

**IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF MISSOURI  
EASTERN DIVISION**

THE STATES OF MISSOURI, ALASKA,  
ARIZONA, ARKANSAS, INDIANA,  
KANSAS, MONTANA, NEBRASKA,  
OHIO, OKLAHOMA, SOUTH  
CAROLINA, TENNESSEE, and UTAH,

*Plaintiffs,*

v.

JOSEPH R. BIDEN, JR., et al.,

*Defendants.*

No. 4:21-CV-00287-AGF

**PLAINTIFFS' MEMORANDUM IN SUPPORT OF  
MOTION FOR PRELIMINARY INJUNCTION**

## TABLE OF CONTENTS

INTRODUCTION .....	1
FACTUAL BACKGROUND.....	2
A. Carbon Dioxide, Methane, and Nitrous Oxide Are Ubiquitous By-Products of Human Economic Activity, Especially Agriculture and Energy Production. ....	2
B. Executive Order 13990 Created an Interagency Working Group to Dictate Binding Values for the “Social Costs” of Carbon Dioxide, Methane, and Nitrous Oxide. ....	3
C. The Working Group Promulgates Binding Interim Values for the “Social Costs” of Carbon Dioxide, Methane, and Nitrous Oxide That Federal Agencies “Shall” Use. ....	4
D. The Interim Values Will Have Enormous Economic Impact and Justify Increased Regulation in Innumerable Aspects of Everyday Life. ....	10
ARGUMENT.....	12
I. The Plaintiff States Are Likely to Succeed on the Merits of Their Claims in Counts One and Three of the First Amended Complaint. ....	12
A. Plaintiffs’ Separation-of-Powers Claim Is Likely to Succeed. ....	13
1. Section 5 of Executive Order 13990 does not rest on the President’s constitutional powers or an Act of Congress. ....	14
2. Executive Order 13990, previous and current regulatory acts, and the nature of the Interim Values all demonstrate that Section 5 exercises legislative power. 16	
3. Justice Jackson’s tripartite framework also confirms that the Executive exceeded his power. ....	27
4. The Executive Order and Interim Values harm Plaintiff States. ....	28
B. Plaintiffs Are Likely to Succeed on Their Claim that the Working Group Violated the APA’s Procedural Requirements When It Promulgated the Interim Values. ....	28
1. The Working Group is an “agency” because it operates with the sanction of the United States Government. ....	29
2. The Interim Values constitute final agency action and Plaintiffs lack an adequate remedy for their harm. ....	32

3. The Interim Values are a substantive rule that required the Working Group to follow the APA’s procedural rules. ....	35
II. Absent a Preliminary Injunction, the Plaintiff States Will Suffer Irreparable Injury. ....	37
A. The Working Group unlawfully deprived the Plaintiff States of their ability to participate in notice-and-comment rulemaking regarding the adoption of the Interim Values. ....	37
B. The Working Group’s promulgation of the Interim Values interferes with the Plaintiff States’ ability to participate meaningfully in other federal agency proceedings. ....	38
C. The Interim Values Directly Impact Plaintiff States’ Sovereign Interests in Administering Cooperative-Federalism Programs in a Constitutional Manner. ....	40
D. Absent Injunctive Relief, the Interim Values Will Injure the States’ Proprietary Interests by Inflicting Non-Recoverable Economic Costs. ....	42
E. The States Are Uniquely Injured by the Violation of the Separation of Powers. ....	47
III. A Preliminary Injunction Requiring Compliance With the Constitution and the APA Will Impose No Cognizable Harm on Defendants. ....	48
IV. The Public Interest Favors Preliminary Injunctive Relief. ....	49
CONCLUSION. ....	50
CERTIFICATE OF SERVICE. ....	54

**TABLE OF AUTHORITIES**

**Cases**

*Anytime Fitness, LLC v. Roberts*,  
 No. 12-CV-02913-SRN-JJG, [2013 WL 1760950](#) (D. Minn. Apr. 24, 2013) ..... 49

*Bennet v. Spear*,  
[520 U.S. 154](#) (1997)..... 33, 36

*Catholic Health Initiatives v. Sebelius*,  
[617 F.3d 490](#) (D.C. Cir. 2010)..... 17, 35

*Chrysler Corp. v. Brown*,  
[441 U.S. 281](#) (1979)..... 35, 37

*Citizens for Responsibility & Ethics in Washington v. Office of Admin.*,  
[566 F.3d 219](#) (D.C. Cir. 2009)..... 30

*Dataphase Sys., Inc. v. C.L. Sys., Inc.*,  
[640 F.2d 109](#) (8th Cir. 1981) (en banc)..... 12, 37, 48

*Daubert v. Merrell Dow Pharms., Inc.*,  
[509 U.S. 579](#) (1993)..... 20

*Dep’t of Homeland Sec. v. Regents of the Univ. of Cal.*,  
[140 S. Ct. 1891](#) (2020)..... 34

*E. Bay Sanctuary Covenant v. Trump*,  
[932 F.3d 742](#), (9th Cir. 2018) ..... 34

*Entergy Corp. v. Riverkeeper, Inc.*,  
[556 U.S. 208](#) (2009)..... 28

*EPA v. EME Homer City Generation, L.P.*,  
[572 U.S. 489](#) (2014)..... 40

*Ferry-Morse Seed Co. v. Food Corn, Inc.*,  
[729 F.2d 589](#) (8th Cir. 1984) ..... 49

*Fletcher v. Peck*,  
[10 U.S. \(6 Cranch\) 87](#) (1810)..... 16

*Free Enter. Fund v. Pub. Co. Acct. Oversight Bd.*,  
[561 U.S. 477](#) (2010)..... 13, 50

*Fruco Constr. Co. v. McClelland*,  
192 F.2d 241 (8th Cir. 1951) ..... 29

*Garcia v. San Antonio Metropolitan Transit Authority*,  
469 U.S. 528 (1985)..... 48

*Gundy v. United States*,  
139 S. Ct. 2116 (2019)..... 50

*Hawkes Co., v. U.S. Army Corps of Engineers*  
782 F.3d 994 (8th Cir. 2015) ..... 34

*Hoctor v. U.S. Dep’t of Agric.*,  
82 F.3d 165 (7th Cir. 1996) ..... 17, 29, 36

*Hunter v. Underwood*,  
362 F.3d 468 (8th Cir. 2004) ..... 29

*I.N.S. v. Chadha*,  
462 U.S. 919 (1983)..... 16, 48

*Indep. Bankers Ass’n of Am. v. Nat’l Credit Union Admin.*,  
936 F. Supp. 605 (W.D. Wis. 1996) ..... 29

*Iowa League of Cities v. EPA*,  
711 F.3d 844 (8th Cir. 2013) ..... 35, 37

*Kingdomware Techs, Inc. v. United States*,  
136 S. Ct. 1969 (2016)..... 30

*Lujan v. Defenders of Wildlife*,  
504 U.S. 555 (1992)..... 37, 38

*Massachusetts v. EPA*,  
549 U.S. 497 (2007)..... 15, 19, 28

*Meyer v. Bush*,  
981 F.2d 1288 (D.C. Cir. 1993) ..... 32

*Morrison v. Olson*,  
487 U.S. 654 (1988)..... 1, 2, 3, 50

*Motor Vehicle Mfrs. Ass’n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*,  
463 U.S. 29 (1983)..... 28

*Nat. Res. Def. Council v. Wheeler*,  
955 F.3d 68 (D.C. Cir. 2020) ..... 33

*Nw. Airlines v. Jackson*,  
185 F.2d 74 (8th Cir. 1950) ..... 31

*Pac. Legal Foundation v. Council on Env'tl. Quality*,  
636 F.2d 1259 (D.C. Cir. 1980) ..... 31

*Panama Ref. Co. v. Ryan*,  
293 U.S. 388(1935)..... 17

*Privacy Info. Ctr. v. Nat'l Sec. Comm'n on Artificial Intelligence*,  
466 F. Supp. 3d 100 (D.D.C. 2020) ..... 30

*Privacy Info. Ctr. v. Presidential Advisory Comm'n on Election Integrity*,  
266 F. Supp. 3d 297 (D.D.C. 2017) ..... 31, 32

*RJR Nabisco, Inc. v. Eur. Cmty.*,  
136 S. Ct. 2090 (2016)..... 21

*Rogers Cartage Co. v. Reynolds*,  
166 F.2d 317 (6th Cir. 1948) ..... 31

*Sackett v. E.P.A.*,  
566 U.S. 120 (2012) ..... 34

*Seila Law LLC v. Consumer Fin. Prot. Bureau*,  
140 S. Ct. 2183 (2020)..... 13

*Sisseton-Wahpeton Oyate of Lake Traverse Reservation v. U.S. Corps of Eng'rs*,  
888 F.3d 906 (8th Cir. 2018) ..... 33

*Soucie v. David*,  
448 F.2d 1067 (D.C. Cir. 1971) ..... 29

*U.S. Army Corps of Eng'rs v. Hawkes Co.*,  
136 S. Ct. 1807 (2016)..... 29, 33

*U.S. ex rel. O'Keefe v. McDonnell Douglas Corp.*,  
132 F.3d 1252 (8th Cir. 1998) ..... 49

*U.S. R.R. Ret. Bd. v. Fritz*,  
449 U.S. 166 (1980)..... 16

<i>United States v. Bert</i> , <a href="#"><u>292 F.3d 649</u></a> (9th Cir. 2002) .....	36, 37
<i>United States v. Riccardi</i> , <a href="#"><u>989 F.3d 476</u></a> (6th Cir. 2021) .....	35
<i>United to Protect Democracy v. Presidential Advisory Comm’n on Election Integrity</i> , <a href="#"><u>288 F. Supp. 3d 99</u></a> (D.D.C. 2017) .....	31
<i>Util. Air Regul. Grp. v. E.P.A.</i> , <a href="#"><u>573 U.S. 302</u></a> (2014) .....	41
<i>Warshauer v. Solis</i> , <a href="#"><u>577 F.3d 1330</u></a> (11th Cir. 2009) .....	35
<i>Watkins Inc. v. Lewis</i> , <a href="#"><u>346 F.3d 841</u></a> (8th Cir. 2003) .....	12
<i>Wayman v. Southard</i> , <a href="#"><u>23 U.S. (10 Wheat.) 1</u></a> (1825) .....	16, 48
<i>Whitman v. Am. Trucking Associations</i> , <a href="#"><u>531 U.S. 457</u></a> (2001) .....	14, 33
<i>Yakus v. United States</i> , <a href="#"><u>321 U.S. 414</u></a> (1944) .....	16
<i>Youngstown Sheet &amp; Tube Co. v. Sawyer</i> , <a href="#"><u>343 U.S. 579</u></a> (1952) .....	1, 12, 13, 14, 15, 17, 18, 27, 48, 50
<i>Zivotofsky ex rel. Zivotofsky v. Kerry</i> , <a href="#"><u>576 U.S. 1</u></a> (2015) .....	14, 15
<b>Constitutional and Statutory Provisions</b>	
<a href="#"><u>15 U.S.C. § 717f</u></a> .....	27
<a href="#"><u>42 U.S.C. § 13384</u></a> .....	15
<a href="#"><u>42 U.S.C. § 1988(b)</u></a> .....	36
<a href="#"><u>42 U.S.C. § 4332(C)</u></a> .....	41
<a href="#"><u>42 U.S.C. § 4332(D)</u></a> .....	42
<a href="#"><u>42 U.S.C. § 6295(a)(2)(A)</u></a> .....	28

<a href="#">42 U.S.C. § 7401</a> .....	40
<a href="#">42 U.S.C. § 7475(a)(3)</a> .....	27
<a href="#">42 U.S.C. § 7479(3)</a> .....	28
<a href="#">5 U.S.C. § 551(1)</a> .....	29
<a href="#">5 U.S.C. § 551(4)</a> .....	35
<a href="#">5 U.S.C. § 553</a> .....	18, 29
<a href="#">5 U.S.C. § 701(b)</a> .....	29
<a href="#">5 U.S.C. § 704</a> .....	32
<a href="#">5 U.S.C. § 706(2)(D)</a> .....	35
Article I, § 1 of the Constitution.....	13, 18
<a href="#">N.J. Stat. § 48:3-87.3(b)(8) (2018)</a> .....	26
Pub. L 100–204 § 1104.....	15
Pub. L 115-97, § 20001(b).....	15
<a href="#">U.S. CONST. art. II, § 1</a> . Article II.....	14
<a href="#">U.S. CONST. art. II, § 3</a> .....	14
Va. Code. Ann. § 56-585.1(6) (2020).....	26
Wash. Rev. Code Ann. § 80.28.405.....	26
<b>Rules</b>	
Federal Rule of Evidence 702.....	20
<b>Regulations</b>	
<a href="#">29 C.F.R. § 790.19(b)</a> .....	31
<a href="#">40 C.F.R. § 1501.5(e)</a> .....	42
<a href="#">40 C.F.R. § 1502.22</a> .....	42

[40 C.F.R. §1501.7\(b\)](#) ..... 42

[86 Fed. Reg. 11268](#) ..... 26

[86 Fed. Reg. 11272](#) ..... 27

Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule,  
75 Fed. Reg 31514 .....41

**Other Authorities**

Executive Order 12866 .....6, 21

Executive Order 10340 .....17, 19

Executive Order 13990 .....3, 13, 16, 18, 22, 27, 30, 36, 47

## INTRODUCTION

This case is about legislative power and who wields it. The Constitution “entrust[s] the law making power to the Congress alone in both good and bad times.” *Youngstown Sheet & Tube Co. v. Sawyer*, [343 U.S. 579, 589](#) (1952). Congress may authorize Executive Branch officials to fill in the details of their policy choices, but those officials must receive a substantive delegation of authority and comply with Congress’s procedures to exercise that power. That is not what happened here. Without citing any statutory or constitutional authority, the President legislated national policy on an issue of immense practical importance, created an agency of the U.S. Government to publish rules, and bound federal agencies to follow those extra-statutory rules when implementing Congress’s statutory commands.

