Mission Critical: How Offshore Wind Energy Development Aligns with the Department of Defense's National Security Goals

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The California coast seems like the ideal location for an offshore wind energy project: the state offers attractive incentives for renewable energy generation, Pacific wind patterns are strong and consistent, and the unusually long coastline provides plenty of space for offshore wind facilities to expand. Despite these favorable factors, the State of California is woefully behind its East Coast counterparts with respect to offshore wind development. In 2017, an Intergovernmental Task Force, composed of government officials and other key stakeholders agreed to facilitate offshore wind siting auctions in three geographic zones off the California coastline to developers. However, an unexpected intervention by the United States Department of Defense before the auction brought all offshore wind development in the state to an abrupt halt. Citing vague concerns over disruptions to military training activities, the Department of Defense's opposition has had the practical effect of preventing all offshore wind development in California. Given the impending threat of climate change, this stalemate could have drastic impacts on the environment, the economy, and, ironically, the Department of Defense's ability to ensure national security.

This conflict is an example of a recurring problem in energy development. When two federal agencies with distinct missions share authority over a proposed project, gridlock is likely to occur, resulting in wasted time and capital

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for all involved. However, this offshore wind conflict is entirely avoidable. This Note argues that Department of Defense's resistance to offshore wind development is irrational and misguided, as renewable energy will actually support its national security mission. Instead, borrowing principles learned from a similar conflict in the recent Supreme Court case, United States Forest Service v. Cowpasture River Preservation Association, government officials could resolve the California offshore wind dispute in a timely and cost-effective manner. Through a series of practical recommendations available to Congress, the executive branch, and the Department of Defense itself, this Note proposes that the Department of Defense reform its review procedures for proposed offshore wind projects to offer more transparency and consistency to the public, and better balance its own interests to accurately account for the benefits of offshore wind.

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"If you were to poll experts here in California—academics, developers, advocates—they'd say probably the number one barrier to the [offshore wind] market getting off the ground is the Department of Defense."

INTRODUCTION

In 2017, California's nascent offshore wind industry appeared to be off to a tremendous start. A joint intergovernmental task force between relevant government officials, developers, and stakeholders had scheduled an offshore wind-siting lease auction for mid-2018 in three geographic zones, known as "Call Areas," off the California coast, and multiple developers had already expressed interest.² The key federal agency, the U.S. Department of the Interior

^{1.} David Iaconangelo, *Deal Emerges to Bring First Offshore Wind Farms to California*, ENERGY WIRE (Feb. 20, 2020), https://www.eenews.net/stories/1062398125 (quoting Mary Collins, the former Managing Director of the American Jobs Project, a clean energy think tank, and lead author of a 2019 report that championed offshore wind for California). To view the referenced report, *see* AMERICAN JOBS PROJECT, THE CALIFORNIA OFFSHORE WIND PROJECT: A VISION FOR INDUSTRY GROWTH (2019).

^{2.} Commercial Leasing for Wind Power Development on the Outer Continental Shelf (OCS) Offshore California – Call for Information and Nominations, 83 Fed. Reg. 53096 (proposed Oct. 19, 2018); Potential Commercial Leasing for Wind Power on the Outer Continental Shelf (OCS) Offshore California – Request for Interest, 81 Fed. Reg. 55228 (proposed Aug. 18, 2016).

(DOI), was fully onboard, and many assumed a consensus had been reached.3 However, the offshore wind industry's progress came to a screeching halt when the U.S. Department of Defense (DOD) vocalized opposition claiming that offshore wind energy development could interfere with naval "missions." DOD deemed all of Central and Southern California off limits for offshore wind development, and called for the Bureau of Ocean Energy Management (BOEM), a unit of DOI, to limit offshore wind development to a sliver of the coastline in far Northern California, hundreds of miles from California's major population centers.⁵ After almost five years of negotiations, California's once-promising offshore wind industry has made little progress. DOD's opposition may have the practical effect of undermining all offshore wind development at the federal level at a time in which renewable energy projects should be given the utmost priority. Although DOD does not have any statutory authority over offshore wind siting, it often receives preferential treatment from all three branches of government and may be able to use its privileged position to effectively veto all offshore wind development.

