UNITED STATES DISTRICT COURT
DISTRICT OF COLUMBIA

FRIENDS OF THE EARTH, et al.,

Plaintiffs,

v.

DEBRA A. HAALAND, et al.,

Defendants,

and

STATE OF LOUISIANA,

Intervenor-Defendant.

Case No. 21-cv-02317-RDM

MEMORANDUM IN SUPPORT OF PLAINTIFFS' MOTION FOR SUMMARY JUDGMENT

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INTRODUCTION

The Bureau of Ocean Energy Management ("the Bureau"), an agency within the Department of the Interior ("Interior"), has proposed to hold offshore Lease Sale 257, offering essentially all unleased acreage in the Gulf of Mexico. Lease Sale 257, the largest offshore oil and gas lease sale in U.S. history, is incompatible with the urgent action needed to slow global warming and avert drastic changes to the world's climate system. Yet, despite the stakes, the Bureau approved the sale without conducting a thorough analysis of the environmental impacts of the action. This failure violates the National Environmental Policy Act, 42 U.S.C. § 4321 *et seq.* ("NEPA").

The Bureau violated NEPA in its review and approval of Lease Sale 257 in two important ways. *First*, the Bureau failed to take a hard look at the indirect climate impacts associated with the sale. The Bureau used an arbitrary methodology to analyze the potential downstream greenhouse gas emissions that would result from the sale, which led it to a counterintuitive conclusion that emissions would *increase* if the Bureau decided *not* to hold the sale. The Bureau relied on this methodology despite the fact that both the Ninth Circuit and the District of Alaska have separately determined that the methodology is fatally flawed. *Ctr. for Biological Diversity v. Bernardt ("Liberty")*, 982 F.3d 723, 736–40 (9th Cir. 2020); *Sovereign Inupiat for a Living Arctic v. Bureau of Land Mgmt. ("Willow")*, Nos. 3:20-cv-00290, 3:20-cv-00308-SLG, 2021 WL 3667986, at *10–14 (D. Alaska Aug. 18, 2021). The Bureau's reliance on false and irrational assumptions about emissions meant that it did not take a hard look at the full environmental effects of holding Lease Sale 257 and caused it to arbitrarily underestimate the negative climate effects of the sale.

Second, the Bureau ignored significant new information about environmental impacts before it reached its decision to hold Lease Sale 257. New information available since the Bureau

completed its EISs in 2016 and 2017 shows climate impacts from leasing are much greater than the Bureau assumed, that drilling and production on leases will take place in much deeper water, that leasing will have greater impacts on the critically endangered Rice's whale, and that pipeline spill risks are greater than previously thought. The Bureau's failure to prepare a supplemental EIS in the face of this extensive new information regarding the environmental impacts of the lease sale is arbitrary and capricious.

NEPA requires each federal agency to take a "hard look" at the environmental effects of its actions based on accurate information. It also requires an agency to supplement its analysis if new information shows that environmental effects will be different than previously thought. The Bureau may not rely on models it knows are faulty nor ignore information that shows environmental effects will be greater. The Bureau's reliance on arbitrary and outdated information unlawfully skewed its evaluation of the lease sale's environmental effects and misinformed the public and the decisionmaker about those effects. Plaintiffs therefore ask this Court to find that the Bureau violated NEPA and the Administrative Procedure Act ("APA"), and to vacate the Bureau's decision to hold Lease Sale 257.

BACKGROUND

I. LEASE SALE 257

On August 31, 2021, the Bureau issued a Record of Decision to hold Lease Sale 257, which will offer "all available, unleased blocks" in the Gulf of Mexico region to the oil and gas industry for development—80.8 million acres—making it the largest oil and gas lease sale in U.S. history. AR0029788–800; 86 Fed. Reg. 50,160, 50,161 (Sept. 7, 2021). The Bureau estimates that the sale will result in the development and production of up to 1.12 billion barrels of oil and up to 4.4 trillion cubic feet of natural gas. 86 Fed. Reg. at 50,161. The Bureau

subsequently issued a Final Notice of Sale on October 4, 2021, which announced that the sale date will be November 17, 2021. 86 Fed. Reg. 54,728 (Oct. 4, 2021).

Lease Sale 257 will take place in the Gulf of Mexico, an area that is home to some of the nation's most productive and biodiverse tropical and temperate ecosystems including coral reefs, wetlands, seagrass beds, mangroves, *Sargassum*, and hard-and soft-bottom communities. AR0026029; AR0026767–72. These ecosystems support thousands of species of fish, whales and dolphins, sea turtles, corals, seabirds, and other wildlife. AR0014396–428; AR0026772–76. Many of the populations living in the Gulf of Mexico are listed as endangered or threatened under the Endangered Species Act. AR0008778–79. The Gulf of Mexico's abundant resources support more than one-third of the nation's domestic seafood supply. Hardy Decl. Ex. 1 at 6–7. Tourism and recreation are also significant parts of the region's economy that are highly dependent on healthy natural resources. AR0026758 (the area sustains a "highly popular and profitable recreational fishery").

At the same time, the Gulf is the nation's primary offshore source of oil and gas, generating about 97 percent of all U.S. offshore oil and gas production.[1] As of September 1, 2021, there are over 2,000 active leases in the Gulf that cover about 11 million acres.[2] Vast networks of oil and gas pipelines crisscross the seafloor and numerous transport vessels, storage facilities, and onshore terminals support operating platforms in these leased areas. AR0008296–300; AR0008304–07; AR0008320–24; AR0008348–59. *See* Figure 1. Lease Sale 257 will

[1] Bureau of Ocean Energy Management, *Oil and Gas – Gulf of Mexico*, https://www.boem.gov/regions/gulf-mexico-ocs-region/oil-and-gas-gulf-mexico (last visited Oct. 11, 2021).
[2] *Combined Lease Report*, Bureau (Oct. 1, 2021), https://www.boem.gov/sites/default/files/documents/regions/pacific-ocs-region/oil-gas/Lease%20stats%209-1-21.pdf.

greatly increase the extent of these oil and gas operations—it will offer all the available area that is currently undeveloped. *See* 86 Fed. Reg. at 50,161.

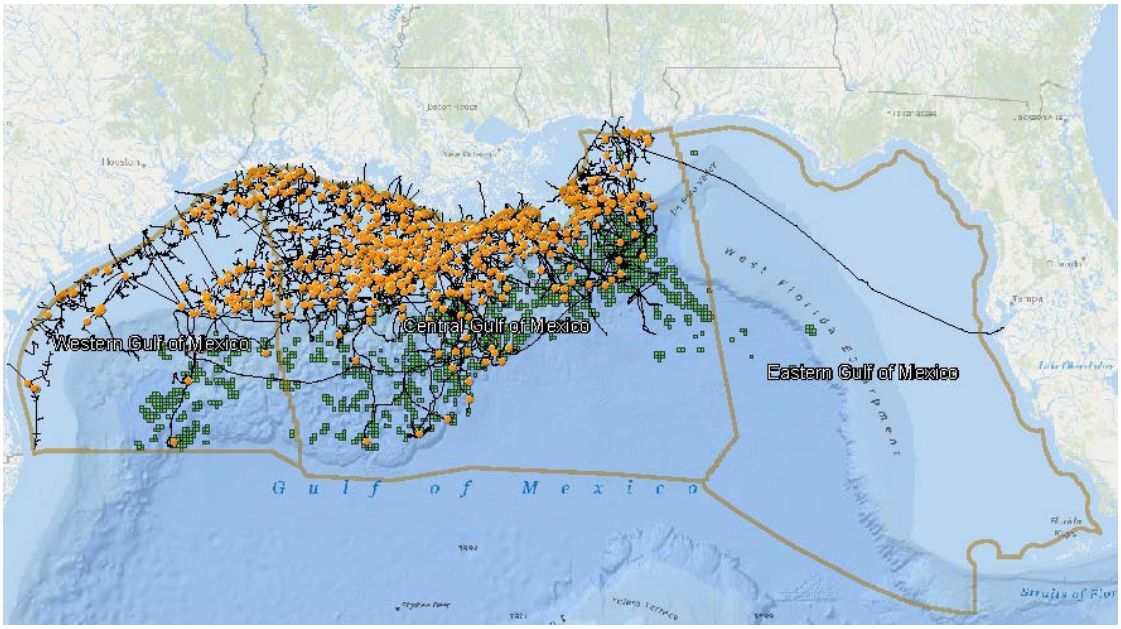

Figure 1: Drilling platforms (orange), active lease blocks (green), and pipelines (black) in federal waters in the Gulf of Mexico as of February 2020 (source: Bureau ARCGIS Online Interactive Map, https://bobson.maps.arcgis.com/apps/webappviewer/index.html?id=956c2a7fbfcb43b7bebfd62722d76670.

II. THE ENVIRONMENTAL AND CLIMATE IMPACTS OF OFFSHORE OIL AND GAS LEASING

The Bureau has recognized that oil and gas operations harm the environment in numerous ways, including through oil spills (both large and small), bottom habitat destruction, marine debris, water pollution, and noise (from vessels, surveys, construction, and general operations). *E.g.*, AR0008289–395. Oil and gas activities also degrade air quality, erode coastal wetlands, impair commercial and recreational fishing opportunities, degrade recreational and aesthetic experiences, and contribute significantly to climate change. *E.g.*, AR0008522–9012. Lease Sale 257 will increase the extent of oil and gas development and thus exacerbate all these harms. *See* AR0029789 (offering all available, unleased areas). The Bureau estimates the lease sale will result in up to nearly 2,000 new exploration and development wells, 280 new production

structures, over 2,000km of new pipeline, and about 550,000 service vessel round trips. AR0015883.

In particular, Lease Sale 257 would take place against the backdrop of a dramatically changing climate and an urgent need to transition away from fossil fuel energy. The world has warmed substantially over the last 150 years, with remarkable acceleration in recent decades, resulting in changes in surface, atmospheric, and oceanic temperatures, and in melting glaciers, reduced snow cover, shrinking sea ice, rising sea levels, ocean acidification, and changes in precipitation patterns, among other effects. Hardy Decl. Ex. 2 at 4; AR0014377–78; AR0014199–200. Human activity, especially emissions of greenhouse gasses, are primarily responsible for this change. 74 Fed. Reg. 66,496 (Dec. 15, 2009); Hardy Decl. Ex. 2 at 2–3; AR0014377–78. Chief among the drivers is increasing atmospheric concentrations of carbon dioxide and other greenhouse gases, including methane, nitrous oxide, fluorinated gases, and black carbon. AR0014377.