In doing so, the President and his Working Group violated both the structural separation of powers and the requirements of the Administrative Procedure Act (APA). These actions should be enjoined. Our Constitution reflects the Founders’ insights that “the legislative, executive, and judiciary departments ought to be separate and distinct,” and that this separation is an “essential precaution in favor of liberty.” *THE FEDERALIST* NO. 47, at 301 (Madison) (C. Rossiter ed. 1961). “The accumulation of all powers, legislative, executive, and judiciary, in the same hands, whether of one, a few, or many, and whether hereditary, selfappointed, or elective, may justly be pronounced the very definition of tyranny.” *Id.* “The Framers of the Federal Constitution . . . viewed the principle of separation of powers as the absolutely central guarantee of a just Government.” *Morrison v. Olson*, [487 U.S. 654, 697](#) (1988) (Scalia, J., dissenting). Plaintiffs Missouri, Alaska, Arizona, Arkansas, Indiana, Kansas, Montana, Nebraska, Ohio, South Carolina, Tennessee, and Utah (the “Plaintiff States”) seek a preliminary injunction to restore the separation of powers and require the Executive to comply with the APA.

## FACTUAL BACKGROUND

### **A. Carbon Dioxide, Methane, and Nitrous Oxide Are Ubiquitous By-Products of Human Economic Activity, Especially Agriculture and Energy Production.**

Carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and nitrous oxide (N<sub>2</sub>O) are common, naturally occurring gases that are also ubiquitous by-products of agricultural, energy, and industrial production. “Carbon dioxide enters the atmosphere through burning fossil fuels (coal, natural gas, and oil), solid waste, trees and other biological materials, and also as a result of certain chemical reactions (e.g., manufacture of cement).” EPA, *Overview of Greenhouse Gases*, at <https://www.epa.gov/ghgemissions/overview-greenhouse-gases>. “The combustion of fossil fuels such as gasoline and diesel to transport people and goods was the largest source of CO<sub>2</sub> emissions in 2018, accounting for about 33.6% of total U.S. CO<sub>2</sub> emissions and 27.3% of total U.S. greenhouse gas emissions.” *Id.* This includes “transportation sources such as highway and passenger vehicles, air travel, marine transportation, and rail.” *Id.* The second largest activity producing CO<sub>2</sub> is the generation of electricity “to power homes, business, and industry.” *Id.*

Methane emissions result from the energy production, agricultural practices, and the decay of organic waste in municipal landfills. EPA, *Overview of Greenhouse Gases, supra*. The largest source of human-related methane production in the United States comes from “enteric fermentation,” *i.e.*, the manure and flatulence of livestock such as cows, pigs, chickens, sheep, and goats. EPA, *Overview of Greenhouse Gases – Methane*, at <https://www.epa.gov/ghgemissions/overview-greenhouse-gases#methane>. “Natural gas and petroleum systems are the second largest source of CH<sub>4</sub> emissions in the United States. Methane is the primary component of natural gas.” *Id.* Nearly every major form of energy production that relies on fossil fuels emits methane, including coal and oil production.

Nitrous oxide is naturally present in the atmosphere, and “[h]uman activities such as agriculture, fuel combustion, wastewater management, and industrial processes” also emit nitrous oxide. *Id.* EPA estimates that “about 40 percent of total N<sub>2</sub>O emissions come from human activities.” *Id.* “Agricultural soil management”—*i.e.*, fertilizing crops—accounts for by far the largest share of nitrous oxide produced by human activity. “Agricultural soil management is the largest source” and “account[s] for about 77.8 percent of total U.S. N<sub>2</sub>O emissions in 2018.” *Id.*

In sum, these three gases are highly prevalent to human economic activities, and the EPA estimates that they account for approximately 97% of greenhouse gas emissions in 2018. *See* EPA, *Overview of Greenhouse Gases, supra*. The authority to regulate the emission of such gases, in effect, is the authority to regulate entire foundational sectors of the U.S. economy, including innumerable aspects of energy, agricultural, and industrial production.

**B. Executive Order 13990 Created an Interagency Working Group to Dictate Binding Values for the “Social Costs” of Carbon Dioxide, Methane, and Nitrous Oxide.**

On January 20, 2021, President Biden issued Executive Order 13990, “Protecting Public Health and the Environment and Restoring Science To Tackle the Climate Crisis.” [Doc. 6-1, 86 Fed. Reg. 7037](#) (“EO 13990” or the “Executive Order”). Section 5 of the Order, “Accounting for the Benefits of Reducing Climate Pollution,” instructs all federal agencies to “capture the full costs of greenhouse gas emissions as accurately as possible, including by taking global damages into account.” *Id.* at 7040. The “social cost” of greenhouse gases (SCC, SCN, and SCM) are “estimates of the monetized damages associated with incremental increases in greenhouse gas emissions.” *Id.* These metrics “are intended to include changes in net agricultural productivity, human health, property damage from increased flood risk, and the value of ecosystem services.” *Id.*

The Executive Order establishes an entity to promulgate the social costs. It creates an “Interagency Working Group” co-chaired by the “Chair of the Council of Economic Advisors, Director of OMB, and Director of the Office of Science and Technology Policy.” *Id.* The Working Group includes seven cabinet secretaries and five other high-level executive branch officials or their designees. *Id.* The Executive Order directs the Working Group to publish an interim social cost for carbon dioxide, methane, and nitrous oxide that all federal agencies “*shall* use when monetizing the value of changes in greenhouse gas emissions resulting from regulations and other relevant agency actions until final values are published.” *Id.* (emphasis added). Section 5(b)(ii)(B) directs the Working Group to “publish a final SCC, SCN, and SCM by no later than January 2022,” and Section 5(b)(ii)(C)-(E) provides that the Working Group shall provide recommendations regarding the use, updating, and methodology of those numbers. *Id.* The Working Group was to consider “climate risk, environmental justice, and intergenerational equity.” *Id.*

The Executive Order directs the Working Group to “solicit public comment; engage with the public and stakeholders; [and] seek the advice of ethics experts,” and to consider a specific report by the National Academy of Sciences. *Id.* The Executive Order directs the Working Group to “ensure that the SCC, SCN, and SCM reflect the interests of future generations in avoiding threats posed by climate change.” *Id.* It cites no statutory authority to create the Working Group or to set binding values for SCC, SCN, and SCM that “shall” be used by regulatory agencies administering delegated authority from Congress.

**C. The Working Group Promulgates Binding Interim Values for the “Social Costs” of Carbon Dioxide, Methane, and Nitrous Oxide That Federal Agencies “Shall” Use.**

On February 26, 2021, the Working Group released its Interim Values for the social costs of carbon, methane, and nitrous oxide. *See* [Doc. 6-2](#), Interagency Working Group on Social Cost

of Greenhouse Gases, United States Government, *Technical Support Document: Social Cost of Carbon, Methane, and Nitrous Oxide, Interim Estimates Under Executive Order 13990* (Feb. 26, 2021) (“Interim Values” or “2021 TSD”). Although EO 13990 instructed the Working Group to elicit input from the public and stakeholders, the Working Group did not do so before publishing the Interim Values, and it cited no such comments in its analysis. *See id.* The Interim Values were simply published without notice or opportunity for public comment. *Id.*

The Working Group defines the SCGG as “the monetary value of the net harm to society associated with adding a small amount of that GHG to the atmosphere in a given year.” *Id.* at 2. The SCGG “are the theoretically appropriate values [for agencies] to use in conducting benefit-cost analyses of policies that affect GHG emissions.” *Id.*

The Working Group acknowledges that the task of assigning “social costs” to greenhouse gases involves attempting to predict global “changes in net agricultural productivity, human health effects, property damage from increased flood risk natural disasters, disruption of energy systems, risk of conflict, environmental migration, and the value of ecosystem services.” *Id.* at 2. This includes “spillover pathways such as economic and political destabilization and global migration.” *Id.* at 3. In other words, this task involves attempting to predict such unknowable contingencies as the likelihood, frequency, scope, and severity of future international conflicts and human migrations for decades and centuries into the future—an inherently speculative task, akin to attempting to predict in 1721 that World War II would break out in 1939, and to estimate its casualties and economic impact. *Id.* The Interim Values also admit that its calculations involve attempting to predict future developments in human technology and innovation for centuries to come, future mitigation strategies performed by the world’s 195 nations, and global atmospheric concentrations due to greenhouse gas emissions—another inherently speculative task. *See, e.g.,*

*id.* at 16 (considering the potential impact of “mitigation activities by other countries”); *id.* at 30 (noting estimates reflect “incomplete treatment of adaptation and technological change”).

To make these predictions, the Working Group uses three Integrated Assessment Models (IAMs), the so-called “DICE,” “PAGE,” and “FUND” models. *Id.* at 10. These models (and the methodology adapting them) date back to the Obama Administration’s social cost of carbon with minor updates by the former Working Group over time. *See id.*; *Technical Support Document: Social Cost of Carbon for Regulatory Impact Analysis – Under Executive Order 12866* (Feb. 2010) (“2010 TSD”).<sup>1</sup> To develop the SCGG, the Working Group runs each IAM thousands of times under five scenarios (discussed below as the Stanford Energy Modeling Forum Exercises (EMF-22)) through the year 2300. These results are equally weighted and averaged to report four values (three discount rates, and a 95th percentile damage distribution with a 3% discount rate). 2010 TSD at 5, 25. The final SCGG is the average of all these simulations and is wholly dependent on what values the individual IAMs generate.

To account for the effect of the greenhouse gas emissions, the IAMs calculate damages from a variety of predicted future environmental impacts. Each IAM “combine[s] climate processes, economic growth, and feedbacks between the climate and the global economy into a single modeling framework.” 2010 TSD at 5. “The three IAMs translate emissions into changes in atmospheric greenhouse concentrations, atmospheric concentrations into changes in temperature, and changes in temperature into economic damages.” *Id.* For each IAM, part of the damages considers the putative effect of greenhouse gas emissions on different categories of market and non-market goods and services—for example, agriculture, sea-level rise (causing land lost or costs

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<sup>1</sup> Available at <https://obamawhitehouse.archives.gov/sites/default/files/omb/inforeg/for-agencies/Social-Cost-of-Carbon-for-RIA.pdf>.

to protect land), human health (considering disease propagation or respiratory health), and extreme weather. *See id.* at 6–8. Likewise, how each model handles human adaptation—*i.e.*, how people and nations respond to climate change based on greenhouse gas emissions—also varies. *See id.* These include, to varying degrees, economic and non-economic impacts on agriculture, forestry, water, energy (based on heating and cooling demand), sea level rise (based on the value of land lost and the cost of protection), human health (based on climate-related diseases, such as malaria and dengue fever, pollution, diarrhea, vector-borne diseases, and cardiovascular and respiratory mortality), extreme weather, non-market amenities (based on outdoor recreation), and human settlements (including resettlements) and ecosystems. *Id.* at 6–8. The models also include impacts from extreme weather events and catastrophic events. *Id.*

Each IAM uses “[t]he emissions projections”—which drives the damages number—that “are based on specified socio-economic (GDP and population) pathways.” *Id.* at 5. To estimate those, the former Working Group selected five out of the ten models from the Stanford Energy Modeling Forum Exercise (EMF-22). *See id.* at 15. Those models project future greenhouse gas emissions, GDP, and population growth, and four of the five scenarios expect “Business as Usual” (BAU) government policies—scenarios where governments take *no* action to curb emissions. *Id.*

Another input is the “equilibrium climate sensitivity (ECS).” *See id.* at 12. ECS supposedly models the effects of “the long-term increase in the annual global-average surface temperature from a doubling of atmospheric CO<sub>2</sub> concentration relative to pre-industrial levels (or stabilization at a concentration of approximately 550 parts per million (ppm)).” *Id.* To set the ECS, the 2010 TSD uses a distribution of values, derived from the Fourth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC). *See id.* at 13, 24. According to the 2010 Working Group, this model was “the only one ... that is based on a theoretical understanding of

the response of the climate system to increased greenhouse gas concentrations,” and the 2010 Working Group believed it “better reflects the IPCC judgment” that temperature increases of more than 4.5 degrees Celsius may occur. *Id.* at 13–14. Similarly, the former Working Group chose to model damages from greenhouse gas emissions out through the year 2300, 100 years beyond the original PAGE model’s default time horizon and 200 years past the EMF-22 models’ last projections for population growth, GDP, and greenhouse gas emission trajectories. *See id.* at 25. The Working Group simply supplied their own assumptions and values to fill in these gaps. *Id.*

The Interim Values concede that “[b]enefit-cost analysis of U.S. Federal regulations have traditionally focused on the benefits and costs that accrue to individuals that reside within the country’s national boundaries.” Doc. 6-2, at 14. But the Interim Values reflect a policy decision and value judgment to consider in their calculation the anticipated global effects of greenhouse gases, not just their anticipated effects within the United States. *See id.* at 14–16.

Under the Working Group’s approach, one critical factor in calculating the present dollar value for the “social cost” of a greenhouse gas is the “discount rate.” *See id.* at 16–22. The Working Group describes the “discount rate” as a percentage factor designed to calculate the net present value of the future anticipated damages from a marginal increase in emissions of a particular gas: “In calculating the SC-GHG, the stream of future damages to agriculture, human health, and other market and non-market sectors from an additional unit of emissions are estimated in terms of reduced consumption (or consumption equivalents). Then that stream of future damages is discounted to its present value in the year when the additional unit of emissions was released.” *Id.* at 17. The lower the discount rate, the higher the “social cost” of that gas.

The Working Group acknowledges that “the discount rate has a large influence on the present value of future damages.” *Id.* For example, the Working Group calculated the social cost

of each gas at four different values using three different discount rates—5%, 3%, and 2.5%, and an upper probability distribution for the 3% rate. Using these different discount rates, the “social cost” of carbon dioxide, ranges from \$14 per metric ton to \$152 per metric ton, depending largely on the discount rate selected. *Id.* at 5. The Working Group admits that the discount rate choice depends heavily on policy and value judgments, not merely empirical predictions. So this choice rests, in large part, on value-laden factors such as “intergenerational ethical considerations,” which must “be accounted for in selecting future discount rates.” *Id.* at 3. “[T]he choice of a discount rate ... raises highly contested and exceedingly difficult questions of science, economics, ethics, and law.” *Id.* at 17 (emphasis added). It also notes that “the range of discount rates reflects both uncertainty and, at least in part, different policy or value judgments.” *Id.* at 27.