This conflict is just one example of a recurring problem in multi-agency actions. Conflicts are likely to occur when two agencies with opposing missions have overlapping jurisdiction over federal land or federal water. In the recent Supreme Court case of *U.S. Forest Service v. Cowpasture River Preservation Association*, a similar agency conflict between the National Park Service (NPS) and the National Forest Service (NFS) increased administrative costs and had the practical effect of rendering a natural gas pipeline development project economically infeasible, even though the pipeline developers eventually prevailed in court.⁶ The conflict largely resulted from the fact that NPS's mission is focused purely on conservation, while part of NFS's mission is to maximize the productivity of its forests. NPS will always oppose pipeline development on or under its lands, but NFS may support pipelines when it finds the pipeline economical and sustainable. *Cowpasture* should serve as a cautionary tale for the stakeholders in the current offshore wind conflict, demonstrating how interagency conflicts can stifle crucial infrastructure development.

However, unlike the agencies in *Cowpasture*, the two agencies involved in the offshore wind conflict do not actually have opposing missions. BOEM, the lead agency for leasing and permitting offshore wind projects, has a mission to develop energy resources on the Outer Continental Shelf in an environmentally and economically responsible way. DOD's mission is to protect American

^{3.} Robert Collier, *California's Plans for Offshore Wind Power Run into Navy Opposition*, S.F. Chron. (Nov. 9, 2017), https://www.sfchronicle.com/opinion/openforum/article/Wind-farm-auctions-delayed-as-US-Navy-says-12345413.php.

^{4.} Memorandum from the Deputy Assistant Secretary of Defense for Force Education and Training to the Acting Assistant Secretary of Defense (Energy, Installations, and Environment) (June 19, 2017) [hereinafter DOD Memorandum].

^{5.} *Id*

^{6.} U.S. Forest Serv. v. Cowpasture River Pres. Ass'n, 140 S. Ct. 1837 (2020).

national security interests. Offshore wind development offers key benefits that could assist both agencies in achieving their respective missions.

In this Note, I argue that DOD's current resistance to offshore wind development is irrational and misguided. DOD should recognize that it has overestimated the risks and underestimated the benefits of offshore wind development in light of its mission to protect national security interests. First, renewable energy, including offshore wind, reduces greenhouse gas emissions, thereby reducing the threat of climate change impacts such as natural disasters, food shortages, and rising sea levels. Further, a renewable-powered electricity grid could help the United States achieve energy independence, lowering the necessity for American military presence abroad. Finally, a decentralized grid better insulates the military from grid disruptions and cyberattacks. Moving forward, DOD should reform its current review procedures for proposed offshore wind projects to better reflect its mission. Although there are many ways in which DOD could improve its approach, DOD should center its improved procedure around three key principles: transparency, consistency, and a balance of interests that accurately account for the benefits of offshore wind.

There are many ways in which key decisionmakers in DOD, Congress, and the executive branch could resolve this conflict and streamline offshore wind decision making. First, the Pentagon, rather than local military officials, should review proposed offshore wind projects, because the Pentagon is in a better position to evaluate the overall costs and benefits of such projects to the federal military mission. Next, DOD should establish a siting clearinghouse for offshore wind, modeled off the successful clearinghouse used for onshore wind farms. Finally, DOD should enter into a Memorandum of Understanding (MOU) with DOI to formally recognize a joint commitment to supporting offshore wind development. If DOD does not adopt these recommendations internally, Congress or the President could choose to mandate such changes through amending the Outer Continental Shelf Leasing Act or by executive order. Regardless, Congress should adopt an explicit statutory framework to streamline the offshore decision-making process, and President Biden should make offshore wind development a priority in the fight against climate change. I aim to resolve this conflict between DOD and BOEM in a way that allows both agencies to achieve their missions. This Note begins, in Part I, with an analysis of the recent Cowpasture case, which involved a similar agency conflict over energy development. Next, Part II explains why rapid offshore wind development is crucial for all federal agencies. Part III then provides an overview of the statutory framework that has led to this conflict. Part IV outlines how the agencies have handled this conflict so far. In Part V, I explain why DOD's opposition to offshore wind is irrational and misguided. Finally, Part VI provides recommendations for resolving this conflict.

