Attorneys General of New York, Arizona, California, Colorado, Delaware, Connecticut, District of Columbia, Hawai'i, Illinois, Maine, Maryland, Massachusetts, Michigan, Minnesota, New Mexico, North Carolina, Oregon, Pennsylvania, Rhode Island, Vermont, Washington, and Wisconsin and the Chief Legal Officers of the Cities of Boulder, Chicago, Denver, New York, and Philadelphia

December 20, 2023

Submitted via www.regulations.gov

U.S. Environmental Protection Agency EPA Docket Center (Docket ID No. EPA-HQ-OAR-2023-0072) Mail Code 28221T 1200 Pennsylvania Ave., NW Washington, DC 20460

Re: EPA Proposed Rule to Limit Greenhouse Gas Emissions from New, Modified, and Existing Fossil-Fueled Power Plants; Supplemental Notice of Proposed Rulemaking; 88 Fed. Reg. 80,682 (Nov. 20, 2023)

To the Environmental Protection Agency:

The undersigned Attorneys General and chief legal officers submit these comments on EPA's supplemental notice of proposed rule rulemaking to limit greenhouse gas emissions from new, modified, and existing fossil-fueled power plants. Many of us submitted comments earlier this year on the proposed rule, 88 Fed. Reg. 33,240 (May 23, 2023). In the supplemental notice, EPA solicits comments on the potential impact of the rule on small businesses and on grid reliability. Our comments here focus on that latter topic.

1. Introduction

Our states and cities have a strong interest in a reliable electricity grid. A reliable grid is necessary not just for our governments,

¹ See Comments of New York Attorney General et al. (Aug. 8, 2023), EPA-HQ-OAR-2023-0072-0748 ("Multistate Comments"); Comments of the State of Colorado (Aug. 8, 2023), EPA HQ-OAR-2023-0072-0576 ("Colorado Comments").

residents, ratepayers, and businesses to safely and productively engage in daily activities, but also as we plan for a transition to a clean energy economy. States—through their public utilities commissions and participation in state or regional-based system operators—play an important role in coordinating with federal agencies and power plant operators to ensure that electricity is reliable and affordable.

Attorneys General and municipal chief legal officers also have a strong interest in addressing climate change, which risks significant harm to public health and welfare, including by threatening grid reliability. To that end, we advocate for federal and state regulations that limit pollution from power plants and advance the development of renewable energy sources, while keeping electricity affordable and reliable. Indeed, in recent years, our states and cities have helped drive the transition away from a reliance on fossil fuel generated power. For example, as discussed in our rulemaking comments submitted earlier this year, the states that are part of the Regional Greenhouse Gas Initiative have reduced carbon pollution from power plants by more than 50 percent while maintaining grid reliability and experiencing more economic growth than other areas.²

Informed by these experiences and interests, our states and cities see the proposed rule as a key component of the nation's effort to reduce greenhouse gas emissions, which is in turn critical to ensuring grid resilience against climate harms. The proposed rule has sufficient safeguards and flexibilities to ensure that its emissions-reduction standards do not threaten grid reliability, and accordingly we continue to support the proposed rule as outlined in our August 2023 comments.

2. Extreme Weather and Grid Reliability

Climate change is adversely impacting our states and cities in numerous ways, including threatening grid reliability. As EPA noted in the preamble to the proposed rule, "many regions of the country have experienced a significant increase in the frequency and severity of

² Multistate Comments, Appendix 2 at 1-3; *see also* Colorado Comments at 6-7 (discussing state laws requiring CO₂ reductions from power plants).

extreme weather events" and such "events have impacted energy infrastructure and both the demand for and supply of electricity." Similarly, in its final rule issued earlier this year directing electric utilities to file reports evaluating vulnerability of their infrastructure to extreme weather, the Federal Energy Regulatory Commission (FERC) recognized that extreme weather fueled by climate change is a threat to grid reliability. FERC found that "[t]he record shows that extreme weather events can also increase electricity prices because grid operators are forced to dispatch higher-priced generators to account for transmission line outages." 5

EPA and FERC's findings are consistent with a recent report issued by the Government Accountability Office (GAO), which found that the average annual costs of severe weather-related outages to utility customers in the U.S. totaled tens of billions of dollars each year. The GAO concluded that "recent weather events—such as extreme heat and associated wildfires, extreme cold, and hurricanes—have adversely affected millions of electric utility customers" and that

³ 88 Fed. Reg. at 33,415.