The indeterminacy and value-laden nature of choosing a discount rate results in a wide range of potential values for the “social costs” of gases. Using different discount factors, the Working Group provides 2020 values for the SCC at \$14, \$51, \$76, and \$152 per metric ton,<sup>2</sup> *id.* at 5, and it also notes with approval other values used by other governmental authorities such as New York (\$125 per metric ton) and Canada (about \$107 USD and \$348 USD per metric ton). *Id.* at 35. Other sources report that estimates of the “social cost” of carbon dioxide has ranged from approximately \$7 per metric ton to over \$1000 per metric ton. *Eight Priorities for Calculating the Social Cost of Carbon*, NATURE (Feb. 19, 2021), at <https://go.nature.com/3xxm0rb>.

The Interim Values calculate that the current “social costs” of carbon, methane, and nitrous oxide, at current rates of emission, are very significant. Among the range of values provided, the Interim Values provide the 3% discount rate as the baseline for agency calculations, but they also

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<sup>2</sup> As noted above, the figure of \$152 is a representation of an upper portion of the probability distribution of the estimated values using a 3% discount rate. *See id.*

invite federal agencies to use smaller discount rates that will increase the calculation of the social cost of gases, including the 2.5% discount rate. [Doc. 6-2, 2021](#) TSD at 4. Under the 3% discount rate, the current “social cost” of carbon dioxide in 2020 is \$51 per metric ton at the 3% discount rate, \$76 per metric ton at the 2.5% discount rate, and \$152 per metric ton at the upper probability distribution of the 3% rate. *Id.* at 5. The SCM at the 3% rate, the social cost in 2020 is \$1,500 per metric ton, \$2,000 per metric ton at 2.5%, and \$3,900 at the upper distribution of the 3% rate. *Id.* The SCN at the 3% discount rate in 2020 is \$18,000 per metric ton a, \$27,000 per metric ton at 2.5%, and \$48,000 per metric ton at the upper probability distribution of 3%. *Id.* at 5. All of these values increase significantly over time. For example, the social cost of carbon dioxide at 3% increases from \$51 to \$56 by 2025, and to \$85 by 2050. *Id.* at 4. The Working Group emphasizes that it believes that these values—including higher values at lower discount rates—“likely underestimate” the actual social costs of those three gases: “It is the IWG’s judgment that ... the range of four interim SCGG estimates presented in this TSD *likely underestimate* societal damages from GHG emissions.” *Id.* at 4 (emphasis added). Thus, the Working Group’s future calculations of SCC, SCM, and SCN will likely increase significantly.

**D. The Interim Values Will Have Enormous Economic Impact and Justify Increased Regulation in Innumerable Aspects of Everyday Life.**

Because the Executive Order directs that federal agencies “shall” use the Interim Values when conducting rulemakings and other agency actions, the Interim Values will inevitably be used to justify increased regulation and restrictions in innumerable areas, affecting virtually every aspect of daily life. The economic impact of these increased regulations will be enormous.

As noted above, using the 3%, 2.5%, and 95-percentile-of-3% discount rates, respectively, the “social cost” of carbon in 2020 was \$51, \$76, and \$152 per metric ton; the “social cost” of methane was \$1500, \$2000, and \$3900 per metric ton; and the “social cost” of nitrous oxide was

\$18,000, \$27,000, and \$48,000 per metric ton, respectively. In 2019, the most recent year for which data is available, the United States emitted 5.274 billion metric tons of carbon dioxide, 26.4 million metric tons of methane, and 1.54 million metric tons of nitrous oxide. EPA, *Draft Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2019* 2-6 tbl.2-2 (Feb. 12, 2021). Assuming similar rates of emission between 2019 and 2020, the total “social cost” of emissions of all three gases at the 3% discount rate was over \$336 billion; the total “social cost” at the 2.5% discount rate was over \$495 billion; and the total “social cost” at the 95th-percentile distribution was over \$978 billion.

In theory, these numbers would justify imposing hundreds of billions or trillions of dollars in regulatory costs on the U.S. economy in upcoming years to offset these supposed “social costs.” In practice, these numbers will inevitably be used to justify increased regulation and expansion of federal regulatory authority in numerous areas. Recent history shows that the Executive Order will require agencies to use the SCGGs to reach into every part of day-to-day life. An academic review in 2017 identified “at least *eighty-three* separate regulatory or planning proceedings conducted by six different federal agencies [that] have used the SCC or SCM in their analyses” through mid-2016. Howard & Schwartz, *Think Global: International Reciprocity as Justification for a Global Social Cost of Carbon*, 42:S COLUM. J. OF ENVT’L LAW 203, 219–20 & appx. A (2017); *see also* [Doc. 6-3](#) (Appendix A to Howard & Schwartz) (emphasis added). This includes agency actions by Defendants EPA, DOE, DOT, DOI, and USDA. *Id.* Appendix A to Howard & Schwartz indicates that, through mid-2016, the “social cost” of greenhouse gases had been used in adopting federal regulations, policies, and regulatory actions related to: vending machines, light trucks, dishwashers, dehumidifiers, microwave ovens, kitchen stoves, clothes washers, small electric motors, residential water heaters, ozone standards, residential refrigerators and freezers,

sewage guidelines, medium and heavy-duty vehicles, mercury emissions, industrial boilers, solid waste incineration units, fluorescent lamps, residential clothes dryers, room air conditioners, residential furnaces, residential central air conditioners, battery chargers, dishwashers, petroleum refineries, halide lamps, walk-in coolers and freezers, commercial refrigeration units, commercial clothes washers, commercial ice makers, and heat pumps. *See id.* EO 13990’s instruction that federal agencies “shall use” the Interim Values “when monetizing the value of changes in greenhouse gas emissions resulting from regulations and other relevant agency actions until final values are published,” necessitates increased regulation in all these areas, among others.

### ARGUMENT

“The burden of establishing the propriety of an injunction is on the movant.” *Watkins Inc. v. Lewis*, [346 F.3d 841, 44](#) (8th Cir. 2003). The Court considers four factors in determining whether to grant a preliminary injunction: “(1) the likelihood of the movant’s success on the merits; (2) the threat of irreparable harm to the movant in the absence of relief; (3) the balance between that harm and the harm that the relief would cause to other litigants; and (4) the public interest.” *Id.* (citing *Dataphase Sys., Inc. v. C.L. Sys., Inc.*, [640 F.2d 109, 114](#) (8th Cir. 1981) (en banc)). Here, all four factors favor Plaintiff States.

#### **I. The Plaintiff States Are Likely to Succeed on the Merits of Their Claims in Counts One and Three of the First Amended Complaint.**

The first *Dataphase* factor considers “the likelihood of the movant’s success on the merits.” *Id.* Here, Plaintiffs are likely to succeed on the merits of their claims. “The President’s power, if any, to issue [an] order must stem either from an act of Congress or from the Constitution itself.” *Youngstown Sheet & Tube Co. v. Sawyer*, [343 U.S. 579, 585](#) (1952). The Executive Order and the Working Group’s actions stem from neither, and thus they are unconstitutional.

**A. Plaintiffs' Separation-of-Powers Claim Is Likely to Succeed.**

Count One alleges that Executive Order 13990 violates the separation of powers by dictating that federal agencies “shall” use the Interim Values to monetize the “social costs” of greenhouse gases when engaging in cost-benefit analyses. *See* FAC, [Doc. 6](#), ¶¶ 195–202. This action exceeds the Executive’s constitutional powers, as it does not “stem either from an act of Congress or from the Constitution itself.” *Youngstown*, [343 U.S. at 585](#). Congress has delegated authority to specific agencies to consider costs when rulemaking, and the President’s command to use the Interim Values is incompatible with agencies deciding costs under their statutory authority. As a result, under the familiar tripartite framework in *Youngstown*, the President’s “power is at its lowest ebb.” [343 U.S. at 637](#) (1952) (Jackson, J., concurring in judgment).

For a separation-of-powers claim, Plaintiff States need only show that a violation has occurred and their harm flows from it. *See Seila Law LLC v. Consumer Fin. Prot. Bureau*, [140 S. Ct. 2183, 2196](#) (2020). One branch of government violates the separation of powers when it invades or substantially interferes with the exercise of powers vested in another branch. *Free Enter. Fund v. Pub. Co. Acct. Oversight Bd.*, [561 U.S. 477, 501](#) (2010) (“two layers of for-cause tenure” represented extensive legislative encroachment of President’s removal powers). To determine whether the President has engaged in “lawmaking,” the court looks to the President’s constitutional powers, statutes, and the character and effect of the challenged order. *Youngstown*, [343 U.S. at 588](#). Executive Order 13990, the Interim Values, past practice, and current practice demonstrate that the President has invaded Congress’s sole domain of legislative authority. Regardless of what one thinks of the underlying calculations, dictating binding values for the social cost of greenhouse gases for use in federal programs is a quintessentially legislative power that lies exclusively with Congress through the vesting clause of Article I, § 1 of the Constitution.

**1. Section 5 of Executive Order 13990 does not rest on the President’s constitutional powers or an Act of Congress.**

The Executive Order invokes only the “authority vested in” the President and does not explicitly rely on any constitutional power or statutory delegation. EO 13990. Nor can any statutory authority be fairly implied, as Congress does not hide “elephants in mouseholes.” *Whitman v. Am. Trucking Associations*, 531 U.S. 457, 468 (2001). And in fact, no constitutional provision or statute authorizes the President to issue the Executive Order.

The Constitution provides that “[t]he executive power shall be vested in a President of the United States of America.” U.S. CONST. art. II, § 1. Article II grants the commander-in-chief, opinion requirement, pardon, treaty, officer appointment (and removal), and reception (and recognition) powers to the President. *Id.* §§ 2–3. Although the President has a role in legislation, the Constitution “limits his functions in the lawmaking process to the recommending of laws he thinks wise and the vetoing of laws he thinks bad.” *Youngstown*, 343 U.S. at 587. It also imposes a duty that the President “take care that the laws be faithfully executed,” U.S. CONST. art. II, § 3, but the “President’s power to see that the laws are faithfully executed refutes the idea that he is to be a lawmaker.” *Youngstown*, 343 U.S. at 587. Thus, no constitutional wellspring permits the President to unilaterally set domestic policy.

Nor can the Executive justify the Executive Order as an exercise of the President’s authority over foreign affairs. *See* Exec. Order 13990 § 5(a) (noting policy benefit of “international leadership of the United States on climate issues.”). Although the Supreme Court has “described the President as ‘the sole organ of the federal government in the field of international relations,’” *Zivotofsky ex rel. Zivotofsky v. Kerry*, 576 U.S. 1, 20 (2015) (citation omitted), it has also recognized that “Congress’ powers, and its central role in making laws, give it substantial authority regarding many of the policy determinations that precede and follow the

act of recognition itself” in foreign affairs, *id.* at 16. Justice Jackson expressly rejected that “a President whose conduct of foreign affairs is so largely uncontrolled . . . can vastly enlarge his mastery over the internal affairs of the country by his own” acts on the international stage. *Youngstown*, 343 U.S. at 642 (Jackson, J., concurring). He further explained that the commander-in-chief power does not make the President “Commander-in-Chief of the country, its industries and its inhabitants.” *Id.*; *cf. Massachusetts v. EPA*, 549 U.S. 497, 534 (2007) (“[W]hile the President has broad authority in foreign affairs, that authority does not extend to the refusal to execute domestic laws.”). So too, here.

Likewise, Section 5 also does not rely on any statutory authority. Section 5 of the Executive Order cites no statute authorizing the President to create the Working Group or to dictate binding values for the “social costs” of gases, and none exists. In fact, Section 3 of the Executive Order 13990 expressly mentions the President’s authority under the Antiquities Act to establish monuments, and section 4 refers to the Coastal Plain Oil and Gas Leasing Program that is required by the Tax Cuts and Jobs Act of 2017. *See* Pub. L 115-97, § 20001(b). But Section 5 does not cite any federal statute. Given that the President cited statutory authority in these two sections, it is unlikely that his failure to do so in Section 5 is accidental. Moreover, although Congress has expressly authorized the President to address shortcomings in climate research and propose legislation to Congress at times, Congress has not asked him to develop the social cost of greenhouse gases or required him to establish a uniform value. *See* Pub. L 100–204 § 1104 (codified as amended at 42 U.S.C. § 13384) (requesting comparative assessment of alternative policy mechanisms for reducing the generation of greenhouse gases). None of this shows any plausible reliance on a statutory grant of authority.

**2. Executive Order 13990, previous and current regulatory acts, and the nature of the Interim Values all demonstrate that Section 5 exercises legislative power.**

The Interim Values are so inherently speculative and policy-laden that their selection is inherently legislative. To determine whether the Interim Values are legislative in character, the court should look at the Executive Order, the Interim Values, and the regulatory background that Congress has enacted. Legislative power is distinct from executive power because “the legislature makes, the executive executes.” *Wayman v. Southard*, 23 U.S. (10 Wheat.) 1, 46 (1825). The Supreme Court instructs that “the powers delegated to the three Branches are functionally identifiable.” *I.N.S. v. Chadha*, 462 U.S. 919, 951 (1983). An “exercise of legislative power depends not on [the actions’] form but upon whether they contain matter which is properly to be regarded as legislative in its character and effect.” *Id.* at 952 (citation and quotation omitted).

It is “the peculiar province of the legislature to prescribe general rules for the government of society; the application of those rules to individuals in society would seem to be the duty of other departments.” *Fletcher v. Peck*, 10 U.S. (6 Cranch) 87, 136 (1810). “The essentials of the legislative function are the determination of the legislative policy and its formulation and promulgation as a defined and binding rule of conduct.” *Yakus v. United States*, 321 U.S. 414, 424 (1944). In making rules, “the legislature must necessarily engage in a process of line-drawing,” and “the fact the line might have been drawn differently at some points is a matter for legislative, rather than judicial, consideration.” *U.S. R.R. Ret. Bd. v. Fritz*, 449 U.S. 166, 179 (1980). Thus, Congress’s “function” is “in laying down policies and establishing standards, while leaving to selected instrumentalities the making of subordinate rules within prescribed limits and

the determination of facts to which the policy as declared by the Legislature is to apply.” *Panama Ref. Co. v. Ryan*, 293 U.S. 388, 421(1935).