I. THE COWPASTURE CASE HIGHLIGHTS THE CHALLENGES ASSOCIATED WITH INTERAGENCY CONFLICT

When two federal agencies with divergent missions have overlapping jurisdiction over federal land or waters, conflicts seem practically inevitable. Absent a clear framework for resolving such conflicts, agency actions are often stalled to the detriment of all parties involved, including the public. The recent Supreme Court case of *U.S. Forest Service v. Cowpasture River Preservation Association* demonstrates how inefficient and harmful these preventable conflicts can be to crucial energy infrastructure. This case should serve as a cautionary tale to all involved in the current conflict between BOEM and DOD regarding offshore wind development.

In *Cowpasture*, a dispute arose between pipeline developers for two major utilities, Dominion Energy and Duke Energy, and environmental-protection groups.⁹ The developers sought to build a pipeline that crossed through the George Washington National Forest ("National Forest").¹⁰ The Appalachian Trail ("Trail") passes through the National Forest, and the developers planned to build part of the pipeline under the Trail.¹¹ The developers applied for a special use permit with NFS to build the pipeline through the National Forest.¹² NFS granted the permits.¹³ The environmental groups filed suit to challenge NFS's jurisdiction to issue a special use permit for the portion of the pipeline that would cross under the Trail.¹⁴ The environmental groups alleged that NFS did not have authority to issue a permit, because the Trail is under the jurisdiction of NPS.¹⁵

In order to resolve this dispute, the Supreme Court reviewed a myriad of overlapping federal statutes. The relevant statutes did not clearly specify which of the two agencies had authority over the Trail. If NFS had jurisdiction over the Trail, then the permits were properly issued, and the developers could build a pipeline under the Trail. However, if NPS had jurisdiction over the Trail, then the permits were improperly issued, and the pipeline could not be built. By statute, no agency head has authority to grant a right-of-way for a pipeline under land within the National Park System. ¹⁶ As a result, if the Court recognized NPS

^{7.} For a further discussion of federal agency conflicts, *see generally* Daniel A. Farber & Anne Joseph O'Connell, *Agencies as Adversaries*, 105 CAL. L. REV. 1375 (2017).

^{8.} U.S. Forest Serv., 140 S. Ct. at 1837.

^{9.} *Id.* at 1841.

^{10.} Id. at 1841.

^{11.} *Id*.

^{12.} Id. at 1842.

^{13.} *Id*.

^{14.} *Id.* The enumerated respondent, Cowpasture River Association, primarily opposed the pipeline development project based on concerns of the "erosion of soil, debris, and rock in rugged mountainous terrain and the threats to surface and ground water quality" associated with the construction and operation of the pipeline. *Atlantic Coast Pipeline Updates*, COWPASTURE RIVER PRES. ASS'N, https://cowpastureriver.org/nopipeline/ (last visited Feb. 1, 2021).

^{15.} U.S. Forest Serv., 140 S. Ct. at 1845.

^{16. 30} U.S.C.A. § 185(b)(1) (2018) (West); U.S. Forest Serv., 140 S. Ct. at 1844 ("If, on the other hand, jurisdiction over the lands has been transferred to the Park Service, then the lands fall under the

jurisdiction here, it would also mean that all National Historic and National Scenic Trails in the United States are "within the National Park System," and no pipeline could ever cross underneath any of them, absent congressional intervention.¹⁷

To the dismay of the environmental groups, in June 2020, the Court held that NFS retained jurisdiction over the Trail based on a long-winded analysis of multiple federal statutes. ¹⁸ The Court expressed concern that recognizing NPS authority over these trails might "significantly curtail" NFS's authority to grant pipelines without clear authorization from Congress. ¹⁹ Further, the Court recognized that granting NPS jurisdiction would drastically curb pipeline development in the United States as a whole. NPS currently administers twenty-one National Historic and National Scenic Trails around the country. ²⁰ The Trail alone runs 2,000 miles nearly parallel to the Atlantic Coast. ²¹ Preventing all pipeline development along the Trail alone could have the practical effect of cutting off natural gas distribution from the Western United States to significant portions of the Eastern Seaboard. ²²

Even though the pipeline developers won their case, they ultimately decided to cancel the pipeline in early July 2020 citing significant delays and rising costs that altogether threatened the viability of the project.²³ The *Cowpasture* lawsuit alone increased projected development costs from \$4.5 billion to nearly \$8 billion.²⁴ Moreover, the developers predicted even more litigation would arise, further increasing uncertainty surrounding the pipeline.²⁵

The eventual cancellation of the pipeline is exemplary of a recurring problem in energy development. Energy projects often involve consultation with multiple federal agencies with distinct missions, and conflicts may seem unavoidable. These conflicts can cause untimely delays, increased administrative costs, and, sometimes, a complete revocation of the proposed project. This results in wasted time and capital and can block crucial infrastructure development at the expense of utility ratepayers.

