ORAL ARGUMENT NOT YET SCHEDULED

No. 24-1120 (and consolidated cases)

IN THE UNITED STATES COURT OF APPEALS FOR THE DISTRICT OF COLUMBIA CIRCUIT

STATE OF WEST. VIRGINIA, et al.,

Petitioners,

Filed: 10/18/2024

v.

ENVIRONMENTAL PROTECTION AGENCY, et al., Respondents.

On Petition for Review of Final Agency Action of the **Environmental Protection Agency** 89 Fed. Reg. 39,798 (May 9, 2024)

BRIEF OF AMICI CURIAE THE NATIONAL LEAGUE OF CITIES AND THE U.S. CONFERENCE OF MAYORS IN SUPPORT OF RESPONDENTS

MICHAEL BURGER (counsel of record) AMY E. TURNER VINCENT M. NOLETTE SABIN CENTER FOR CLIMATE CHANGE LAW COLUMBIA LAW SCHOOL

435 W. 116th St. New York, NY 10027 (212) 854-2372 michael.burger@law.columbia.edu

Counsel for Amici Curiae DATED: October 18, 2024

CERTIFICATE AS TO PARTIES, RULINGS, AND RELATED CASES

A. Parties and Amici

Except for the following and those listed in the Identities and Interests section below, all parties, intervenors, and *Amici Curiae* appearing in this case are listed the Brief of Respondents: *Amici Curiae* in Support of Respondents Ric O'Connell, Brendan Pierpont, Benjamin F. Hobbs, Jesse Jenkins, Brendan Kirby, Kenneth J. Lutz, Michael Milligan, Michael O'Boyle, and Matthew Schuerger.

B. Ruling Under Review

References to the rulings under review appear in the Brief for Respondents.

C. Related Cases

References to related cases appear in the Brief for Respondents.

Dated: October 18, 2024 /s/ Michael Burger

MICHAEL BURGER

STATEMENT REGARDING COMPLIANCE, SEPARATE BRIEFING, AUTHORSHIP, AND MONETARY CONTRIBUTIONS

Amici Curiae National League of Cities and the U.S. Conference of Mayors file this separate amicus brief in compliance with the word limits set forth in Federal Rules of Appellate Procedure 29(a)(5) and 32(a)(7)(B)(i) because it contains 6,428 words, excluding the parts excluded by Federal Rules of Appellate Procedure 27(d)(2) and 32(f) and D.C. Circuit Rule 32(e)(1). This brief complies with the typeface requirements of Fed. R. App. P. 32(a)(5) and the type-style requirements of Fed. R. App. P. 32(a)(6). It has been prepared in a proportionally spaced typeface using Microsoft Word in Times New Roman font.

A single joint brief is not practicable in this case because the other *amicus* briefs do not address the unique perspective of local governments that are responsible for local responses to climate change. *See* D.C. Circuit Rule 29(d).

Under Federal Rule of Appellate Procedure 29(a)(4)(E), *amici* state that no party's counsel authored this brief in whole or in part, and no party or party's counsel contributed money intended to fund the preparation or submission of this brief. No person—other than the *amici curiae* or their counsel—contributed money intended to fund the preparation or submission of this brief.

CORPORATE DISCLOSURES

The undersigned counsel for *amici* certifies that no corporation among *amici* has ever issued stock, and that none has a parent company whose ownership interest is 10 percent or greater.

TABLE OF CONTENTS

CERTIFICATE AS TO PARTIES, RULINGS, AND RELATED CASES ii
STATEMENT REGARDING COMPLIANCE, SEPARATE BRIEFING,
AUTHORSHIP, AND MONETARY CONTRIBUTIONSiii
CORPORATE DISCLOSURESiv
TABLE OF CONTENTSv
TABLE OF AUTHORITIES vii
GLOSSARY OF TERMSxx
IDENTITIES AND INTEREST OF AMICI CURIAE1
SUMMARY OF ARGUMENT2
ARGUMENT3
I. Cities Bear the Burden of, and Lead Efforts to Respond to, the Climate Crisis,
and Climate Impacts Will Increase Without a Strong EPA Power Plant Rule3
II. Unduly Limiting EPA's Regulatory Authority Would Frustrate Cities'
Efforts to Address and Adapt to Climate Change
A. Adaptation Efforts16
B. Mitigation Efforts18

III. The Power Plant Rules are within EPA's Authority, and the Rule Preserves	•
the Cooperative Federalism Structure that Supports Cities' Efforts to Address	
Climate Change	24
CONCLUSION	27
CERTIFICATE OF SERVICE	29

TABLE OF AUTHORITIES

Cases

Am. Elec. Power Co. v. Connecticut, 564 U.S. 410 (2011)	25
Massachusetts v. E.P.A., 549 U.S. 497 (2007)	25
Utility Air Regulatory Group v. EPA, 573 U.S. 302 (2014)	25
West Virginia v. EPA, 597 U.S. 697 (2022)	24
West Virginia v. EPA, No. 24-1120 (D.C. Cir. July 19, 2024)	24
Statutes	
Pub. Law. 117-169 (2022)	14, 25
Regulations	
42 U.S. Code § 7411	4, 24
Federal Register Notices	
74 Fed. Reg. 66496 (2009)	25
89 Fed. Reg. 39,798 (May 9, 2024)	4, 23, 26
Local Resolution	
City of Atlanta, Resolution No. 17-R3510 (2019)	20
City of Augusta, Ga. Resolution File No. 25232,	
https://forms.augustaga.gov/WebLink/DocView.aspx?dbid=0&id=90)684&page=
1	20

City of Charlotte, Resolution Book No. 48, Page No. 839 (June 25, 2018)	19
City of Fayetteville, Ark. Resolution No. 45-17 (Dec. 2017)	20
City of Golden, Co. Resolution No. 2656 (Feb. 2019)	20
City of Helena, Mont., Resolution No. 20592 (2020)	20
City of Knoxville Resolution No. R-265-2019 (Aug. 13, 2019)	19
City of Madison, CRANES Amended Resolution, Leg. File. No. 45569 (Mar.	
2017)	20
City of Missoula & Missoula County, 100% Clean Electricity Joint Resolution	
(2019)	20
City of St. Paul, Mn. Resolution No. 19-1870 (2019)	20
City of Tallahassee, Fla. Resolution No. 19-R-04 (Feb. 20, 2019)	20
Local Ordinances and Rules	
City of Atlanta, Ga. Ord. 17-O-1654 (2017)	22
City of Denver, Co., File No. 21-1310 (2021)	21
City of Fort Collins, Colo. Code. § 5-30-E3401.5 (2019)	22
City of Los Angeles, Cal., Ordinance No. 184674 (2017)	21
City of New York, Local Law 97 (2019)	21
City of New York, N.Y. Intro. No. 0017-2024 (2024)	22
City of Oakland, Cal. Code. § 15.04.3.11010	22
City of Salt Lake City, Utah, Code. Ch. 21A.44.040.B (2019)	22

City of San Francisco, Cal., File No. 101105 (2010)21	1
City of Seattle, Ore. Elec. Code § 625.2722	2
City of Seattle, Wash. Code Ch. 22.925 (2023)21	1
Ordinance Amending City of Boston Code, Ordinances, Ch. VII, Sections 7-2.1	
and 7-2.2 (2021)21	1
Town of Chenango, N.Y. Code. § 74B-322	2
Other Authorities	
2023 - Cities Adaptation Actions, CDP, https://data.cdp.net/Adaptation-	
Actions/2023-Cities-Adaptation-Actions/4ubf-r8fc/about_data16	5
Acacia Coronado and Juan Lozano, Deadly heat wave in the central US strains	
infrastructure, transportation and the Texas power grid, AP NEWS (Aug. 23,	
2023) https://apnews.com/article/summer-heat-wave-	
fd19c3995992c93121ef4baedcbcf07e10)
Alison Saldanha et al., Dangerous Air: As California Burns, America Breathes	
Toxic Smoke, KCRW (Sept. 28, 2021), https://kcrw.co/3ISH4Oh11	1
Austyn Gaffney, Heat Deaths Have Doubled in the U.S. in Recent Decades, Study	
Finds, N.Y. TIMES (Aug 27, 2024),	
https://www.nytimes.com/2024/08/27/climate/heat-deaths.html9	9

