UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MASSACHUSETTS

RENEW NORTHEAST, *et al.*, Plaintiffs, v. U.S. DEPARTMENT OF THE INTERIOR, *et al.*, Defendants.	Case No. 1:25-CV-13961

[PROPOSED] BRIEF OF *AMICI CURIAE* ENVIRONMENTAL ORGANIZATIONS IN SUPPORT OF PLAINTIFFS' MOTION FOR PRELIMINARY INJUNCTION

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RULE 7.1 CORPORATE DISCLOSURE STATEMENT

Pursuant to Federal Rule of Civil Procedure 7.1, the undersigned counsel of record for *Amici Curiae* Conservation Law Foundation, Citizens Campaign for the Environment, Environmental Defense Fund, Environmental League of Massachusetts, Environmental Protection Information Center, National Wildlife Federation, Natural Resources Defense Council, New York League of Conservation Voters, and Sierra Club certify that none of the *Amici* (all private, not-for-profit, non-governmental organizations) has a corporate parent, subsidiary, or affiliate, and that none issues stock to the public.

INTRODUCTION AND INTERESTS OF *AMICI*[1]

The responsible deployment of wind and solar power provides affordable and reliable electricity while helping safeguard our air and water and fight climate change. Wind and solar projects are the most cost-effective electricity generation technologies today.[2] And they are the fastest-growing sources of electricity in the country. Yet the President has targeted what he calls "ugly" and "ridiculous" renewable energy[3] while attempting to revive "beautiful" fossil fuel energy,[4] and has directed federal agencies to stop issuing permits for wind and solar projects.[5] Defendant agencies heeded the President's instructions, leading to the six actions challenged by Plaintiffs. The agencies' sudden imposition of major roadblocks for the development of wind and solar projects is inconsistent with federal permitting statutes, unsupported by evidence or adequate reasoning, and unvetted by public notice and comment. *See* Pls.' Mem. in Supp. of Prelim. Inj. 19-41, Dkt. No. 36.

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[1] *Amici* affirm that no counsel for a party authored this brief in whole or in part, and no person other than *Amici* or their counsel made any monetary contributions intended to fund the preparation or submission of the brief. *Cf.* Fed. R. App. P. 29(a)(4)(E).

[2] Press Release, Lazard, *Lazard Releases 2025 Levelized Cost of Energy+ Report* (June 16, 2025), https://perma.cc/32PZ-AW7Y ("Despite facing macro challenges and headwinds, utility-scale solar and onshore wind remain the most cost-effective forms of new-build energy generation on an unsubsidized basis."); Lazard, *Levelized Cost of Energy+* 4 (June 2025), https://perma.cc/9EKZ-66TP.

[3] Donald J. Trump (@realDonaldTrump), *Truth Social* (Aug. 19, 2025, at 7:28 AM), https://truthsocial.com/@realDonaldTrump/posts/115055190585472069; Oliver Milman, *Trump's War on Windmills Started in Scotland. Now He's Taking it Global*, The Guardian (July 24, 2025), https://perma.cc/4E3J-BN8D; Oliver Milman, *How Trump Is Targeting Wind and Solar Energy—and Delighting Big Oil*, The Guardian (Feb. 3, 2025), https://perma.cc/WS6N-22JH.

[4] Exec. Order No. 14,261, Reinvigorating America's Beautiful Clean Coal Industry and Amending Executive Order 14241, 90 Fed. Reg. 15,517 (Apr. 8, 2025).

[5] *See, e.g.*, Presidential Memorandum, Temporary Withdrawal of All Areas on the Outer Continental Shelf from Offshore Wind Leasing and Review of the Federal Government's Leasing and Permitting Practices for Wind Projects, 90 Fed. Reg. 8363 (Jan. 29, 2025); Donald J. Trump (@realDonaldTrump), *Truth Social* (Aug. 20, 2025, 9:51 AM), https://truthsocial.com/@realDonaldTrump/posts/115061417084982814.

Amici Curiae focus here on the legal deficiencies of three of the actions challenged by Plaintiffs: the Department of the Interior's ("Interior") Secretarial Order 3438 and the Army Corps of Engineers' ("Corps") Memorandum (collectively, the "capacity density restrictions"), and the Fish & Wildlife Service's ("Service") Eagle Take Permit Ban. Interior and the Corps have instituted new capacity density restrictions that assume wind and solar projects are inefficient and worse for the environment than coal and gas generation simply because wind and solar projects purportedly occupy a larger footprint, without considering the area actually used for infrastructure, the coexistence of multiple uses like agriculture, or the serious public health and ecosystem harms from fossil fuel projects. Am. Compl. Ex. B, Sec'y of the Interior, Order No. 3438, Dkt. No. 33-2 (hereinafter "Order 3438"); Am. Compl. Ex. C, Mem. from Ass't Sec'y Civil Works to Commanding Gen., U.S. Army Corps of Eng'rs (Sept. 18, 2025), Dkt. No. 33-3 (hereinafter "Corps Memorandum"). As for the Eagle Take Permit Ban, after revising its eagle incidental take permitting program in 2024 based on public comment and agency expertise, the Service has now simply announced without any reasoned support that it will no longer issue eagle take permits for wind projects. Am. Compl. Ex. D, U.S. Fish & Wildlife Serv., 3-200-71: Eagle Incidental Take (General Permit), Dkt. No. 33-4 (hereinafter "Eagle Take Permit Ban").

