d 1247, 1261 (E.D. Cal. 2010); *Defs. of Wildlife v. Babbitt*, 130 F. Supp. 2d 121, 130–31 (D.D.C. 2001).

EPA has historically considered the cumulative impacts of its rules by incorporating in the baseline of each rule all of its prior rules. But where, as here, EPA intends to finalize a suite of rules affecting the same sources, pollutants, and health endpoints all at once, it must grapple with and justify the *combined* effects of its rollbacks and regulatory actions. Otherwise, it risks

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[265] *See Analysis of the Final Greenhouse Gas Standards and Guidelines*, EPA, https://www.epa.gov/power-sector-modeling/analysis-final-greenhouse-gas-standards-and-guidelines (last updated Mar. 4, 2025); EPA, Doc. ID No. EPA-HQ-OAR-2023-0072, IPM Sensitivity Runs Memo (Apr. 2024), https://www.epa.gov/system/files/documents/2024-04/technical-memo-ipm-sensitivities_final.pdf.

[266] March 12 EPA 'Deregulation Day' Press Release, *supra* note 178.

an incorrect or incomplete baseline without any analysis of the damage to communities that its rules are doing together. In the Biden Administration, when promulgating a much smaller number of regulatory actions close in time, the EPA took that challenge seriously. In particular, it examined the cumulative effect of regulations affecting the production or use of power on the reliability of the grid. For example, in April 2024, EPA released a Resource Adequacy Analysis[267] that evaluated the combined effects of the vehicle rules and power plant rules (including Clean Air Act section 111 and section 112 rules, and the Clean Water Act effluent guidelines) on electricity resource adequacy. This allowed EPA to conclude that the combined effect of its rules was unlikely to adversely affect resource adequacy.[268] And before issuing the Carbon Pollution Standards, the last of the suite of power sector-related rules, EPA ran a sensitivity analysis using its Integrated Planning Model that reflected the combined effects of all of the rules finalized.[269]

EPA now must similarly take into account the combined effects of its rollbacks. On the costs side, EPA must examine the combined emissions of greenhouse gases, criteria pollutants, and hazardous air pollutants from its near-in-time rollbacks, including this effort, its proposed rescission of the updated Mercury and Air Toxics standards, *see* 90 Fed. Reg. 25,535 (June 17, 2025), its forthcoming rollback of the 2009 endangerment finding and greenhouse gas vehicle standards, *see* 90 Fed. Reg. at 36,288, *supra* note 95, and any revision of the Good Neighbor Plan or oil and gas methane standards and guidelines, *see, e.g.*, 90 Fed. Reg. 35,966 (July 31, 2025), at a minimum. EPA cannot adequately consider an important aspect of the problem—one that affects the health and welfare of the American public—without doing so. *See State Farm*, 463 U.S. at 42, 46–48, 51. In particular, EPA must ensure that when it estimates the additional pollutants from one rollback (e.g., the MATS Technology Review), it is taking account of the potential for greater utilization of polluting sources created by another rollback (i.e., this Proposal). And when it is considering the ability of States to attain National Ambient Air Quality Standards (for example, under the Good Neighbor rule), it must similarly take into account the effect of its rollbacks on the existence and utilization of polluting sources.

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[267] EPA, Resource Adequacy Analysis: Vehicle Rules, Final 111 EGU Rules, ELG and MATS RTR Technical Memo, Doc. ID No. EPA-HQ-OAR-2023-0072 (Apr. 2024), https://www.epa.gov/system/files/documents/2024-04/technical-memo-resource-adequacy-analysis-vehicle-rules-final-111-egu-rules-elg-and-mats.pdf. *See also* Final Rule Sens Vehicle Rules MATS and ELG in *Analysis of the Final Greenhouse Gas Standards and Guidelines*, EPA, https://www.epa.gov/power-sector-modeling/analysis-final-greenhouse-gas-standards-and-guidelines (last updated Mar. 4, 2025); EPA, IPM Sensitivity Runs Memo, Doc. ID No. EPA-HQ-OAR-2023-0072 (Apr. 2024), https://www.epa.gov/system/files/documents/2024-04/technical-memo-ipm-sensitivities_final.pdf.

[268] EPA, Resources Adequacy Analysis: Vehicle Rules, Final 111 EGU Rules, ELG and MATS RTR Technical Memo at 3-4, *supra* at note 267.

[269] EPA, IPM Sensitivity Runs Memo, *supra* note 267.