Barbara Russo-Lennon, Latest NYC heat wave: New Yorkers urged to conserve
energy as temperatures will feel like over 100 degrees this week, AMNY (July 15,
2024), https://www.amny.com/news/nyc-heat-wave-july-15-2024-energy-
conservation/10
Budget Exposure to Increased Cost and Lost Revenue Due to Climate Change: A
Preliminary Assessment and Proposed Framework for Future Assessments,
WHITE HOUSE OFFICE OF MGMT. & BUDGET (Mar. 2023),
https://www.whitehouse.gov/wp-
content/uploads/2023/03/climate_budget_exposure_fy2024.pdf13
Caleb Robinson et al., Modeling Migration Patterns in the USA Under Sea Level
Rise, PLoS ONE, Jan. 2020, https://rb.gy/axq3lh7
Casey Crownhart, Cities Are Scrambling to Prevent Flooding, MIT TECH. R. (July
20, 2021), https://bit.ly/3ywGKAg7
City Climate Policy, CTR. FOR CLIMATE & ENERGY SOLUTIONS,
https://www.c2es.org/content/city-climate-policy/14
City of Atlanta, Climate Action Plan (2016),
https://atlantaclimateactionplan.wordpress.com/wp-
content/uploads/2016/02/atlanta-climate-action-plan-07-23-2015.pdf18

City of Chicago, Climate Action Plan (2022),
https://www.chicago.gov/content/dam/city/sites/climate-action-
plan/documents/Chicago-CAP-071822.pdf17
City of Cincinnati, Green Cincinnati Plan (2023), https://www.cincinnati-
oh.gov/oes/climate/climate-protection-green-cincinnati-plan/green-cincinnati-
plan-2023-spreads/19
City of Cleveland, Climate Action Plan (2018),
https://drive.google.com/file/d/1Z3234sMp7S7MjaXvMgcZtcAaYs4x2oHE/vie
w19
City of Columbus, Climate Action Plan (2021),
https://www.columbus.gov/files/sharedassets/city/v/1/utilities/sustainability/cap/
columbus-climate-action-plan_final.pdf19
City of Decatur, Climate Action Plan (2022),
https://www.decaturga.com/media/2744120
City of Kansas City, Climate Protection and Resiliency Plan (Sept. 2022),
https://indd.adobe.com/view/3e643429-e6da-428d-a6d6-00ef730388f519
City of Miami, Florida, Heat Action Plan (2022),
https://www.miamidade.gov/environment/library/2022-heat-action-plan.pdf16

City of Omaha, Priority Climate Action Plan (Mar. 2024),
https://www.epa.gov/system/files/documents/2024-03/omaha-council-bluffs-ne-
msa-priority-climate-action-plan.pdf16
City of Phoenix, Arizona, Office of Heat Response and Mitigation,
https://www.phoenix.gov/heat
City of Pittsburgh, Climate Action Plan 3.0
https://apps.pittsburghpa.gov/redtail/images/7101_Pittsburgh_Climate_Action_P
lan_3.0.pdf19
City of Rochester, Climate Action Plan,
https://www.cityofrochester.gov/sites/default/files/2024-
06/Rochester%20Climate%20Action%20Plan.pdf18
Clarkston Georgia Commits to 100 Percent Clean Energy, NAT'L RES. DEF.
COUNCIL https://www.sierraclub.org/press-releases/2019/03/clarkston-georgia-
commits-100-percent-clean-renewable-energy20
Climate Change Impacts on Coasts, U.S. Env't. Protection Agency,
https://www.epa.gov/climateimpacts/climate-change-impacts-
coasts#:~:text=Damaged%20or%20lost%20coastal%20property,level%20if%20c
urrent%20trends%20continue (last accessed Sept. 24, 2024)

Climate Mayors Announces Major New Commitment from Nearly 350 Mayors to
Accelerate US Electric Vehicle Transition, CLIMATE MAYORS (Aug. 13, 2024),
https://www.climatemayors.org/post/electrify50-ev-announcement23
Climate Mayors Submit Comments on Proposed Repeal of Clean Power Plan,
CLIMATE MAYORS (March 27, 2018), https://bit.ly/3a7V6ta1
Corey Davis, Rapid Reaction: Historic Flooding Follows Helene in Western NC,
North Car. State Climate Office (Sept. 30, 2024),
https://climate.ncsu.edu/blog/2024/09/rapid-reaction-historic-flooding-follows-
helene-in-western-nc/
CTA Receives \$25 Million to Advance its Electric Bus Fleet, Chicago Transit
Authority (June 27, 2023), https://www.transitchicago.com/cta-receives-25-
million-to-advance-its-electric-bus-fleet-/22
D. Dodman et al., Cross-Chapter Paper 2: Cities and Settlements by the Sea in
IPCC: Sixth Assessment Report 2022
D. Hayward et al., IPCC, Cities, Settlements and Key Infrastructure in Climate
Change 2022: Impacts, Adaptation and Vulnerability
Dan Gunderson, Cost is a barrier as cities prepare for wild weather in a changing
climate, MPR NEWS (Aug. 26, 2024),
https://www.mprnews.org/story/2024/08/26/cost-is-a-barrier-as-cities-prepare-
for-wild-weather-in-a-changing-climate

E.K. Chu et al., Ch. 11: Built Environment, Urban Systems, and Cities, in Impacts,
Risks, and Adaptation in the United States: Fifth National Climate Assessment,
Volume II 567, 578 (2023), https://rb.gy/qtarzq5, 10, 13, 17
Final EPA Power Plants Rules Comment, C40 CITIES & CLIMATE MAYORS (Aug.
7, 2023),
https://drive.google.com/file/d/13ST48UaNLSACZ4FN2rdRxCRrBHPV422V/vi
ew15
Global and Regional Sea Level Rise Scenarios for the United States, NOAA (Feb.
2022), https://sealevel.globalchange.gov/internal_resources/756/noaa-nos-
techrpt01-global-regional-SLR-scenarios-US.pdf6
Gloria Oladipo, New York City faces lower air quality from Canada wildfires, THE
GUARDIAN (Oct. 2, 2023), https://www.theguardian.com/us-
news/2023/oct/02/new-york-city-air-quality-smoke-canada-wildfires11
Hayley Smith, As California swelters, climate officials declare Summer 2024 the
hottest on record, L.A. TIMES (Sept. 6, 2024),
https://www.latimes.com/environment/story/2024-09-06/summer-2024-was-
earths-hottest-on-
record#:~:text=2024%20was%20the%20hottest%20boreal,was%201.24%20degr
ees%20Fahrenheit%20hotter
Hurricane Costs, NOAA Office for Coastal Management, https://rb.gy/gxnhzo6

IPCC, AR6 Synthesis Report: Climate Change 2023 (2023)9, 12
James E. Neumann et al., Climate effects on US infrastructure: the economics of
adaptation for rail, roads, and coastal development, 167 CLIMATIC CHANGE 4
(Aug. 19, 2021), https://doi.org/10.1007/s10584-021-03179-w
Jenna Smith et al., Chicago's air quality: 'We're in the crosshairs.' Wildfires and
wind push region's air to worst in the world, global pollution index shows,
CHICAGO TRIBUNE (June 29, 2023),
https://www.chicagotribune.com/2023/06/27/chicagos-air-quality-were-in-the-
crosshairs-wildfires-and-wind-push-regions-air-to-worst-in-the-world-global-
pollution-index-shows/1
John Muyskens et al., 1 in 6 Americans live in areas with significant wildfire risk,
WASH. POST (May 22, 2022), https://www.washingtonpost.com/climate-
environment/interactive/2022/wildfire-risk-map-us/12
Julie Arrighi et al., Climate Change and the Escalation of Global Extreme Heat:
Assessing and Addressing the Risks (May 28, 2024),
https://assets.ctfassets.net/cxgxgstp8r5d/5sjPWtBWuPk56xVZKuuL3g/fe050dd8
d61e8b2a7e3a315a4b75b22f/Climate_Change_and_the_Escalation_of_Global_E
xtreme_Heat_Climate_Central.pdf
Kelly A. Burks-Copes et al., Risk Quantification for Sustaining Coastal Military
Installation Assets and Mission Capabilities 9 (2014), https://rb.gy/7bvoyo