Those agency actions, like the other actions challenged by Plaintiffs, violate the Administrative Procedure Act ("APA"), 5 U.S.C. § 706(2), because the agencies failed to provide any reasoned bases for their decisions, acted contrary to law, and failed to comply with notice-and-comment requirements. These illegal actions undermine fair markets, ratepayer affordability, and state and local efforts to meet state climate and energy mandates and targets while increasing reliance on fossil fuels—an outcome that carries well-documented risks to public health, wildlife, and the environment. They also harm the public by halting the fastest

growing sources of electricity and, thus, the nation's progress towards cleaner, more affordable, and reliable power.

Amici are regional and national nonprofit organizations dedicated to advancing policies that protect the environment, wildlife, public health, and communities. *Amici* support Plaintiffs' request for preliminary injunctive relief. The Court should stop the significant, irreparable harm the agency actions are causing Plaintiffs and the public who rely on and benefit from wind and solar power.

ARGUMENT

I. WIND AND SOLAR ARE CRITICAL ELECTRICITY SOURCES THAT DELIVER IMMENSE PUBLIC BENEFITS

A. Wind and solar power are critical to meeting U.S. energy needs

Wind and solar are the fastest growing sources of power in the United States, and now account for 17% of U.S. electricity generation.[6] Nine states generate more than 25% of their in-state electricity from wind.[7] In three states, Iowa, Kansas, and South Dakota, wind comprises more than half the current electricity mix.[8] In 2024, Texas generated a quantity of wind energy sufficient to power all of New England.[9] Solar power similarly represents a substantial source of energy generation. In three states, solar power comprises more than a quarter of total energy generation.[10]

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[6] Ember, *US Electricity 2025 Special Report* 2 (Mar. 12, 2025), https://perma.cc/XR6P-SQVS.
[7] Climate Central, *A Decade of Growth for U.S. Solar and Wind* (Mar. 12, 2025), https://perma.cc/2YJD-SSGM (compiling U.S. Energy Information Administration data).
[8] Climate Central, *State Share of Electricity from Solar and Wind in 2024* (Mar. 12, 2025), https://www.climatecentral.org/graphic/solar-and-wind-2025?graphicSet=State+Share+of+Electricity+from+Solar+and+Wind+in+2024&location=IA&lang=en (select state from location menu).
[9] *Compare* Climate Central, *supra* note 7 (Texas generated over 124,000 gigawatt-hours ("GWh") from wind), *with* ISO New England, *New England's Electricity Use*, https://perma.cc/9PDQ-DQ6S (New England used about 117,000 GWh).
[10] Climate Central, *supra* note 7.

As U.S. wind and solar power capacity have expanded, costs have dramatically decreased. Today, onshore wind power is the most cost-effective form of electricity generation in the country in terms of levelized costs—installation, operation, and maintenance expenses spread over the expected lifespan of the generator.[11] And utility-scale solar is a close second.[12]

Although wind and solar are variable resources, they are critical to meeting grid reliability needs. Particularly because wind and solar energy are inexhaustible and geographically diverse, they have delivered more reliable electricity to Americans during extreme weather events, when fossil fuel sources—which are dependent on limited resources and vulnerable to supply chain interruptions—experienced higher levels of outages. For example, during Winter Storm Uri in 2021 and during Winter Storm Elliott in 2022, gas plants accounted for far more unplanned outages than wind and solar.[13] Wind and solar also provide reliable power in heat waves. During a record heatwave in June 2023, wind and solar provided nearly one-third of Texas's power during peak demand hours.[14]

The need for reliable electricity will increase in the future due to climate change, which exacerbates extreme weather events.[15] And especially as demand for electricity to power data

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[11] *See* Lazard, *Levelized Cost*, *supra* note 2, at 4, 8.
[12] *Id.*
[13] FERC et al., *The February 2021 Cold Weather Outages in Texas and the South Central United States* 15 (Nov. 2021), https://www.ferc.gov/media/february-2021-cold-weather-outages-texas-and-south-central-united-states-ferc-nerc-and; FERC et al., *Inquiry into Bulk-Power System Operations During December 2022 Winter Storm Elliott* 17 (Oct. 2023), https://www.ferc.gov/news-events/news/ferc-nerc-release-final-report-lessons-winter-storm-elliott; Midcontinent Independent System Operator, *Overview of Winter Storm Elliott December 23, Maximum Generation Event* 10, 11 (Jan. 17, 2023), https://perma.cc/3U5C-P24K.
[14] Press Release, Am. Clean Power, *Clean Energy Keeps Texas Grid Resilient During Heatwave*, (July 5, 2023), https://perma.cc/CU3X-7GH6.
[15] NASA, *Extreme Weather and Climate Change*, https://perma.cc/5CPX-Z73X (last updated Oct. 23, 2024).

centers and other electrification needs increases, wind and solar will be critical to meeting that demand as other types of energy may not become available rapidly enough.[16]

B. Wind and solar power have enormous public health, environmental, and climate benefits

Responsibly developed wind and solar projects offer enormous health, environmental, and climate benefits by enabling retirement of existing—or obviating the need for new—high-polluting fossil-fuel-fired facilities.