A review of these two agencies' missions suggests conflicts are probable. NFS is a multi-use agency, which is required to "sustain the health, diversity,

Leasing Act's carve-out for 'lands in the National Park System,' thus precluding the grant of the right-of-way"); see also U.S. Forest Serv., 140 S. Ct. at 1852 (Sotomayor, J., dissenting) ("[A]s all acknowledge, if a proposed pipeline would cross any land in the Park System, then no federal agency would have 'authority under the Mineral Leasing Act to grant' a 'right-of-way across' that land").

- 17. U.S. Forest Serv., 140 S. Ct. at 1844.
- 18. Id. at 1841.
- 19. *Id.* at 1849.
- 20. Id.
- 21. *Id*.
- 22. *Id*.

- 24. Id.
- 25. Id.

^{23.} Ivan Penn, *Atlantic Coast Pipeline Canceled as Delays and Costs Mount*, N.Y. TIMES (July 5, 2020), https://www.nytimes.com/2020/07/05/business/atlantic-coast-pipeline-cancel-dominion-energy-berkshire-hathaway.html.

and *productivity* of the Nation's forests and grasslands to meet the needs of present and future generations."²⁶ NFS must consider both the sustainability of the public lands *and* economically productive uses of the lands when reviewing permit applications for logging, natural gas pipelines, or infrastructure expansion. NPS, on the other hand, is exclusively concerned about conservation. Its mission is to "preserve unimpaired the natural and cultural resources . . . for the enjoyment, education, and inspiration of this and future generations."²⁷ As a result, NPS should always be opposed to pipelines, as they disturb the land,²⁸ but NFS may find pipelines to be economically productive enough to justify such a disturbance. When these agencies share authority over the same land, they are likely to have opposing goals for its use.

Many commentators saw the cancellation of the Atlantic Coast Pipeline as a turning point for renewables, demonstrating that the administrative costs and public opposition associated with natural gas makes pipeline expansion increasingly less attractive for investors.²⁹ However, environmentalists should view this victory with skepticism, because the outcome could similarly stall or halt the development of renewable energy projects.³⁰ The environmental groups in *Cowpasture* sought to block the pipeline by pitting two federal agencies against each other, drowning the pipeline developers in litigation until the costs and delays made the project economically unviable. The same strategies could

^{26.} About the Agency, U. S. FOREST SERV., https://www.fs.usda.gov/about-agency (last visited Oct. 12, 2020) (emphasis added).

^{27.} About Us, NAT'L PARK SERV., https://www.nps.gov/aboutus (last visited Oct. 12, 2020).

^{28.} As mentioned above, no federal agency, including NPS, has authority to authorize pipeline construction beneath national park lands. However, even if NPS did have statutory authority to do so, a pipeline would likely conflict with the agency's mission to "preserve unimpaired" the land because natural gas pipelines significantly impair the surrounding land. For further information about the environmental impacts of pipelines, see Environmental Impacts of Natural Gas, UNION OF CONCERNED SCIENTISTS (June 19, 2014), https://www.ucsusa.org/resources/environmental-impacts-natural-gas; Pipeline Construction Step by Step Guide, FRACTRACKER ALL., https://www.fractracker.org/resources/oil-and-gas-101/pipeline-construction/ (last visited Feb. 28, 2021).