⁴ See 88 Fed. Reg. 41,477, 41,478 (June 27, 2023) (finding that the trend of increasing severe weather events "threatens livelihoods, electric system reliability, and the Commission's ability to ensure just and reasonable jurisdictional rates."). FERC cited the North American Electric Reliability Corporation's 2022 Long-term Reliability Assessment, which identified the need for industry and policymakers to include extreme weather scenarios in resource and system planning among its top recommendations to address reliability risks. *Id.* at 41,479 (citing NERC, 2022 Long-term Reliability Assessment 8 (Dec. 2022), available at https://www.nerc.com/pa/RAPA/ra/Reliability%20Assessments%20DL/NERC LTRA2022.pdf.)

⁵ 88 Fed. Reg. at 41,480.

⁶ Testimony of Frank Rusco, Director, Natural Resources and Environment, Government Accountability Office, Before the U.S. Senate Committee on Environment and Public Works (Mar. 10, 2021) ("GAO Testimony") at 4 (citing two government reports and one independent research report), available at https://www.gao.gov/assets/gao-21-423t.pdf.

power outages during extreme weather events illustrate the need to plan for climate change risks and invest in climate resilience.⁷

Similarly, the Fifth National Climate Assessment, issued last month by the U.S. Global Change Research Program, found that extreme weather is the primary cause of power outages. The average number of major power outages (exceeding 50,000 customers) increased by 64 percent during the most recent ten-year period (2011-21), compared to the previous one (2000-10).8 Weather-related outages, which were responsible for 83 percent of power outages during the entire period (2000-21), increased by 78 percent in the 2011-21 period compared to the previous ten-year period. Of these weather-related outages, severe weather (e.g., thunderstorms, tornados, blizzards) was responsible for 58 percent, followed by extreme cold (22 percent), and hurricanes (15 percent). 10 The report discusses how climate change, which contributes to the prevalence of severe weather events and longer-term conditions such as drought, threatens the ability of power plants to reliably generate electricity as well as the transmission of electricity to residents and businesses. 11

Power outages caused by extreme weather cause disproportionate impacts in our already underserved communities due to circumstances such as a lack of access to backup generators, poorly insulated homes, or an inability to afford temporary shelter elsewhere. For example, in

⁷ *Id.* at 9.

⁸ U.S. Global Change Research Program, *Fifth National Climate Assessment* (Nov. 2023), ch. 5 (Energy), available at https://nca2023.globalchange.gov/chapter/5/.

⁹ Climate Central, Surging Power Outages and Climate Change (Sept. 14, 2022), at 3, available at https://assets.ctfassets.net/cxgxgstp8r5d/73igUswSfOhdo7DUDVLwK7/bb0a4e95e1d04457e56106355a1f74b9/2022PowerOutages.pdf. Climate Central analyzed data submitted by utility companies submitted to the North American Reliability Corporation during the 2000-21 time period.

¹⁰ Fifth National Climate Assessment, ch. 5

¹¹ *Id*.

Buffalo, last year's Winter Storm Elliot disproportionately resulted in deaths of people of color, due in part to a lack of critical public infrastructure, power generators, and food and medical supplies.¹²

Extreme weather events and their significant impacts on the power grid and public health and welfare are expected to grow more frequent unless we take action to substantially curb the burning of fossil fuels. As the authors of the Energy chapter of the Fifth National Climate Assessment put it, "[w]ithout mitigation and adaptation, projected increases in the frequency, intensity, duration, and variability of extreme events will amplify effects on energy systems (virtually certain, very high confidence)." For example, the GAO predicted that more frequent and severe weather associated with climate change could increase the cost of power outages from roughly \$55 billion over the 2006-19 period to over approximately \$480 billion during the 2080-99 period (in 2019 dollar values). 14

In light of this well-established and increasing threat, it is critical to act now to significantly reduce greenhouse gas emissions from the power sector and other sources. The proposed rule is an important piece of that strategy.