U.S. greenhouse gas emissions come largely from "the consumption of fossil fuels including oil, natural gas, and coal," primarily through electricity generation and transportation. AR0014201. Greenhouse gas emissions from the transportation sector originate almost entirely from petroleum (oil) products. *Id*. Greenhouse gas emissions during the lifecycle of oil and gas production and consumption include both "downstream" emissions from consumption and onshore processing as well as "upstream" emissions from exploration, development, and production. AR0014379. The production of oil and gas will lead to increased greenhouse gas emissions throughout the lifecycle of the resources extracted from the offshore lease blocks: from operations on the lease blocks (exploration, development, and production); from the onshore processing (refining and storage); from delivery of the final products to consumers; and

from the consumption of the oil and gas products downstream. AR0014198, AR0014203–07. The upstream and downstream greenhouse gas emissions from offshore lease blocks could consume a measurable piece of both the world's and the United States' greenhouse gas emissions budget. AR0014190.

The nation and the Gulf region have already begun to feel the harmful effects of rising temperatures. AR0014377–78. For example, climate change is having dramatic impacts on fisheries resources throughout the nation. AR0014542. "Climate-induced changes to ocean ecosystems, such as increasingly warming oceans, species shifts, rising sea levels, and ocean acidification, are already happening." *Id*. As much as 88 percent of the northern Gulf coast is highly vulnerable to sea level rise and over the last fifty years, sea levels have risen by up to 8 inches along parts of the Atlantic and Gulf coasts. AR0008461. The Louisiana coast is facing high rates of sea-level rise and land loss. *Id*. Further, strong storms have become increasingly severe in the Gulf. AR0044730–31. The Fourth National Climate Assessment predicts that Texas alone will see an additional 1,300 deaths per year due to rising temperatures and as much as $21 billion in damages to flooded coastal property by 2030. AR0044743; AR0044750.

The United States has recently recognized the extreme threat from climate warming and emphasized the significant greenhouse gas emissions that result from oil and gas development. 86 Fed. Reg. 7619 (Feb. 1, 2021). The administration has directed agencies to make significant reductions in greenhouse gas emissions; to build resilience against the impacts of climate change; to address actions that conflict with these objectives; and to "combat the climate crisis" by implementing a government-wide approach that reduces climate pollution in every sector of the economy. *Id*. The United States also formally recommitted to climate change targets under

the Paris Agreement on January 20, 2021, that require the nation to steadily decrease greenhouse gas emissions.[3]

III. THE BUREAU'S NEPA PROCESS FOR LEASE SALE 257

In order to inform its decision to hold Lease Sale 257, the Bureau relied on a Supplemental EIS that the Bureau completed in 2017 to evaluate the environmental effects of two previous lease sales scheduled in 2018 (Lease Sales 250 and 251). ("Lease Sale EIS"). AR0029788; 82 Fed. Reg. 59,644 (Dec. 15, 2017); AR0015475. The Lease Sale EIS tiered to, updated, and incorporated by reference two previous, broader environmental analyses: (1) a Programmatic EIS ("Program EIS") analyzing the effects of the 2017–2022 Five-Year Program, completed in November 2016; and (2) a Multisale EIS ("Multisale EIS") analyzing the impacts of the lease sales in the Gulf of Mexico under the 2017–2022 Program, completed in March 2017.[4] AR0029788; 81 Fed. Reg. 83,870 (Nov. 22, 2016); 82 Fed. Reg. 13,363 (Mar. 10, 2017).

When the Bureau published its EISs in 2016 and 2017, it committed to supplementing its analysis at least once a year. For example, in the Multisale EIS, the Bureau stated that it would only make a decision about whether and how to proceed with the first lease sale, Lease Sale 249, based on the analysis in the Multisale EIS. AR0008125. It stated that it would make decisions on each subsequent lease sale "after completion of the appropriate supplemental NEPA documents." *Id*. It also stated that the agency planned to supplement the Multisale EIS "on a regular basis to provide for more consistency and for planning purposes." AR0008202. Unless circumstances or

[3] Joseph R. Biden, Acceptance on Behalf of the United States of America (Jan. 20, 2021), https://www.whitehouse.gov/briefing-room/statements-releases/2021/01/20/paris-climate-agreement/.

[4] An agency can tier to a prior, broad programmatic EIS by "incorporating by reference the general discussion" from the broader EIS. 40 C.F.R. § 1508.28 (2019); *see also id*. § 1502.20.

information warranted an *earlier* Supplemental EIS, the Bureau stated it expected "to issue a Supplemental EIS once a calendar year." *Id*. *See also* AR0008203, Figure 1-6.

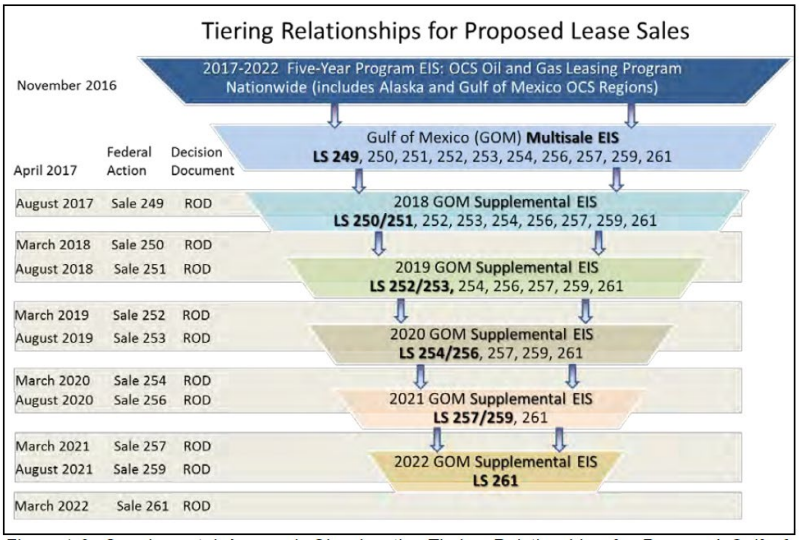

Figure 1-6 from AR0008203, depicting the supplemental approach that the Bureau planned for the Gulf of Mexico Lease Sales.

The Bureau subsequently issued the Lease Sale EIS to evaluate its decision to hold the 2018 lease sales (Lease Sales 250 and 251) (*see* Figure 1-6, above). In the Lease Sale EIS, the Bureau repeated its commitment to supplement saying, "Supplemental NEPA reviews, including opportunities for public involvement, are currently planned to be conducted annually for the remaining proposed lease sales." AR0015475. It stated that it would use the Lease Sale EIS to inform the two proposed lease sales scheduled in 2018 and that it would supplement the analysis for decisions on each of the remaining sales. AR0015480–81. The Bureau subsequently issued a "Notice of Intent to Prepare a Supplemental Environmental Impact Statement" which the agency "expected to . . . use[ ] to inform the decisions for each of the two proposed lease sales scheduled in 2020 and the subsequent lease sales through 2022." 83 Fed. Reg. 66,302 (Dec. 26, 2018). However, the agency never released a draft supplemental EIS and subsequently withdrew its

notice. 85 Fed. Reg. 2,437 (Jan. 15, 2020). Since completing the Lease Sale EIS in 2017, the Bureau has not supplemented or amended its EISs.

A. Assessment of Greenhouse Gas Emissions in the EISs

In the Program EIS, the Bureau evaluated greenhouse gas emissions from both upstream emissions (from development and production) and downstream emissions (from consumption and processing). AR0014379. It summed these two types of emissions and referred to them as "lifecycle greenhouse gas emissions." *Id*. The Bureau produced a separate report to examine the lifecycle greenhouse gas emissions from offshore leases, entitled "OCS Oil and Natural Gas: Potential Lifecycle Greenhouse Gas Emissions and Social Cost of Carbon" ("Wolvovsky and Anderson Report"). AR0014381; AR0014198. The Bureau quantified the lifecycle emissions for the proposed program by summing up the projected emissions under the proposed program. AR0014380–81; AR0014221.

For the No Action Alternative scenario—in which no new leasing would take place— the Bureau applied a market simulation model ("MarketSim") to predict the greenhouse gas emissions from energy sources that would substitute for oil and gas not produced from leasing. AR0014351; AR0014208.[5] However, in applying MarketSim, the Bureau "[e]xclud[ed] the foreign oil and gas markets" and resulting foreign emissions from its estimate of total global emissions. AR0014220.

Instead of quantitatively estimating foreign emissions, the Bureau assumed, without any support, that international sources would substitute for domestic production and "[t]he production of oil and gas from other global sources [would be] more carbon intense relative to

[5] MarketSim is a "a multi-market equilibrium model that simulates the energy supply, demand, and price effects of OCS oil and gas production compared with baseline productions" and addresses substitution effects across the energy market. AR0014351; AR0014208.

oil and gas produced on the OCS." AR0014190. The Bureau also assumed foreign consumption would remain static whether or not oil is produced as a result of leasing, in contradiction to basic principles of supply and demand. *Id*.[6] Although the Bureau stated it did "not have information related to how changes in the U.S. market would affect other countries" it assumed "that other oil producing countries will supply oil for U.S. import." AR0014220.

Based on these assumptions, the Bureau reached the conclusion that U.S. greenhouse gas emissions "would be slightly higher" if the Bureau were to have no lease sales. AR0014233; *see also* AR0014381 ("Overall, the [greenhouse gases] from the activities associated with the Proposed Action would be similar to but slightly lower than the No Action Alternative in both low- and high-price scenarios . . . due to the economic substitution effects from onshore and overseas sources expected under the No Action Alternative."). It estimated greenhouse gas emissions of up to about 8 million metric tons of carbon dioxide under the No Action Alternative as compared to up to only 7.9 million metric tons under the proposed leasing program. AR0014221; AR0014381.

Likewise, in its Multisale EIS and Lease Sale EIS, the Bureau incorporated by reference the Wolvovsky and Anderson report. AR0008523; AR0015627; AR0015651. Relying on that same report, the Bureau again concluded that "the greenhouse gases from the activities associated with the proposed action would be similar to but slightly lower than the No Action Alternative" in all scenarios "due to the economic substitution effects from onshore and overseas sources." AR0008545; AR0015651.

[6] As the Ninth Circuit explained, if oil is produced domestically, "the total supply of oil in the world will rise. Increasing global supply will reduce prices. Once prices drop, foreign consumers will buy and consume more oil." *Liberty*, 982 F.3d at 736.