The human health harms of fossil fuel energy are substantial and well documented. For example, extracting and burning fossil fuels produces harmful and toxic air pollutants, including sulfur dioxide, nitrogen oxides, particulate matter, carbon monoxide, and mercury.[17] An estimated 20% of premature deaths worldwide annually, and 350,000 premature deaths in the United States, are attributable to fine particulate matter pollution from burning fossil fuels.[18] The impacts of mercury pollution from burning fossil fuels are also devastating: even low levels of exposure can cause learning disabilities; higher levels of exposure can cause developmental, neurological, and cardiovascular problems, and even early death.[19] These health harms fall predominantly on low-income communities and communities of color, which commonly

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[16] *See* Press Release, Wood Mackenzie, *Coal and Gas Generation Can Accommodate 40 to 75% of Expected US Peak Demand Growth Through 2030* (Nov. 20, 2025), https://perma.cc/F67B-4LRJ ("Expected growth in AI demand cannot be met without additional renewables investment due to constraints on gas and coal growth."); *id.* ("The report notes that manufacturing bottlenecks are a key constraint on new thermal capacity. Gas turbine orders currently face extended lead times, with new gas plant additions limited to 58 GW (49 GW of peak load contribution) between 2025 and the end of 2030.").

[17] Savannah Bertrand, *Fact Sheet: Climate, Environmental, and Health Impacts of Fossil Fuels*, Env't & Energy Study Inst. (Dec. 17, 2021), https://perma.cc/6MFM-4Q7B.

[18] Anna Miller, *Fossil Fuel Air Pollution Responsible for 1 in 5 Deaths Worldwide*, Harvard T.H. Chan School of Pub. Health (Feb. 9, 2021), https://perma.cc/ARH6-SBVE.

[19] N.H. Dep't of Env't Servs., *Mercury: Sources, Transport, Deposition and Impacts* (2019), https://perma.cc/DDF5-7TTJ.

neighbor fossil fuel facilities[20] and are disproportionately susceptible to harms from pollution because of cumulative environmental and social burdens.[21]

Fossil fuel plants are also the largest source of toxic water pollution in the nation, dumping billions of pounds of toxic chemicals in wastewater annually.[22] The discharges include toxic and bioaccumulative pollutants such as selenium, mercury, and arsenic, and can cause severe public health problems such as cancer and lowered child IQ.[23] Fossil fuel plants often discharge this wastewater into waterbodies used for fishing, recreation, or drinking water.[24] Coal combustion also produces coal ash, a waste product that contains toxic metals including arsenic, mercury, cadmium, and lead.[25] Coal ash is stored in landfills and surface impoundments where toxins can leach into groundwater[26] or result in catastrophic spills.[27]

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[20] *E.g.*, Paul Mohai et al., *Racial and Socioeconomic Disparities in Residential Proximity to Polluting Industrial Facilities*, 99 Am. J. Pub. Health S649, S654 (2009), https://tinyurl.com/4tc32a2f.

[21] *See, e.g.*, Kevin P. Josey et al., *Air Pollution and Mortality at the Intersection of Race and Social Class*, 388 N. Engl. J. Med. 1396, 1396 (2023), https://tinyurl.com/2eaevfjh (showing the health harms from fine particulate matter exposure are greater among marginalized subpopulations).

[22] U.S. Env't Prot. Agency ("EPA"), Environmental Assessment for the Proposed Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category 3-14 (April 2013), *available at* https://downloads.regulations.gov/EPA-HQ-OLEM-2019-0173-0197/attachment_9.pdf.

[23] EPA, *Steam Electric Power Generating Effluent Guidelines* (last updated Dec. 23, 2025), https://perma.cc/5KV2-LAGJ.

[24] EPA, Environmental Assessment for Final Supplemental Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category 2 (Apr. 2024), https://perma.cc/XC79-8XPF.

[25] Michael Hendryx, Keith J. Zullig & Juhua Luo, *Impacts of Coal Use on Health*, 41 Ann. Rev. of Pub. Health 397, 404 (Jan. 8, 2020), https://doi.org/10.1146/annurev-publhealth-040119-094104.

[26] Hazardous and Solid Waste Management System: Disposal of Coal Combustion Residuals From Electric Utilities; Legacy CCR Surface Impoundments, 89 Fed. Reg 38,950, 38,951 (Apr. 8, 2024); EPA, *Frequent Questions About the 2015 Coal Ash Disposal Rule* (last updated Sept. 8, 2025), https://perma.cc/6PLC-QV4X.

[27] EPA, *EPA Response to Kingston TVA Coal Ash Spill* (last updated May 28, 2025), https://perma.cc/L5P8-PWLK.

Meeting electricity demand with wind and solar rather than fossil fuels significantly reduces those health harms. For example, one peer-reviewed study documented that, in 2022, combined U.S. wind and solar generation "led to 1,200 to 1,600 fewer premature mortalities" nationwide thanks to reduced sulfur dioxide and nitrogen oxide emissions alone.[28] Another recent study projects that planned offshore wind generation would replace gas and coal power, "reduc[ing] annual estimated [U.S.] premature deaths . . . by 520 per year," with low-income communities and communities of color "account[ing] for a disproportionately large share of the premature deaths avoided."[29] As the country builds more wind and solar projects, health benefits continue to grow.