3. The Proposed Rule and Grid Reliability

In contrast to power outages associated with extreme weather, which are difficult to predict with any specificity, a well-designed regulation that provides sufficient lead time and compliance flexibility can *enhance* grid reliability while curbing greenhouse gas emissions. As discussed below (and noted in our previous comments), the proposed rule has several features—such as sufficient time for compliance and

¹² New York University, Robert F. Wagner School of Public Service, *Lessons Learned from the Buffalo Blizzard: Recommendations for Strengthening Preparedness and Recovery Efforts* (June 2023), at 13, 17-18, available at <u>Buffalo Blizzard Report - RELEASE VERSION</u> (nyu.edu).

¹³ Fifth National Climate Assessment, ch. 5

¹⁴ GAO Testimony at 4.

state flexibility—that safeguard grid reliability. Several recently published studies further bolster this conclusion.

In our experience, regulations that require power plants to cut their air pollution are often met with unsubstantiated objections and legal challenges related to reliability of the grid that never come to pass. For example, such arguments have been raised over the last dozen years in the context of Clean Air Act regulations targeting ozone and particulate matter under section 110's "good neighbor" provision, addressing mercury and other toxic pollutants under section 112's hazardous air pollutant program, and previous attempts to cut carbon pollution under section 111's new source performance standards provisions. These contentions have proven to be unfounded; instead, these rules have led to substantial reductions in power plant pollution without causing reliability problems. As summarized in a recent report from the Analysis Group titled *Electric System Reliability and EPA Regulation of GHG Emissions from Power Plants* (Nov. 7, 2023):

In every instance in the past dozen years, the industry [] stepped up to ensure that reliability was not compromised—mainly because these many [reliability] tools are available and because power plant owners, reliability organizations, regulators, other public officials, and a wide variety of other stakeholders took myriad actions to ensure that the grid as a whole performed its essential public service functions. ¹⁶

This rule will be no exception. As discussed in our comments on the proposed rule, section 111 of the Clean Air Act directs EPA to consider "energy requirements" when it determines the best system of emission reduction, and the agency did so in developing the proposed

¹⁵ Analysis Group, *Electric System Reliability and EPA Regulation of GHG Emissions from Power Plants* (Nov. 7, 2023) ("Analysis Group Report") at 4, 15-22, available at https://www.analysisgroup.com/globalassets/insights/publishing/2023-tierney-electric-reliability-and-epa-ghg-regs.pdf.

¹⁶ *Id.* at 4.

rule.¹⁷ Pursuant to that directive, EPA consulted with a wide range of agencies and stakeholders—including FERC; the Department of Energy; state environmental and energy agencies; Tribal air regulators; power companies and trade associations representing investor-owned utilities, rural electric cooperatives, and municipal power agencies; environmental justice and community organizations; and labor, environmental, and public health organizations—to evaluate the ability of the power sector to cut carbon pollution without compromising reliability.¹⁸ These consultations further informed EPA's knowledge about the significant transition the electricity generation sector is undergoing as older, more polluting sources of electricity such as coalfired power, are replaced with lower or zero-emitting generation.

Based on this engagement and further analysis, EPA designed the proposed rule with several features that address reliability concerns:

- *Compliance lead times.* Power plants subject to the proposed rule have until 2030 to meet emission reduction requirements, which are also phased in.
- Subcategories for existing coal plants tied to operating horizons. Existing coal-fired power plants that do not intend to install carbon capture and sequestration (CCS) are—based on industry input—provided with a compliance glide path based on planned retirement dates and capacity factors.
- Capacity factor consideration for existing natural gas turbines. The proposed rule only applies to large existing natural gas turbines (those with an average annual capacity factor of greater than 50 percent). Allowing for averaging of capacity factors on an annual basis provides significant flexibility: units can ramp up output to meet short term spikes in electricity demand while staying below the annual compliance threshold. In his recent testimony before FERC, Will Toor, Executive Director of the Colorado Energy Office, cited this aspect of the rule in

¹⁷ See Multistate Comments at 52-53.

¹⁸ 88 Fed. Reg. at 33,276-77, 33,415.