However, available information shows that changes in U.S. oil and gas production translate into shifts in global prices, global consumption, and associated greenhouse gas pollution. *See generally* AR26911–58. Specifically, information in the record shows that increasing U.S. oil and gas production lowers oil prices and increases global consumption, while leaving U.S. oil and gas undeveloped increases oil prices and decreases global consumption. AR0026967–69 (concluding that increased U.S. oil production would result in substantial increases in global oil consumption). Energy experts at the Stockholm Environment Institute ("SEI") prepared a comprehensive analysis of the greenhouse gas emissions consequences of ending new federal fossil fuel leasing that concludes ceasing such leasing would result in substantial emissions reductions. AR0026913; AR0026935–38. The study estimated that for each unit of federal oil production cut, other oil supplies will substitute for about half a unit, and net oil consumption will drop by nearly half a unit. AR0026936. The SEI analysis points out the decrease in global greenhouse gas emissions under the No Action Alternative of the 2017–2022 leasing program would be large:

> These *decreases* in rest-of-world emissions dwarf the official estimated *increases* in US emissions that [the Bureau's] official Programmatic Environmental Impact Statement reports for its No Action Alternative (relative to the Proposed Program), which instead amount to just 0.13 billion, 0.12 billion and 0.013 billion tonnes [carbon dioxide] for the high, mid, and low-price scenarios, respectively. Those calculations *exclude* the far larger emissions attributable to the global market effect.

AR0026966. The studies show when accounting for the effects of reducing U.S. oil production on worldwide oil consumption, the global greenhouse gas impact of the No Action alternative over the life of the 2017–2022 OCS leasing program would be a decrease of up to 2.3 billion tons of CO2—greater than a year's worth of emissions from the entire U.S. transportation sector (i.e., 1.7 billion tons CO2). AR0026966.

In reaching its contrary conclusion that producing oil leasing will *reduce* greenhouse gas emissions, the Bureau did not address this available evidence demonstrating that reducing the supply of U.S. oil measurably reduces global demand and therefore greenhouse gas emissions. *See* AR0014220. The Wolvovsky and Anderson Report indicates that the Bureau did that by excluding the reduction in foreign consumption when it ran its model. A summary of the Bureau's lifecycle emissions methodology explains that a key assumption is that "[t]he reduction in foreign consumption of oil and gas in a no action analysis is not taken into account." AR0014220. The summary states, without any evidentiary support, that it is "reasonable" to exclude this factor because "[o]il consumption in each country is different, and [the Bureau] does not have information related to which countries would consume less oil." *Id*.

At the same time, the Bureau acknowledged that MarketSim is capable of estimating reductions in foreign oil consumption but chose not to include those calculations. *Id*. In explaining its choice to exclude consideration of foreign oil consumption in the 2017–2022 Offshore Oil and Gas Leasing Program, the Bureau disclosed MarketSim's calculation of the reduction in foreign oil consumption under the No Action Alternative. *Id*. MarketSim estimated that each barrel of oil left undeveloped under the No Action Alternative would result in approximately a half-barrel decrease in global oil consumption, equaling a 4 billion barrel reduction in foreign oil consumption over the course of the five-year program under a mid-price scenario.[7] *Id*. (reporting that taking 8 billion barrels of U.S. oil production off the global market would result in "a reduction in foreign oil consumption of approximately 1, 4, and 6 billion

[7] These results are consistent with other studies in the record. AR0026967–69 (calculating that forgoing 8.3 billion barrels of U.S. offshore production will decrease global consumption by 4 billion barrels and decrease global emissions by 1.7 billion metric tons); AR0026911–58 (finding that a one unit decrease in U.S. oil production decreases annual global production by 0.61 units).

barrels of oil for the low-, mid-, and high-price scenarios, respectively, over the duration of the 2017–2022 Program."). However, the Bureau ultimately excluded these quantitative reductions from its simulations. *Id*. ("[Greenhouse gas] impacts for this reduction in oil consumption . . . are not captured in this analysis.").

The MarketSim analysis from the Wolvovsky and Anderson Report upon which the Bureau relied has been the subject of two other cases challenging oil and gas development projects in Alaska. In both cases, the Ninth Circuit and the District of Alaska determined that the MarketSim analysis was flawed and the EISs that used the analysis to compare the greenhouse gas impacts of different alternatives was arbitrary and capricious. *Liberty*, 982 F.3d at 736–40; *Willow*, 2021 WL 3667986, at *10–14.

Plaintiffs provided comments to the Bureau on the Program EIS and the Lease Sale EIS highlighting flaws with the Bureau's greenhouse gas emissions analysis and highlighting studies that showed the agency's conclusions and assumptions about foreign oil and markets were flawed. *E.g.*, Hardy Decl. Ex. 3 at 14–17; AR0029621–28. In response to comments on the Lease Sale EIS, the Bureau confirmed that the Lease Sale EIS "incorporate[d] the greenhouse gas analysis of the Five-Year Program by reference." AR0016238. The agency explained that, in the Five-Year Program EIS, the Bureau concluded that reducing "oil and gas consumption in the U.S. and the associated emissions from limiting [] leasing would largely be offset by substitutes from other energy sources, either within the United States or elsewhere." AR0016239. The Bureau provided no details or evidence demonstrating the specific substitutes or the flow of markets and associated emissions. *Id*. At the same time, the Bureau acknowledged that "methods for quantifying greenhouse gas and potential social costs of such emissions are subject to

continual improvement" and stated that the Bureau "will update its analysis as warranted." AR0016325.

Plaintiffs submitted additional comments to the Bureau on July 29, 2021, before the Bureau reached its decision to hold Lease Sale 257, to reiterate the existing problems found with the Bureau's emissions modeling and highlight the two related cases. Hardy Decl. Ex. 4 at 4–7.

B. New Information About the Environmental Effects of Holding Lease Sale 257

1. New Information on Climate Change Impacts from the Lease Sale

The Bureau used EISs published in 2016 and 2017 to inform its decision to hold Lease Sale 257 in 2021. *See supra* at 7. At that time, the Bureau recognized that the United States agreed to keep global temperature warming within 2°C in accordance with the Paris agreement. AR0014381; AR0014201–02. Since then, in 2018, the IPCC issued a Special Report on Global Warming of 1.5°C that highlighted the necessity of limiting warming to 1.5°C to avoid catastrophic impacts to people and the planet. Hardy Decl. Ex. 6. The report found that in order to avoid exceeding 1.5°C of warming, global net carbon dioxide emissions need to decline by 45 percent relative to 2010 levels by 2030 and reach net zero by 2050; for a two-thirds chance for limiting warming to 1.5°C, emissions must reach net zero in 25 years. Hardy Decl. Ex. 6 at 12, 15. It stated that pathways to limit warming to 1.5°C with little or no overshoot require "a rapid phase out of [carbon dioxide] emissions and deep emissions reductions in other [greenhouse gases] and climate forcers." Hardy Decl. Ex. 7 at 20. "Several studies have shown that the vast majority of known fossil fuel reserves must stay in the ground to keep global warming below 2°C" indicating "that there is no room for new fossil fuel development." Hardy Decl. Ex. 8 at 7, 13, 28 ("The emissions from all currently developed and undeveloped oil and gas that could be produced and burned by 2050 could amount to close to 55 billion tons of [carbon dioxide] . . .

close to 10 percent of the total global carbon budget for a 50 percent chance of keeping warming within 1.5°C."); Hardy Decl. Ex. 9; Hardy Decl. Ex. 10; Hardy Decl. Ex. 11.

New evidence also shows that leasing on federal lands and in federal waters is responsible for a great majority of U.S. greenhouse gas emissions. A 2018 report from the U.S. Geological Survey demonstrates that fossil fuels produced on federal lands account for a significant percentage of U.S. emissions—approximately 24 percent of national carbon dioxide, 7 percent of methane, and 2 percent of nitrogen emissions from 2005-2014. AR0041771. A 2019 study also highlights that delay in phasing out fossil fuel infrastructure reduces the probability and the possibility of keeping global temperature rise below 1.5°C. Hardy Decl. Ex. 9 at 1.

New studies show that additional leasing will not limit warming to the extent needed. The United Nations' November 2019 "Emissions Gap" report stated that if the world is to limit global warming to 1.5°C, countries must cut emissions by at least 7.6 percent per year over the next decade, for a total emissions reduction of 55 percent between 2020 and 2030. Hardy Decl. Ex. 14 at 51–52. The United Nations' November 2019 "Production Gap" report shows that countries like the United States are on course to extract vastly more fossil fuels than what is allowed to meet a 1.5°C or even 2°C target. Hardy Decl. Ex. 13 at 12, 27. The world's current fossil fuel production plans would lead to 120 percent more fossil fuel emissions by 2030 than would be consistent with a 1.5°C pathway, and 210 percent more by 2030. *Id.* The 2019 reports also show the United States is a primary contributor of over-production of fossil fuels as the world's largest oil and gas producer and second largest coal producer, with current policies projected to lead to a 30 percent increase in oil and gas production by 2030. *Id*. at 25.

Recent findings show that methane emissions from oil and gas development have been widely underestimated. Monsell Decl. Ex. 23; Hardy Decl. Ex. 15; AR0036828. Methane is a

powerful contributor to climate warming. AR0014379. The new evidence demonstrates that existing operations in the Gulf of Mexico emit twice the amount of methane than previously thought. AR0036828, 36833. Studies also show that many abandoned wells continue to leak oil as well as harmful gases, including methane, benzene, nitrogen oxides, and carbon dioxide. Hardy Decl. Ex. 16; Hardy Decl. Ex. 17.

The International Energy Agency, an international energy regulatory body, also issued a report in July of 2021, concluding that "hav[ing] a fighting chance of . . . limiting the rise in global temperatures to 1.5°C . . . requires nothing short of a total transformation of the energy systems that underpin our economies." Hardy Decl. Ex. 18 at 4. The study articulates a pathway for the global energy sector to reach net zero emissions by 2050, which would require no new fossil fuel leasing. *Id.* at 18 at 4, 22.

In August of this year, the IPCC released a new working group report on climate change, which incorporated updated methodologies and new climate evidence. AR0030689–34637. The report concluded that "[g]lobal warming of 1.5°C and 2°C will be exceeded during the 21st century unless deep reductions in [carbon dioxide] and other greenhouse gas emissions occur in the coming decades." AR0030706–07. The report shows that extreme climate changes will increase across the globe, including increased heat waves, more severe storms, and greater sea level rise. AR0030721. For example, the report stated "extreme sea level events that occurred once per century in the recent past are projected to occur at least annually" by the end of the century. AR0030722.