Wind and solar operations also help avoid the disproportionate ecological destruction caused by fossil fuel development. Fossil fuel development harms species and ecosystems by destroying and fragmenting wildlife habitat; causing air, water, and other pollution impacts; and spreading invasive species.[30] In mountaintop removal mining, for instance, entire mountaintops are scraped and blasted away to expose underground coal or oil.[31]

Developing wind and solar energy is also critical to combatting climate change. Climate change is driving rising temperatures, intensifying and increasing the frequency of extreme

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[28] Dev Millstein et al., *Climate and Air Quality Benefits of Wind and Solar Generation in the United States from 2019 to 2022*, 1 Cell Reps. Sustainability 100105, at 1, 6 (2024), https://tinyurl.com/y6pn754r.

[29] Daniel Shawhan, Sally Robson & Ethan Russell, *Offshore Wind Power Examined: Effects, Benefits, and Costs of Offshore Wind Farms Along the US Atlantic and Gulf Coasts*, Res. for the Future, at iv (rev. Feb. 2025), https://perma.cc/CTR8-XY7U.

[30] Shaye Wolf et al., *Scientists' Warning on Fossil Fuels*, 5 Oxford Open Climate Change (2025), https://academic.oup.com/oocc/article/5/1/kgaf011/8099165#511047316.

[31] *See* EPA, EPA/600/R-09/138F, The Effects of Mountaintop Mines and Valley Fills on Aquatic Ecosystems of the Central Appalachian Coalfields, (Mar. 2011), https://cfpub.epa.gov/ncea/risk/recordisplay.cfm?deid=225743&CFID=63330774&CFTOKEN=63962894.

weather, including heat waves, megafires, floods, and droughts, accelerating sea level rise, and disrupting communities and ecosystems.[32] These changes threaten public health and the water sources, food systems, infrastructure, and economic systems that support modern society.[33] And they pose severe risks to wildlife, disrupting migration patterns, degrading habitats, and pushing many species towards extinction.[34]

Unlike fossil-fuel-fired generation, wind turbines and solar panels produce no direct climate-warming greenhouse gas emissions. The total "carbon footprint" of wind turbines—including materials, construction, repairs, and decommissioning—is minimal compared to that of fossil fuel plants.[35] Indeed, the life-cycle greenhouse gas emissions of coal- and gas-fired power are about 80- and 40-times greater, respectively, than those of wind power.[36] Greenhouse gas emissions related to a wind farm's construction can be offset in less than a year of operation.[37] The life-cycle greenhouse gas footprints of coal- and natural-gas-fired power are about 20- and 10-times greater, respectively, than those of solar power.[38]

Given these clear and substantial climate benefits, every credible national and international climate mitigation scenario, including those developed by the Intergovernmental

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[32] *See* U.S. Global Change Rsch. Program, Fifth National Climate Assessment 1-5 to 1-7 (2023), https://perma.cc/J7V7-FRYB.
[33] *See id.* at 1-23 to 1-28, 1-32 to 1-33.
[34] *See id.* at 1-31.
[35] Wang et al., *Life-cycle Green-house Gas Emissions of Onshore and Offshore Wind Turbines*, 210 J. Cleaner Prod'n 804 (2019), Introduction, https://tinyurl.com/yc2frphw.
[36] National Renewable Energy Laboratory ("NREL"), *Life Cycle Greenhouse Gas Emissions from Electricity Generation: Update* at 3, https://docs.nrel.gov/docs/fy21osti/80580.pdf.
[37] Guezuraga et al., *Life Cycle Assessment of Two Different 2MW Class Wind Turbines*, 37 Renewable Energy 37 (2012), Abstract, https://tinyurl.com/sy56auw9.
[38] NREL, *supra* note 36 at 3.

Panel on Climate Change,[39] the International Energy Agency,[40] and the National Renewable Energy Laboratory ("NREL"),[41] identifies wind and solar energy as essential components of the energy transition needed to avoid the worst consequences of climate change.

II. THE CHALLENGED AGENCY ACTIONS ARE UNLAWFUL

Interior and the Corps' capacity density restrictions and the Service's Eagle Take Permit Ban are arbitrary, capricious, and contrary to law, and were issued in violation of procedural requirements. *See* 5 U.S.C. § 706(2)(A), (D).

A. Interior and the Corps' unprecedented "capacity density" analysis is arbitrary, capricious and contrary to law

Interior and the Corps have made their new concept of "capacity density"—a project's potential energy generation per amount of land within the project boundary—the focus of environmental analyses across multiple statutes. In doing so, they ignore how that land is actually used, how much pollution will be generated when these projects operate, and how the extraction and transportation of fuel affect the environment. Through this extreme manipulation of environmental analysis, Interior and the Corps irrationally favor fossil fuel plants, by unjustifiably concluding that they are more environmentally protective than wind and solar projects solely because of their typically smaller project boundaries. The Supreme Court has rejected that kind of "contrived reasoning." *See Dep't of Comm. v. New York*, 588 U.S. 752, 785

[39] *See* Intergovernmental Panel on Climate Change, Climate Change 2022: Mitigation of Climate Change 37, 57 (2022), https://perma.cc/SLM9-SPPG.
[40] Int'l Energy Agency, Net Zero by 2050: A Roadmap for the Global Energy Sector 3 (rev. 2021), https://perma.cc/LJJ2-7FZA.
[41] *See* NREL, 2024 Standard Scenarios Report: A U.S. Electricity Sector Outlook, at x-xii (Dec. 2024), https://perma.cc/FGB7-ABX7. The Trump administration has renamed this laboratory the National Laboratory of the Rockies. *See* Press Release, Nat'l Lab'y Rockies (Dec. 1, 2025), https://perma.cc/H3RK-HLQQ.