- explaining how Colorado can comply with the rule while maintaining reliability.¹⁹ He noted that existing gas turbines operating at low capacity can provide a supporting role as the state integrates more renewable energy into the grid.
- *Emissions trading*. Under the proposed rule, states could allow power plants to use emissions trading to comply. As explained in our comments on the proposed rule, and more recently in the congressional testimony of Maryland Secretary of the Environment Serena McIlwain, trading is an important aspect of the rule that gives states flexibility to design their plans to meet pollution reduction requirements while maintaining reliability.²⁰
- Remaining useful life and other factors. Pursuant to section 111(d) and the proposed rule, states may consider the remaining useful life or other factors in establishing a standard of performance for a particular source. Thus, if a state determines that a generating unit is needed to run beyond its expected retirement date or at a higher capacity than originally proposed in order to maintain reliability, the state can propose a standard that reflects those circumstances in its section 111(d) plan.

In addition to these features in the proposed rule, under EPA's section 111(d) regulations, states can propose revisions to their plans to account for subsequent developments. Accordingly, for example, if a facility that planned to comply with the rule by using CCS experienced a delay associated with permitting the construction of a pipeline to transport

¹⁹ Testimony of Will Toor, Executive Director, Colorado Energy Office (Nov. 9, 2023), available at <u>Will Toor statement | Federal Energy Regulatory Commission</u> (ferc.gov)

²⁰ See Multistate Comments at 76-87; Testimony of Serena McIlwain, Secretary of the Environment, State of Maryland, Before the U.S. House Energy and Commerce Committee, Subcommittee on Environment, Manufacturing, and Critical Materials (Nov. 14, 2023), at 4-5, available at https://dldth6e84htgma.cloudfront.net/11 14 23 ENV Testimony Mc Ilwain 490a 0e5b3d.pdf.

captured CO₂, the state agency implementing the rule could submit a revised plan to propose adjusting the facility's compliance date.²¹

Our states are experienced in proactively managing their power sectors to ensure a reliable electricity supply while reducing emissions, and the proposed rule is no obstacle to these continued efforts. Several recent studies reinforce that conclusion. The Analysis Group, in its recent report referenced above, cites the proposed rule's flexible design and the existing mechanisms and organizations (e.g., regional grid operators, state public utility commissions, North American Electricity Reliability Corporation) in place to ensure continued reliability as a basis for its conclusion that the proposed rule will not undermine grid reliability.²² And in another recent report, Energy Innovations evaluated six studies that examined the question of generation resource adequacy under conditions aligned with a power sector under the proposed rule. It concluded that "the six studies use four modeling tools to reach the same conclusion as the EPA—the U.S. electricity system would likely remain resource adequate even if all unabated coal generation retired by 2035, all while operating existing gas plants at or below their current average capacity factors."23 Thus, contentions that the proposed rule will undermine grid reliability are unfounded.

To the contrary, the proposed rule should *enhance* grid reliability in two ways. First, by requiring reductions in the carbon pollution that contributes to climate change harms such as extreme weather, the proposed rule would help reduce those threats to grid reliability.

²¹ As further described in our previous comments, there are additional tools available to EPA, state regulators, and grid operators to ensure that power plants needed to generate electricity can continue to run if needed to ensure the lights are kept on. *See* Multistate Comments at 52-53 (discussing Department of Energy temporary orders and examples in which federal and state agencies have exercised enforcement discretion).

²² Analysis Group Report at 6, 13-14.

²³ Energy Innovation, *Maintaining a Reliable Grid Under EPA's Proposed 111 Rules Restricting Power Plant* Emissions (Nov. 2023), at 10, available at https://energyinnovation.org/publication/maintaining-a-reliable-grid-under-epas-proposed-111-rules-restricting-power-plant-emissions/.

Second, the proposed rule's provision that allows coal-fired power plants to comply by committing to an enforceable retirement date can facilitate planning for when replacement resources must be brought online.

4. Conclusion

One of the many threats that climate change poses to our states and cities is undermining the integrity of the electricity grid. Acting now to cut carbon pollution from the power sector and other sources will help address that threat. EPA's proposed rule is designed to achieve those emission reductions while maintaining grid reliability, as confirmed by several recent studies. We urge EPA to continue its work coordinating with federal, state, Tribal, industry, and community stakeholders to ensure that the final rule delivers significant pollution reductions while maintaining the reliability of our grid.