Courts also recognize that when an agency wants to state a principle “in numerical terms,” and those “numerical terms” cannot be derived from a particular record, the agency is legislating and should act through rulemaking. *Catholic Health Initiatives v. Sebelius*, 617 F.3d 490, 495 (D.C. Cir. 2010) (citing Henry J. Friendly, *Watchman, What of the Night?*, in *BENCHMARKS* 144–45 (1967)). This rule reflects the understanding that “[l]egislators have the democratic legitimacy to make choices among value judgments, choices based on hunch or guesswork or even the toss of a coin, and other arbitrary choices.” *Hector v. U.S. Dep’t of Agric.*, 82 F.3d 165, 170 (7th Cir. 1996). Under these criteria, the Interim Values are functionally equivalent to legislating.

**a. A plain reading of Section 5 shows that it is making presidential policy and not implementing congressional policy.**

On its face, Section 5 does not “direct that a congressional policy be executed in a manner prescribed by Congress—it directs that a presidential policy be executed in a manner prescribed by the President.” *Youngstown*, 343 U.S. at 588. Like the *Youngstown* order, Executive Order 13990 “sets out reasons why the President believes certain policies should be adopted, proclaims these policies as rules of conduct to be followed, and again, like a statute, authorizes a government official to promulgate additional rules and regulations consistent with the policy proclaimed and needed to carry that policy into execution.” *Id.* These similarities show that like the *Youngstown* order 10340, Executive Order 13990 is an exercise of legislative power.

In *Youngstown*, Executive Order 10340 cited the “existence of a national emergency which requires that the military, naval, air, and civilian defenses of this country be strengthened as speedily as possible” and that “steel is an indispensable component” for the defense of the free world. Exec. Order No. 10340, 17 Fed. Reg. 3139 (Apr. 8, 1952). President Truman further

explained that the threatened “work stoppage would immediately jeopardize and imperil our national defense and the defense of those joined with us in resisting aggression,” and the safety of the service members. *Id.* The order then commanded the Secretary of Commerce to operate the steel plants and “all Federal agencies shall cooperate with the Secretary of Commerce to the fullest extent possible.” *Id.* § 2. In addition to plenary control of the plants, the Secretary of Commerce was “authorized to prescribe and Issue such regulations and orders not inconsistent herewith as he may deem necessary or desirable for carrying out the purposes of this order.” *Id.* § 3.

Executive Order 13990 also sets forth the federal government’s policies and orders the agencies “to immediately commence work to confront the climate crisis.” § 1. Section 5(a) states that “[i]t is essential that agencies capture the full costs of greenhouse gas emissions as accurately as possible, including by taking global damages into account.” This directive allegedly promotes “sound decision-making, recognizes the breadth of climate impacts, and supports the international leadership of the United States on climate issues.” EO 13990 § 5(a). It creates and requires the Working Group to publish the Interim Values. *Id.* § 5(b)(i)–(ii). The Executive Order prescribes that the Working Group fulfills its mission by considering specific recommendations and soliciting public comment. *Id.* § 5(b)(iii). Notably, this mimics informal rulemaking under the APA without any guarantee against arbitrary conduct. *See* [5 U.S.C. § 553](#). And the Interim Values are a rule of conduct because all “agencies shall use” it. EO 13990 § 5(b)(ii).

These executive orders also run afoul of exclusive congressional powers. The *Youngstown* Court explained that Congress’s authority to seize the steel mills (and make labor laws) could not be questioned or subjected to presidential supervision as it was Congress’s prerogative. [343 U.S. at 588](#) (citing the Takings and Necessary and Proper Clauses). In the same way, Congress has authority to set environmental policy and require agencies to evaluate specific factors like costs,

subject to constitutional limits. *See Massachusetts*, [549 U.S. at 533](#) (authorizing statute cabins reasons for regulating or failing to regulate). An agency “cannot avoid its statutory obligations” in light of its own policy judgments after Congress has spoken. *Id.* at 534. The Executive Order crosses this line into lawmaking because several environmental statutes explicitly require the consideration of costs, and the President has usurped those agencies’ statutory obligations.

As Executive Order 10340, invoking the President’s Commander-in-Chief power to avert an imminent threat during military conflict, failed the constitutional design, so must this one.

**b. The TSD performs a legislative function by picking the Interim Values through an arbitrary and policy-laden process.**

The Interim Values are policy-driven numerical values based on assumptions and line-drawing choices that are typical in the legislative process. Small and reasonable policy choices that form the basis of these “estimates of the [global] monetized damages associated with incremental increases in greenhouse gas emissions,” Exec. Order 13990 § 5(a), can drastically increase the numerical values or even cause them to be less than zero. In particular, the Working Group’s choice to use global damages, certain discount rates, a nearly 300-year time horizon, and an outdated Equilibrium Climate Sensitivity Distribution (ECS Distribution) illustrate the outsized and arbitrary effects that policy choices have on the Interim Values.

The heart of the SCGG is a probabilistic Monte Carlo analysis of three Integrated Assessment Models (IAMs): Dynamic Integrated Climate and Economy (DICE) 2010, Climate Framework for Uncertainty, Negotiation, and Distribution (FUND) 3.8; and Policy Analysis of the Greenhouse Gas Effect (PAGE) 2009. These IAMs calculate economic damages that occur for each additional metric ton of a greenhouse gas emitted in a particular year by “predicting (1) the amount of warming that all greenhouse gases in the atmosphere now and those that will be added will have on the planet over a certain time period, (2) the overall effects that warming will have

on society, and (3) the costs that those effects will have on society.” Dayaratna Decl.<sup>3</sup> ¶ 10. The Working Group sets various assumptions and then averages the results of these three IAMs to determine the gross damages for all 300 years, and then discounts that amount to a present value. “The present value of a future benefit or cost is the amount you would have to invest today that would grow in value to match that benefit or cost at the specified time in the future.” *Id.* ¶ 19. Using a 3% discount rate, the Working Group’s values for the SCGG in 2020 are \$51 (carbon), \$1500 (methane), and \$18,000 (nitrous oxide). Doc. 6-2. at 24–25.

The first policy choice that has a large impact on the numerical value is whether the Interim Values should use global or domestic damages. Although not adjusted for inflation, the domestic value for the social cost of carbon was roughly \$7—seven times less than the interim social cost of carbon. Similarly, the domestic social cost of methane was roughly \$55—27 times less than the interim social cost of methane.<sup>4</sup>

The Working Group cites a number of reasons why it believes that global damages are appropriate: “GHG emissions contribute to damages around the world regardless of where they are emitted”; global impacts “will have a direct impact on [overseas] U.S. citizens and the investment returns on those assets owned by U.S. citizens and residents”; global issues “impact the welfare of individuals and firms that reside in the United States through their effect on international markets, trade, tourism, and other activities”; and taking global damages into account

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<sup>3</sup> Dr. Kevin Dayaratna is an expert in the field of mathematical modeling, specifically as it relates to the IAMs that the Working Group used. He has a doctorate in mathematical statistics, lectured at two universities, researched and written on the use of the IAMs (including two peer reviewed publications), and testified before Congress on the social cost of carbon. Plaintiff States submit that his mathematical modeling analyses as developed in his declaration and scholarly work are helpful to the court, based on sufficient facts and data, and result from the application of reliable principles and methods. The Court should consider him qualified as an expert under Federal Rule of Evidence 702. *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579, 593 (1993).

<sup>4</sup> <https://bit.ly/3eBiSlj>.

“allow[s] the U.S. to continue to actively encourage other nations, including emerging major economies, to take significant steps to reduce emissions.” *Id.* at 15–16. But these reasons have nothing to do with statutes that require cost-benefit analyses and whether Congress intended that costs include damages incurred by other countries. Courts generally limit the application of statutes to domestic applications under the presumption against extra-territoriality. *RJR Nabisco, Inc. v. Eur. Cmty.*, 136 S. Ct. 2090, 2100 (2016). This presumption recognizes “the more prosaic commonsense notion that Congress generally legislates with domestic concerns in mind.” *Id.* (quotations omitted). Although a statute could require accounting for global damages in a cost-benefit analysis, the Working Group does not even give lip service to Congress’s policy choices.

The choice of discount rate is another consequential policy choice that the Working Group admits “has a large influence on the present value of future damages” and “raises highly contested and exceedingly difficult questions of science, economics, ethics, and law.” Doc. 6-2, 2021 TSD at 17. To illustrate this influence, at a 7% discount rate, the average social cost of carbon in the FUND Model for 2020 goes from a range of \$21 to \$39<sup>5</sup> to *negative* 37 cents in 2007 dollars. Dayaratna Decl. ¶ 23. Adjusted for inflation, the FUND Model at a 7% discount rate equals *negative* 45 cents. *Id.* This means that under a different discount rate, the social cost of emitting an extra ton of carbon becomes a *benefit*. *Id.* The average social cost of carbon in the DICE Model for 2020 goes from a range of \$28 to \$48, 2016 TSD App. A Table A2, to \$5.87 when the discount rate is changed to 7%. Dayaratna Decl. § 22. Adjusted for inflation, the DICE Model at a 7% discount rate equals \$7.21. *Id.* Adjusted for inflation, the values for methane and nitrous oxide

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<sup>5</sup> *Technical Support Document- Technical Update of the Social cost of Carbon for Regulatory Impact Analysis- Under Executive Order 12866* (Aug. 2016) (2016 TSD) available at [https://obamawhitehouse.archives.gov/sites/default/files/omb/inforeg/scc\\_tsd\\_final\\_clean\\_8\\_26\\_16.pdf](https://obamawhitehouse.archives.gov/sites/default/files/omb/inforeg/scc_tsd_final_clean_8_26_16.pdf).

show similar sensitivity in the DICE Model for 2020 at the 7% rate are \$331.76 (methane) and \$2,312.44 (nitrous oxide). *Id.* ¶¶ 25–26.

By failing to include the 7% discount rate in its choices, the Working Group unilaterally rejects the longstanding guidance in the peer-reviewed OMB Circular A-4.<sup>6</sup> This choice stems from what each rate measures: a 7% rate measures the cost of government regulation displacing investment (it is what a government project must “earn” (pre-tax) to justify the cost, else it would have been better to invest in the market); a 3% rate measures the opportunity cost of government regulation that displaces future consumption (for example, that a person considers \$1.03 tomorrow (post-tax) equal to a \$1.00 today). *See* OMB Circular A-4. The Working Group chose to use the consumption rate of return alleging that it calculated the Social Cost of Carbon in terms of consumption. The Working Group, however, conceded that its analysis only works if it can convert “displaced investment ... into a flow of consumption equivalents”—something it suggested it had yet to do. *See* 2021 TSD at 18; *see also id.* at 19 (needing “a more complete measure of costs, accounting for displacement of investment”).

The Working Group further claimed that 3% was proper because government regulation displaces a mix of investment and consumption, and so the discount rate associated with government regulation is lower than the investment rate of return. *See id.* at 18–19. It also reasoned that a lower discount rate showed benefits to GHG mitigation, thus avoiding “the risk to society of maintaining” a discount rate that was possibly too high. *Id.* The Working Group suggested that “uncertainty and ethics when discounting in an intergenerational context” argued

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<sup>6</sup> Notably, OMB Circular A-4 sets discount rates only in the decision of whether to regulate or not. Executive Order 13990 has no limitation and expressly includes “regulations and other relevant agency actions.” § 5(b)(ii)(A).

for a lower discount rate. *Id.* Because the discount rate has an outsize impact on the Interim Values, these policy choices have a determinative effect on other regulations and federal actions.

The Working Group's decision to run the IAMs through the year 2300 is another policy choice that has an outsized impact on the social cost of greenhouse gases. Dayaratna Decl. ¶ 27. This choice originated in the first TSD and occurred because “[m]any consider 2200 too short a time horizon because it could miss a significant fraction of damages under certain assumptions about the growth of marginal damages and discounting.” 2010 TSD at 25. In other words, without going to the year 2300, the costs would be lower. To accomplish this task, the Working Group “adjusted” the PAGE Model because it was designed to end in the year 2200. *Id.* Because it did not have data projections for GDP, population, and greenhouse gas emission trajectories after 2100, the Working Group made those assumptions for the next 200 years. *Id.*

The changes had the desired effect: the longer time horizon increased damages significantly. *See* Dayaratna Decl. ¶ 30. This is a predictable change because “[t]he longer the horizon, the more years are summed into the damages and those years have greater and greater damages in a future that is difficult if not impossible to predict.” *Id.* ¶ 34. To illustrate this effect, when the DICE Model (at a 3% discount rate) is only run until the year 2150 (roughly half the time period) the damages are 13.43% to 20.28% less. *Id.* ¶ 35–36. Although categorized as uncertainty, those damages assume what will happen centuries into the future. These models cannot predict dynamic changes like the commonplace technological innovations such as internet, smartphones and GPS technology that were mere science fiction 300 years ago. *Id.* ¶ 29.

Another policy choice that causes drastic changes to the IAMs, and therefore the SCGGs, is the Working Group's decision to use an ECS distribution that is out-of-date and one of the reasons that the TSD does “not reflect the tremendous increase in the scientific and economic

understanding of climate-related damages that has occurred in the past decade.” 2021 TSD at 22; *id.* at 32. An “ECS is a distribution that probabilistically quantifies the earth’s temperature response to a doubling of carbon dioxide concentrations.” Dayaratna Decl. ¶ 39. For each IAM, it shows the carbon dioxide impacts on climate and the “[s]econdary effects, such as sea-level rise, all depend on a reliable ECS.” *Id.* The ECS used is more than a decade old, and it vastly overstates the probability of high-end global warming compared to more recent distributions. *Id.* ¶ 40.