(2019). In short, the "capacity density" analysis appears to be a pretextual tool to carry out the President's wishes to forbid the federal permitting of solar and wind projects.

1. The capacity density restrictions subvert the agencies' statutory mandate to broadly consider environmental impacts

The statutes that Interior and the Corps cite as authority to issue these new capacity density restrictions instruct the agencies to consider environmental impacts broadly, not to elevate an arbitrary metric above this holistic environmental analysis. Interior issues permits under the Federal Land Policy and Management Act ("FLPMA") and the Outer Continental Shelf Lands Act ("OCSLA"), after required environmental analysis under the National Environmental Policy Act ("NEPA").[42] Under FLPMA, Interior must manage public lands to "protect . . . ecological, environmental, air, atmospheric, [and] water resource[s]." 43 U.S.C. § 1701(a)(8). Under OCSLA, Interior must provide for the "protection of the environment." *Id.* § 1337(p)(4)(B). And NEPA requires the analysis of "reasonably foreseeable adverse environmental effects." 42 U.S.C. § 4332(C)(ii). The Corps implements parts of the Clean Water Act, guided by the similarly broad congressional goal to "restore and maintain the chemical, physical, and biological integrity of the [n]ation's waters," 33 U.S.C. § 1251(a), together with the older Rivers and Harbors Act, *see* 33 U.S.C. § 403. The agency has long implemented restrictions on discharge into navigable waters by considering whether the discharge "will . . .

[42] *See* 43 U.S.C. § 1701(a)(8) (FLPMA's purposes include the management of public lands "in a manner that will protect … ecological, environmental, air and atmospheric, water resource, and archeological values"); *id.* § 1337(p)(4)(B), (D) (in any OCSLA-authorized activity, Interior must provide for "protection of the environment" and "conservation of the natural resources of the outer Continental Shelf"); 42 U.S.C. § 4332(C)(i)-(iv) (NEPA statements must include "reasonably foreseeable environmental effects of the proposed agency action"; "any reasonably foreseeable adverse environmental effects"; "a reasonable range of alternatives . . . including an analysis of any negative environmental impacts of not implementing the proposed agency action"; and "the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity").

have an unacceptable adverse impact either individually or in combination with known and/or probable impacts of other activities affecting the ecosystems of concern." 40 C.F.R. § 230.1(c).

Interior and the Corps are substituting a novel, arbitrary, and extremely narrow metric for the broader environmental impact analysis these statutes require. The agencies must consider environmental impacts, not the scope of the project boundary alone. The project boundary cannot serve as a proxy for environmental impacts because it does not shed light on many significant environmental harms, including air and water pollution, which are specifically named by the implementing statutes. *See Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto Ins. Co.*, 463 U.S. 29, 43 (1983). Operation of the "capacity dense" fossil fuel power plants the Administration prefers generates far more pollution than renewable sources. *See supra*, Arg. I.B. This pollution both immediately damages land and water and has sweeping long-term impacts. The extraction and transportation of fuel for these plants also inflicts environmental damage. *See id.* Federally protected land and water are not immune to these effects. And any lawful environmental impacts analysis would require the agencies to consider how the "capacity dense" sources they prefer harm public health. Because the agencies have decided that "capacity dense" projects always take precedence, they are not considering these harmful impacts. The exclusion of impacts to human health, land, and water is unreasonable and contrary to the agencies' statutory mandates.

2. The agencies irrationally base capacity density on project boundaries instead of land impacts

The capacity density restrictions not only unlawfully exclude consideration of key environmental impacts, they also mispresent the one issue they purport to prioritize—the amount of land impacted by a project. Wind and solar projects often have large project boundaries, but within those boundaries, large swaths of land are unoccupied by built infrastructure and are

instead used simultaneously and effectively for other purposes like crop production or grazing, or set aside for preservation.

The ground covered by the facilities needed for wind and solar projects—e.g., turbines or panels, access roads (for onshore projects), and ancillary facilities—is often minimal. For an onshore wind project, the area directly impacted is on average less than 1% of the total area.[43] Offshore wind projects in the United States are often designed with 1 nautical mile between turbines, per Coast Guard recommendations.[44]

Between and even underneath the built infrastructure of wind and solar projects, land or waters within the project boundaries are commonly used for alternative purposes, such as wildlife habitat, livestock grazing, crop production, recreation, fishing, or research. The vast majority of agricultural land used for solar or onshore wind development remains in agricultural use.[45] For solar, 85% of sites remain in agricultural use, and 99% of wind sites remain in agricultural use.[46] That agricultural use is typically between built infrastructure, but it is possible for agricultural use to coexist underneath solar arrays as well. Known as "agrivoltaics," this land-sharing model is widely deployed in Europe and increasingly adopted in the United States,[47] with

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[43] Paul Denholm et al., NREL, *Land-Use Requirements of Modern Wind Power Plants in the United States* 10 (Aug. 2009), https://perma.cc/FWJ3-HLCU.