Laris Karklis et al., The damage caused by Hurricane Milton, WASH. POST (Oct.
10, 2024), https://www.washingtonpost.com/weather/2024/10/10/hurricane-
milton-damage-florida/6
Leah Louis-Prescott & Rachel Golden, How Local Governments and Communities
Are Taking Action to Get Fossil Fuels out of Buildings, ROCKY MOUNTAIN INST.
(Aug. 9, 2022),21
Local Government Climate and Energy Goals, Am. COUNCIL FOR AN ENERGY-
EFFICIENCY ECON., https://database.aceee.org/city/local-government-energy-
efficiency-goals20
M.H. Hayden et al., Ch. 15: Human Health in 5th National Climate Assessment9
Manas Sharma et al., The Age of the "Megafire," REUTERS GRAPHICS (Feb. 1,
2021), https://tmsnrt.rs/3yx2uvw11
Marshall Burke et al., The Changing Risk and Burden of Wildfire in the United
States, Procs. of the Nat'l Acad. of Scis. of the U.S., Jan. 12, 2021,
https://bit.ly/3F4s1yD12
Mona Abdo et al., Impact of Wildfire Smoke on Adverse Pregnancy Outcomes in
Colorado, 2007 –2015, Int't J. of Env't Rsch. and Pub. Health, Oct. 2019,
https://bit.ly/3q2c1ab11
N. Bjarke et al., Storylines for Global Hydrologic Drought Within CMIP6, 12
EARTH'S FUTURE 6, June 3, 2024,, https://doi.org/10.1029/2023EF00411712

State of the Climate 2023, World Meteorological Org.,	
https://library.wmo.int/viewer/68835/download?file=1347_Global-statement-	
2023_en.pdf&type=pdf&navigator=1	.4
Taylor Delandro, Flooding costs US billions of dollars per year: Report, THE HIL	L
(Jun. 11, 2024), https://thehill.com/changing-america/resilience/natural-	
disasters/4714466-flooding-costs-us-billions-of-dollars-per-year-report/	.7
Tzeidle N. Wasserman & Stephanie E. Mueller, Climate influences on future fire	
severity: a synthesis of climate-fire interactions and impacts on fire regimes,	
high-severity fire, and forests in the western United States, 19 FIRE ECOLOGY 43	3,
July 24, 2023, https://fireecology.springeropen.com/articles/10.1186/s42408-	
023-00200-8	0
U.S. Cities Factsheet, Univ. of Mich. Ctr. for Sustainable Systems,	
https://css.umich.edu/publications/factsheets/built-environment/us-cities-	
factsheet	.4
Weather It Together: A Cultural Resource Hazard Mitigation Plan for the City of	•
Annapolis (2018), https://bit.ly/3re60rG	17
Wildland Fire Summary and Statistics Annual Report 2023, NAT. INTERAGENCY	
COORDINATION CTR. (2023), https://www.nifc.gov/sites/default/files/NICC/2-	
Predictive%20Services/Intelligence/Annual%20Reports/2023/annual_report_20)2
3 0.pdf	10

GLOSSARY OF TERMS

EPA United States Environmental Protection Agency

BSER Best System of Emission Reduction

GHG Greenhouse Gas

CPRG Climate Pollution Reduction Program

IRA Inflation Reduction Act

2024 Power Plant Rules New Source Performance Standards for Greenhouse

Gas Emissions From New, Modified, and

Filed: 10/18/2024

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 (May 9, 2024)

IDENTITIES AND INTEREST OF AMICI CURIAE

The National League of Cities (NLC), founded in 1924, is the oldest and largest organization representing U.S. municipal governments. NLC works to strengthen local leadership, influence federal policy, and drive innovative solutions. In partnership with forty-nine state municipal leagues, NLC serves as a national advocate for more than 19,000 cities, towns, and villages representing more than 218 million Americans. NLC's sustainability and resilience program serves as a resource hub for climate change mitigation and adaptation for cities.

The U.S. Conference of Mayors, founded in 1932, is the official nonpartisan organization of the more than 1,400 U.S. cities that are home to 30,000 people or more. The Conference of Mayors established its Climate Protection Center and its Alliance for a Sustainable Future to assist local governments with implementation of both the 2005 Mayors Climate Protection Agreement and the goal to establish comprehensive de-carbonization efforts to keep the global rise in temperature to the 1.5-degree Celsius level.

Amici regularly submit amicus briefs to the Court in support of the broad principles of federalism and the vitality of state and local authority in our federalist system. In this case, amici have a strong interest in the proper interpretation and implementation of the Clean Air Act's cooperative federalism structure and ensuring appropriate regulation of greenhouse gas (GHG) emissions from new and existing power plants. Local governments

have been and will continue to be first responders to the impacts of climate change and have invested significant public funds to mitigate and adapt to the impacts of a changing climate, and they rely on a strong federal partner in the U.S. Environmental Protection Agency (EPA) to reduce pollution from sources outside cities' jurisdiction, such as power plants. Given the urgency and costs of the climate crisis for our nation's cities, towns, suburbs, and other forms of local government, the Court should uphold the EPA's rules described in the briefing in the case.

SUMMARY OF ARGUMENT

Cities – large and small, urban and rural, in every region of the country – are championing the response to climate change. In response to the catastrophic effects of the climate crisis, cities protect their residents through a host of actions that aim to reduce GHG emissions, prepare for and protect against future climate impacts, and increase resiliency in the aftermath of climate disasters. Yet, GHG emissions do not respect state or municipal borders, and local governments must rely on federal regulation to support their own actions. Petitioners' claim that the EPA's 2024 Power Plant Rules will result in a forced generation shift within the power sector is unfounded. And their interpretation of EPA's authority under the Clean Air Act would unduly curtail EPA's ability to regulate GHG pollution from power plants in an efficient, cost-effective manner, depriving cities of a critical partner in mitigating and adapting to climate change.

Cities are disproportionately harmed by the increasingly severe impacts of climate change. Not only is the toll on human life great, but so too are the associated costs of climate change, threatening the health of amici's members and their residents and costing cities billions of dollars a year. Simultaneously, cities are leading the nation's climate mitigation and adaptation efforts, implementing creative solutions to reduce GHG emissions and make their communities more resilient to climate impacts. Without the federal government to complement cities' efforts with strong power plant rules, the impacts from and costs associated with climate change will become progressively more relentless.

These rules also preserve the cooperative federalism framework that underlies Section 111 of the Clean Air Act. While regulation of interstate air pollution is a fundamentally federal issue, cities and other local governments rely on EPA regulating sources of GHG emissions outside their jurisdiction to bolster their own efforts. If the Court were to unduly limit the EPA's authority here, as Petitioners argue it should, state governments would be freed from federal obligations to curb power plant emissions, leading to more climate pollution, thus harming local governments and undermining their climate efforts.

ARGUMENT

I. Cities Bear the Burden of, and Lead Efforts to Respond to, the Climate Crisis, and Climate Impacts Will Increase Without a Strong **EPA Power Plant Rule**

Greenhouse gases are emitted by a range of industries nationwide, but the most acute effects of GHG-induced climate change are often felt in cities. So, too, is the financial burden

associated with responding to climate disasters, preparing for future extreme weather, and reducing community GHG emissions. In this way, cities and other local governments rely on the EPA to implement robust rules to limit emissions of GHGs and other harmful air pollutants originating outside their jurisdictional authority. EPA did just that with its 2024 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 (May 9, 2024) (hereinafter referred to as the "Power Plant Rules"). Amici and their members urge this Court to uphold the Power Plant Rules as a proper exercise of EPA's authority under the Clean Air Act § 111 (42 U.S. Code § 7411), in order to safeguard cities' investments to address the impacts of climate change and lessen their continued and costly exposure to additional damage resulting from extreme weather. With over 80 percent of Americans living in urban areas,² amici's members are tasked with understanding the risks to, and planning for the wellbeing of, the great and increasing majority of Americans. The economic value of cities cannot be

overstated – the sheer concentration of people, activity, and infrastructure imbues them with

¹ See State of the Climate 2023, WORLD METEOROLOGICAL ORG., https://library.wmo.int/viewer/68835/download?file=1347_Global-statement-2023 en.pdf&type=pdf&navigator=1.