Sincerely,

LETITIA JAMES

Attorney General of New York

/s/Michael J. Myers

MICHAEL J. MYERS

Senior Counsel for Air Pollution and Climate Change Litigation

ANDREW G. FRANK

Assistant Attorney General Environmental Protection

Bureau

The Capitol

Albany, NY 12224

(518) 776-2400

michael.myers@ag.ny.gov

KRISTIN K. MAYES

Attorney General of Arizona

PAUL PHELPS

Assistant Attorney General Office of the Attorney General

Environmental Enforcement

Section

2005 N. Central Ave.

Phoenix, AZ 85004

602.542.8543

Paul.Phelps@azag,gov

ROB BONTA

Attorney General of California

DENNIS BECK

MYUNG PARK

Supervising Dep. Attys. General

KAVITA LESSER

THEODORE MCCOMBS

Deputy Attorneys General

300 South Spring Street Los Angeles, CA 90013

(213) 269-6605

Kavita.Lesser@doj.ca.gov

PHILLIP J. WEISER

Attorney General of Colorado

JESSICA L. LOWREY

Second Assistant Attorney General Natural Resources and Environment

Section

1300 Broadway, 7th Floor

Denver, CO 80203

(720) 508-6167

jessica.lowrey@coag.gov

WILLIAM TONG

Attorney General of Connecticut

MATTHEW I. LEVINE

Deputy Associate Attorney General

SCOTT N. KOSCHWITZ

Assistant Attorney General

Office of the Attorney General

165 Capitol Avenue

Hartford, CT 06106

(860) 808-5250

Scott.Koschwitz@ct.gov

KATHLEEN JENNINGS

Attorney General of Delaware

CHRISTIAN DOUGLAS WRIGHT

VALERIE S. EDGE

Deputy Attorneys General

Delaware Department of Justice

820 N. French Street

Wilmington, DE 19801

christian.wright@delaware.gov

valerie.edge@delaware.gov

BRIAN L. SCHWALB

Attorney General for the District

of Columbia

DAVID S. HOFFMANN

Senior Assistant Attorney General

Public Advocacy Division

Social Justice Section

400 Sixth St. NW

Washington, D.C. 20001

(202) 442-9889

David.Hoffmann@dc.gov

ANNE E. LOPEZ

Attorney General of Hawaii

LYLE T. LEONARD

Deputy Attorney General

State of Hawaii

Dept. of the Attorney General

465 South King Street, Room 200

Honolulu, HI 96813

(808) 587-3050

lyle.t.leonard@hawaii.gov

KWAME RAOUL Attorney General of Illinois

JASON E. JAMES
Assistant Attorney General
MATTHEW DUNN
Chief, Environmental
Enforcement/
Asbestos Litigation Division
201 W. Pointe Drive, Suite 7
Belleville, IL 62226
(872) 276-3583
jason.james@ilag.gov

AARON M. FREY Attorney General of Maine

EMMA AKRAWI
Assistant Attorney General
Natural Resources Division
6 State House Station
Augusta, ME 04333
(207) 626-8800
Emma.Akrawi@maine.gov

ANTHONY G. BROWN Attorney General of Maryland

STEVEN J. GOLDSTEIN Special Assistant Attorney General Office of the Attorney General 200 Saint Paul Place Baltimore, MD 21202 (410) 576-6414 sgoldstein@oag.state.md.us

ANDREA JOY CAMPBELL Attorney General of Massachusetts

TURNER SMITH Assistant Attorney General & Deputy Bureau Chief BENJAMIN J. MESHOULAM Senior Attorney for Climate & Energy/Managing Attorney JULIA JONAS-DAY Assistant Attorney General Energy and Environment Bureau One Ashburton Place, 18th Fl. Boston, MA 02108 (617) 963-2782 turner.smith@mass.gov

DANA NESSEL

Attorney General of Michigan

ELIZABETH MORRISSEAU

Assistant Attorney General Environment, Natural Resources, and Agriculture Division 6th Floor G. Mennen Williams Building 525 W. Ottawa Street P.O. Box 30755 Lansing, MI 48909 (517) 335-7664