On the "benefits" side, EPA must ensure that it is not double, triple, or quadruple counting cost savings or other alleged benefits. For example, it cannot claim the "benefits" of the same coal-fired power plant remaining in operation in multiple rulemakings if that plant would have remained operational had only a single rollback been promulgated. So too, for any asserted reliability benefits of particular sources choosing to remain in operation due to a rollback. In other words, EPA must make sure the baseline it is working from reflects its close-in-time rulemakings. *See id.; Appalachian Power Co.*, 251 F.3d at 1034; *Mayo*, 177 F. Supp. 3d at 138–39; *Ctr. for Auto Safety*, 751 F.2d at 1391. And EPA must account, in any forecast of energy demand, for the lost demand from rolling back vehicle standards that would likely have resulted in greater electric vehicle penetration. Double or triple counting cost and reliability "benefits" would mislead both the Administrator in making the judgments afforded him by the Clean Air Act and the American people.

C. EPA's failure to include the value of the tax credits in its estimates of the costs of controls is arbitrary and capricious.

In the RIA, EPA questions whether the value of tax credits for CCS should be considered in assessing the costs of utilizing the technology, but the agency offers no indication of how the effects of the tax code could be extracted from an analysis of BSER costs or the assessment of the costs and benefits of the agency action. Nor could EPA justify how an exercise so divorced from economic reality would be reasonable and appropriate. As EPA explained in promulgating the Carbon Pollution Standards:

> [S]ection 111(a)(1) is clear that the cost that the Administrator must take into account in determining the BSER is the cost of the controls to the source. It is reasonable to take the tax credit into account because it reduces the cost of the controls to the source, which has a significant effect on the actual cost of installing and operating CCS. In addition, all sources that install CCS to meet the requirements of these final actions are eligible for the tax credit. The legislative history of the IRA makes clear that Congress was well aware that the EPA may promulgate rulemaking under CAA section 111 based on CCS and the utility of the tax credit in reducing the costs of CCUS (i.e., CCS).

89 Fed. Reg. at 39,881. EPA further noted that this was consistent with the approach it had taken in the 2015 NSPS Rule and with its approach in other rules where it accounted for revenues from the sale of the by-products of emission controls in assessing the costs of operating those controls. *Id*.

Here, Congress enacted the 45Q tax credit specifically to encourage increased CCS deployment because Congress deemed such deployment sufficiently valuable to justify the cost. The tax credit has a clear and direct effect on the cost of the carbon pollution and sequestration controls to the source. If it was not considered, the BSER cost analysis and the analysis of the costs and benefits of the standards would be detached from economic reality, in conflict with the

U.S. government's long-standing cost-benefit analysis practice and guidance, and would constitute arbitrary agency action.

If even EPA does not approve of the tax credit, it was Congress's choice to make it law and EPA has no authority to alter that choice or pretend it was not made. As directed in the 2003 OMB Circular A-4, "[agencies] need to measure the benefits and costs of a rule against a baseline. This baseline should be the best assessment of the way the world would look absent the proposed action."[270] The 45Q tax credit is a part of how the world looks today, and will have a significant effect on the costs (or revenue enhancement) that coal and gas plants deploying CCS will experience, and therefore their behavior—materially affecting the costs and benefits of the proposed repeal.

Further, the idea that the effects of the tax code should and *could* be eliminated from the cost and benefit analysis of a regulatory action is implausible. The tax code has many effects on both the operational costs of industrial sources (including but not limited to affecting the costs of fuels, fuel extraction, fuel transport, other materials and services and their transport, the cost and availability of capital and labor, depreciation, earnings, and the treatment of profit) as well as on the broader effects of a regulatory action beyond the regulated entities. Accordingly, because EPA failed to provide an updated baseline or adequately consider the tax credits in its economic analysis, the RIA is arbitrary and capricious.

CONCLUSION

Given the ever-worsening and daily harms our communities are experiencing due to climate change, it is critical that we aggressively reduce greenhouse gas emissions to mitigate those harms. Despite the fact that U.S. fossil fuel-fired power plants are one of the largest sources of greenhouse gas emissions in the world, EPA proposes to abandon section 111—the statutory tool the Supreme Court held in *American Electric Power* "speaks directly" to those emissions. EPA's new position that a sector that comprises 25% of U.S. greenhouse gas emissions—and 4% of worldwide emissions—does not significantly contribute to air pollution that endangers public health and welfare is unsupportable and unlawful. EPA must withdraw the Proposed Rule and implement the existing regulations limiting power plant greenhouse gas emissions.

[270] Off. of Mgmt. & Budget, Exec. Off. of the President, Circular A-4: Guidance to Federal Agencies on the Development of Regulatory Analysis as Required Under Section 6(a)(3)(c) of Executive Order 12866 (Sept. 17, 2003), https://obamawhitehouse.archives.gov/omb/circulars_a004_a-4.

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