Finally, new studies show that racial minorities and low-income communities bear a disproportionate burden from climate change. New studies have found that refineries and petrochemical plants are more likely to be in low-income neighborhoods and communities of

color. Hardy Decl. Ex. 19. Tribal lands in coastal Louisiana are suffering severe land loss from pipeline canals displacing people from their ancestral lands. Monsell Decl. Ex. 24. Moreover, new studies highlight severe storms—exacerbated by climate change and land loss from offshore oil activities disproportionately impact communities of color. Monsell Decl. Ex. 25 at 18. The Flores study found "that neighborhood-level Hispanic composition, poverty, disability status, and young age were associated with the disproportionate distribution of petrochemical releases post-[Hurricane] Harvey." *Id.* at 17.

2. New Information on Deepwater Drilling Activities

In its Lease Sale EIS, the Bureau assessed the effects of activities that could occur under a lease sale, including, most broadly, the effects of exploration, development, and production activities that are likely to occur as a result of a sale. AR0015489–90. The Bureau estimated activity levels for two different production scenarios to account for uncertainties in oil prices, costs, and other factors: a low activity scenario and a high activity scenario. AR0015580–81. It concluded that "[w]hen analyzing both the low and high production scenarios for all of the alternatives, most exploration drilling activity is expected to occur on the continental shelf (0- to 200-m [0- to 656-ft] water depth). AR0015585; *see also* AR0015586, Fig. 3-3. Likewise, the Bureau concluded that "[r]egardless of the production scenario or alternative, most support structure installation is expected to be on the continental shelf (0- to 200-m [0- to 656-ft] water depth)." AR0015587; AR0015588, Fig. 3-4. Finally, while the Bureau determined that in the low production scenario, activity would be fairly evenly spread between water depths, for the high production scenario, the Bureau concluded that "most development and production drilling activity is expected to occur on the continental shelf (0- to 200-m [0- to 656-ft] water depth)." AR0015589. *See also* AR0015592 ("Relatively more exploration and development drilling and

structure installation would occur on the shelf (in depths <200 m [656 ft]) than in deep water, regardless of the production case scenario.").

New information reveals that most exploration and development activity is actually occurring in deeper water, not the continental shelf. So far in 2021, for example, Interior has approved 17 new well permits and 26 revised new well permits in shallow water (less than 500 ft deep) compared to 30 new well permits and *over 300* revised new well permits in deep water (more than 500 ft deep); in 2020 Interior approved 10 new well permits and 25 revised new well permits in shallow water compared to 54 new well permits and *410* revised new well permits in deeper water; and in 2019 it approved 25 new well permits and 77 revised new well permits in shallow water compared to *62* new well permits and *416* revised new well permits in deeper water. Bureau of Safety and Environmental Enforcement, Status of Gulf of Mexico Permits, https://www.bsee.gov/stats-facts/offshore-information/status-of-gulf-of-mexico-well-permits (last visited Oct. 12, 2021). *See also* Monsell Decl. Ex. 26 (describing increase in deepwater production, and noting that in 2017, 52 percent of US oil production was from ultra-deep wells (≥ 1500 m water depth)).[8]

Operations at deeper depths pose unique risks, exposing equipment to strong ocean currents, low water temperatures, and high water pressures. Hardy Decl. Ex. 1 at 2, 3–5. In addition, experts still understand relatively little about the geology and effects of pressure in ultra-deepwater wells. *See, e.g.*, *id.* at 3, 12, 13–14. And the further offshore oil and gas activities

[8] *See also* Bureau of Safety and Environmental Enforcement, Deepwater Production Summary by Year, https://www.data.bsee.gov/Production/ProductionData/Summary.aspx (last visited Oct. 13, 2021) (showing that along with approvals, the production of oil from deepwater has also risen steadily over the last decades).

occur, the more difficult oil spill or other responses are, as the *Deepwater Horizon* disaster highlights all too well. *See e.g.*, *id*. at 7, 8–9.

3. New Information on the Endangered Rice's Whale

At the time that the Bureau completed its Multisale EIS in 2017, the Bureau stated the status of the Gulf of Mexico Bryde's whale (now named the Rice's whale) was "unknown," as there was "insufficient data to determine the population trends for this stock." AR0008794. Although the Bureau recognized that exploration and development is harming the Bryde's whale, it discounted risks because it concluded the whale's primary habitat is located in the Eastern Planning Area, an area that is mostly subject to moratorium. AR0008800. The Bureau recognized that transportation impacts (vessel strikes) from vessels traveling from the Central and Western Areas still had the potential to affect the whale. *Id*. However, it did not evaluate transportation impacts (like vessel strikes) on the Bryde's whale in the Multisale EIS or the Lease Sale EIS. *See, e.g.*, AR008801–02 (discussing impacts of vessel strikes on sperm whales and other marine mammals but not the Bryde's whale). Overall, in both the Multisale EIS and the Lease Sale EIS, the Bureau concluded that "there are no data to suggest" that routine oil and gas activities offshore are significantly impacting any marine mammal populations. AR0008808, AR0008825; AR0015750. And it concluded that the incremental effects on marine mammals from a lease sale would be negligible under all its proposed alternatives. AR0008826; AR0015567–68; AR0015751.

Since the Bureau completed its environmental analyses, the National Marine Fisheries Service ("the Fisheries Service") listed the Gulf of Mexico Bryde's whale, then considered a subspecies of the Bryde's whale, as endangered under the Endangered Species Act in 2019. 84 Fed. Reg. 15,446 (Apr. 15, 2019). The Fisheries Service determined that the species' biologically important area ("BIA") is larger than previously understood—out to 400 m depth and extending

west to Mobile Bay, Alabama, *id.* at 15,472— and concluded that "[i]f oil and gas development and production were to move closer to the BIA or expand within the BIA or if seismic survey activity levels near or within the BIA were to increase, extremely detrimental effects on the remaining individuals within the population could result." *Id.* at 15,458.

The whale is highly imperiled. One study, for example, concluded that given the heavily industrialized nature of Gulf waters and the already restricted habitat for Gulf of Mexico Bryde's whales, it is essential to accurately identify and remove anthropogenic threats through protective measures (*e.g.*, marine protected area establishment); and that to effect recovery, such protections must extend beyond currently occupied, remnant habitat. Hardy Decl. Ex. 20. The study also found that the whale's behavior—including their dive behaviors and tendency to spend a considerable amount of time at night within the upper 15 meters of the water column, which is within the draft depths of most commercial vessels—significantly raises the risk of vessel strikes. *Id.*; 84 Fed. Reg. at 15,479-80; Monsell Decl. Ex. 28.

Further, the Fisheries Service recently determined that existing and planned activities related to the exploration and development of oil and gas on the Gulf of Mexico outer continental shelf will likely jeopardize the continued existence of Gulf of Mexico Bryde's whales. AR0037441–42. The Fisheries Service concluded that the "population is extremely small (approximately 44 individuals) [and] likely recently experienced a significant decline due to the [Deepwater Horizon] incident." AR0037444. In its analysis, the Fisheries Service found that the species is threatened by energy exploration, development, and production, oil spills and oil spill response, noise pollution, and vessel strikes (among other stressors), AR0037441, which can cause mortality, as well as chronic stress, behavioral disruption, significant masking, and hearing loss, which are expected to reduce the fitness of individuals. AR0037443–44.

And just this year, based on new genetic evidence, scientists determined that the Gulf of Mexico Bryde's whale, previously considered one of two subspecies of the Bryde's whale that exists around the world, is in fact a unique baleen whale species. 86 Fed. Reg. 47,022 (Aug. 23, 2021). The newly discovered species, referred to as the Rice's whale (*Balaenoptera ricei*), Monsell Decl. Ex. 27, is the only large whale species that resides exclusively in the northern Gulf of Mexico. *Id*. Moreover, the study supporting the new listing indicates that the biologically important area for the whale is larger than what the Bureau considered in its EISs. *Id.* at 22.

4. New Information About Pipeline Safety

Pipelines are the primary method that oil and gas companies in the Gulf use to transport oil and gas products. AR0015593. In the Lease Sale EIS, the Bureau estimated that a Gulf-wide lease sale would result in up to about 2,144 km (about 1,330 miles) of new pipeline installations underwater. AR0015583; AR0008308. The Bureau's sister agency, the Bureau of Safety and Environmental Enforcement ("Safety Bureau"), is responsible for pipeline regulation, permitting, and inspection. AR0008304; AR0009222. In the Lease Sale EIS, the Bureau recognized the potential for spills as a result of pipeline leaks. AR0015601. The Bureau stated that "leaks in pipelines are detected through a series of pressure gauges" and that the Safety Bureau conducts pipeline inspections "at least monthly" to detect leaks and ensure safe operations. AR0008307. The Bureau estimated the risk of a pipeline spill based on historical pipeline leaks that the Safety Bureau reported. AR0015604; AR0008387; Hardy Decl. Ex. 21 at 15.

In addition, the Bureau concluded the risk of a catastrophic pipeline spill is low because of regular inspections and checks. In the Multisale EIS, the Bureau noted specifically that improved safety, as well as increased regulatory checks and inspections make the risk of a catastrophic oil spill less likely. AR0008604. The Bureau believed that operators on new leases

would complete decommissioning and removal at the end of production operations, as required under existing regulations. AR0008343–46; AR0009235.

However, a 2021 report from the Government Accountability Office ("GAO") concluded that the Safety Bureau "does not have a robust oversight process to ensure the integrity of approximately 8,600 miles of active offshore oil and gas pipelines in the Gulf of Mexico." Hardy Decl. Ex. 12 at 9–10. It also concluded that the Safety Bureau "does not have a robust process to address the safety and environmental risks posed by leaving decommissioned pipelines in place on the seafloor due to the cumulative effects of oversight gaps before, during, and after the decommissioning process." *Id.* at 15–16. Specifically, the report found that the Safety Bureau "does not generally conduct or require subsea inspection of active pipelines to detect leaks." *Id*. at 10. Instead, the Bureau relies on monthly surface observations and pressure sensors to detect leaks, despite recognizing that these methods and technologies are not always reliable for detecting ruptures. *Id*. The GAO report determined that pressure sensors are not reliable, especially in deeper water where more production is occurring. *Id*. Moreover, surface observations that the Safety Bureau typically relies upon are not generally reliable indicators of leaks. *Id*. The report determined the Safety Bureau "has long recognized the need to update its pipeline regulations to better ensure pipeline integrity through improved inspection and leak detection technologies but has made limited progress in doing so." *Id*.