[44] Daniel Mulas Hernando et al., NREL, *Summary Analysis of Different Offshore Wind Capacity Density Drivers in Proposed U.S. Projects and Impacts on Progress Towards State and Federal Deployment Targets* 6 (Oct. 2023), https://perma.cc/9QZP-3RMQ; New England Wind Project, *App'x O: Responses to Comments on the Draft Environmental Impact Statement*, https://perma.cc/5PWB-RBND; Am. Clean Power, *7 Myths About Offshore Wind and Commercial Fishing* 2 (May 2021), https://perma.cc/7ZFX-9T66.

[45] Karen Maguire, Sophia Tanner & Justin B. Winikoff, *Agricultural Land Near Solar and Wind Projects Usually Remained in Agriculture After Development*, Econ. Rsch. Serv. (Sept. 12, 2024), https://perma.cc/AK3R-KQ3P.

[46] *Id.*

[47] *See, e.g.*, Press Release, Enel, *Enel Grazes Texas Solar Farms with 6,000+ Sheep in Largest Announced U.S. Solar Grazing Contract* (Aug. 15, 2024), https://perma.cc/E4LY-N7RU.

agricultural and livestock grazing yields that are comparable to, and sometimes exceeding, conventional production.[48] The waters within offshore wind project boundaries also have other uses, allowing for safe vessel navigation and fishing, among other things.[49] For example, after the South Fork Wind project began operating in 2024,[50] fishing activity within the project area continued.[51] The agencies provide no rational explanation for including other-use areas in their capacity density metric.

By using the proxy of project boundary for environmental impacts, the agencies are assuming that even land set aside for environmental preservation has negative land impacts. Wind and solar energy projects often include additional areas designated for the sole purpose of preserving important environmental features. For example, the permit terms for Dry Lake East, a large solar facility, limit disturbance to less than 70% of the project boundary, for reasons including preservation of environmentally-important desert washes.[52] The agencies' approach dictates that these areas set aside for preservation be added to the denominator of the capacity density metric, reducing its "score" and thus irrationally implying that the project was more environmentally damaging than if no preservation had been included.

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[48] Alyssa C. Andrew et al., *Herbage Yield, Lamb Growth and Foraging Behavior in Agrivoltaic Production System*, 5 Front. Sustain. Food Syst. (Apr. 2021), https://tinyurl.com/35avyt5f.
[49] *See supra* note 44.
[50] *South Fork Wind Powers Up New Era for American Clean Energy*, Orsted (Mar. 14, 2024), https://perma.cc/26G7-VN7T.
[51] *See* Nat'l Marine Fisheries Serv., *Descriptions of Selected Fishery Landings and Estimates of Vessel Revenue from Areas: A Planning-level Assessment* (June 2025), https://apps-garfo.fisheries.noaa.gov/offshore-energy/wind-reports/com/OCS_A_0517_com.html (see data from 2024); *see also* Letter from James Bennett, U.S. Dep't of Interior, to Peter Allen, https://perma.cc/7WU9-YGVN (reflecting that South Fork's lease area is OCS-A 0517).
[52] U.S. Dep't of Interior, *Environmental Assessment: Dry Lake East Energy Center Solar Project* 5, 66 (Apr. 2024), https://perma.cc/72RM-YR9E (stating that "washes would be left in their natural condition wherever practicable" and that "the proposed solar array layout includes areas free of panels along the larger wash corridors that would maintain natural drainage patterns").

3. The limited data cited by the agencies in support of the capacity density restrictions were never meant to be used to measure land-use impacts

Interior and the Corps have made broad generalized assumptions about the land impacts of wind and solar projects, citing figures that are neither designed nor appropriate for measuring land-use impacts. Order 3438 includes an appendix with capacity density figures based on a combination of NREL and U.S. Energy Information Administration (EIA) data.[53] The Corps memorandum also cites NREL and EIA data.[54] However, the EIA does not purport to analyze capacity density, land-use efficiency, or permanent surface disturbance. Instead, it estimates the capital costs, operating costs, and levelized cost of electricity for various power-generation technologies.[55] In doing so, the EIA quantifies "costs to the owner" of each type of energy project, including the cost of "project land requirements," which are "based on typical land requirements for each technology with per-acreage costs based on a survey of vacant land listings zoned for industrial use within the United States."[56] The EIA's land figures therefore represent the amount of land needed for lease or purchase, not the amount of land impacted by the project. The total amount of land needed includes land that is not disturbed and/or that could be used for multiple purposes. And as NREL itself warned, "any metric that includes only area and does not include the quality of impact (damage function) will be unable to completely capture the land-use impacts of wind power plants or any electricity generation technology."[57]

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[53] Order 3438 at App. 1.
[54] Corps Memorandum at 2 nn.1-2.
[55] EIA, *Capital Cost and Performance Characteristics for Utility-Scale Electric Power Generating Technologies* at V-XXI (Jan. 2024), https://www.eia.gov/analysis/studies/powerplants/capitalcost/pdf/capital_cost_AEO2025.pdf.
[56] *Id.* at IX.
[57] Denholm et al., *supra* note 43, at 20.

For these additional reasons, the arbitrary capacity density restrictions fail to accurately measure the land impacts of wind and solar energy projects.

4. Interior's capacity density metric predetermines the results of its NEPA analysis, rendering it arbitrary and capricious

Order 3438 is also unlawful because it predetermines the outcome of the comparison between different types of energy projects in Interior's NEPA analyses. An agency violates NEPA, "and consequently the APA, when it predetermines the result of its environmental analysis."[58] *Forest Guardians v. U.S. Fish & Wildlife Serv.*, 611 F.3d 692, 714 (10th Cir. 2010); *see also Allen v. Nat'l Institutes of Health*, 974 F.Supp.2d 18, 37 (D. Mass. 2013) (holding that an environmental impact statement "will fail if it unreasonably narrows the agency's consideration of alternatives so that the outcome is preordained").