Again, by changing just this one factor, the average social cost of carbon (at 3% discount rate in 2020 dollars) is reduced by as much as 45% for the DICE Model and 80% for the FUND Model. Dayaratna Decl. ¶¶ 43–46. A number of more recent ECS distributions suggest lower probabilities of extreme global warming in response to carbon dioxide concentrations. *Id.* ¶ 41. Using the ECS distribution in Lewis and Curry (2015), controlling for observed ocean heat uptake efficiency, the DICE Model’s values go from \$46.43 to \$24.15 in 2020, \$55.47 to \$28.95 in 2030, \$65.43 to \$34.25 in 2040, and \$75.83 to \$39.94 in 2050. *Id.* ¶ 43. The FUND Model’s values go from \$23.75 to \$4.09 in 2020, \$26.76 to \$4.79 in 2030, \$29.93 to \$5.52 in 2040, and \$33.25 to \$6.25 in 2050. *Id.* ¶ 45. The Working Group does not explain why it relied on science it knows is outdated to create the Interim Values.

The Working Group has made still other policy choices that effectively ratchet up the Interim Values. For example, it fails to fairly account for agricultural benefits caused by increased carbon dioxide concentrations. Of the three IAMs, only the FUND Model includes some quantification of these benefits. Using the outdated Roe Baker ECS distribution, the FUND Model (at a 3% discount rate) has a greater than 10% chance to generate a negative social cost of carbon through 2040. Dayaratna Decl. ¶ 49. Changing the discount rate to 7% raises that probability significantly, and if we use an updated ECS distribution, there is a greater than 50% chance the

social cost of carbon is less than 69 cents through the year 2050. *Id.* ¶ 50–51. And there is good reason to believe that if the DICE Model was permitted to account for these benefits, then it would generate some negative social cost of carbons. *Id.* ¶ 52. Of course, a negative social cost of carbon suggests that additional carbon emissions are beneficial. *Id.* ¶ 54.

And the Working Group continues to rely on assumptions that have no grounding in reality. For example, four of the five EMF-22 scenarios (inputs for all three IAMs) “represent the modelers’ judgment of the most likely pathway *absent* mitigation policies to reduce greenhouse gas emissions, rather than the wider range of possible outcomes.” 2010 TSD at 16 (emphasis added). In addition to climate and emissions policies and rules in the last decade, President Biden announced “that America would aim to cut its greenhouse gas emissions 50 percent to 52 percent below 2005 levels by 2030.” Brad Plumer and Nadja Popovich, *The U.S. Has a New Climate Goal. How Does It Stack Up Globally?*, N.Y. TIMES (Apr. 22, 2021). Other nations pledged to cut emissions: the EU nations by 51%, Britain by 63%, Canada by 45%, Japan by 44%, and Australia by 28%. *Id.* All of these countries pledged to achieve zero net emissions by 2050. *Id.* And China, the world’s largest emitter of greenhouse gases, has pledged that it will aim to get down to zero net emissions by 2060. *Id.* And in addition to pledges, the United States and the EU nations have all been decreasing their emissions. *Id.* The Interim Values’s continued use of the four BAU scenarios cannot be justified, and have been criticized as “not just badly out of date, but reflecting a set of fictional worlds.” Roger Pielke Jr, *The Biden Administration Just Failed its First Science Integrity Test*, February 28, 2021 (available at <https://bit.ly/3eHQldY>).

As show above, any number of reasonable (and factually based) assumptions cause the IAMs (the sole inputs to the Interim Values) to swing from positive to negative, making them too

sensitive to be reliable. These all show that the Working Group’s policy choices, and not data or Congress’s policy choices, drive the social cost of greenhouse gases.

**c. Other legislative actors show the Interim Values exercise legislative power.**

State legislatures have also passed laws requiring the use of a social cost of carbon and specifying the discount rate, thus confirming that such actions are legislative in character. Washington requires its agencies to use the 2016 social cost of carbon at 2.5% for its utility resource planning. Wash. Rev. Code Ann. § 80.28.405 (2019). New Jersey specifically approved the social cost of carbon for use in its Zero Emissions Certificate program. [N.J. Stat. § 48:3-87.3\(b\)\(8\)](#) (2018). New York’s Climate Leadership and Community Protection Act requires the New York State Energy Research and Development Authority to “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 (McKinney 2019). And the Virginia General Assembly passed a statute requiring the State Corporation Committee to consider it for applications to construct new generating facilities. Va. Code. Ann. § 56-585.1(6) (2020). Adoption by state legislatures shows that the social cost of greenhouse gases are exercises of legislative, and not executive, power.

Even more recently, FERC has shown that deciding whether to use the social cost of carbon requires legislative power. On February 18, 2021, FERC reopened a Notice of Inquiry on its policy statement on the certification of new natural gas transportation facilities for public comment.<sup>7</sup> [86 Fed. Reg. 11268, 11269](#). It specifically requests comment on whether “the NGA, NEPA, or other federal statute authorize or mandate the use of Social Cost of Carbon (SCC) analysis by the

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<sup>7</sup> Plaintiff States took advantage of this process and commented. State of Missouri and 21 other states, Comment Letter on Certification of New Interstate Natural Gas Facilities, PL18-1-000, Submission ID 1207996 (Apr. 26, 2021), <https://ferconline.ferc.gov/SubmissionDetail.aspx?ID=1207996>.

Commission in its consideration of certificate applications? If so, how does the statute direct or authorize the Commission to use SCC?” *Id.* at 11272 (question C6). It further asks for comment on how the SCC could be “used to determine whether a proposed project is required by public convenience and necessity,” *id.*, because that is the statutory language that Congress requires FERC to meet when certifying a new pipeline. [15 U.S.C. § 717f](#). This shows that before Executive Order 13990 mandated the use of its Interim Values, agencies properly understood that any use of the social cost of carbon requires evaluating whether Congress had delegated that authority to an agency. This is even more evidence that the social cost of carbon is an exercise of legislative power that the President cannot exercise unilaterally.

**3. Justice Jackson’s tripartite framework also confirms that the Executive exceeded his power.**

The Executive Order is subject to the “severe tests” under Justice Jackson’s third grouping where executive action can only be sustained by showing it is “within his domain and beyond control by Congress.” *Youngstown*, [343 U.S. at 640](#). Justice Jackson’s now familiar framework views executive power at its maximum when Congress authorizes such action, in a “zone of twilight” where the Executive and Congress may have concurrent authority, and “at its lowest ebb” when the Executive “can rely only upon his own constitutional powers minus any constitutional powers of Congress over the matter.” *Id.* at 635–638.

EO 13990 falls within the last category because Congress has already told agencies when and what costs to consider in many statutes, and it has not authorized consideration of the social costs of greenhouse gases. Under the Clean Air Act (as amended), EPA regulates new sources emitting 75,000 tons of greenhouse gases with the “best available control technology for each pollutant” standard, [42 U.S.C. § 7475\(a\)\(3\)](#), as determined by “the permitting authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs,

determines is achievable for such facility” and other available processes. [42 U.S.C. § 7479\(3\)](#). The Clean Water Act requires consideration of cost for the “best practicable control technology currently available,” “best conventional pollutant control technology,” “best available technology economically achievable,” and “best available demonstrated control technology” standards. *Entergy Corp. v. Riverkeeper, Inc.*, [556 U.S. 208, 219–21](#) (2009); *id.* at 227 (collecting provisions). The Department of Energy also must consider costs when promulgating “[a]ny new or amended energy conservation standard . . . designed to achieve the maximum improvement in energy efficiency . . . which the Secretary determines is technologically feasible and economically justified.” [42 U.S.C. § 6295\(a\)\(2\)\(A\)](#); *id.* (B)(i) (defining economically justified).

Congress does not allow agencies to invent new costs (or benefits) that they choose, as agencies can only “exercise discretion within defined statutory limits.” *Massachusetts*, [549 U.S. at 533](#). And generally, an “agency rule would be arbitrary and capricious if the agency has relied on factors which Congress has not intended it to consider” and, *inter alia*, “entirely failed to consider an important aspect of the problem.” *Motor Vehicle Mfrs. Ass’n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*, [463 U.S. 29, 43](#) (1983). These Congressional commands show that the Executive must justify his actions on his constitutional powers alone—a burden he cannot meet.

#### **4. The Executive Order and Interim Values harm Plaintiff States.**

As discussed in detail below, the Executive Order and the Interim Values inflict at least five discrete harms on the Plaintiff States. *See infra*, Part II.

#### **B. Plaintiffs Are Likely to Succeed on Their Claim that the Working Group Violated the APA’s Procedural Requirements When It Promulgated the Interim Values.**

The Plaintiff States are also likely to succeed on their claim that the Working Group violated the APA when it promulgated the Interim Values. Here, it is indisputable that Working Group failed to follow the procedures Congress requires agencies to use when promulgating the

Interim Values. *See* [5 U.S.C. § 553](#). The Working Group provided no public notice or opportunity for comment before publishing the Interim Values.

The Working Group’s action is subject to the APA’s procedural requirements because (1) the Working Group is an “agency” under the APA; (2) the Interim Values are a final agency action; and (3) the Interim Values are a substantive rule, not a mere “interpretative rule” under § 553(b)(A). The Working Group is an agency because it operates independently, exercises the authority of the U.S. government, and binds the actions of other agencies. *See Soucie v. David*, [448 F.2d 1067, 1073](#) (D.C. Cir. 1971). The Interim Values are final agency actions as they are the last word on the values, the Working Group does not seek comments or revisions to the rule, and they have direct legal consequences. *U.S. Army Corps of Eng’rs v. Hawkes Co.*, [136 S. Ct. 1807, 1814](#) (2016). And the Interim Values are not an “interpretative rule” because rules assigning numerical values do not merely “interpret” any underlying regulation. *Hoctor*, [82 F.3d at 170](#).

**1. The Working Group is an “agency” because it operates with the sanction of the United States Government.**

An “agency” is “each authority of the Government of the United States.” [5 U.S.C. § 551\(1\)](#). *See also* [5 U.S.C. § 701\(b\)](#) (mirroring the definition). “For purposes of the APA, an entity comes within the definition [of “agency”] if it has the authority to act with the sanction of government.” *Indep. Bankers Ass’n of Am. v. Nat’l Credit Union Admin.*, [936 F. Supp. 605, 614](#) (W.D. Wis. 1996); *see Fruco Constr. Co. v. McClelland*, [192 F.2d 241, 247](#) (8th Cir. 1951). “[T]he APA . . . confers agency status on any administrative unit with substantial independent authority in the exercise of specific functions,” *Soucie v. David*, [448 F.2d 1067, 1073](#) (D.C. Cir. 1971), *i.e.*, it can act on its own and with the blessing of the federal government. *Cf. Hunter v. Underwood*, [362 F.3d 468, 477](#) (8th Cir. 2004) (“The APA does not grant federal courts jurisdiction to review actions of state or municipal agencies.”).

Looking to its “charter document[ ],” *Citizens for Responsibility & Ethics in Washington v. Office of Admin. (CREW)*, [566 F.3d 219, 244](#) (D.C. Cir. 2009), the court should determine whether the Working Group has the “authority to make final and binding decisions” as well as “investigative power”—“two factors that are central to whether an entity wields ‘substantial independent authority’ . . . .” *Elec. Privacy Info. Ctr. v. Nat’l Sec. Comm’n on Artificial Intelligence*, [466 F. Supp. 3d 100, 109](#) (D.D.C. 2020). Section 5 of Executive Order 13990 is the charter document that established the Working Group and vested it with putative authority to publish the Interim Values, publish the final values, and direct it on matters to advise the President. § 5(b)(ii). The order does not mince words: all federal “agencies *shall use* [the Interim Values] when monetizing the value of changes in greenhouse gas emissions resulting from regulations and other relevant agency actions.” [Doc. 6-1](#), § 5(b)(ii)(A). “Unlike the word ‘may,’ which implies discretion, the word ‘shall’ usually connotes a requirement.” *Kingdomware Techs, Inc. v. United States*, [136 S. Ct. 1969, 1977](#) (2016). Section 5 also vests the Working Group with sole authority to publish the values. *See* EO 13990 § 5(b)(ii) (“The Working Group shall” publish the social cost of greenhouse gas). Executive Order 13990 sets a methodology for the Working Group to follow, but the Working Group is only to “consider,” “solicit,” “engage,” and to “seek” input. § 5(b)(iii) This all points to a standalone entity that can bind other agencies.

The President also gave the Working Group an investigative role. He ordered it to review “areas of decision-making, budgeting, and procurement . . . where the SCC, SCN, and SCM should be applied” and provide recommendations to the President. EO 13990, § 5(b)(ii)(C)–(E), (b)(iii). Even after the final values are published, the Working Group is tasked with providing recommendations on a process for reviewing the social costs of greenhouse gases and how “to revise methodologies for calculating the SCC, SCN, and SCM.” §§ 5(b)(ii)(D), (E). As the social

costs have been implemented through various agencies, the group naturally performs those functions through review, oversight, and investigation.

The Executive Order shows that the Working Group has as much, if not more, independent authority than similar entities that courts have found to be agencies. *See, e.g., Pac. Legal Foundation v. Council on Env'tl. Quality*, [636 F.2d 1259, 1264](#) (D.C. Cir. 1980) (being “independently authorized to evaluate federal programs” sufficient to confer agency status on the CEQ); *Nw. Airlines v. Jackson*, [185 F.2d 74, 81–82](#) (8th Cir. 1950) (finding National Railway Labor Panel an agency under Portal-to-Portal Act due Chairman’s ability to issue rulings on whether wage adjustments were consistent with stabilization programs).<sup>8</sup>

The Working Group is also significantly more independent than similar entities. The Presidential Advisory Commission on Election Integrity created by President Trump to study federal election voting processes failed *Soucie*’s independence test because it was “purely advisory in nature” and had “[n]o independent authority” and did not “exercise[] independent authority that is unrelated to its advisory mission.” *Elec. Privacy Info. Ctr. v. Presidential Advisory Comm’n on Election Integrity*, [266 F. Supp. 3d 297, 315](#) (D.D.C. 2017) (*EPIC*); *United to Protect Democracy v. Presidential Advisory Comm’n on Election Integrity*, [288 F. Supp. 3d 99, 115](#) (D.D.C. 2017). President Reagan’s Task Force on Regulatory Relief also was not an agency subject to FOIA “because it lacked substantial authority independent of the President ‘to direct executive branch officials.’” *CREW*, [566 F.3d at 233](#) (quoting *Meyer v. Bush*, [981 F.2d 1288](#),

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<sup>8</sup> Decisions interpreting section 9 of the Portal-to-Portal Act rely on the APA’s agency definition. *See, e.g., 29 C.F.R. § 790.19(b)* (using APA definition to find agency means “persons vested . . . with real power to act”); *Rogers Cartage Co. v. Reynolds*, [166 F.2d 317, 320 n.1](#) (6th Cir. 1948) (using APA agency definition); Jared P. Cole & Daniel T. Shedd, Cong. Research Serv., R43562, *Administrative Law Primer: Statutory Definitions of “Agency” and Characteristics of Agency Independence*, 9 & n.65 (2014) (discussing APA agency definition).