The GAO report also found that although "pipelines must be removed from the seafloor," the Safety Bureau "has authorized industry to leave over 97 percent of pipeline mileage (almost 18,000 miles) on the Gulf of Mexico seafloor following the conclusion of their active use." *Id*. at 17–18. It also noted that the Safety Bureau "does not ensure that decommissioning activities are conducted in accordance with regulatory standards because [it] does not observe any pipeline

decommissioning activities, inspect pipelines after their decommissioning, or verify most of the pipeline decommissioning evidence submitted." *Id*. at 23–25. Further "operators do not always comply with the agreed-upon environmental mitigations." *Id.* at 20. Indeed, the report found that the Safety Bureau does not have a robust process to address the environmental and safety risks posed by leaving decommissioned pipelines in place on the seafloor due to the cumulative effects of oversight gaps before, during, and after the decommissioning process. *Id*. at 16–17.[9]

5. Other New Information

New information demonstrates that induced hydraulic fracturing ("fracking" or "acidization") procedures occur frequently in the Gulf. There have been at least 3,039 instances of offshore fracking and at least 760 instances of acidizing from 2010 through 2020 in the Gulf. Hardy Decl. Ex. 22 at 1. A 2021 preliminary report provided to the Environmental Protection Agency by the oil industry analyzed fracking waste in concentrations likely to occur around offshore drilling platforms. Monsell Decl. Ex. 29. Toxicity data indicates that fracking fluid discharges from offshore platforms in the Gulf may cause acute toxicity to marine organisms such as fish and mysids in concentrations that are likely to occur near offshore wells. *Id.* at 5–16. The report indicated that 520 barrels, or 21,840 gallons, of well treatment, completion, and workover fluids (collectively called "TCW" fluids) with industrial chemicals like biocides, polymers and solvents were discharged with every frack. *Id*. at 2–3, 4.

In addition, new information demonstrates that the Bureau is actively pursuing wind leasing options. The Bureau recently issued a "Request for Interest in Commercial Leasing for

[9] *See also* Blacki Migliozzi & Hiroko Tabuchi, *After Hurricane Ida, Oil Infrastructure Springs Dozens of Leaks*, New York Times (Sept. 26, 2021), https://www.nytimes.com/interactive/2021/09/26/climate/ida-oil-spills.html.

Wind Power Development on the Gulf of Mexico Outer Continental Shelf" to "determine[e] potential interest in offshore wind" in the Gulf of Mexico. 86 Fed. Reg. 31,339 (June 11, 2021).

Plaintiffs submitted new information to the Bureau in its July 2021 comments and in a letter to the Bureau, dated August 18, 2021. Hardy Decl. Ex. 4 at 7–16; Hardy Decl. Ex. 5.

LEGAL BACKGROUND

I. NATIONAL ENVIRONMENTAL POLICY ACT

NEPA is this country's "basic national charter for protection of the environment." 40 C.F.R. § 1500.1 (2019);[10] *see* 42 U.S.C. § 4331 *et seq*. Congress enacted NEPA to "promote efforts which will prevent or eliminate damage to the environment" and to ensure that federal agencies incorporate environmental concerns into the decision-making process. 42 U.S.C. §§ 4321, 4331(a)–(b); *see New York v. Nuclear Regul. Comm'n*, 681 F.3d 471, 476 (D.C. Cir. 2012). NEPA imposes environmental review requirements to "insure that environmental information is available to public officials and citizens before decisions are made and before actions are taken." 40 C.F.R. § 1500.1(b). The D.C. Circuit has confirmed that "[t]he NEPA duty is more than a technicality; it is an extremely important statutory requirement to serve the public and the agency *before* major federal actions occur." *Found. on Econ. Trends v. Heckler*, 756 F.2d 143, 157 (D.C. Cir. 1985). NEPA's aim is not to produce better documents, but to achieve better decisions. 40 C.F.R. § 1500.1(c).

To that end, NEPA requires all federal agencies to prepare a "detailed" Environmental Impact Statement ("EIS") for all "major federal actions significantly affecting the quality of the

[10] The Council on Environmental Quality recently revised its regulations implementing NEPA. 85 Fed. Reg 43,304 (July 16, 2020). Those new regulations do not apply to the NEPA analyses at issue here, which began in August 2016. 81 Fed. Reg. 55,480 (Aug. 19, 2016). *See also* 85 Fed. Reg. at 43,372, 43,340 (stating new regulations only "apply to any NEPA process begun after September 14, 2020").

human environment." 42 U.S.C. § 4332(2)(C). The EIS must provide a "full and fair discussion of significant environmental impacts and . . . inform decisionmakers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment." 40 C.F.R. § 1502.1. Because the EIS is intended to "serve as the means of assessing the environmental impact of proposed agency actions," rather than a justification of decisions already made, 40 C.F.R. § 1502.2(g), agencies are prohibited from committing "resources prejudicing selection of alternatives before making a final decision," *id.* § 1502.2(f). Ultimately, both the draft and final EIS are to serve an informational role—to give "the public the assurance that the agency has indeed considered environmental concerns in its decisionmaking process and, perhaps more significantly, provide[] a springboard for public comment." *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349 (1989) (internal quotation marks and citation omitted).

The EIS process "forces the agency to take a 'hard look' at the environmental consequences of its actions, including alternatives to its proposed course," and "ensures that these environmental consequences, and the agency's consideration of them, are disclosed to the public." *Sierra Club v. FERC*, 867 F.3d 1357, 1367 (D.C. Cir. 2017) (citations omitted). The agency must perform this duty using high-quality, accurate scientific information and must ensure the scientific integrity of its analyses. 40 C.F.R. §§ 1500.1(b), 1502.24; *see Native Ecosystems Council v. U.S. Forest Serv.*, 418 F.3d 953, 964 (9th Cir. 2005) ("To take the required 'hard look' at a proposed project's effects, an agency may not rely on incorrect assumptions or data in an EIS." (citing 40 C.F.R. § 1500.1(b))). NEPA also requires an agency to show its work: the agency must, in the EIS, "identify any methodologies used and . . . make

explicit reference . . . to the scientific and other sources relied upon for conclusions." 40 C.F.R. § 1502.24.

An agency's NEPA obligations do not end with the preparation of an EIS. NEPA and its implementing regulations impose a continuing duty on agencies to prepare a supplemental EIS if a major federal action remains to occur and when "(i) The agency makes substantial changes in the proposed action that are relevant to environmental concerns; or (ii) There are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts." 40 C.F.R. §§ 1502.9(c)(1)(i), (ii). An agency must prepare, circulate, and file a supplemental EIS "in the same fashion (exclusive of scoping) as a draft and final statement." *Id*. § 1502.9(c)(4).

II. OUTER CONTINENTAL SHELF LANDS ACT

The Outer Continental Shelf Lands Act ("OCSLA") governs the leasing, exploration, development, and production of oil and gas deposits on the Outer Continental Shelf.[11] 43 U.S.C. § 1331 *et seq*. OCSLA prescribes tiered stages for the Secretary to manage offshore oil and gas development that includes the holding of lease sales.[12] The Secretary is required to complete an EIS at the lease sale stage—a "critical stage" in the leasing process. *Ctr. for Biological Diversity v. U.S. Dep't of Interior*, 563 F.3d 466, 481 (D.C. Cir. 2009). *See also* 43 U.S.C. § 1346(a)(1); *Vill. of False Pass v. Clark*, 733 F.2d 605, 609, 614 (9th Cir. 1984); *Ctr. for Biological Diversity v. Zinke*, 260 F. Supp. 3d 11, 18 (D.D.C. 2017).

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[11] The Outer Continental Shelf extends from the outer boundary of state waters—which ranges from three to nine nautical miles from shore—to the outer boundary of the United States' Exclusive Economic Zone, 200 nautical miles from shore. 43 U.S.C. §§ 1301(a), 1331(a); 48 Fed. Reg. 10,605 (Mar. 10, 1983).

[12] OCSLA prescribes four, tiered stages for the Secretary to manage offshore oil and gas development: 1) five-year leasing programs; 2) lease sales; 3) exploration plans; and 4) development and production plans. 43 U.S.C. §§ 1344, 1337, 1340, 1351.

Through OCSLA, Congress authorized the Secretary of the Interior to lease portions of the Outer Continental Shelf to qualified bidders. The Secretary has made the Bureau responsible for managing the development of offshore resources, including offering lease sales and conducting environmental analyses for the sales. 76 Fed. Reg. 64,432, 64,432 (Oct. 18, 2011); 30 C.F.R. § 550.101. The Secretary has made another agency within Interior, the Safety Bureau, responsible for offshore safety and environmental regulation and enforcement. 76 Fed. Reg. at 64,432; 30 C.F.R. § 250.101.

STANDARD OF REVIEW

A party is entitled to summary judgment if "the movant shows that there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law." Fed. R. Civ. P. 56(a). Challenges to final agency action under NEPA are reviewed under the APA. *Sierra Club v. FERC*, 867 F.3d at 1367. "In the APA context, summary judgment is the mechanism for deciding whether as a matter of law an agency action is supported by the administrative record and is otherwise consistent with the APA standard of review." *Lewis v. Sec'y of Navy*, 195 F. Supp. 3d 277, 283 (D.D.C. 2016).

The APA requires courts to "hold unlawful and set aside agency action, findings, and conclusions found to be . . . arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. § 706(2)(A). When considering a motion for summary judgment, a court must determine whether the agency "examine[d] the relevant data and articulate[d] a satisfactory explanation for its action including a 'rational connection between the facts found and the choice made.'" *Motor Vehicle Mfrs. Ass'n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983) (quoting *Burlington Truck Lines v. United States*, 371 U.S. 156, 168 (1962)). Courts "do not hear cases merely to rubber stamp agency actions," *Nat. Res. Def. Council, Inc. v. Daley*, 209 F.3d 747, 755 (D.C. Cir. 2000), nor can they "accept [an agency's]

bare conclusory allegations as fact," *Taylor v. FDIC*, 132 F.3d 753, 762 (D.C. Cir. 1997). Instead, they must consider "whether the agency has explained its decision, whether the facts on which the agency purports to have relied have some basis in the record, and whether the agency considered the relevant factors." *Fund for Animals v. Babbitt*, 903 F. Supp. 96, 105 (D.D.C. 1995) (citations omitted); *accord State Farm*, 463 U.S. at 43; *see also Sierra Club v. Salazar*, 177 F. Supp. 3d 512, 532 (D.D.C. 2016) (court's review is guided by four principles: "deliberation, transparency, rationality, and evidentiary propriety").