² See U.S. Cities Factsheet, UNIV. OF MICH. CTR. FOR SUSTAINABLE SYSTEMS, https://css.umich.edu/publications/factsheets/built-environment/us-cities-factsheet (last accessed October 2, 2024).

unique importance. But what gives cities their value is also what the climate crisis threatens with increasingly devastating impacts such as more frequent extreme heat events and heat-related deaths, dirtier air, damaged and disappearing coastlines, longer droughts and other strains on water quantity and quality, increased wildfire risk, higher prevalence of infectious diseases, and more frequent and severe storms.³ The multiple and compounding effects of climate change can amplify cities' existing challenges, including social inequality, aging and deteriorating infrastructure, stressed ecosystems, and threats to the public health of vulnerable communities.⁴

The specific impacts experienced in U.S. cities vary from place to place. Coastal cities – home to 20% of the total U.S. population – from Florida to Maine to California are preparing for and responding to the overwhelming effects of sea level rise,⁵ the associated high costs of infrastructure corrosion and inundation of coastal property,⁶ and disruptions to daily life resulting from shrinking coastlines. Cities like Charleston, South Carolina and Boston, Massachusetts have already seen huge increases in so called "nuisance flooding"

³ See E.K. Chu et al., *Ch. 11: Built Environment, Urban Systems, and Cities, in* Impacts, Risks, and Adaptation in the United States: Fifth National Climate Assessment, Volume II 567, 578 (2023), https://rb.gy/qtarzq [hereinafter "5th National Climate Assessment"].

⁴ *Id*.

⁵ See D. Hayward et al., IPCC, Cities, Settlements and Key Infrastructure in Climate Change 2022: Impacts, Adaptation and Vulnerability at 925.
⁶ Id. at 958.

that is further projected to increase as seas rise and land subsides.⁷ Looming beyond the frequent serious damage and disruption of nuisance flooding is the extraordinary threat of destructive storm surges, similar or more severe than the ones that accompanied Hurricanes Helene, Ida, Maria, Isabel, Katrina, Rita, Harvey, Florence, Michael, Idalia, Ophelia, and Sandy. In 2023 alone, storms caused billions of dollars of damage to municipalities in the Gulf Coast region and up and down the eastern seaboard.8 In October 2024, just last week, Hurricane Milton devastated parts of Tampa, Sarasota, and St. Petersburg, Florida with heavy rain, blistering winds, and a six foot storm surge in Naples. 9 In Norfolk, Virginia, another coastal city, these climate impacts also threaten the Naval Station Norfolk – the largest naval station in the U.S. – which could be "completely submerge[]d by "sea level rise coupled with significant storm surge."10 The risks to the Naval Station Norfolk are indicative of broader risks to critical infrastructure housed in U.S. cities, such as transport supply chains, airports, ports, and energy infrastructure. 11 Moreover, non-coastal cities that

⁷ See Global and Regional Sea Level Rise Scenarios for the United States, NOAA (Feb. 2022), https://sealevel.globalchange.gov/internal resources/756/noaa-nostechrpt01-global-regional-SLR-scenarios-US.pdf.

⁸ Hurricane Costs, NOAA Office for Coastal Management, https://rb.gy/gxnhzo (last visited Sept. 15, 2024).

⁹ Laris Karklis et al., The damage caused by Hurricane Milton, WASH. POST (Oct. 10, 2024), https://www.washingtonpost.com/weather/2024/10/10/hurricane-miltondamage-florida/.

¹⁰ Kelly A. Burks-Copes et al., Risk Quantification for Sustaining Coastal Military Installation Assets and Mission Capabilities 9 (2014), https://rb.gy/7bvoyo.

¹¹ See D. Dodman et al., Cross-Chapter Paper 2: Cities and Settlements by the Sea in IPCC: Sixth Assessment Report 2022.

are not at direct risk from sea level rise will still feel its effects; experts project roughly thirteen million coastal residents in the U.S. may be displaced to non-coastal areas by 2100, placing increased demand on municipal infrastructure.¹²

Climate change is also fueling more intense storms in inland and riverine areas, where amici have numerous member cities. Increases in extreme precipitation and decreasing snowpack storage in mountainous regions have led to increases in flooding throughout non-coastal areas of the U.S. Each year, flooding costs the country an amount equal to 1-2% of the U.S.'s total gross domestic product (GDP), between \$179.8 and \$496 billion per year, and much of this cost is borne by and in cities. ¹³ For example, Detroit, Michigan, despite having spent hundreds of millions of dollars to improve its stormwater system, is still being deluged with flooding. ¹⁴ Fully upgrading Detroit's stormwater systems would cost billions of dollars. ¹⁵ In Minnesota, a \$3 billion river-flood diversion project in Moorhead will offer protection against river flooding but not against costly flooding from extreme rain events. ¹⁶

¹² See Caleb Robinson et al., Modeling Migration Patterns in the USA Under Sea Level Rise, PLoS ONE, Jan. 2020, https://rb.gy/axq3lh.

¹³ Taylor Delandro, *Flooding costs US billions of dollars per year: Report*, THE HILL (Jun. 11, 2024), https://thehill.com/changing-america/resilience/natural-disasters/4714466-flooding-costs-us-billions-of-dollars-per-year-report/.

¹⁴ See Casey Crownhart, Cities Are Scrambling to Prevent Flooding, MIT TECH. R. (July 20, 2021), https://bit.ly/3ywGKAg.

¹⁶ Dan Gunderson, *Cost is a barrier as cities prepare for wild weather in a changing climate*, MPR NEWS (Aug. 26, 2024),

 $[\]underline{https://www.mprnews.org/story/2024/08/26/cost-is-a-barrier-as-cities-prepare-for-wild-weather-in-a-changing-climate}.$

Investments to overhaul existing storm sewers and other systems to adapt to increases in precipitation volume is an unexpected financial burden of hundreds of millions or billions of dollars that cities like Moorhead, a relatively smaller city with a population of 45,000, must bear.¹⁷ There appears to be no relief: Asheville, North Carolina is still reeling from and assessing the damage caused by September 2024's Hurricane Helene.¹⁸

Cities are also experiencing heat waves made more frequent, hotter, and longer by climate change, and these are increasingly harming amici's members and their residents. Researchers have noted that "human-induced climate change manifests through more intense and frequent weather events, with heat waves being the most dramatically affected." As temperatures continue to rise, cities that already acutely experience the effects of extreme heat – like Houston, Texas and Phoenix, Arizona – could experience average summer high temperatures at least six degrees warmer than what they are now. Heat waves are the deadliest type of extreme weather, leading to thousands of deaths each

¹⁷ *Id*.

¹⁸ See Corey Davis, Rapid Reaction: Historic Flooding Follows Helene in Western NC, North Car. State Climate Office (Sept. 30, 2024), https://climate.ncsu.edu/blog/2024/09/rapid-reaction-historic-flooding-follows-helene-

in-western-nc/.

¹⁹ Julie Arrighi et al., Climate Change and the Escalation of Global Extreme Heat: Assessing and Addressing the Risks (May 28, 2024),

https://assets.ctfassets.net/cxgxgstp8r5d/5sjPWtBWuPk56xVZKuuL3g/fe050dd8d61e8 b2a7e3a315a4b75b22f/Climate Change and the Escalation of Global Extreme Hea t Climate Central.pdf.

²⁰ See Shifting U.S. Cities, CLIMATE CENTRAL (July 13, 2022), https://www.climatecentral.org/climate-matters/shifting-u-s-cities.

year.²¹ Because urban "heat islands" heat up faster and stay hotter longer than suburban and rural areas, city dwellers are disproportionately harmed by heat waves.²² Heat-related deaths and illnesses are projected to increase, causing additional damages, injuries, and deaths in cities.²³ A Natural Resources Defense Council analysis of NOAA data found that 45 major U.S. urban areas could see 28,000 more deaths each year from extreme summer heat by the 2090s.²⁴ The summer of 2024, the earth's hottest on record, saw stifling heat domes across the country.²⁵ In July, temperatures soared in Portland, Oregon, sustaining record-breaking triple-digit temperatures for multiple days, resulting in dozens of deaths in Portland and cities across the Pacific Northwest, California, and Nevada.²⁶

²¹ See Austyn Gaffney, Heat Deaths Have Doubled in the U.S. in Recent Decades, Study Finds, N.Y. TIMES (Aug 27, 2024),

https://www.nytimes.com/2024/08/27/climate/heat-deaths.html.

²² M.H. Hayden et al., *Ch. 15: Human Health in 5*th National Climate Assessment at 15-6; IPCC, AR6 Synthesis Report: Climate Change 2023 (2023) [hereinafter IPCC AR6 SR] at 50.

²³ M.H. Hayden et al., *Ch. 15: Human Health in* 5th National Climate Assessment at 15-6.

²⁴ See supra note 19.