RAUL TORREZ

Attorney General of New Mexico 408 Galisteo St. Santa Fe, NM 87501

MorrisseauE@michigan.gov

JOSHUA H. STEIN

Attorney General of North Carolina

DANIEL S. HIRSCHMAN

Senior Deputy Attorney General

ASHER P. SPILLER

Special Deputy Attorney General

TAYLOR CRABTREE

Assistant Attorney General

North Carolina Department of

Justice

P.O. Box 629

Raleigh, NC 27602

(919) 716-6400

KEITH ELLISON

Attorney General of Minnesota

PETER N. SURDO

Special Assistant Attorney General Minnesota Attorney General's Office 445 Minnesota Street Town Square Tower Suite 1400 Saint Paul, MN 55101 (651) 757-1061

Peter.Surdo@ag.state.mn.us

MICHELLE A. HENRY

Attorney General of Pennsylvania

ANN R. JOHNSTON

Assistant Chief Deputy Attorney

General

Office of the Attorney General

Civil Environmental Enforcement

Unit

Strawberry Square, 14th Floor

Harrisburg, PA 17120

717-497-3678

ajohnston@attorneygeneral.gov

ELLEN F. ROSENBLUM Attorney General of Oregon

PAUL GARRAHAN
Attorney-in-Charge
STEVE NOVICK
Special Assistant Attorney General
Natural Resources Section
Oregon Department of Justice
1162 Court Street NE
Salem, OR 97301-4096
(503) 947-4540
Paul.Garrahan@doj.state.or.us
Steve.Novick@doj.state.or.us

CHARITY R. CLARK Attorney General of Vermont

HANNAH YINDRA Assistant Attorney General Office of the Attorney General 109 State Street Montpelier, VT 05609 (802) 828-3186 Hannah.yindra@vermont.gov

JOSHUA L. KAUL Attorney General of Wisconsin

GABE JOHNSON-KARP Assistant Attorney General Wisconsin Department of Justice Post Office Box 7857 Madison, WI 53702-7857 (608) 267-8904 johnsonkarpg@doj.state.wi.us PETER F. NERONHA Attorney General of Rhode Island

ALISON B. HOFFMAN
Assistant Attorney General
Chief, Environmental and Energy
Unit
Rhode Island Office of the Attorney
General
150 South Main Street
Providence, RI 02908
(401) 274-4400
gSchultz@riag.ri.gov

ROBERT W. FERGUSON Attorney General of Washington

CHRISTOPHER H. REITZ CAROLINE E. CRESS Assistant Attorneys General Office of the Attorney General P.O. Box 40117 Olympia, WA 98504-0117 (360) 586-4614 chris.reitz@atg.wa.gov

TERESA TAYLOR TATE City of Boulder City Attorney

LUIS A. TORO Senior Counsel 1777 Broadway, 2nd Floor Boulder, CO 80302 (303) 441-3020 Torol@bouldercolorado.gov

MARY B. RICHARDSON-LOWRY

City of Chicago Corporation Counsel

BRADLEY R. RYBA

Assistant Corporation Counsel City of Chicago Department of Law Regulatory & Contracts Division 2 N. LaSalle Street, Suite 540 Chicago, IL 60602 (312) 742-6432 bradley.ryba@cityofchicago.org

KERRY TIPPER

City and County of Denver City Attorney

EDWARD J. GORMAN

Assistant City Attorney
201 W. Colfax Avenue, Dept. 1207
Denver, CO 80202
(720) 913-3275
edward.gorman@denvergov.org

HON. SYLVIA O. HINDS-RADIX

Corporation Counsel of the City of New York

TESS DERNBACH

Assistant Corporation Counsel 100 Church Street New York, NY 10007 (212) 356-2320 tdernbac@law.nyc.gov

KRISTIN BRAY

City of Philadelphia Acting City Solicitor

INDIA MCGHEE

Senior Attorney City of Philadelphia Law Department 1515 Arch St. 16th Fl Philadelphia, PA 19102 215-683-5169 india.mcghee@phila.gov