^{29.} See, e.g., Robert Barnes, Supreme Court Removes Major Obstacle to Atlantic Coast Pipeline, a Long-Delayed Project Crossing Central Virginia, WASH. POST (June 15, 2020, 7:54 AM), https:// www.washingtonpost.com/politics/courts law/supreme-court-removes-major-obstacle-to-atlantic-coastpipeline-a-long-delayed-project-crossing-central-virginia/2020/06/15/d0f6529c-ab52-11ea-9063e69bd6520940_story.html ("'This is not a viable project,' D.J. Gerken, program director of the Southern Environmental Law Center, said in a statement after the decision was announced. 'It is still missing many required authorizations. . . . It's time for these developers to move on and reinvest the billions of dollars planned for this boondoggle into the renewable energy that Virginia and North Carolina customers want and deserve.""); see also Ivan Penn, Atlantic Coast Pipeline Canceled as Delays and Costs Mount, N.Y. TIMES (July 5, 2020), https://www.nytimes.com/2020/07/05/business/atlantic-coast-pipeline-canceldominion-energy-berkshire-hathaway.html ("Gillian Giannetti, a lawyer with the Sustainable FERC Project at the Natural Resources Defense Council, quickly issued a statement in support of the utilities' move. 'The costly and unneeded Atlantic Coast Pipeline would have threatened waterways and communities across its 600-mile path,' she said. 'As they abandon this dirty pipe dream, Dominion and Duke should now pivot to investing more in energy efficiency, wind and solar - that's how to provide jobs and a better future for all."").

^{30.} See, e.g., James W. Coleman, Pipelines and Power-Lines Building the Energy Transport Future, 80 OHIO ST. L. J. 263, 290-91 (2019).

be used by opponents to block critical renewable-energy projects, especially with respect to crucial transmission line expansion.³¹ The transition to clean energy will require major upgrades to transmission infrastructure, and given transmission's precarious position as an interstate, above-ground "permanent eyesore," it has historically faced legal challenges similar to those faced by oil and gas pipelines.³² Environmentalists and clean energy advocates must find a way to both properly address legitimate environmental concerns with renewables projects and prevent bad-faith legal challenges brought by fossil fuel advocates to stymy infrastructure development. These federal agency conflicts will only pose greater threats to the energy industry moving forward. In order to scale up the grid in a timely manner and protect renewable energy developers from bad-faith legal challenges, we must find an expedient way to resolve these federal agency conflicts.

Amici briefs from *Cowpasture* called on Congress to write public land laws that "pay special attention to the varied types of agency power and authority." Unfortunately, Congress does not always draft legislation that comprehensively and clearly distinguishes the authority of overlapping federal agencies. At present, similar to *Cowpasture*, a vague and insufficient statutory framework for offshore wind energy development has resulted in a comparable power struggle between DOD and BOEM in California. If this new agency conflict is not resolved in a timely manner, the entire nascent offshore wind industry in California may face more drastic, permanent setbacks in development.

II. OFFSHORE WIND IS ESSENTIAL FOR THE UNITED STATES TO FIGHT CLIMATE CHANGE AND RESPOND TO CHANGES IN THE ENERGY SECTOR

Similar to how the agency conflict in *Cowpasture* resulted in unnecessary expenses and delays to pipeline development, the current conflict between BOEM and DOD is stalling offshore wind development. Unclear statutory authority, ostensibly divergent agency missions, and an overall lack of transparency have pinned DOD and BOEM on opposing sides of the emerging offshore wind industry in California. However, unlike the Atlantic Coast Pipeline, the implications of this bulwark could have dire consequences for America's climate future.

^{31.} *Id.* at 291 ("These opponents of wind and solar projects will use the same tactics employed in pipeline debates . . . the transmission approval process will provide another opportunity to re-litigate familiar disputes that wind turbines endanger bird populations and damage scenic vistas or that solar farms have impacts on water use, land use, and endangered species").

^{32.} Id. at 290.

^{33.} Brief for National Association of Manufacturers, et al. as Amici Curiae Supporting Petitioners, U.S. Forest Serv. v. Cowpasture River Pres. Ass'n, 140 S. Ct. 1837, 2-3 (2020) (Nos. 18-1584, 18-1587).

A. Offshore Wind Is a Carbon-Neutral Renewable Resource That Would Help Coastal States Meet Their RPS Goals and Mitigate the Impacts of Climate Change

As the United States moves to decarbonize the national electricity grid, the energy industry has sought to deploy large-scale renewable energy projects around the country at a rapid pace.³⁴ Although both solar and land-based wind generation has grown exponentially, offshore wind has been held back by bureaucratic red tape. As of the writing of this paper, there is only one operational offshore wind facility in the United States,³⁵ despite concerted efforts by many stakeholders to expand offshore wind over the last ten years.³⁶ Given offshore wind's many potential contributions to a decarbonized national electricity grid,³⁷ regulators should be prioritizing offshore wind at a far grander scale.