²⁵ Hayley Smith, As California swelters, climate officials declare Summer 2024 the hottest on record, L.A. TIMES (Sept. 6, 2024),

https://www.latimes.com/environment/story/2024-09-06/summer-2024-was-earths-hottest-on-

 $[\]frac{record\#:\sim:text=2024\%20was\%20the\%20hottest\%20boreal,was\%201.24\%20degrees\%20Fahrenheit\%20hotter.}$

²⁶ See Anita Snow, Things to know about heat deaths as a dangerously hot summer shapes up in the western US, CapRadio (July 16, 2024),

 $[\]underline{https://www.capradio.org/articles/2024/07/16/things-to-know-about-heat-deaths-as-adangerously-hot-summer-shapes-up-in-the-western-us/.}$

Extreme heat often stresses urban infrastructure to the breaking point, like in Texas, where one of the multiple 2024 heat waves buckled roads, burst water pipes, and compromised air conditioners.²⁷ Due to extreme heat, grid operators in Texas and New York have been forced to ask city residents to reduce energy usage because of high energy demand and low reserves.²⁸ When extreme heat stresses the power system into failure, it can have cascading effects – "transportation, water and wastewater treatment, telecommunications, health services, and many other economic activities are also disrupted."²⁹

Anthropogenic climate change is also increasing the frequency, size, and severity of wildfires in the United States.³⁰ With more than 55,550 wildfires reported in the U.S. in 2023,³¹ the Western U.S. has been particularly affected. During the record setting year of

_

²⁷ Acacia Coronado and Juan Lozano, *Deadly heat wave in the central US strains infrastructure, transportation and the Texas power grid*, AP NEWS (Aug. 23, 2023) https://apnews.com/article/summer-heat-wave-fd19c3995992c93121ef4baedcbcf07e.

²⁸ Barbara Russo-Lennon, *Latest NYC heat wave: New Yorkers urged to conserve energy as temperatures will feel like over 100 degrees this week*, AMNY (July 15, 2024), https://www.amny.com/news/nyc-heat-wave-july-15-2024-energy-conservation/.

²⁹ 5th Climate Assessment at 18-6.

³⁰ Tzeidle N. Wasserman & Stephanie E. Mueller, *Climate influences on future fire severity: a synthesis of climate-fire interactions and impacts on fire regimes, high-severity fire, and forests in the western United States*, 19 FIRE ECOLOGY 43, July 24, 2023, https://fireecology.springeropen.com/articles/10.1186/s42408-023-00200-8; Yizhou Zhuang et al., *Quantifying contributions of natural variability and anthropogenic forcings on increased fire weather risk over the western United States*, PROCS. OF THE NAT'L. ACAD. OF SCIS. OF THE U.S., Nov. 1, 2021, https://rb.gy/ak0rds.
³¹ *Wildland Fire Summary and Statistics Annual Report 2023*, NAT. INTERAGENCY COORDINATION CTR. (2023), https://www.nifc.gov/sites/default/files/NICC/2-

2020, wildfires consumed more than 10 million acres in the region.³² Western cities like Los Angeles, California; Eugene, Oregon; Salt Lake City, Utah; and Denver, Colorado are ranked among the most polluted cities in the United States based on ozone and annual particulate matter pollution, with wildfires as the major contributor to the "increasing number of days and places with unhealthy levels of particle pollution" in recent years.³³ While the fires themselves are concentrated in the Western United States, cities across the country feel their effects. Smoke from fires that originate in Canada blows south, decreasing air quality in cities like Philadelphia, Pennsylvania; New York City; and Hartford, Connecticut, to name just a few, and exposing their residents to wildfire smoke.³⁴ Exposure to wildfire smoke can damage the heart, lungs, and brain,³⁵ and exposure during pregnancy correlates with pre-term births, low birth weights, and negative maternal health outcomes.³⁶ As climate change continues to increase wildfire smoke exposure in cities across the country,

 $[\]underline{Predictive\%20Services/Intelligence/Annual\%20Reports/2023/annual_report_2023_0.p} \ df.$

³² Manas Sharma et al., *The Age of the "Megafire,"* REUTERS GRAPHICS (Feb. 1, 2021), https://tmsnrt.rs/3yx2uvw.

³³ State of the Air: 2024 Report, AMERICAN LUNG ASS'N. (2024), https://www.lung.org/getmedia/dabac59e-963b-4e9b-bf0f-73615b07bfd8/State-of-the-Air-2024.pdf.

³⁴ See Gloria Oladipo, New York City faces lower air quality from Canada wildfires, THE GUARDIAN (Oct. 2, 2023), https://www.theguardian.com/us-news/2023/oct/02/new-york-city-air-quality-smoke-canada-wildfires.

³⁵ Alison Saldanha et al., *Dangerous Air: As California Burns, America Breathes Toxic Smoke*, KCRW (Sept. 28, 2021), https://kcrw.co/3ISH4Oh.

³⁶ Mona Abdo et al., *Impact of Wildfire Smoke on Adverse Pregnancy Outcomes in Colorado*, 2007 –2015, INT'T J. OF ENV'T RSCH. AND PUB. HEALTH, Oct. 2019, https://bit.ly/3q2c1ab.

exposure to smoke may lead to mortalities on the scale of the temperature-related mortalities described above,³⁷ and may create compound events with other climate change impacts like heat waves.³⁸

Alongside larger, more severe, and frequent wildfires, municipalities in the Western U.S. are suffering from severe droughts that are made worse and more frequent by climate change. Droughts hinder the livelihoods of ranchers in Staples, Texas and farmers in Ventura, California, as well as the millions of urban residents who reside in cities that are living with strict permanent water-use regulations³⁹ and at risk of catastrophic wildfires due to drier conditions that lengthen the fire season.⁴⁰ And drought duration and severity is expected to increase in the coming decades.⁴¹ As NOAA's Drought Task Force stated in its analysis of the 2020-2021 Southwestern U.S. drought:

[t]he warm temperatures that helped make this drought so intense and widespread will continue (and increase) until stringent climate

. _

³⁷ Marshall Burke et al., *The Changing Risk and Burden of Wildfire in the United States*, PROCS. OF THE NAT'L ACAD. OF SCIS. OF THE U.S., Jan. 12, 2021, https://bit.ly/3F4s1yD.

³⁸ IPCC AR 6 at 51.

³⁹ See, e.g., Rulemaking to Make Conservation a California Way of Life, State Water Res. Control Bd.,

https://www.waterboards.ca.gov/conservation/regs/water_efficiency_legislation.html (last accessed Sept. 18, 2024).

⁴⁰ John Muyskens et al., *1 in 6 Americans live in areas with significant wildfire risk*, WASH. POST (May 22, 2022), https://www.washingtonpost.com/climate-environment/interactive/2022/wildfire-risk-map-us/.

⁴¹ N. Bjarke et al., *Storylines for Global Hydrologic Drought Within CMIP6*, 12 EARTH'S FUTURE 6, June 3, 2024, https://doi.org/10.1029/2023EF004117.

mitigation is pursued and regional warming trends are reversed. . . . Human-caused increases in drought risk will continue to impose enormous costs upon the livelihoods and well-being of the \sim 60+ million people living in the six states of the U.S. Southwest, as well as the broader communities dependent on the goods and services they produce.

Cities are already incurring costs running into the billions of dollars because of climate impacts. The U.S. now experiences, on average, a billion-dollar weather or climate disaster every three weeks; one estimate puts the per year price tag of extreme weather events in the U.S. at \$150 billion. The average annual losses to residential homes due to flooding are projected to increase 67 percent to \$34 billion over the next thirty years. By 2050, over \$100 billion worth of coastal property will likely be below sea level. And in a scenario where emissions keep rising unabated and infrastructure is not adapted to a changing climate, hundreds of billions of dollars of infrastructure damage per year is expected by 2090. All of these impacts fall in significant part at the feet of amici and their members.

¹²

⁴² 5th National Climate Assessment at 1-17.

⁴³ Budget Exposure to Increased Cost and Lost Revenue Due to Climate Change: A Preliminary Assessment and Proposed Framework for Future Assessments, WHITE HOUSE OFFICE OF MGMT. & BUDGET (Mar. 2023), https://www.whitehouse.gov/wp-content/uploads/2023/03/climate_budget_exposure_fy2024.pdf.

⁴⁴ Climate Change Impacts on Coasts, U.S. ENV'T. PROTECTION AGENCY, https://www.epa.gov/climateimpacts/climate-change-impacts-coasts#:~:text=Damaged%20or%20lost%20coastal%20property,level%20if%20current%20trends%20continue (last accessed Sept. 24, 2024).