Here, Order 3438 requires that Interior, when analyzing proposed energy projects on federal lands or waters: (1) consider a range of alternatives in its NEPA analysis that includes projects with "capacity densities meeting or exceeding that of the proposed project"; and (2) "*only* permit those energy projects" that have higher capacity density because "energy projects with higher capacity densities have lower Federal land use impacts."[59]

It will be impossible for wind or solar to satisfy capacity density restrictions based on a project boundary because there is undeveloped area within these boundaries. The Order indicates not merely that energy projects with higher capacity densities will function as preferred

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[58] Predetermination occurs "when an agency *irreversibly and irretrievably* commits itself to a plan of action that is dependent upon the NEPA environmental analysis producing a certain outcome, *before* the agency has completed that environmental analysis." *Forest Guardians*, 611 F.3d at 714. To decide whether predetermination has occurred, a court must give greater weight to communications that "have the effect of binding the agency (as a whole) to an irreversible and irretrievable commitment to a course of conduct." *Id.* at 717-18.

[59] Order 3438 at 1-3 (emphasis added).

alternatives but that Interior will not permit *any* wind or solar projects on federal lands based on their faulty reasoning that "common sense, arithmetic, and physics" lead to the conclusion that "wind and solar projects are highly inefficient uses of Federal lands."[60] Further, the Order inexplicably requires Interior to consider nuclear, gas, and coal energy projects as reasonable alternatives to proposed offshore wind projects, even though offshore wind projects are located offshore, in areas not suitable to nuclear, gas, or coal plants.[61]

By effectively prohibiting the permitting of any wind or solar projects on federal lands or waters, Interior has "irreversibly and irretrievably" committed itself to conduct NEPA analyses in a way that produces a predetermined outcome, *before* the agency has completed any environmental analyses for solar and wind projects. *Forest Guardians*, 611 F.3d at 714. Because the Order arbitrarily predetermines that wind and solar projects are less efficient uses of federal lands than nuclear, gas, and coal plants and, therefore, should not be permitted on federal lands, it violates the APA and NEPA. *See id.* This predetermination against wind and solar projects is also inconsistent with Congress's intent for Interior to grant both onshore and offshore renewable leases. *See* 43 U.S.C. §§ 3001-3004 (setting a national production goal for renewable energy on federal land); *id.* §§ 3007-3008 (regarding leases, permits, and rights-of-way for renewable energy projects on federal land onshore); *id.* § 1337(p) (regarding "production, transportation, storage, or transmission of energy from sources other than oil and gas" on the outer Continental Shelf).

[60] *Id.* at 2.
[61] *Id*.

5. *The agencies introduced the new capacity density restrictions without explaining the change*

The agencies' unacknowledged and unexplained about-face also renders the capacity density restrictions arbitrary. When agencies "change their existing policies" they must "provide a reasoned explanation for the change," "display awareness that [they are] changing position," and "consider serious reliance interests." *Food & Drug Admin. v. Wages & White Lion Invs., LLC*, 604 U.S. 542, 568 (2025) (internal quotation marks omitted).[62] Here, Interior and the Corps have not displayed awareness of changing their position, nor have they provided a reasonable explanation for the change. Before issuing the capacity density orders, Interior and the Corps had never utilized capacity density as a factor in their environmental analyses.[63] The agencies have not explained why capacity density is suddenly a key factor for assessing the environmental impacts of and ultimately deciding whether to issue permits for energy projects.

B. The Eagle Take Permit Ban is unlawful

In 2024, after considering extensive public comments, the Service updated its incidental take permitting rules for wind projects under the Bald and Golden Eagle Protection Act to simplify processes, increase participation, and generate more funding for eagle protection. The Service's new Eagle Take Permit Ban—which stops the issuance of incidental take permits for wind energy projects under any set of rules, Eagle Take Permit Ban at 1—is unlawful.

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[62] In such cases, "a reasoned explanation is needed for disregarding facts and circumstances that underlay or were engendered by the prior policy." *Encino Motorcars, LLC v. Navarro*, 579 U.S. 211, 222 (2016) (internal quotation marks omitted). An "'[u]nexplained inconsistency' in agency policy is 'a reason for holding an interpretation to be an arbitrary and capricious change from agency practice.'" *Id.* (quoting *Nat'l Cable & Television Ass'n v. Brand X Internet Servs.*, 545 U.S. 967, 981 (2005)).

[63] Before these capacity density orders issued, no federal agencies had relied on capacity density to analyze environmental impacts. Although during the Biden Administration, NREL employed "capacity density" in the context of assessing the total area required to meet state and (then existing) federal offshore wind deployment targets, NREL's capacity density analysis has never been used as a metric for impacts of an energy source on federal lands.