1297 (D.C. Cir. 1993)). Instead, the Task Force’s members were functionally like “senior White House staffers.” *Meyer*, 981 F.3d at 1297.

The Working Group stands apart from these advisory boards. It acts independently of other agencies and it has the power to bind them. The Working Group has no expiration date, and the Executive Order clearly envisions that it will continue to promulgate rules and revise the social costs of greenhouse gases after the final values. Unlike the advisory group in *EPIC*, it will not “disband shortly after it delivers a report to the President.” 266 F. Supp. 3d at 315 (D.D.C.). Nor is it limited to “administrative support like arranging travel for the members of the Commission, and [] no other federal agencies are cooperating with the Commission.” *Id.* (quotations omitted). Similarly, although there is no congressionally “delegated regulatory authority to supervise agencies,” *Meyer*, 981 F.2d at 1293, the Executive Order and the TSD show that the Working Group is not merely “passing on the President’s wishes,” *id.* at 1293–94. These all point to an independent Working Group, exercising the authority of the “United States Government,” Doc. 6-2, at 2 (2021 TSD, at 0), to make policy for all agencies.

**2. The Interim Values constitute final agency action and Plaintiffs lack an adequate remedy for their harm.**

The Interim Values qualify as “final agency action for which there is no other adequate remedy in a court . . . .” 5 U.S.C. § 704. Here, the Interim Values represent final agency action, and Plaintiffs lack another adequate remedy to address the harm that they will cause.

To be final, an agency’s action must meet two requirements: “First, [it] must mark the consummation of the agency’s decisionmaking process . . . [a]nd second, the action must be one by which rights or obligations have been determined, or from which legal consequences will flow.” *Bennet v. Spear*, 520 U.S. 154, 177–78 (1997) (internal quotations omitted). The first requirement is plainly met here. The Interim Values represent the Working Group’s “last word,” *Whitman v.*

*American Trucking Associations*, [531 U.S. 457, 478](#) (2001), on what values agencies “shall use” in their regulatory analyses through January 2022. EO 13990 § 5(b)(ii)(A). The Working Group explains that while it continues to work, “it *is* setting interim estimates.” TSD at 3 (emphasis added). As the Working Group has decided that these are *the* Interim Values, there is nothing “tentative or interlocutory” about the choice. *Sisseton-Wahpeton Oyate of Lake Traverse Reservation v. U.S. Corps of Eng’rs*, [888 F.3d 906, 915](#) (8th Cir. 2018).

How the agency labels the action is not determinative, *Whitman*, [531 U.S. at 479](#), and here it is hardly probative. The Executive Order and the Working Group label the social cost of greenhouse gases as the “Interim Estimates,” but it is only interim in that the Working Group should publish another set of numbers “by no later than January 2022.” EO 13990 § 5(b)(ii)(B). It is more accurate to call the Interim Values the 2021 values, as even the “final” values will be periodically revised—every social cost of carbon to date was an “interim” as these values have been continually updated since 2009. *E.g.*, 2016 TSD. Even though the Working Group plans on updating the “terms of service” does not mean the Interim Estimates are not final or binding. Periodic revision of regulations is “a common characteristic of agency action, and does not make an otherwise definitive decision nonfinal.” *U.S. Army Corps of Eng’rs v. Hawkes Co.*, [136 S. Ct. 1807, 1814](#) (2016). Finality arises from the direct and appreciable legal consequence that these values will govern other final, regulatory actions. *Id.* Thus, “despite the potential for a different permanent decision,” the Interim Values are final since it is not “subject to further consideration by the agency.” *Nat. Res. Def. Council v. Wheeler*, [955 F.3d 68, 78](#) (D.C. Cir. 2020).

Finally, Plaintiffs have no other adequate remedy. Outside of judicial review under the APA now, Plaintiffs could only challenge the Interim Values when an agency uses them. As Executive Order 13990 mandates that agencies use the Interim Values, it is not clear that Plaintiff

States could challenge the Interim Values by challenging subsequent actions. *Compare Dep't of Homeland Sec. v. Regents of the Univ. of Cal.*, [140 S. Ct. 1891, 1910](#) (2020) (reserving the question of whether an attack on action by the Secretary of Homeland Security was the “proper vehicle[] for attacking” the mandate of another agency), *with E. Bay Sanctuary Covenant v. Trump*, [932 F.3d 742](#), (9th Cir. 2018) (permitting review of an Executive Order that is “incorporated . . . by reference into the” agency rule). But it has never been an adequate remedy for an agency wrong to wait for *another* agency to act in order to seek redress. *See Sackett v. E.P.A.*, [566 U.S. 120, 127](#) (2012) (“The remedy for denial of action that might be sought from one agency does not ordinarily provide an ‘adequate remedy’ for action already taken by another agency.”).

The Interim Values will justify imposing hundreds of millions, if not billions, of dollars in regulatory and wallet costs on Plaintiff States. The additional work required to implement the Interim Values in various cooperative federalism programs cannot be avoided by challenging a specific permitting decision or when a federal partner rejects an environmental assessment. And the extreme penalty that might result in the EPA rejecting a SIP and wrongfully supplanting Plaintiff States’ prerogative in regulating the environment is too costly. In short, the alternatives to judicial review impose “prohibitive costs, risk, and delay.” *Hawkes Co., Inc. v. U.S. Army Corps of Engineers*, [782 F.3d 994, 1001](#) (8th Cir. 2015), *aff'd*, [136 S. Ct. 1807](#) (2016). Thus, “a properly pragmatic analysis of . . . final agency action principles compels the conclusions that [the Interim Values are] subject to immediate judicial review. *Id.* at 1002.

Finally, even if the Interim Values were an interim rule, it is not exempt from APA’s notice-and-comment requirements. An agency must find good cause that the “notice and public procedure thereon are impracticable, unnecessary, or contrary to the public interest.” *Id.* § 553(b)(3)(B). The

TSD fails to make the necessary findings, and therefore the APA has been violated, and Plaintiffs have shown a likelihood of success on Count Three. *See* [5 U.S.C. § 706\(2\)\(D\)](#).

**3. The Interim Values are a substantive rule that required the Working Group to follow the APA’s procedural rules.**

The Interim Values are a substantive, legislative rule because it is a final agency action imposing new rights or duties. *Iowa League of Cities v. EPA*, [711 F.3d 844, 873](#) (8th Cir. 2013); *see* [5 U.S.C. § 551\(4\)](#). And notice-and-comment was required because the Interim Values are legislative rules. “Expanding the footprint of a regulation by imposing new requirements . . . is the hallmark of legislative rules.” *Id.* “Interpretive rules,” by contrast, “are issued by an agency to advise the public of the agency’s construction of the statutes and rules which it administers.” *Chrysler Corp. v. Brown*, [441 U.S. 281, 302](#) n.31 (1979) (quotation omitted).<sup>9</sup>

A telltale indicator of whether a rule is a legislative rule is when an agency promulgates *numerical* values. *See, e.g., United States v. Riccardi*, [989 F.3d 476, 487](#) (6th Cir. 2021) (“Precedent . . . recognizes that a specific numeric amount . . . generally will not qualify as a mere ‘interpretation’ of general nonnumeric language.”); *Catholic Health Initiatives v. Sebelius*, [617 F.3d 490, 495](#) (D.C. Cir. 2010) (“Judge Friendly wrote that when an agency wants to state a principle ‘in numerical terms,’ terms that cannot be derived from a particular record, the agency is legislating and should act through rulemaking.”); *Warshauer v. Solis*, [577 F.3d 1330, 1340](#) (11th Cir. 2009) (noting that “ a rule that turns on a number is likely legislative”); *cf. United States v. Bert*, [292 F.3d 649, 652](#) (9th Cir. 2002)(calling “an arbitrary quantitative determination” “a quintessentially legislative function”).

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<sup>9</sup> There are also general statements of policy, which “advise the public prospectively of the manner in which the agency proposes to exercise a discretionary power.” *Chrysler Corp.*, [441 U.S. at 302](#) n.31. As the Interim Values presently bind federal agencies, they are not prospective.

In *Hector*, the Seventh Circuit analyzed whether a USDA rule—that ligers and other dangerous cats be housed inside a perimeter fence “at least eight feet high”—was an interpretive rule. *Id.* at 168–69. The court reasoned that it could be an interpretive rule “[o]nly if it can be derived from the regulation” alleged to be interpreted. *Id.* at 170. So although a number may be “consistent with the statute or regulation under which the rule [is] promulgated [it is] not derived from it, because [the number] represent[s] an arbitrary choice among methods of implementation.” *Id.* There is, in short, “no way to reason” from a generic standard to a particular number; “no process of cloistered, appellate-court type reasoning by which” an agency “could have exogitated” a specific number from a general statutory or regulatory requirement. *Id.* For example, it is impossible to deduce a constant percentage, like 50% or 120%, of a money judgment that would always be a reasonable attorney’s fee under [42 U.S.C. § 1988\(b\)](#).

The Interim Values cannot be an interpretative rule as there is no statutory authority, or any other authority, calling for the Interim Values. The TSD never purports to interpret *any* authority (statutory, regulatory, or otherwise), and Executive Order 13990 similarly has no statutory basis. Moreover, the Interim Values rests on numerous value-laden assumptions and policy judgments. *Infra* Part I.B. These include choices that “raise[] highly contested and exceedingly difficult questions of science, economics, philosophy, and law.” 2010 TSD at 17.

Although it is possible for an interpretive rule to have a numerical component, “[e]specially in scientific and other technical areas,” *Hector*, [82 F.3d at 171](#), this is not one of those cases. The Working Group did more than create a “rule [that] translates a *general* norm into a number,” *id.* (emphasis added), it derived a rule after making numerous ethical, philosophical, scientific, and legal assumptions. And so it made “an arbitrary quantitative determination,” which “is a quintessentially legislative function . . . .” *Bert*, [292 F.3d at 652](#).

As a result, the Working Group could only promulgate the rule by following the APA's procedural steps. *See, e.g., Chrysler Corp.*, [441 U.S. at 303](#). Since it does, the rule must be vacated. *E.g., Iowa League of Cities*, [711 F.3d at 875](#).

## **II. Absent a Preliminary Injunction, the Plaintiff States Will Suffer Irreparable Injury.**

The second *Dataphase* factor is “the threat of irreparable harm to the movant in the absence of relief.” *Dataphase*, [640 F.2d at 114](#). Here, the Working Group's illegal action in promulgating the Interim Values inflicts at least five forms of irreparable injury on the Plaintiff States that can only be remedied by injunctive relief.

### **A. The Working Group unlawfully deprived the Plaintiff States of their ability to participate in notice-and-comment rulemaking regarding the adoption of the Interim Values.**

By failing to comply with the APA's notice-and-comment requirement, the Working Group deprived Plaintiff States of their procedural right to participate in notice-and-comment rulemaking regarding the Interim Values to protect their concrete interests. *See Lujan v. Defenders of Wildlife*, [504 U.S. 555, 572](#) & n.7 (1992). In doing so, they inflicted an injury on Plaintiff States that can only be remediated by an injunction invalidating the Interim Values and ordering the Working Group to comply with the APA's procedural requirements.

The Executive Order, in section 5(b)(iii), provides that “[i]n carrying out its activities, the Working Group shall ... solicit public comment” and “engage with the public and stakeholders.” [Doc. 6-1 at 6](#). The APA also required the Working Group to do so. *Supra* Part I.B. After EO 13990, Plaintiff Missouri diligently monitored both the Federal Register and the White House's website for a notice of public comment for the Interim Values. Johnson Decl. ¶¶ 2–3. But the Working Group never posted a notice to let the public comment before promulgating the Interim Values. Johnson Decl. ¶¶ 5–6. Had the Working Group done so, Plaintiff States would have taken

advantage of the opportunity to raise their concerns with the Working Group. Indeed, Missouri and other Plaintiff States recently did comment on a FERC Notice of Inquiry. State of Missouri and 21 other states, Comment Letter on Certification of New Interstate Natural Gas Facilities, FERC PL18-1-000, Submission ID 1207996 (Apr. 26, 2021), available at <https://ferconline.ferc.gov/SubmissionDetail.aspx?ID=1207996> (Johnson Decl. Ex. 1).

Plaintiff States have many “concrete interests” in exercising this procedural right to participate in the Working Group’s rulemaking process, and thus the deprivation of the right inflicts injury of constitutional magnitude on them, regardless of whether the Working Group would have adopted their concerns. *Lujan*, 504 U.S. at 572 n.7. The Plaintiff States are critical stakeholders in the manifold questions of energy policy addressed by the Working Group’s adoption of sweeping “Interim Values.” The Interim Values affect the Plaintiff States’ sovereign interests, especially in their joint administration of cooperative-federalism programs under the supervision of federal agencies, and the promulgation of binding Interim Values directly impacts their exercise of this sovereign function. *See infra* Part II.C. Plaintiff States are major consumers of energy, and major consumers of numerous products whose costs will be affected by the Interim Values. *See infra* Part II.D. And Plaintiff States suffer a unique injury from the violation of the separation of powers, because the Constitution’s separation of powers principle was designed to preserve the authority of the States in our system of federalism. *See infra* Part II.E.