Recent technological developments have made offshore wind financially competitive with other renewables. Experts predict that by the mid-2020s, floating wind farms will be close to price parity with land-based renewables and fossil fuels.³⁸ In just the five-year period between 2012 and 2017, the cost per

^{34.} For example, wind and solar projects are predicted to represent 70 percent of new electric generating capacity to come online in 2021. Suparna Ray, *Renewables Account for Most New U.S. Electricity Generating Capacity in 2021*, U.S. ENERGY INFO. ADMIN. (Jan. 11, 2021), https://www.eia.gov/todayinenergy/detail.php?id=46416. At the current growth rate, renewables could overtake fossil fuels as the "leading source of generation by the early 2030s." Emma Penrod, *Wind, Solar to Make Up 70% of New US Generating Capacity in 2021 While Batteries Gain Momentum EIA*, UTIL. DIVE (Jan. 13, 2021), https://www.utilitydive.com/news/wind-solar-make-up-70-of-new-generation-in-2021-while-batteries-gain-mome/593278/.

^{35.} Offshore Wind in Rhode Island, R.I. OFF. ENERGY RES., http://www.energy.ri.gov/renewable-energy/wind/offshore-wind.php (last visited Nov. 15, 2020) ("In 2016, Rhode Island became home to the first offshore wind project in the nation with the successful installation of the 30 MW Block Island Wind Farm.").

^{36.} For example, the proposed Cape Wind Offshore Wind Project off the coast of Cape Cod was "stymied by endless litigation" and countless financial and political setbacks. Proponents fought to develop the project for sixteen years but eventually gave up after it seemed unlikely that the project would ever move forward. See Katharine Q. Seelye, After 16 Years, Hope for Cape Cod Wind Farm Float Away, N.Y. TIMES (Dec. 19, 2017), https://www.nytimes.com/2017/12/19/us/offshore-cape-wind-farm.html.

^{37.} For example, DOE estimates that 86 GW of offshore wind deployment by 2050 would reduce total greenhouse gas emissions by 1.8 percent in the United States, which is equivalent to 1.6 billion metric tons of carbon dioxide and could save \$50 billion in "avoided global damages." PATRICK GILMAN ET AL., U.S. DEP'T OF ENERGY & BUREAU OF OCEAN ENERGY MGMT., U.S. DEP'T OF THE INTERIOR, NATIONAL OFFSHORE WIND STRATEGY: FACILITATING THE DEVELOPMENT OF THE OFFSHORE WIND INDUSTRY IN THE UNITED STATES 19 (2016). DOE has also estimated that a "single" 1.5 MW wind turbine displaces 2700 tons of carbon dioxide per year, or "the equivalent of planting 4 square kilometers of forest every year." U.S. DEP'T OF ENERGY, 20% WIND ENERGY BY 2030: INCREASING WIND ENERGY'S CONTRIBUTION TO THE U.S. ELECTRICITY SUPPLY 107 (2008). For context, Rhode Island's Block Island Wind Farm has a capacity of 30 MW, or roughly the equivalent of planting 80 square kilometers of forest every year. Wind in Rhode Island, R.I. OFF. ENERGY RES., http://www.energy.ri.gov/renewable-energy/wind/ (last visited Feb. 19, 2021).

^{38.} ROBERT COLLIER, HIGH ROAD FOR DEEP WATER: POLICY OPTIONS FOR A CALIFORNIA OFFSHORE WIND INDUSTRY 6 (2017).

watt of power from offshore wind projects dropped by nearly 50 percent.³⁹ The U.S. Department of Energy (DOE) indicates that offshore wind may lower wholesale electric prices in coastal states more effectively than land-based wind has in other regions.⁴⁰

The potential output of offshore wind dwarfs its competitors. A recent study by the International Energy Agency found that offshore wind could meet the world's total electricity demand eleven times over by 2040.⁴¹ Moreover, recent technological improvements have opened up potential offshore wind sites to deeper parts of the ocean as well as smaller lakes and rivers.⁴² This means that offshore turbines could be competitive everywhere from the Pacific, to the Gulf, to the Atlantic, to the Great Lakes. Given the wide range of geographic possibilities, offshore wind has the potential to play a leading role in the global clean energy future.