⁴⁵ See James E. Neumann et al., Climate effects on US infrastructure: the economics of adaptation for rail, roads, and coastal development, 167 CLIMATIC CHANGE 4 (Aug. 19, 2021), https://doi.org/10.1007/s10584-021-03179-w.

In this context of ever-rising costs attributable to damage from climate change, cities of all sizes, spanning every region of the country, more than ever need a supportive approach to reducing emissions from power plants that fully realizes EPA's authority to regulate under Clean Air Act § 111. The Power Plant Rules are a strong regulatory tool that will help cities mitigate or avoid the worst of climate impacts.

II. **Unduly Limiting EPA's Regulatory Authority Would Frustrate** Cities' Efforts to Address and Adapt to Climate Change

Cities not only experience climate impacts – they also lead climate change adaptation and mitigation efforts nationwide. The Power Plant Rules support them in doing just that; a robust framework for reducing GHG emissions from power plants will limit the sector's contribution to global climate change, thus lessening the cost to cities to adapt and amplifying cities' own efforts to lessen climate pollution.

More than 350 mayors have adopted the Paris Agreement goals for their cities and 125 cities have pledged to transition to 100% clean energy. 46 Under the landmark 2022 Inflation Reduction Act, ⁴⁷ eighty-one of the nation's largest metropolitan areas received grants under the Climate Pollution Reduction Grants (CPRG) program to create climate action plans that

⁴⁶ City Climate Policy, CTR. FOR CLIMATE & ENERGY SOLUTIONS, https://www.c2es.org/content/city-climate-policy/ (last accessed Sept. 19, 2024).

⁴⁷ Pub. Law. 117-169 (2022).

include specific priority measures to reduce climate pollution in their communities.⁴⁸ Yet, local governments have limited control over what circumstances are imposed on them from outside their jurisdiction, and GHG emissions from sources beyond municipal borders still impact people, infrastructure, and resources inside them.

For these reasons, cities have previously supported strong EPA regulations for power plants. In 2022, 244 Mayors representing over 52 million Americans asked EPA not to repeal the Clean Power Plan, and in 2023 a network of mayors urged EPA to adopt ambitious standards on this rule. ⁴⁹ In particular, Climate Mayors wrote that "local efforts to address climate change are highly sensitive to national policies like [power plant standards], which shape markets, steer state action, and have large direct impacts on nationwide emissions." ⁵⁰ Section 111 of the Clean Air Act is a vital tool available to the federal government to regulate GHG emissions, support local initiatives to deliver climate solutions, and reduce the adaptation costs that local governments will incur over the coming decades and centuries. Without broader regulatory action, local governments will bear ever increasing costs in the coming years.

R

⁴⁸ Priority Climate Actions Plans for States, MSAs, Tribes, and Territories, ENV'T PROTECTION AGENCY, https://www.epa.gov/inflation-reduction-act/priority-climate-action-plans-states-msas-tribes-and-territories#state-msa (last accessed Sept. 19, 2024).

⁴⁹ Final EPA Power Plants Rules Comment, C40 CITIES & CLIMATE MAYORS (Aug. 7,

^{2023),} https://drive.google.com/file/d/13ST48UaNLSACZ4FN2rdRxCRrBHPV422V/view.

⁵⁰ Climate Mayors Submit Comments on Proposed Repeal of Clean Power Plan, CLIMATE MAYORS (March 27, 2018), https://bit.ly/3a7V6ta.

A. Adaptation Efforts

Across the nation, cities are taking action to protect their residents from the most severe impacts of climate change: in 2023, U.S. cities reported 879⁵¹ separate climate adaptation actions; things like increasing the urban tree canopy, expanding green infrastructure programs, and investing in emergency response equipment for extreme weather events.⁵² In some states, cities are the only level of government to implement adaptation strategies. For example, both Nebraska and the City of Omaha submitted Priority Climate Action Plans to EPA under the IRA's CPRG program, but while Omaha's plan centers adaptation as a key priority, the State of Nebraska's does not use the word "adaptation" a single time.⁵³

Climate adaptation costs to cities are significant, but the costs of *not* adapting would be far higher. Phoenix, Arizona, a city that experiences dangerously high temperatures, created the nation's first Office of Heat Response and Mitigation to protect residents from the hazard of urban heat.⁵⁴ Miami, which routinely clocks upper ninety degree temperatures, appointed its first Chief Heat Officer in 2022, and subsequently released its Extreme Heat Action Plan

⁵¹

⁵¹ 2023 – Cities Adaptation Actions, CDP, https://data.cdp.net/Adaptation-Actions/2023-Cities-Adaptation-Actions/4ubf-r8fc/about_data (last accessed Sept. 20, 2024) (data filtered for U.S. cities).

⁵² Id.

⁵³ City of Omaha, *Priority Climate Action Plan* (Mar. 2024), https://www.epa.gov/system/files/documents/2024-03/omaha-council-bluffs-ne-msa-priority-climate-action-plan.pdf; State of Nebraska, *Priority Climate Action Plan* (Mar. 2024), https://www.epa.gov/system/files/documents/2024-03/nebraska-pcap.pdf.

⁵⁴ See City of Phoenix, Arizona, Office of Heat Response and Mitigation, https://www.phoenix.gov/heat (last accessed Sept. 20, 2024).

to prepare residents for and protect them from extreme heat events.⁵⁵ Annapolis, Maryland developed a first-in-the-nation Cultural Resources Hazard Mitigation Plan in 2018 to mitigate climate impacts on important cultural and historic landmarks,⁵⁶ and the Eastern Shore Climate Adaptation Partnership has brought together local governments from across the Eastern Shore to prepare for climate impacts.⁵⁷ Chicago, Illinois, recognizing the importance of "tak[ing] action to minimize the impact of change we can no longer avoid[,]" embraced five adaptation objectives in its 2022 Climate Action Plan to help guide the city's response to impacts such as flooding, extreme winter events, and tornadoes.⁵⁸

Cities will need to invest billions of dollars to properly equip themselves for future climate impacts.⁵⁹ And without investing in adaptation measures, the costs of climate change could reach into the *hundreds* of billions of dollars by the end of the century.⁶⁰ Cities' adaptation costs are high, and they stand to turn stratospheric absent a strong federal framework for limiting GHG emissions from power plants. In promulgating the Power Plant

^{55 4}

⁵⁵ City of Miami, Florida, *Heat Action Plan* (2022), https://www.miamidade.gov/environment/library/2022-heat-action-plan.pdf.

⁵⁶ See Weather It Together: A Cultural Resource Hazard Mitigation Plan for the City of Annapolis (2018), https://bit.ly/3re60rG; Resilient People, EASTERN SHORE LAND CONSERVANCY, https://bit.ly/3fkQR2d (last visited Sept. 20, 2024).

⁵⁷ Resilient People, EASTERN SHORE LAND CONSERVANCY, https://bit.ly/3fkQR2d (last visited Sept. 20, 2024).

⁵⁸ City of Chicago, *Climate Action Plan* (2022), https://www.chicago.gov/content/dam/city/sites/climate-action-plan/documents/Chicago-CAP-071822.pdf.

⁵⁹ 5th National Climate Assessment at 31-24.

⁶⁰ *Id*.

Rules, EPA appropriately exercised its Clean Air Act Section 111 authority to protect communities across the country from ever-worsening climate harms.

B. Mitigation Efforts

Although federal regulation is both mandated by statute and necessary to help ensure the health and welfare of cities and their residents, local governments of all sizes around the U.S. are working to reduce their own contributions to global GHG pollution. These efforts include the procurement and deployment of renewable energy resources, investing in zero-emission vehicles and alternative modes of transportation, and electrifying buildings, among many emission reducing actions. In addition, local governments are increasingly seeking to reduce GHG emissions in an equitable manner, emphasizing the reduction of local pollutants in disadvantaged communities. Though cities' efforts to reduce local GHG emissions are ambitious and wide-ranging, they only go so far as municipal boundaries. Strong federal action in the form of EPA's Power Plant Rules is necessary to get close to the economy-wide GHG emission reductions needed to stave off the worst impacts of climate change.