**B. The Working Group’s promulgation of the Interim Values interferes with the Plaintiff States’ ability to participate meaningfully in other federal agency proceedings.**

Further, the Working Group’s promulgation of Interim Values that other federal agencies “shall” use in regulatory actions, Doc. 6-1, at 5, § 5(b)(ii)(A), deprives Plaintiff States from meaningfully participating in federal agency proceedings that address the “social costs” of carbon

and other gases. If the Interim Values are allowed to stand, debate and thoughtful consideration of these policy-laden choices will be stifled and federal decision-making will be the poorer for it. Future proceedings will be rendered essentially meaningless, because Section 5(b)(ii)(A) mandates that federal agencies “shall” use the Working Group’s numbers. [Doc. 6-1, at 5](#). Faced with a choice between the States’ comments and the President’s direct command, federal agencies like FERC will inevitably follow the President’s directive.

If past practice under the Obama Administration is any indication, it is more important than ever to require the Working Group to go through notice and comment with judicial review available. In 2013, the Working Group published a notice for the first time requesting comments (but not under the APA) on the most recent version of the TSD. *Social Cost of Carbon: Response to Comments* at 1 (July 2, 2015).<sup>10</sup> Yet, after receiving comments on the IAMs, the heart of the SCC, “OMB clarified that it was not requesting comments on the three peer reviewed IAMs themselves.” *Id.* at 3. As a result, the former Working Group insulated the SCC from review.

The Executive Order similarly shields the IAMs from critique in future rule makings. The upshot is that the Executive Order and the Interim Values do not just place a thumb on the scale for future agency actions—they fix the scale entirely in favor of SCGG analysis. This renders Plaintiff States’ ability to comment and have their views considered in future proceeding effectively meaningless. This is contrary to sound decision-making, and the developers of FUND cautioned that “[n]ot-understood models are irrelevant, half-understood models treacherous, and mis-understood models dangerous.”<sup>11</sup>

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<sup>10</sup> Available at <https://obamawhitehouse.archives.gov/sites/default/files/omb/inforeg/scc-response-to-comments-final-july-2015.pdf>.

<sup>11</sup> Available at <http://www.fund-model.org/>.

**C. The Interim Values Directly Impact Plaintiff States' Sovereign Interests in Administering Cooperative-Federalism Programs in a Constitutional Manner.**

Plaintiff States also experience a direct sovereign injury through the many programs they administered through cooperative federalism. The Executive Order and the Interim Values effectively mandate the States to employ the SCGG metric in administering numerous cooperative-federalism programs under the supervision of federal agencies. Thus, they directly require the States to cooperate and participate in regulatory actions that their chief legal officers have deemed to be unconstitutional and violate the separation of powers.

In environmental regulation, energy production, infrastructure, and many other programs, the States play a front-line role as enforcers of federal programs, under the supervision of federal agencies. For example, under the Clean Air Act, Congress has declared that air pollution and its prevention for stationary sources are “the primary responsibility of States and local governments.” [42 U.S.C. § 7401](#). States are the primary permitting authorities, and they essentially guarantee in their state implementation plans (SIPs) that they have the enforcement capability to ensure federal law and regulations are followed. *EPA v. EME Homer City Generation, L.P.*, [572 U.S. 489, 498](#) (2014). If EPA finds that a state’s SIP is inadequate, EPA must create a compliant federal implementation plan within two years. *Id.* Thus, a State can lose this primary authority for failing to agree to enforce or being incapable of enforcing federal regulations.

Thus, the Interim Values have a direct impact on Plaintiff States’ permitting new stationary sources under the Clean Air Act’s Prevention of Significant Deterioration program—that applies to essentially all stationary sources. *Util. Air Regul. Grp. v. E.P.A.*, [573 U.S. 302, 308](#) (2014). If a source is regulated for a National Ambient Air Quality standard (NAAQs) pollutant and emits more than 75,000 tons of a greenhouse gas, they are subject to the Clean Air’s best achievable control technology standard for their permit. *Util. Air Regul. Grp. v. E.P.A.*, [573 U.S. at 313](#).

Missouri, alone, has issued two permits of this type in the past three years.<sup>12</sup> EPA has estimated that a PSD permit requires about 43 hours to process for commercial or residential sources and up to 430 hours for industrial sources. *See* Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule, 75 Fed. Reg. 31514, at 31536 (June 3, 2010). Adding greenhouse gases to existing permits required 9 more hours to process each permit. *Id.* Similarly, requiring an SCGG analysis imposes direct practical burdens on States as cooperative administrators of this federal program, in addition to the injury of requiring States to engage in actions they deem unconstitutional.

These injuries are not limited to the Clean Air Act, as they will also occur when state agencies collaborate on major federal actions under the National Environmental Policy Act (NEPA) and now must add the Interim Values to their analyses. NEPA requires all federal agencies to include a “detailed statement” on the environmental impacts of agency action “in every recommendation or report on proposals for legislation and other major Federal actions significantly affecting the quality of the human environment.” 42 U.S.C. § 4332(C). Under EPA regulations, when an agency discusses cost and benefits to proposed federal action, they must discuss the relationship between quantified and unquantified environmental impacts, values, and amenities. 40 C.F.R. § 1502.22. And state agencies help prepare these statements and underlying determinations, provided that the federal official approves. 42 U.S.C. § 4332(D).

DOT regulations require “involv[ing] the public, State, Tribal, and local governments, relevant agencies, and any applicants, to the extent practicable in preparing environmental

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<sup>12</sup> Owens Corning Insulation Systems, LLC, New Source Review Permit Amendment (Apr. 19, 2018) available at <https://dnr.mo.gov/env/apcp/permits/docs/owens-corn-joplin2018cpe.pdf>; and Nucor Steel–Sedalia LLC, New Source Review Permit (Sept. 12, 2018) available at <https://dnr.mo.gov/env/apcp/permits/docs/nucor-sedalia2018cp.pdf>.

assessments.” [40 C.F.R. § 1501.5\(e\)](#). In doing so, state agencies act as “joint lead agencies to prepare an environmental impact statement or environmental assessment.” [40 C.F.R. §1501.7\(b\)](#). As federal agencies must use the Interim Values that quantify the “social benefits of reducing greenhouse gas emissions when conducting cost-benefit analyses of regulatory and other actions,” EO 13990 § 5(a), state agencies will be compelled to use them, too.

**D. Absent Injunctive Relief, the Interim Values Will Injure the States’ Proprietary Interests by Inflicting Non-Recoverable Economic Costs.**

In addition to the “regulatory” harms and burdens that the Interim Values cause, they will also harm Plaintiff States’ proprietary interests. Plaintiff States are major consumers of energy and many other regulated goods whose costs will necessarily increase under the increased regulation mandated by the Executive Order and Interim Values. Unless the use of the Interim Values is enjoined, these costs will be passed on and constitute irreparably injure Plaintiffs.

Missouri can reasonably be expected to suffer current and future economic harms. It receives 73% of its electricity from coal-fired power plants. U.S. Energy Info. Admin., *Missouri: State Profile and Energy Estimates* (updated May 21, 2020).<sup>13</sup> In 2019, Missouri produced 6,800 barrels of crude oil per month. *Id.* In addition to its developed resources, it has undeveloped resourced in the tar sands of western Missouri and the shale formations in the northern and southern parts of the state. *Id.* Its infrastructure and central location are key to moving raw materials and finished products by rail, river, highway, and air across the country. *Id.* Missouri is a top-ten producer of corn, and propane is used to dry the corn crop after harvest. *Id.*

Alaska is an energy rich state and “revenues from Alaska’s oil and gas industry fund most of the state government.” U.S. Energy Info. Admin., *Alaska: State Profile and Energy Estimates*

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<sup>13</sup> Available at <https://www.eia.gov/state/analysis.php?sid=MO>.

(updated Jan. 21, 2021).<sup>14</sup> The state was the sixth largest oil producing state in 2019. *Id.* Its pipelines deliver about 490,000 barrels of crude oil to refineries in Washington and California each day. *Id.* Alaska ranks 11th in natural gas reserves and 14th in recoverable coal reserves. *Id.* Fossil fuels comprise nearly 70% of its electricity generation capacity, including 20% from natural gas. *Id.* “Alaska is the largest jet fuel-consuming state on a per capita basis.” *Id.* And a third of its residents use fuel oil, kerosene or propane for heating. *Id.*

Arizona generates most of its electricity from natural gas. U.S. Energy Info. Admin. *Arizona: State Profile and Energy Estimates* (updated Mar. 18, 2021).<sup>15</sup> Coal fuels about 12% of its electricity generation. Arizona has significant coal reserves, even though it is used now. *Id.* Arizona’s transportation sector uses 86% of the petroleum consumed yearly. *Id.*

Arkansas generates most of its electricity from natural gas and coal. U.S. Energy Info. Admin., *Arkansas: State Profile and Energy Estimates* (updated Apr. 15, 2021).<sup>16</sup> It produces roughly 83,000 barrels of crude oil each day, and the transportation sector uses about 80% of all petroleum consumed in Arkansas. *Id.*

Indiana is the nation’s eighth largest coal producer mining 5% of the nation’s coal production in 2018. U.S. Energy Info. Admin., *Indiana: State Profile and Energy Estimates* (updated June 18, 2020).<sup>17</sup> But its production is not enough to cover the 44 million tons of coal consumed in 2018. It ranks 11th nationally in energy use due to its weather, and its largest energy consumer is its industrial sector that include chemical, petroleum, and steelmaking industries. *Id.* Indiana generates 59% of its energy by coal fired plants. *Id.* Indiana’s industrial activities include the energy-intensive chemical, petroleum, and steelmaking industries. *Id.*

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<sup>14</sup> Available at <https://www.eia.gov/state/analysis.php?sid=AK>.

<sup>15</sup> Available at <https://www.eia.gov/state/analysis.php?sid=AZ>.

<sup>16</sup> Available at <https://www.eia.gov/state/analysis.php?sid=AR>.

<sup>17</sup> Available at <https://www.eia.gov/state/analysis.php?sid=IN>.

Kansas generates about 33% of its electricity from coal. U.S. Energy Info. Admin., *Kansas: State Profile and Energy Estimates* (updated Apr. 16, 2020).<sup>18</sup> It refines about 394,000 barrels of crude oil daily, and its transportation sector uses 70% of that output. *Id.* Kansas also relies on natural gas interstate pipelines. *Id.* Six in ten households use natural gas for heat, and half of all natural gas production goes to agriculture and manufacturing. *Id.*

Montana holds about 30% of the nation's recoverable coal reserves, in addition to its crude oil and natural gas reserves. U.S. Energy Info. Admin., *Montana: State Profile and Energy Estimates* (updated Feb. 18, 2021).<sup>19</sup> The state generates about 40 % of its electricity from coal fired power plants and exports half of its total electricity generation to other states. *Id.* Montana refines about 213,000 barrels of crude oil each day, and its industrial sector uses about 25% of the state's petroleum consumption. *Id.*

Nebraska receives more than half of its electricity from coal-fired power plants. U.S. Energy Info. Admin., *Nebraska: State Profile and Energy Estimates* (updated Apr. 16, 2020).<sup>20</sup> Nebraska has no oil refineries and small natural gas reserves. *Id.* Interstate pipelines meet its demand for oil and natural gas. Nearly 60% of Nebraska families rely on natural gas for heating their homes. *Id.* The state's agriculture sector, the nation's third largest corn producers, uses natural gas to run irrigation pumps for its fields. *Id.*

Ohio is in the top ten states for total energy consumption. U.S. Energy Info. Admin., *Ohio: State Profile and Energy Estimates* (updated Apr. 16, 2020).<sup>21</sup> It boasts the fourth largest interstate highway system, and its industrial sector (including chemicals; motor vehicles and transportation equipment; food, beverage, and tobacco products; fabricated metals; and machinery) account 33%

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<sup>18</sup> Available at <https://www.eia.gov/state/analysis.php?sid=KS>.

<sup>19</sup> Available at <https://www.eia.gov/state/analysis.php?sid=MT>.

<sup>20</sup> Available at <https://www.eia.gov/state/analysis.php?sid=NE>.

<sup>21</sup> Available at <https://www.eia.gov/state/analysis.php?sid=OH>

of its energy use. *Id.* Ohio produces 6.4% of the nation’s natural gas, and its electric energy sector uses one-third of all natural gas delivered to consumers in the state. *Id.* Ohio is the tenth largest producer of bituminous coal, and 90% of its coal consumption is used for electric power generation. *Id.* “Ohio is the largest oil-producing state east of the Mississippi River, and its oil output reached a record high of 28 million barrels in 2019.” *Id.*

Oklahoma has 7% of the nation’s proved natural gas reserves and 5% of the nation’s proved crude oil reserves. U.S. Energy Info. Admin., *Oklahoma: State Profile and Energy Estimates* (updated Apr. 16, 2020).<sup>22</sup> The state is the fourth largest producer of crude oil and refines more than half a million barrels of crude oil each day. *Id.* Oklahoma produces three times more natural gas than it consumes, and it is shipped via interstate pipelines to other states. *Id.* Natural gas fuels the lion’s share of electricity generation in the state, and half of Oklahoma’s households use natural gas for heat. *Id.*

South Carolina relies on coal for 14% and natural gas for 25% of its electricity generation. U.S. Energy Info. Admin., *South Carolina: State Profile and Energy Estimates* (updated Nov. 19, 2020).<sup>23</sup> It has no significant fossil fuel reserves and imports fuel through interstate pipelines. South Carolina’s industrial sector uses a third of its total energy consumption to help manufacture automobiles, chemicals, fabricated metals, primary metals, paper and wood products, plastics, electrical equipment, and textiles. *Id.* Its tourism industry during the hot summer months contributes to the residential sector using 40% of the state’s total electricity retail sales. *Id.*

Tennessee relies on coal for 23% of its electricity generation, and its largest power plant is a coal fired facility. U.S. Energy Info. Admin., *Tennessee: State Profile and Energy Estimates*

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<sup>22</sup> Available at <https://www.eia.gov/state/analysis.php?sid=OK>.

<sup>23</sup> Available at <https://www.eia.gov/state/analysis.php?sid=SC>.