Plaintiffs' claim to compel the Bureau to prepare a supplemental EIS "[is] . . . an action arising under 5 U.S.C. § 706(1), to 'compel agency action unlawfully withheld or unreasonably delayed.'" *Friends of the Clearwater v. Dombeck*, 222 F.3d 552, 560 (9th Cir. 2000) (citation omitted). "In such cases, review is not limited to the record as it existed at any single point in time, because there is no final agency action to demarcate the limits of the record." *Id.* Rather, courts evaluate the new information and consider whether the agency made a reasoned determination of whether it reveals significant effects to the environment not previously considered. *Stand Up for California! v. U.S. Dep't of the Interior*, 994 F.3d 616, 628 (D.C. Cir. 2021) (*citing Marsh v. Oregon Nat. Res. Council*, 490 U.S. 360, 374 (1989)).

ARGUMENT

Congress directed the Bureau to complete a thorough environmental analysis before holding Lease Sale 257. This requires the Bureau "to take into account the full environmental effects of its actions when deciding whether and in what manner to pursue the lease sale." *Native Vill. of Point Hope v. Jewell*, 740 F.3d 489, 504 (9th Cir. 2014) (citing 42 U.S.C. § 4332(2)(C)). "It is only at the lease sale stage that the agency can adequately consider cumulative effects of the lease sale on the environment, including . . . the effects of the sale on climate change." *Id*.

The Bureau's reliance on arbitrary greenhouse gas emissions modeling and its failure to consider significant, new information about the environmental effects of the sale meant that it did not take a "hard look" at the full, foreseeable environmental effects of holding Lease Sale 257. Specifically, in its review and approval of Lease Sale 257, the Bureau failed to take a hard look at the climate impacts that would result from the sale. The Bureau used an arbitrary methodology to analyze the potential downstream greenhouse gas emissions, which led it to counterintuitively predict emissions would increase if the Bureau decided not to hold the sale. And the Bureau ignored significant new information about environmental impacts before it reached its decision to hold Lease Sale 257. The Bureau's failures to take a hard look at the climate impacts from the sale and its failure to prepare a supplemental EIS in the face of extensive new information violates NEPA and is arbitrary and capricious, in violation of the APA.[13]

I. THE BUREAU FAILED TO ADEQUATELY CONSIDER AND ANALYZE THE CLIMATE IMPACTS OF LEASE SALE 257

Interior violated NEPA by failing to adequately analyze the greenhouse gas emissions associated with Lease Sale 257. In particular, the Bureau relied on flawed analysis that undervalued the greenhouse gas emissions that would result from the lease sale. NEPA requires

[13] Plaintiffs have standing to bring this action on behalf of their members, as demonstrated by the declarations attached to this Motion. Declarations of Manuel, Templeton, Saxon, Skrmetta, Galvin, Wiygul, and Steiner (discussing the concrete interests of Plaintiffs' members, including recreational, aesthetic, informational, commercial, and scientific interests); *see Hunt v. Wash. State Apple Advert. Comm'n*, 432 U.S. 333, 343 (1977); *accord Friends of the Earth, Inc. v. Laidlaw Env't Servs. (TOC), Inc.*, 528 U.S. 167, 181 (2000); *Nat. Res. Def. Council v. EPA*, 489 F.3d 1364, 1370 (D.C. Cir. 2007). Because Plaintiffs assert "archetypal procedural injur[ies]," the case law "relieves [them] of the need to demonstrate that (1) the agency action would have been different but for the procedural violation, and (2) that court-ordered compliance with the procedure would alter the final result." *Nat'l Parks Conservation Ass'n v. Manson*, 414 F.3d 1, 5 (D.C. Cir. 2005).

the Bureau to adequately consider the reasonably foreseeable indirect effects of its action, including the impacts from greenhouse gas emissions. 40 C.F.R. §§1502.16(b), 1508.8(b); *see also Sierra Club v. FERC,* 867 F.3d at 1371; *Liberty,* 982 F.3d at 737 ("An EIS that does not adequately consider the indirect effects of a proposed action violates NEPA."). The production of oil and gas will lead to increased greenhouse gas emissions throughout the lifecycle of the resources extracted from the offshore lease blocks: from operations on the lease blocks (exploration, development, and production); from the onshore processing (refining and storage); from delivery of the final products to consumers; and from the consumption of the oil and gas products downstream. *See supra* at 5–6. NEPA demands that the Bureau take a hard look at those impacts to inform both the public and the agency decisionmaker before the Bureau takes action. *Robertson*, 490 U.S. 332 at 349–50. Moreover, the Bureau must disclose its assumptions when making estimates and the consequences of those assumptions. *Sierra Club v. FERC,* 867 F.3d at 1374; *WildEarth Guardians v. Zinke*, 368 F. Supp. 3d 41, 68–70 (D.D.C. 2019) (determining an agency's assertion that quantifying greenhouse gas emissions "would be overly speculative" was "belied by an administrative record replete with information on oil and gas development and [greenhouse gas] emissions."). An agency "must either quantify and consider the project's downstream carbon emissions or explain in more detail why it cannot do so." *Sierra Club v. FERC,* 867 F.3d at 1375.

Here, the Bureau relied on MarketSim models to estimate the greenhouse gas emissions that would result if it did not hold the sale. *See supra* at 9–10. However, the Bureau excluded foreign emissions from its analysis. A summary of the Bureau's methodology explains that a key assumption is that "[t]he reduction in foreign consumption of oil and gas in a no action analysis is not taken into account." AR0014220. The summary states, without any analysis, that it was

"reasonable" to exclude this factor because "[o]il consumption in each country is different, and [the Bureau] does not have information related to which countries would consume less oil," and so it could not make predictions about the changes in net emissions from changes in foreign assumptions. *Id*. Instead of quantifying foreign emissions, the Bureau summarily assumed that foreign emissions would increase if the U.S. did not produce oil and that overall global emissions would be greater if the Bureau did not hold lease sales. *See supra* at 10.

In failing to quantify foreign emissions, the Bureau ignored available evidence demonstrating that it was scientifically possible for the agency to quantify those emissions. And the evidence showed that reducing the supply of U.S. oil measurably reduces global demand and therefore greenhouse gas emissions. *See supra* at 11 (discussing Stockholm Institute and other studies). The Bureau acknowledged that MarketSim could even be used to estimate foreign emissions, and that foreign oil consumption would go down substantially under the No Action Alternative. AR0014220. Yet the Bureau declined to "capture[] this information in [its] analysis" and thus entirely ignored foreign reductions in demand that it knew would occur. *Id*.

The MarketSim models that the Bureau relied on to evaluate greenhouse gas emissions are the very same that the Ninth Circuit Court of Appeals and the District of Alaska rejected as arbitrary. *Liberty*, 982 F.3d at 738; *Willow*, 2021 WL 3667986, at *10–12, *10 n.107, *11 n.125. In both cases, the court concluded the agency unlawfully excluded foreign oil emissions from its greenhouse gas emissions analysis, information that was available to the Bureau. *See Liberty,* 982 F.3d. at 738, *Willow*, 2021 WL 3667986 at, *11–12.

In *Liberty*, the Ninth Circuit rejected the Bureau's evaluation of an offshore oil and gas project because the agency failed to properly assess downstream greenhouse gas emissions that would result from consuming oil abroad. *Liberty*, 982 F.3d at 740. Rather than assessing foreign

emissions, the Bureau limited its analysis to U.S. emissions to predict that the absence of oil and gas from the project would actually increase downstream greenhouse gas emissions. *Id.* at 736. The Ninth Circuit rejected the Bureau's explanation "that '[e]xcluding the foreign oil and gas markets is reasonable' because '[o]il consumption in each country is different, and [the Bureau] does not have information related to which countries would consume less oil'" because the Bureau did not "cite any materials in support of [those] statements nor describe the research it relied upon to reach [those] conclusions." *Id*. at 738. The court held that NEPA requires an agency to quantitatively evaluate emissions resulting from the foreign consumption of oil unless it "thoroughly explain[s] why such an estimate is impossible." *Id.* at 738–39. The Court also found that the record "belie[d] [the Bureau's] contention that it could not have summarized or estimated foreign emissions with accurate or credible scientific evidence." *Id*. at 738.

In *Willow,* the court evaluated the Bureau of Land Management's ("BLM's") greenhouse gas emissions estimates for an onshore development project. *Willow*, 2021 WL 3667986, at *10–14. In the EIS for the project, BLM relied on the greenhouse gas emissions analysis that the Bureau prepared for BLM, using the same MarketSim model. *Id*. at *10, n.107. The District of Alaska concluded that the agency's greenhouse gas analysis suffered from "the same flaws the Ninth Circuit identified in *Liberty"* and accordingly the agency's exclusion of foreign emissions in its alternatives analysis in the EIS was arbitrary and capricious. *Id.* at *12. While BLM acknowledged "the Willow [project] would affect both domestic and foreign energy consumption," *id*. at *10, n.109, it excluded foreign oil and gas consumption from its model on the same basis that the *Liberty* court squarely rejected: that it lacked reliable data or methods to assess global emissions. *Id*. at *11. Although BLM provided a lengthier explanation for its failure to estimate foreign emissions than the Bureau did in *Liberty*, the court still concluded that

BLM did not thoroughly explain why an estimate of foreign emissions was impossible. *Id*. at *11–12. And BLM failed to address the studies that were in the agency record which showed the agency could have estimated foreign emissions with credible evidence. *Id*. at *12.

The Bureau's analysis here suffers the same flaws identified in these cases. The Bureau relied on the same MarketSim model and same emissions report (Wolvovsky and Anderson Report) that the courts rejected in *Liberty* and *Willow* to conclude that the greenhouse gas emissions from the activities resulting from a single lease sale would be *lower* than if the Bureau did *not* hold a lease sale. The Bureau also offered the same reasoning for its decision not to estimate foreign greenhouse gas emissions in *Liberty* and *Willow*: "a purported lack of information on foreign energy consumption and emissions patterns." *Willow*, 2021 WL 3667986, at *11, *Liberty*, 982 F.3d at 738, AR0014220 ("Oil consumption in each country is different, and [the Bureau] does not have information related to which countries would consume less oil."). Like in the *Liberty* and *Willow* cases, information available to the Bureau showed that increasing U.S. oil and gas production lowers oil prices and increases global consumption, while leaving U.S. oil and gas undeveloped increases oil prices and decreases global consumption. *See, e.g.*, AR0026967–69. The Bureau had adequate information to quantify the lease sale's effects on foreign oil consumption before deciding to hold the sale but failed to perform that analysis. *See supra* at 11–13. The Bureau's faulty assumption that the No Action Alternative would increase greenhouse gas emissions prevented it from accurately assessing the environmental effects likely to result from the proposed lease sale and caused it to undervalue the environmental benefits of not holding the lease sale. While the Bureau acknowledged that MarketSim is capable of estimating reductions in foreign oil consumption, it essentially ignored foreign reductions in demand because it would have been too difficult to translate those reductions into changes in net

emissions. AR0014220. As in *Liberty* and *Willow*, the Buruea's failure to use accurate and high-quality information to estimate greenhouse gas emissions and effects is arbitrary and violates NEPA.