Hundreds of local governments have made ambitious and specific GHG reduction commitments. For example, Atlanta, Georgia has a goal to reduce GHG emissions 40%

below 2009 levels by 2030.⁶¹ Rochester, New York, shares the same goal.⁶² Kansas City, Missouri has a goal to achieve carbon neutrality by 2040.⁶³ In Ohio, multiple cities have incorporated ambitious goals in their climate plans: Cincinnati has a goal to reach 100% community-wide carbon neutrality by 2050;⁶⁴ in Cleveland, a goal to reduce GHG emissions 40% by 2030 and 80% by 2050, both from 2010 levels;⁶⁵ and Columbus intends to achieve carbon neutrality by 2050, with an interim goal of reducing its GHG emissions by 45% from 2013 levels by 2030.⁶⁶ Pittsburgh's Climate Action Plan sets the city's GHG reduction goal of an 80% reduction by 2050 from 2003 levels.⁶⁷ Knoxville, Tennessee has adopted a goal to reduce community-wide GHG emissions 80 percent by 2050;⁶⁸ and Charlotte, North

 $\underline{https://atlantaclimateactionplan.wordpress.com/wp-content/uploads/2016/02/atlantaclimate-action-plan-07-23-2015.pdf}.$

https://www.cityofrochester.gov/sites/default/files/2024-

06/Rochester%20Climate%20Action%20Plan.pdf (last accessed Sept. 20, 2024).

 $\underline{https://drive.google.com/file/d/1Z3234sMp7S7MjaXvMgcZtcAaYs4x2oHE/view.}$

⁶¹ City of Atlanta, Climate Action Plan (2016),

⁶² City of Rochester, Climate Action Plan,

⁶³ City of Kansas City, *Climate Protection and Resiliency Plan* (Sept. 2022), https://indd.adobe.com/view/3e643429-e6da-428d-a6d6-00ef730388f5.

⁶⁴ City of Cincinnati, *Green Cincinnati Plan* (2023), https://www.cincinnati-oh.gov/oes/climate/climate-protection-green-cincinnati-plan/green-cincinnati-plan/2023-spreads/.

⁶⁵ City of Cleveland, Climate Action Plan (2018),

⁶⁶ City of Columbus, Climate Action Plan (2021),

 $[\]frac{https://www.columbus.gov/files/sharedassets/city/v/1/utilities/sustainability/cap/columbus-climate-action-plan_final.pdf.$

⁶⁷ City of Pittsburgh, *Climate Action Plan 3.0*

https://apps.pittsburghpa.gov/redtail/images/7101_Pittsburgh_Climate_Action_Plan_3. 0.pdf (last accessed Sept. 20, 2024).

⁶⁸ City of Knoxville Resolution No. R-265-2019 (Aug. 13, 2019).

Carolina has set a goal of less than two tons of carbon dioxide equivalent per resident per year by 2050.⁶⁹ These commitments and plans are just a snapshot of the hundreds of municipal GHG reduction goals set by local governments around the U.S.⁷⁰

To achieve these commitments to reduce GHG emissions, numerous cities have also committed to a 100 percent "clean" or renewable energy supply. For example, Savannah, Georgia has a goal of achieving 100% renewable electricity community wide by 2035, while Atlanta⁷¹ Augusta,⁷² Clarkston,⁷³ and Decatur⁷⁴ have set similar goals. In other states, local governments are making commitments to 100% renewable energy: Portland, Oregon (by 2050);⁷⁵ Helena⁷⁶ and Missoula,⁷⁷ Montana (by 2030); St. Paul, Minnesota (by 2030);⁷⁸

⁶⁹ City of Charlotte, Resolution Book No. 48, Page No. 839 (June 25, 2018).

⁷⁰ See Local Government Climate and Energy Goals, Am. COUNCIL FOR AN ENERGY-EFFICIENCY ECON., https://database.aceee.org/city/local-government-energy-efficiency-goals.

⁷¹ City of Atlanta, Resolution No. 17-R3510 (2019).

⁷² City of Augusta, Ga. Resolution File No. 25232,

 $[\]underline{https://forms.augustaga.gov/WebLink/DocView.aspx?dbid=0\&id=90684\&page=1}.$

⁷³ Clarkston Georgia Commits to 100 Percent Clean Energy, NAT'L RES. DEF. COUNCIL https://www.sierraclub.org/press-releases/2019/03/clarkston-georgia-commits-100-percent-clean-renewable-energy.

⁷⁴ City of Decatur, *Climate Action Plan* (2022), https://www.decaturga.com/media/27441.

⁷⁵ https://www.portland.gov/policies/environment-natural/climate-change/enn-508-establish-goal-meet-100-community-wide-energy.

⁷⁶ City of Helena, Mont., Resolution No. 20592 (2020).

⁷⁷ City of Missoula & Missoula County, *100% Clean Electricity Joint Resolution* (2019),

 $[\]underline{https://www.missoulacounty.us/home/showpublisheddocument/32876/6369049826530}{30000}.$

⁷⁸ City of St. Paul, Mn. Resolution No. 19-1870 (2019).

Madison, Wisconsin (by 2050);⁷⁹ Golden, Colorado (by 2030);⁸⁰ Fayetteville, Arkansas (by 2050);⁸¹ and Tallahassee, Florida (by 2050).⁸² All told, more than 200 local governments have committed to achieving 100 percent clean, carbon-free electricity,⁸³ a number which does not account for ambitious local renewable energy goals that fall short of a 100 percent target.

In addition to procuring and deploying renewable energy, cities' efforts to reduce operational and community-wide GHG emissions are highly contingent on electrifying most communities' two highest-emitting sectors: buildings and transportation. Both sectors must achieve near total electrification if cities are to achieve their GHG emissions reduction targets. More than 100 local governments have adopted policies that require or encourage

⁷⁹ City of Madison, CRANES Amended Resolution, Leg. File. No. 45569 (Mar. 2017).

⁸⁰ City of Golden, Co. Resolution No. 2656 (Feb. 2019).

⁸¹ City of Fayetteville, Ark. Resolution No. 45-17 (Dec. 2017).

⁸² City of Tallahassee, Fla. Resolution No. 19-R-04 (Feb. 20, 2019).

⁸³ Sam Ricketts et al., *Implementing America's Clean Energy Future*, CTR. FOR AMERICAN PROGRESS (Sept. 14, 2023),

 $[\]frac{https://www.americanprogress.org/article/implementing-americas-clean-energy-future/\#:\sim:text=More\%20than\%2020\%20states\%2C\%20and,clean\%2C\%20carbon\%2Dfree\%20electricity.$

building electrification,⁸⁴ including New York City,⁸⁵ Seattle,⁸⁶ Boston,⁸⁷ Denver,⁸⁸ San Francisco,⁸⁹ and Los Angeles.⁹⁰ However, the success of these local electrification efforts in reducing GHG emissions heavily depends on cleaner power plants, an area in which EPA has a broader ability to regulate and with the Power Plant Rules has done so in the robust manner consistent with its responsibilities under Section 111.

Similarly, local governments have invested in electric vehicle charging infrastructure, or enacted policies that incentivize private property owners to do so. For example, more local building codes include EV charging or EV-readiness requirements, including in New York City;⁹¹ Seattle;⁹² Oakland, California;⁹³ Atlanta;⁹⁴ and Fort Collins, Colorado.⁹⁵ Other cities require or incentivize electric vehicle chargers through their zoning codes; Salt Lake

⁸⁴ See Leah Louis-Prescott & Rachel Golden, How Local Governments and Communities Are Taking Action to Get Fossil Fuels out of Buildings, ROCKY MOUNTAIN INST. (Aug. 9, 2022),

https://rmi.org/taking-action-to-get-fossil-fuels-out-of-buildings/#:~:text=A%20chart%20titled%20%22Local%20government,took%20action%20on%20building%20electrification.

⁸⁵ City of New York, Local Law 97 (2019).

⁸⁶ City of Seattle, Wash. Code Ch. 22.925 (2023).

⁸⁷ Ordinance Amending City of Boston Code, Ordinances, Ch. VII, Sections 7-2.1 and 7-2.2 (2021).

⁸⁸ City of Denver, Co., File No. 21-1310 (2021).

⁸⁹ City of San Francisco, Cal., File No. 101105 (2010).

⁹⁰ City of Los Angeles, Cal., Ordinance No. 184674 (2017).

⁹¹ City of New York, N.Y. Intro. No. 0017-2024 (2024).

⁹² City of Seattle, Ore. Elec. Code § 625.27.

⁹³ City of Oakland, Cal. Code. § 15.04.3.11010.

⁹⁴ City of Atlanta, Ga. Ord. 17-O-1654 (2017).

⁹⁵ City of Fort Collins, Colo. Code. § 5-30-E3401.5 (2019).