The Service's only explanation for the Ban is that it was issued "pursuant to" a presidential memorandum that directed agencies to cease issuing all permits and other authorizations related to wind projects for an indefinite time (the "Wind Memo").[64] *Id.* But in December 2025, this Court invalidated that rationale, holding that by halting issuance of authorizations to wind projects pursuant to the Wind Memo, Interior and other agencies failed to consider relevant issues, provided no reasoned explanation, failed to account for reliance interests, and violated the APA's "reasonable time" requirements. *New York v. Trump*, No. 25-CV-11221-PBS, 2025 WL 3514301, at *14–16 (D. Mass. Dec. 8, 2025). The Eagle Take Permit Ban, which likewise purports to implement the Wind Memo by indefinitely ceasing to issue permits and lacks any additional explanation, is invalid for the same reasons, and more.

First, the Service failed to consider the impact on bald and golden eagles of abruptly halting incidental take permitting—plainly an "important aspect of the problem." *State Farm*, 463 U.S. at 43. In 2024, through a years-long notice-and-comment rulemaking process, the Service revised its eagle incidental take permitting system and established a "general permitting" program for wind energy projects that meet certain criteria.[65] "[B]y simplifying the permitting framework and increasing certainty," the new program aimed to increase participation of wind projects and thereby "increase[] benefits to eagle populations as more projects implement avoidance, minimization, and mitigation measures."[66] These measures included mitigation fees, averaging an estimated $37,200 per general permit, to fund eagle protection actions such as

[64] *See* Presidential Memorandum, Temporary Withdrawal of All Areas on the Outer Continental Shelf from Offshore Wind Leasing and Review of the Federal Government's Leasing and Permitting Practices for Wind Projects, 90 Fed. Reg. 8363 (Jan. 29, 2025).
[65] *See* 89 Fed. Reg. 9920, 9921 (Feb. 12, 2024).
[66] *Id.* at 9921-22; *see* 50 C.F.R. § 22.250.

power pole retrofits and lead abatement.[67] And the 2024 rule did substantially increase participation, with 113 eagle incidental take general permits issued for wind projects between April 12, 2024 and January 20, 2025 (after which the agency ceased issuing permits),[68] compared to just 26 incidental take permits over a six-year span under the prior program.[69] There is no indication that the Service took any of this into account in implementing the Eagle Take Permit Ban.

Second, the Service provided no reasoned explanation for its abrupt change in policy. The Eagle Take Permit Ban relies solely on the Wind Memo, and that Memo did not discuss the 2024 rule or the Bald and Golden Eagle Protection Act. Further, as the court held in *New York v. Trump*, the Wind Memo's generic references to "various *alleged* legal deficiencies" and "*potential* inadequacies" regarding wind permitting in general are far too vague to meet the basic administrative law requirement of reasoned explanation for a decision to halt a permitting program. 2025 WL 3514301, at *14; *see White Lion Invs.*, 604 U.S. at 568 (agency must "provide a reasoned explanation" for policy change (internal quotation marks omitted)).

C. The challenged agency actions are procedurally invalid

The capacity density orders and Eagle Take Permit Ban must also be vacated on the independent grounds that they failed to comply with the APA's notice-and-comment requirements. 5 U.S.C. § 706(2)(D). Notice-and-comment is required when an agency issues a rule that "creates rights, assigns duties, or imposes obligations, the basic tenor of which is not

[67] *See* 89 Fed. Reg. at 9931, 9933; 50 C.F.R. § 22.220 (describing requirements for compensatory mitigation actions).
[68] *See* U.S. Fish & Wildlife Serv., Current Eagle General Permits (updated Dec. 4, 2025), https://perma.cc/6UB3-P6R5.
[69] *See* Permits for Incidental Take of Eagles and Eagle Nests, Proposed Rule, 87 Fed. Reg. 59,598, 59,602 (Sept. 30, 2022).

already outlined in the law itself." *N.H. Hosp. Ass'n v. Azar*, 887 F.3d 62, 70 (1st Cir. 2018) (quoting *La Casa Del Convaleciente v. Sullivan*, 965 F.2d 1175, 1178 (1st Cir. 1992)).

By mandating that permitting decisions be based on capacity density, Order 3438 is inconsistent with Interior's existing regulations, which do not make low capacity density a threshold requirement for permitting. The Corps memorandum similarly directs the Corps to consider hypothetical alternatives of higher capacity density, like the government's preferred fossil fuel sources, Corps Memorandum at 2, even though its regulations bind the agency to consider only "practicable alternatives," considering "cost, existing technology, and logistics," 40 C.F.R. § 230.10(a)(2). And the Eagle Take Permit Ban obligates the Service to cease granting permits to wind projects, which is directly at odds with existing Service regulations. *See* 50 C.F.R. § 22.250.

Had the agencies followed notice-and-comment procedures as required, *Amici* would have provided comment, just as they did on the prior agency actions.[70] "Because affected members of the public received no advance warning and no chance to comment first, and because the government has not identified a lawful excuse for neglecting its statutory notice-and-comment obligations," the rules "cannot stand." *Azar v. Allina Health Servs.*, 587 U.S. 566, 568 (2019).

CONCLUSION

The Court should grant a preliminary injunction to Plaintiffs.

[70] *See* Regulations.gov, "Eagle Permits; Incidental Take," Rulemaking Docket, FWS-HQ-MB-2020-0023, https://www.regulations.gov/docket/FWS-HQ-MB-2020-0023.

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CERTIFICATE OF SERVICE

I, Erica A. Fuller, certify that this document was filed through the CM/ECF system on January 16, 2026, and will be sent electronically to the registered participants as identified in the Notice of Electronic Filing (NEF).

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