One document in the record briefly addresses the holding in the *Liberty* case, an Addendum to the Bureau's Determination of NEPA Adequacy. AR0029962–68. In that Addendum, the Bureau recognized that there are "similarities in approach for the (sic) analyzing downstream [greenhouse gas] emissions with [the Liberty] plan and [Lease Sale 257]." AR0029963. However, the Bureau posited that "a quantitative analysis of emissions from foreign oil consumption is not possible with the current available data" and provided a brief "qualitative analysis" of foreign emissions. AR0029967. The Addendum is not sufficient to correct the Bureau's failings for three reasons. First, the Addendum inappropriately considered whether to supplement its EIS—although the Liberty opinion was "new," the problems with the MarketSim model were not. The Bureau could not rely on a flawed model to support its decision under NEPA. Second, the Addendum did not directly address the *Liberty* court holdings, including its determination that record evidence "belied" the agency's insistence that it could not perform a quantitative analysis. Third, the Bureau's post-EIS discussion of this issue cannot cure deficiencies in the EISs. The discussion and analysis must appear within the EIS to ensure "NEPA's goal of allowing the public the opportunity to 'play a role in . . . the decisionmaking process'" is given effect. *Great Basin Res. Watch v. Bureau of Land Mgmt.*, 844 F.3d 1095, 1104 (9th Cir. 2016) (alteration in original) (quoting *Robertson*, 490 U.S. at 349); *see also Hammond v. Norton*, 370 F. Supp. 2d 226, 250 n.15 (D.D.C. 2005).

In the record of decision, the Bureau again acknowledged the *Liberty* holding. AR0029794. Yet, even with this acknowledgment, the Bureau failed to provide any reasoning or

justification for still using the flawed and rejected analysis: "The potential impacts of [greenhouse gas] emissions from foreign oil consumption are not inconsistent with conclusions from the 2017-2022 National [] Program EIS, 2017-2022 [] Multisale EIS, [or] 2018 [] Supplemental EIS." *Id.* In other words, the Bureau stated that the emissions analysis it relied on in its decision to hold Lease Sale 257 was "not inconsistent" with the same conclusions from its prior, and now outdated, EISs that both the *Liberty* and *Willow* courts determined were arbitrary. *Id*. Before deciding to hold Lease Sale 257, the Bureau was required to quantitatively estimate the magnitude of foreign emissions that would result. By not doing so, the Bureau's decision is unlawful, in violation of NEPA and the APA.

II. THE BUREAU VIOLATED NEPA BY FAILING TO SUPPLEMENT ITS LEASE SALE EIS'S BEFORE DECIDING TO HOLD LEASE SALE 257

The obligation to take a hard look at the environmental impacts of an action does not terminate with the production of an EIS. *Marsh,* 490 U.S. at 374. NEPA and its implementing regulations impose a continuing duty on agencies to prepare a supplemental EIS. 40 C.F.R. § 1502.9(c)(1)(ii). When potentially significant new information comes to light, "the agency must consider it, evaluate it, and make a reasoned determination whether it is of such significance" as to warrant supplementation. *Friends of the Clearwater*, 222 F.3d at 558 (citation omitted); *see also Marsh*, 490 U.S. at 385 ("[T]he Corps had a duty to take a hard look at the proffered [new] evidence."). As the Supreme Court summarized, "[i]t would be incongruous with [NEPA's] approach to environmental protection, and with the Act's manifest concern with preventing uninformed action, for the blinders to adverse environmental effects, once unequivocally removed, to be restored prior to the completion of agency action simply because the relevant proposal has received initial approval." *Marsh*, 490 U.S. at 371.

It has been four years since the Bureau last issued an EIS to support a Gulf-wide lease sale. The world has changed substantially since then, including the development of significant new information about the heightened risks that oil and gas leasing poses to the climate, water quality, wildlife, and human health that the Bureau had before it when evaluating and deciding to proceed with Lease Sale 257. The Bureau failed to account for—indeed, it did not even acknowledge—this new information before taking action on the lease sale, and despite the agency's previous commitment to make individual lease sale decisions "after completion of the appropriate supplemental NEPA documents." AR0008125; AR0008202 (outlining its intent "to issue a Supplemental EIS once a calendar year"), AR0008203 fig. 1-6. These statements may even have created a binding duty on the agency to implement its promises. *See W. Org. of Res. Councils v. Zinke*, 892 F.3d 1234, 1245 (D.C. Cir. 2018) (citing 40 C.F.R. § 1505.3 for the proposition that, where an agency commits to a measure in its EIS, the agency is required to implement the measure). And while the Bureau published a "Notice of Intent" to prepare a supplemental EIS in late 2018 to inform its lease sale decisions through 2022, 83 Fed. Reg. 66,302, it subsequently withdrew that notice, 85 Fed. Reg. 2,437. The Bureau simply cannot pretend that it is still 2017 when it offers a lease sale in 2021. The agency's failure to examine and analyze all of the significant new information about the environmental effects of a lease sale on the environment before deciding to hold Lease Sale 257 violates NEPA. The Court can and should set aside the Lease Sale 257 decision on this basis alone.

A. The Bureau Failed to Supplement Its EISs with New Science Demonstrating that Climate Change Impacts from Leasing are Greater than Previously Thought.

As detailed above, a raft of new reports, studies, and information about the causes, effects, and urgent actions necessary to address the climate crisis have become available over the past four years. *See supra* at 14–17 (discussing new information on climate change, including

studies that demonstrate a need to halt additional oil and gas leasing to avoid the worst effects of climate change, and disproportionate effect on low-income communities and communities of color in the Gulf). With two exceptions—the IPCC Report and the Merrill study—the Bureau failed to examine any of this information and failed to consider whether it was required to supplement its EISs before deciding to proceed with a lease sale that will increase greenhouse gas emissions and the effects of climate change. There is no question that this new information about the effects of climate change is relevant when the Bureau is deciding to offer a lease sale that will result in the extraction and combustion of up to 1.1 billion barrels of oil and 4.4 trillion cubic feet of natural gas. The Bureau's failure to consider this information at all or to determine whether its significance merits supplementing its EISs, much less take a "hard look" at the effects of its action in light of this information, violates NEPA's most basic requirements. *See* 40 C.F.R. § 1502.9(d); *Robertson*, 490 U.S. at 349–50; *Friends of the Clearwater*, 222 F.3d at 558–59; *Hughes River Watershed Conservancy v. Glickman,* 81 F.3d 437, 445–46 (4th Cir.1996) (concluding that agency failed to take a hard look when its decision not to supplement an EIS did not address new expert evidence).

While the Bureau acknowledged one of these new studies—the IPCC's August 9, 2021 report—in its Record of Decision and admitted that it "may be [] significant," for leasing decisions, the agency summarily concluded that the report did not warrant supplementing the EIS "at this time." AR0029794. The record also includes two reports, titled "Determination of NEPA Adequacy," that mention the IPCC study along with one other new study—the Merrill 2018 report. AR0029980; AR0029812. Without any analysis, the Bureau simply states that its "review to date has not located any information in the report that would disturb [the Bureau's] prior assessments of the incremental climate impacts of this sale." AR0029812. The Bureau stated that

its previous conclusions "remain valid and can be used to support the [record of decision] for proposed Lease Sale 257 without further supplementation." AR0029804, 29972.

These cursory (and incorrect) statements fall far short of the Bureau's duty to take a hard look and analyze all relevant factors. *See, e.g., Getty v. Fed. Sav. and Loan Ins. Corp.,* 805 F.2d 1050, 1055 (D.C. Cir. 1986) ("Stating that a factor was considered . . . is not a substitute for considering it."); *Hughes River Watershed Conservancy*, 81 F.3d at 445 (a "hard look" requires "careful scientific scrutiny"). Moreover, the Bureau does not explain how *existing* information about the alarming pace and consequences of climate change may be significant in the future, but not now, in the context of an agency decision to offer over 80 million acres of the Gulf of Mexico for oil and gas drilling. NEPA requires agencies to consider new information and supplement an EIS to ensure consideration of all potentially significant environmental effects *before* an agency takes any action affecting the environment. *Found. on Econ. Trends*, 756 F.2d at 157. The Bureau's irrational attempt to put off until later what it must consider today turns this requirement on its head and violates NEPA's most basic requirements.

B. The Bureau Failed to Supplement Its EISs with New Information Undermining Its Previous Conclusions About Risks from Drilling and Development and Harm to Gulf Wildlife.

In its previous EISs that the Bureau completed in 2016 and 2017, the Bureau made a range of assumptions and drew a number of conclusions that, in light of new information and subsequent events, are simply no longer valid. When confronted with this important new information, "it [is] incumbent on the [agency] to evaluate the existing EIS to determine whether it required supplementation." *Friends of the Clearwater,* 222 F.3d at 558 (*citing Marsh*, 490 U.S. at 374). The Bureau failed to consider this new information at all, much less take a "hard look" to determine whether its significance merits supplementing. The agency's failure to supplement

its analyses with information that directly contradicts its previous conclusions about environmental impacts fatally undermines its decision to proceed with Lease Sale 257. For example, when considering the effects of different production scenarios for activity resulting from its lease sales, the Bureau concluded that most exploration and drilling activity would occur on the continental shelf in waters less than 650 ft. deep. *E.g.*, AR0015592 ("Relatively more exploration and development drilling and structure installation would occur on the shelf (in depths <200m [660 ft]) than in deep water, regardless of the production case scenario."). The reality over the past four years has been quite different, with far greater industry interest in deep water drilling. Contrary to its 2017 conclusions about where drilling activity would take place, in 2019 and 2020 combined, Interior approved three times the new well permits in deep water compared to well permits in shallow water. *See supra* at 18 (35 new well permits in shallow water versus 116 new well permits in deep water and detailing even more significant disparity between issuance of revised well permits in deep and shallow water).

Drilling in deeper water is far more challenging and significantly increases the probability of serious accident, fatality, injury, explosion, or fire. *See supra* at 18–19. And as the world learned from the *Deepwater Horizon* catastrophe in 2010, deep water drilling carries significantly higher consequences when something goes wrong. *Id*. The Bureau's failure to even consider this new information about deep water drilling, much less explain whether and how it impacted its previous assessments of the environmental effects of holding a lease sale, deprived both the agency and the public of vital information about the effects of Lease Sale 257.