(updated June 18, 2020).<sup>24</sup> “Memphis is one of the world’s busiest hubs for barge, air, truck, and rail cargo traffic.” *Id.* “More than four-fifths of Tennessee’s petroleum consumption is in its transportation sector, and nearly three out of five petroleum barrels consumed in the state is motor gasoline.” *Id.* The state has no significant reserves of natural gas, and a third of all Tennessee families rely on interstate pipelines to heat their home. *Id.*

Utah is a net exporter of energy sending its surplus to neighboring states. U.S. Energy Info. Admin., *Utah: State Profile and Energy Estimates* (updated Mar. 18, 2021).<sup>25</sup> “[C]oal fueled 61% of Utah’s total electricity net generation, and natural gas accounted for 25%.” *Id.* Utah has three of the largest U.S. natural gas fields, but it still consumes more than it produces. *Id.* More than 8 in 10 households use natural gas as their primary heating fuel and consume the largest share of Utah’s natural gas. *Id.* Also, “[r]oyalties from energy development on extensive state trust lands typically are the largest source of income for Utah’s public-school trust fund.” *Id.*

The Executive Order mandate that the Interim Values shall be used means it will receive even more wide spread use than the formerly voluntary social cost of carbon. *See* Howard & Schwartz, 42:S COLUM. J. OF ENV’T L LAW 9–20 (noting “eighty-three separate regulatory or planning proceedings conducted by six different federal agencies [that] have used the SCC or SCM in their analyses”). These regulations have applied to a host of items that Plaintiff States and their constituent agencies regularly purchase, including appliances, vehicles, and environmental systems. *See* [Doc. 6-3](#). A former OIRA Administrator has foreshadowed that “the social cost of carbon” is “a figure that helps determine the stringency of federal regulations governing cars, trucks, power plants, refrigerators, microwave ovens, washing machines, vending machines and

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<sup>24</sup> Available at <https://www.eia.gov/state/analysis.php?sid=TN>.

<sup>25</sup> Available at <https://www.eia.gov/state/analysis.php?sid=UT>.

much more.” Cass Sunstein, *Biden Climate Regulation Is About to Get Tougher*, BLOOMBERG OPINION (Jan. 26, 2021), at <https://bloom.bg/3vtZyx6>. President Biden’s call to use the social cost of greenhouse gases to determine the benefits of reducing emissions will limit consumers’ choices for cheaper technology that emits more greenhouse gases directly impact the States as consumers.

Any argument that the Interim Values will not result in concrete harms because they are “interim” should be disregarded. Until the “final” values issue, Executive Order 13990 requires agencies to use them. Although it is true that Interim Values are expected to be replaced in January 2022, there is no guarantee the Working Group sticks to its schedule—these “interim” values could be in effect for years. And past practice shows that interim values have been used in rulemakings that have had effects for years after final values are published. 2010 TSD at 4 (noting use for EPA-DOT Fuel economy standards). It is more accurate to call the Interim Values the 2021 values, as even the “final” values are only temporary—they will be replaced by “updated” values, whether or not they reflect scientific progress or better data. *E.g.*, 2016 TSD. It is a cycle that never ends.

**E. The States Are Uniquely Injured by the Violation of the Separation of Powers.**

The Plaintiff States are also uniquely injured by the Executive’s violation of the separation of powers, and thus they have a unique interest in obtaining an injunction to force the federal government to respect the separation of powers. One dominant purpose of separating powers was to preserve the role of the States in our federal system. “[T]he composition of the Federal Government was designed in large part to protect the States from overreaching by Congress.” *Garcia v. San Antonio Metropolitan Transit Authority*, 469 U.S. 528, 550–51 (1985). The Executive Order and the Working Group’s actions undo the “Great Compromise” struck in our constitutional plan to split the legislative power into two chambers that “allayed the fears of both the large and small states.” *Chadha*, 462 U.S. at 950. James Wilson explained that without a

divided legislature “there can be neither liberty nor stability.” *Id.* at 949 (quoting 1 M. FARRAND, THE RECORDS OF THE FEDERAL CONVENTION OF 1787 at 254). Here, the harm is even greater because instead of legislative power being restrained by a consensus of the People’s representatives, the President has unilaterally exercised the power to both prescribe the rules of conduct and act to “fill up the details.” *Wayman*, 23 U.S. (10 Wheat at 43. This fulfills Alexander Hamilton’s warning that accumulating “all the most important prerogatives of sovereignty” in one body would lead to the “very tyranny” that antifederalist forces feared from the new national government. THE FEDERALIST NO. 22, at 152 (C. Rossiter ed. 1961).

All this shows that Plaintiff States were injured when President Biden, through the Working Group, legislated the social cost of greenhouse gases. “The Founders of this Nation entrusted the law making power to the Congress alone in both good and bad times.” *Youngstown*, 343 U.S. at 589. The President’s order is not based in his constitutional or statutory powers, and he was unwilling to pay the “price” of bicameralism. *See id.* at 613 (Frankfurter, J. concurring).

### **III. A Preliminary Injunction Requiring Compliance With the Constitution and the APA Will Impose No Cognizable Harm on Defendants.**

The third *Dataphase* factor is “the balance between that harm,” *i.e.*, the irreparable harm to Plaintiffs, “and the harm that the relief would cause to other litigants.” *Dataphase*, 640 F.2d at 114. Here, a preliminary injunction that restores the status quo and requires the Executive to comply with the Constitution and the APA will impose no cognizable harm on Defendants. Accordingly, this factor decisively favors the Plaintiff States.

Defendants are not harmed by an order maintaining the status quo and requiring them to follow their constitutional and statutory obligations. The injunction is limited in scope: Defendants simply must exercise delegated power in a manner authorized by Congress through the APA or other procedural statutes—all of which allow participation by the entities subject to

that decision and judicial review of that decision. It is axiomatic that an injunction requiring Defendants to comply with the Constitution and laws of the United States inflicts no irreparable injury. *See, e.g., Anytime Fitness, LLC v. Roberts*, No. 12-CV-02913-SRN-JJG, [2013 WL 1760950](#), at \*6 (D. Minn. Apr. 24, 2013) (“Defendants will not suffer irreparable harm as a result of being forced to comply with the law.”).

#### **IV. The Public Interest Favors Preliminary Injunctive Relief.**

The public interest heavily favors Plaintiff States because it preserves the status quo and promotes democratic accountability. Vindicating the separation of powers is manifestly in the public interest. “The primary function of a preliminary injunction is to preserve the status quo until, upon final hearing, a court may grant full, effective relief.” *Ferry-Morse Seed Co. v. Food Corn, Inc.*, [729 F.2d 589, 593](#) (8th Cir. 1984). By granting relief, the Court will require agencies wishing to use the SCGGs to justify their actions by citing an appropriate delegation of authority and following the appropriate statutory procedures. Congress has already made the determination that failing to abide by such procedures is not in the public interest because an “agency’s promulgation of rules without valid statutory authority implicates core notions of the separation of powers, and [courts] are required by Congress to set these regulations aside.” *U.S. ex rel. O’Keefe v. McDonnell Douglas Corp.*, [132 F.3d 1252, 1257](#) (8th Cir. 1998). Arguments that the alleged delay in implementing the President’s policies are against the public interest are contrary to our separation of powers doctrine that exists “not to promote efficiency but to preclude the exercise of arbitrary power.” *Youngstown*, [343 U.S. at 613](#) (Frankfurter, J., concurring). “While the separation of powers may prevent us from righting every wrong, it does so in order to ensure that we do not lose liberty.” *Morrison v. Olson*, [487 U.S. 654, 697](#) (1988) (Scalia, J., dissenting).

Democratic accountability also favors the public interest in separation-of-powers cases. “Without the involvement of representatives from across the country or the demands of bicameralism and presentment, legislation would risk becoming nothing more than the will of the current President.” *Gundy v. United States*, 139 S. Ct. 2116, 2134–35 (2019) (Gorsuch, J., dissenting). “Legislators might seek to take credit for addressing a pressing social problem by sending it to the executive for resolution, while at the same time blaming the executive for the problems that attend whatever measures he chooses to pursue.” *Id.* “Our Constitution was adopted to enable the people to govern themselves, through their elected leaders. The growth of the Executive Branch, which now wields vast power and touches almost every aspect of daily life, heightens the concern that it may slip from the Executive’s control, and thus from that of the people.” *Free Enter. Fund*, 561 U.S. at 499. All of these considerations apply.

### CONCLUSION

Plaintiffs respectfully request that the Court preliminarily enjoin all defendants, except for the President, from using the social cost of greenhouse gases promulgated in the February 26, 2021 Technical Support Document as binding values in any agency action.

April 30, 2021

Respectfully submitted,

**ERIC S. SCHMITT**  
**MISSOURI ATTORNEY GENERAL**

/s/ D. John Sauer  
D. John Sauer, #58720MO  
Justin D. Smith, #63253MO  
Jeff P. Johnson, #102929 DC  
Michael E. Talent, #322220CA  
Office of the Attorney General  
Supreme Court Building  
207 West High Street  
P.O. Box 899  
Jefferson City, Missouri 65102

Tel. (573) 751-8870  
Fax (573) 751-0774  
John.Sauer@ago.mo.gov  
*Counsel for Plaintiff States*

**TREG R. TAYLOR**  
**Attorney General of Alaska**  
Ronald W. Opsahl (Colo. Bar No. 35662)\*  
Assistant Attorney General  
Alaska Department of Law  
1031 West Fourth Avenue, Suite 200  
Anchorage, Alaska 99501  
Ph: (907) 269-5100  
F: (907) 276-3697  
Email: ron.opsahl@alaska.gov  
*Counsel for the State of Alaska*

**MARK BRNOVICH**  
**Attorney General of Arizona**  
Robert J. Makar\*  
Assistant Attorney General  
2005 N. Central Avenue  
Phoenix, Arizona 85004  
Ph: (602) 542-5205  
Robert.Makar@azag.gov  
*Counsel for the State of Arizona*

**LESLIE RUTLEDGE**  
**Attorney General of Arkansas**  
Nicholas J. Bronni\*  
Solicitor General  
Dylan L. Jacobs  
Assistant Solicitor General  
Office of Arkansas Attorney  
General Leslie Rutledge  
323 Center Street, Suite 200  
Little Rock, Arkansas 72201  
Ph: (501) 682-6302  
Nicholas.bronni@arkansasag.gov  
*Counsel for the State of Arkansas*

**THEODORE E. ROKITA**  
**Attorney General of Indiana**  
Tom Fisher\*  
Solicitor General  
Kian Hudson\*  
Deputy Solicitor General  
Office of Attorney General Todd Rokita  
  
302 West Washington Street  
IGCS-5th Floor  
Indianapolis, IN 46204  
Ph: (317) 232-0709  
F: (317) 232-7979  
kian.hudson@atg.in.gov  
*Counsel for the State of Indiana*

**DEREK SCHMIDT**  
**Attorney General of Kansas**  
Jerry Edwards  
Assistant Solicitor General  
Office of Kansas Attorney General Derek  
Schmidt  
120 SW 10th Avenue, 3rd Floor  
Topeka, KS 66612-1597  
Ph: (785) 368-8435 Phone  
F: (785) 291-3767 Fax

**AUSTIN KNUDSEN**  
**Montana Attorney General**  
David M.S. Dewhirst\*  
Solicitor General  
Montana Attorney General's Office  
  
215 North Sanders  
P.O. Box 201401  
Helena, MT 59620-1401  
Ph: (406) 444-4145

Jerry.Edwards@ag.ks.gov  
*Counsel for the State of Kansas*

david.dewhirst@mt.gov  
*Counsel for the State of Montana*

**DOUGLAS J. PETERSON**

**Attorney General of Nebraska**  
James A. Campbell, *pro hac vice*  
Solicitor General  
Justin D. Lavene, *pro hac vice*  
Assistant Attorney General  
Office of the Nebraska Attorney General  
2115 State Capitol  
Lincoln, NE 68509  
Ph: (402) 471-2682  
jim.campbell@nebraska.gov  
*Counsel for the State of Nebraska*

**DAVE YOST**

**Ohio Attorney General**  
Benjamin M. Flowers  
Ohio Solicitor General  
30 E. Broad St., 17th Fl.  
Columbus, Ohio 43215  
Ph: (614) 466-8980  
bflowers@ohioattorneygeneral.gov  
*Counsel for the State of Ohio*

**MIKE HUNTER**

**Attorney General of Oklahoma**  
Mithun Mansinghani  
Solicitor General  
Bryan Cleveland  
Assistant Solicitor General  
Oklahoma Office of Attorney General  
313 N.E. 21ST Street  
Oklahoma City, OK 73105  
Ph: (405) 522-4392  
mithun.mansinghani@oag.ok.gov  
*Counsel for the State of Oklahoma*

**ALAN WILSON**

**Attorney General of South Carolina**  
J. Emory Smith, Jr., *pro hac vice*  
Deputy Solicitor General  
Office of the Attorney General  
PO Box 11549  
Columbia South Carolina 29211  
Ph.: (803)734-3680  
F: (803) 734-3677  
esmith@scag.gov  
*Counsel for the State of South Carolina*

**HERBERT SLATERY III**

**Attorney General of Tennessee**  
Office of Tennessee Attorney General  
P.O. Box 20207  
Nashville, Tennessee 37202  
Phone: (615) 532-2580  
*Counsel for the State of Tennessee*

**SEAN D. REYES**

**Utah Attorney General**  
Melissa A. Holyoak\*  
Solicitor General  
Utah Attorney General's Office  
350 N. State Street, Suite 230  
P.O. Box 142320  
Salt Lake City, UT 84114-2320  
385.271.2484  
melissaholyoak@agutah.gov

*Counsel for the State of Utah*

*\*Admission application forthcoming*

**CERTIFICATE OF SERVICE**

I hereby certify that, on April 30, 2021, a true and correct copy of the foregoing and any attachments were filed electronically through the Court's CM/ECF system, to be served on counsel for all parties by operation of the Court's electronic filing system and to be served on those parties that have not appeared who will be served in accordance with the Federal Rules of Civil Procedure by mail or other means agreed to by the party.

*/s/ D. John Sauer*