City mandates one electric vehicle charging space for every 25 parking spaces in new multifamily buildings. ⁹⁶ Chenango, New York simplifies deployment by permitting EV charging stations as an accessory use in all zoning districts. ⁹⁷ Complementarily, cities are steadily electrifying their municipal fleets with crucial federal funding provided by the IRA, ⁹⁸ and in August 2024, a network of nearly 350 mayors committed to electrifying at least 50% of their municipal fleets by 2030. ⁹⁹ While these electrification efforts are essential to reducing sector-specific GHG emissions, their overall success is incumbent upon the federal government fulfilling its duty of ensuring that sources of electricity are well controlled for GHG pollution consistent with Section 111.

Cities' efforts to reduce emissions of GHGs and other harmful air pollutants take on particular importance in light of the disproportionate health impacts of air pollution presently and historically experienced by disadvantaged communities. In promulgating the Power Plant Rules, the EPA noted the importance of addressing the impacts of the rule on historically disadvantaged and overburdened communities. ¹⁰⁰ While EPA's Power Plant

_

⁹⁶ City of Salt Lake City, Utah, Code. Ch. 21A.44.040.B (2019).

⁹⁷ Town of Chenango, N.Y. Code. § 74B-3.

⁹⁸ See, e.g., CTA Receives \$25 Million to Advance its Electric Bus Fleet, Chicago Transit Authority (June 27, 2023), https://www.transitchicago.com/cta-receives-25-million-to-advance-its-electric-bus-fleet-/.

⁹⁹ Climate Mayors Announces Major New Commitment from Nearly 350 Mayors to Accelerate US Electric Vehicle Transition, CLIMATE MAYORS (Aug. 13, 2024), https://www.climatemayors.org/post/electrify50-ev-announcement.

¹⁰⁰ See 89 Fed. Reg. 39,801, 39804.

Rules stand to result in large reductions of GHG emissions and local pollution, they also provide a "meaningful engagement" requirement to ensure that stakeholders, including those most vulnerable to the adverse impacts of powerplant pollution, will have an opportunity to participate in the decision making process related to sources affected by these actions. ¹⁰¹ In so doing, the Power Plant Rules buttress local governments' efforts to address climate change in an equitable manner responsive to the needs of disadvantaged communities.

III. The Power Plant Rules are within EPA's Authority, and the Rule Preserves the Cooperative Federalism Structure that Supports Cities' Efforts to Address Climate Change

In addressing Petitioners' motion to stay this Court rightly determined that the Power Plant Rules "fall[] well within EPA's bailiwick." *West Virginia v. EPA*, No. 24-1120 (D.C. Cir. July 19, 2024), 2024 WL 5542546 *1 (order denying Petitioners' stay request). In 2022's *West Virginia v. EPA*, the Supreme Court imparted a clear directive to EPA about how the agency may regulate GHG emissions within its authority. 597 U.S. 697, 726-728 (2022) (concluding that the EPA is generally "limited to ensuring the efficient pollution performance of each individual regulated source"). In promulgating the Power Plant Rules, EPA heeded the Court's regulatory boundaries. Notwithstanding Petitioners' arguments to the contrary, EPA is doing exactly what the Clean Air Act directs it to: regulating GHG emissions from individual sources using a technology-based approach based upon the "best

¹⁰¹ *Id.* at 39,992.

system of emission reduction" (BSER). See 42 U.S.C. 7411(a)(1), (d). No major question is implicated in this case because the Power Plant Rules do not constitute an "unheralded" agency action that represents a "transformative" change in EPA's authority. West Virginia, 597 U.S. at 724. These rules, in accordance with the Clean Air Act, regulate individual sources based on technological controls; they do not represent the wholesale recast of the electricity system envisaged by the Supreme Court in West Virginia. Id. at 732. (holding EPA's Clean Power Plan based on a BSER that would have power plants shifting electricity production from higher-emitting to lower-emitting producers represented a "major question" that needed a "clear[]" Congressional delegation of authority.) Petitioners' approach here would unduly curtail the EPA's authority, limiting its ability to work with states and cities to cost-effectively reduce GHG emissions and lessen the harms from climate change experienced by localities nationwide.

There is no question that EPA possesses the authority to regulate GHGs from power plants. *See, e.g.*, IRA, Pub. L. No. 117-169, § 60101, 136 Stat. 2064 (2022) (defining greenhouse gas as "the air pollutants carbon dioxide, hydrofluorocarbons, methane, nitrous oxide, perfluorocarbons, and sulfur hexafluoride."); *see also West Virginia*, 597 at 720-721; *Utility Air Regulatory Group v. EPA*, 573 U.S. 302, 319 (2014); *Am. Elec. Power Co. v. Connecticut*, 564 U.S. 410, 426 (2011) ("Congress delegated to EPA the decision whether and how to regulate carbon-dioxide emissions from powerplants"); *Massachusetts v. E.P.A.*, 549 U.S. 497, 532–34 (2007) ("Because greenhouse gases fit well within the Clean Air Act's

capacious definition of 'air pollutant,' we hold that EPA has the statutory authority to regulate the emission of such gases from new motor vehicles"); 74 Fed. Reg. 66496 (2009) (finding that six GHGs endanger public health and welfare). The Power Plant Rules set a technology-based rule "based on the application of measures that would reduce pollution by causing regulated sources to operate more cleanly," West Virginia, 597 U.S. at 706, and accounting for Congressionally-specified factors, including the cost of achieving emissions reduction, nonair quality health and environmental impacts, effects on energy requirements, whether the system of emissions reduction has been adequately demonstrated, and the extent of "emission reduction." 42 U.S.C. § 7411(a)(1); 89 Fed. Reg. 39,801, 39,823-824. After a fact-specific, technical analysis that considered a few approaches that the agency found to be "adequately demonstrated," 102 EPA landed on a few BSERs for new and existing power plants that fall well within its authority to regulate GHG emissions and which do not include a "generation-shifting" mandate, but rather that only directly cause individual power plans to operate more cleanly through technological controls.

For amici and their members, the well-calibrated Power Plant Rules are part and parcel of a cooperative federalism model in which the EPA regulates emissions from electric generating units consistent with its Clean Air Act-delegated authority, while local governments and states pursue a variety of approaches to mitigating and adapting to climate

¹⁰² See, e.g., 89 Fed. Reg. 39,801, 39887 (explaining why certain approaches were not chosen as the BSER for long-term coal-fired powerplants).

change. Amici's members – cities of all sizes – rely on EPA to do its part in reducing GHG emissions from sources outside their jurisdiction. Without a strong federal partner, cities' adaptation budgets will be further stressed (or their adaptation investments will prove inadequate despite considerable price tags); their mitigation measures will fail to achieve maximum GHG reductions; and the bill for responding to climate disasters will continue to mount.

The Clean Air Act states in its opening provisions "that the growth in the amount and complexity of air pollution brought about by urbanization [and] industrial development...has resulted in mounting dangers to the public health and welfare" and that "Federal financial assistance and leadership is essential for the development of cooperative Federal, State, regional, and local programs to prevent and control air pollution." 42 U.S.C.A. § 7401. The Power Plant Rules stand to protect and bolster local climate action in every single state, and this Court should recognize that EPA properly promulgated them according to the mandate they hold from the Clean Air Act.

CONCLUSION

For cities across the country, EPA's Power Plant Rules represent an essential complement to local efforts to mitigate and adapt to climate change, and are critical to lessening the burden to amici's members in addressing damage from climate events. EPA was well within its Clean Air Act authority in promulgating the Power Plant Rules and this

case does not implicate the major questions doctrine. Accordingly, amici urge the Court to uphold the EPA's authority to regulate GHG emissions from power plants through the technology based BSER approach it took in promulgating the Power Plant Rules.

Respectfully Submitted,

MICHAEL BURGER

Counsel of Record

AMY E. TURNER

VINCENT M. NOLETTE

SABIN CENTER FOR CLIMATE

CHANGE LAW

435 West 116th Street New York, NY 10027 (212) 854-2372 michael.burger@law.columbia.edu

Counsel for Amici Curiae

CERTIFICATE OF SERVICE

I hereby certify that on this 18th day of October 2024, I caused a true and correct copy of the foregoing to be electronically filed with the Clerk of the Court of the United States Court of Appeals for the District of Columbia Circuit by using the CM/ECF system. I certify that all participants in the case are registered CM/ECF users, and that service will be accomplished by the CM/ECF system.

/s/ Michael Burger
MICHAEL BURGER

Filed: 10/18/2024