The Bureau similarly failed to consider a 2021 report from the GAO that undermines its previous assumptions about the safety of current oil and gas operations in the Gulf. As explained above, the Bureau assumed that the risk of spills or other accidents from existing development,

as well as the risks created by unused pipelines, would be adequately mitigated by regulations requiring safety checks, inspections, and oversight by the Safety Bureau. AR0008604; *see supra* at 21–22. The GAO report, however, concluded that the Safety Bureau's regulatory inspection program is woefully inadequate because, among other things, it relied on monthly reporting rather than any direct inspection of active pipelines and other infrastructure. *See supra* at 22–23. The report also found that the Safety Bureau does not directly or independently ensure that industry follows through with practices for decommissioning pipelines no longer in use. When confronted with this important new information, the agency was obligated to evaluate the existing EISs and determine whether a supplemental EIS was required. *Friends of the Clearwater,* 222 F.3d at 558. The Bureau did not consider or even disclose this information, let alone analyze its effects on its previous assumptions, in a supplemental EIS before deciding to offer Lease Sale 257.

The Bureau likewise failed to consider significant new information about the effects of leasing on Gulf wildlife. The Bureau in its exiting EISs concluded that the activity from a lease sale would not have significant impacts on the Rice's whale because it lacked information to determine the whale's status and had "no data to suggest" that either existing oil and gas activities or the incremental effects of another lease sale would significantly impact any marine mammal population. *See supra* at 19. New information from scientists both within and outside the federal government undercuts this assertion. *See supra* at 19–21. In 2019, the Fisheries Service listed the Gulf of Mexico Bryde's whale as endangered under the Endangered Species Act, finding oil and gas development as primary threats. 84 Fed. Reg. at 15,457 ("The best available scientific and commercial information establishes that energy exploration, development, and production, oil spills and oil spill response, vessel collision . . . are currently

threatening the species and contributing to its extinction risk."). The Fisheries Service recently confirmed, contrary to the Bureau's previous conclusions, that existing and future activities related to oil and gas exploration and development in the Gulf will not only harm the species but will likely jeopardize its continued existence. AR0037445. And, this year, the Fisheries Service listed the Rice's whale as a distinct species. 86 Fed. Reg. at 47,022. Additionally, there is new evidence demonstrating that biologically-important habitat for the whale is larger than previously believed and that the whale is even more prone to vessel strikes. *See supra* at 20–21. Lease Sale 257 will create more stressors from development and increase the chance of vessel strikes. AR0015883.

New information about impacts to wildlife and endangered species is a quintessential trigger for the agency's duty to supplement an EIS. *See, e.g.*, *Friends of the Clearwater*, 222 F.3d at 558 (finding agency failed to consider whether impacts to seven newly identified species required a supplemental EIS); *Nat'l Wildlife Fed'n. v. Nat'l Marine Fisheries Serv.*, 184 F. Supp. 3d 861, 937 (D. Or. 2016) (finding previous NEPA analyses stale in part because "several new species [had] been listed and much additional habitat [had] been designated as critical habitat" and agencies failed to "explain how the EISs from the 1990s properly addressed impacts to species that were not yet listed"); *League of Wilderness Defs./Blue Mountains Biodiversity Project v. Connaughton*, 752 F.3d 755, 761 (9th Cir. 2014) (finding plaintiffs likely to succeed on claim that supplemental EIS was required to assess logging project on elk in light of agency's subsequent withdrawal of framework that mitigated other effects on the population). But the Bureau did not consider any of this information before deciding to offer Lease Sale 257.

In the Lease Sale Record of Decision, the Bureau incorrectly states that the Fisheries Service "amended its Biological Opinion in April 2021 to . . . remove the jeopardy

determination." AR0029799.[14] Contrary to the Bureau's characterization, the Fisheries Service, on April 24, 2021, amended only the incidental take statement included in this biological opinion to update take numbers of listed species associated with recently issued regulations governing seismic air-gun surveys in the Gulf—the Fisheries Service did not amend the Biological Opinion or its jeopardy determinations. *See* AR0034710–29; *See also* AR0034955–0035083 (Marine Mammal Protection Act Five-Year Regulations for Geophysical Surveys in the Gulf of Mexico).

The agency also failed to supplement its EISs with new information about the extent and harm of fracking discharges. *See supra* at 23. Significant new information on the extent and harms of fracking exist, but the Bureau failed to consider whether any of it—whether in addition to or independently from the other information discussed above—would require supplementation.

Additionally, the Bureau failed to consider how and to what extent selling lease parcels for oil and gas development is incompatible with leasing for wind energy. In particular, abandoned wells on lease areas could create conflicts for the future development of offshore wind. *See* AR0014358 (showing that leased areas create space-use conflicts for wind energy projects). An analysis that includes new information about wind energy leasing is particularly important given the Bureau's obligation under OCSLA to manage the outer continental shelf "in a manner which considers economic, social, and environmental values of the renewable and nonrenewable resources contained in the outer Continental Shelf, and the potential impact of oil and gas exploration on other resource values of the outer Continental Shelf and the marine, coastal, and human environments" as well as Congress' instruction that, in evaluating whether,

[14] The Bureau makes similar statements in a record document that addresses some of the new information, its August 2021 Determination of NEPA Adequacy. AR0029816.

where, and when to allow oil and gas leasing, the Bureau must consider the location of the area "with respect to other uses of the sea and seabed." 43 U.S.C. §§ 1344(a)(1), (a)(2)(D).

The Bureau's failure to consider the new information about the environmental effects of its lease sale is not a technicality. Each piece of evidence—alone or in combination—could lead the Bureau to consider different alternatives or even reach a different decision. *See* 40 C.F.R. § 1502.14 (identifying and analyzing alternatives is "the heart of" the NEPA process). Requiring the agency to comply with NEPA and to fully consider the effects of offering 80 million acres of the Gulf of Mexico for drilling will allow the Bureau and the public to transparently consider new approaches, including deciding not to hold the lease sale at all because of the harm it will cause to the nation's effort to fight the climate crisis, preserve wildlife, and protect Gulf communities from the dual threats posed by pollution and climate change.

III. THIS COURT SHOULD VACATE THE BUREAU'S DECISION TO HOLD LEASE SALE 257

The Bureau's Record of Decision to hold Lease Sale 257 relies on a flawed and arbitrary EIS, and accordingly should be vacated. *See* 5 U.S.C. § 706(2) (requiring courts to "set aside" agency action found to be unlawful). Vacatur is the normal remedy under the APA and is applied in all but exceptional cases. *See, e.g.*, *Standing Rock Sioux Tribe v. U.S. Army Corps. of Eng'rs*, 985 F.3d 1032, 1050 (D.C. Cir. 2021) ("The ordinary practice is to vacate unlawful agency action."); *United Steel v. Mine Safety & Health Admin.*, 925 F.3d 1279, 1287 (D.C. Cir. 2019) (noting departures only "[i]n rare cases"). This is because APA judicial review is a statutory cause of action, and Congress directly specified a remedy—vacatur—in the statute. *See* 5 U.S.C. §§ 704, 706(2); *FCC v. NextWave Pers. Commc'ns, Inc.*, 537 U.S. 293, 300 (2003) (stating the APA "requires federal courts to set aside federal agency action" that fails judicial review). Unlike common-law remedy analysis, the strong presumption in an APA case is that Congress'

instructions should be followed, and the plaintiff has no burden to establish that vacatur applies. *See, e.g.*, *Nat'l Parks Conservation Ass'n v. Semonite*, 422 F. Supp. 3d 92, 99 (D.D.C. 2019) ("Because vacatur is the default remedy, plaintiffs are correct that defendants bear the burden to prove that vacatur is unnecessary."). Moreover, departures from the statutory remedy of vacatur are rare, and the D.C. Circuit generally has required the flaws in the agency action to be minimally serious, and/or vacatur to be highly disruptive. *See Allied-Signal, Inc. v. Nuclear Regul. Comm'n*, 988 F.2d 146, 150–51 (D.C. Cir. 1993). Here, neither applies.

The Bureau's irrational NEPA analysis substantially underestimates and fails to account for the environmental harm from Lease Sale 257. The Bureau's faulty analysis led it to arbitrarily conclude that producing up to 1.12 billion barrels of oil and 4.4 trillion cubic feet of natural gas will not contribute to climate change, and in fact will reduce greenhouse gas emissions. Furthermore, updated and accurate information show the impacts of the action to be greater, and more specific, than what is reflected in the agency's NEPA documentation. These flaws are substantial in the decision-making context of NEPA; proper analysis could have led the Bureau to reject altogether the lease sale, or to narrow its scope. *Willow*, 2021 WL 3667986, at *13 (rejecting argument that agency's failure to account for foreign emissions was inconsequential). Because sufficient "doubt [exists as to] whether the agency chose correctly," remand without vacatur is not warranted. *Allied-Signal*, 988 F.2d at 150 (internal quotation omitted).

In terms of disruptive consequences, courts may consider whether vacatur would result in increased harm to the environment compared to remand without vacatur. *See, e.g.*, *Ctr. for Biological Diversity v. EPA*, 861 F.3d 174, 188–89 (D.C. Cir. 2017). This is not such a case, as the Record of Decision for Lease Sale 257 enables actions with a harmful effect on the environment. To the extent other disruptive consequences—such as economic costs—are

cognizable, they are minimal in this case. *See, e.g.*, *Pub. Emps. for Env't. Resp. v. U.S. Fish and Wildlife Serv.*, 189 F. Supp. 3d 1, 3 (D.D.C. 2016) ("[I]t is not clear that economic concerns are as relevant in an environmental case like this one."); *see also Standing Rock Sioux Tribe*, 985 F.3d at 1051, 1053 (upholding vacatur despite economic disruptions). The lease sale has not yet occurred. No serious disruption would occur if the Record of Decision were vacated. *See Allied-Signal*, 988 F.2d at 150–51.

This Court should follow Congress' instructions and vacate the Record of Decision for Lease Sale 257. No compelling reasons exist to depart from the ordinary remedy of vacatur and failing to do so would undermine the mandate for informed decision-making that was established in NEPA. *See Standing Rock Sioux*, 985 F.3d at 1052 ("[B]ecause NEPA is a purely procedural statute, where an agency's NEPA review suffers from a significant deficiency, refusing to vacate the corresponding agency action would vitiate the statute." (citations omitted)).

CONCLUSION

For the foregoing reasons, the Court should declare Lease Sales 257 along with the three related EISs unlawful, arbitrary, capricious, an abuse of discretion, and otherwise contrary to NEPA and the APA. The Court should vacate the Bureau's decision to hold Lease Sale 257 and remand the EISs to the Bureau with instructions to prepare new, legally compliant EISs.

Respectfully submitted this 13th day of October, 2021.

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