Further, offshore wind development may face less public resistance than land-based renewable projects for aesthetic and geographic reasons. Offshore wind farms, particularly the floating wind farms that are proposed on the West Coast, are installed dozens or more miles from shore, preventing some of the aesthetic concerns with solar and land-based wind farms.⁴³ For instance, the proposed Castle Wind Offshore Project would be built approximately thirty miles off the coast of Central California, which is not visible from shore.⁴⁴ In addition, solar and land-based wind farms have faced public resistance because of the amount of surface area required for these projects,⁴⁵ as both require at least

^{39.} Jess Shankleman & Brian Parkin, *Wind Power Blows Through Nuclear, Coal as Costs Drop at Sea*, BLOOMBERG BUS. NEWS (Mar. 8, 2017, 4:01 PM), https://www.bloomberg.com/news/articles/2017-03-09/wind-power-blows-through-nuclear-coal-as-costs-plunge-at-sea.

^{40.} PATRICK GILMAN ET AL., *supra* note 37, at 19.

^{41.} Int'l Energy Agency, World Energy Outlook Special Report: Offshore Wind Outlook 11 (2019).

^{42.} See id. at 22 ("... [S]everal large projects in the pipeline are 100 km or more from shore. This is becoming more common as developers look to install turbines in deeper water with improved construction techniques"). Several offshore wind projects in U.S. lakes and rivers are currently under consideration by developers. See Karl-Erik Stromsta, New York's Hudson Valley Future Offshore Wind Hub?, GREEN TECH MEDIA (Aug. 21, 2020), https://www.greentechmedia.com/articles/read/new-yorks-hudson-valley-future-offshore-wind-hub; Karl-Erik Stromsta, Mitsubishi Eyes Great Lakes for Offshore Wind Development, GREEN TECH MEDIA (Oct. 12, 2020), https://www.greentechmedia.com/articles/read/mitsubishi-eyes-great-lakes-for-offshore-wind-development.

^{43.} Alternatively, fixed-bottom offshore wind turbines, like those used on the Atlantic Coast, may be visible from shore. The Cape Wind Project in Massachusetts was cancelled partially due to extreme public opposition from local residents who claimed the offshore wind farm would "spoil their ocean views." Because floating-wind farms are not visible from shore, there is less risk that NIMBYism and aesthetic concerns will stall development. Jennifer A. Dlouhy, *The Oil Industry Can Teach Offshore Wind Farms How to Stay Afloat*, BLOOMBERG (May 17, 2016), https://www.bloomberg.com/news/articles/2016-05-17/new-california-gold-rush-beckons-wind-developers-off-coast.

^{44.} Jeff St. John, *California Community Choice Aggregator Sees Promise in Floating Offshore Wind*, GREEN TECH MEDIA (Aug. 16, 2019), https://www.greentechmedia.com/articles/read/community-choice-aggregator-sees-promise-in-california-offshore-floating-wi.

^{45.} It is worth noting that this estimate may be misguided, as it does not provide the full picture of land-use issues associated with renewables in comparison with fossil fuels. For example, unlike fracking sites or coal mines, renewable projects can be "dual-use": onshore wind can coexist on the same parcel

ten times as much land per unit of power produced than fossil fuel power plants.⁴⁶ Offshore wind can mitigate the risk of public opposition, as the number of viable sites in the ocean is exponentially higher than that onshore.

B. Offshore Wind Would Help Diversify the National Energy Portfolio

To build a reliable decarbonized electricity grid, energy providers must find solutions to mitigate the variability of renewable energy sources and ensure supply will consistently meet demand. Without massive improvements in battery storage, a grid based on exclusively solar and land-based wind could be prohibitively challenging: solar can only be relied on during daylight hours, and land-based wind is intermittent.⁴⁷ Offshore wind, however, with its unparalleled reliability, has the potential to solve one of the most formidable challenges in clean energy: stabilizing a decarbonized grid.⁴⁸

Offshore wind is one of the most reliable sources of renewable energy because winds are typically "more energetic" and "less turbulent" offshore than on land.⁴⁹ As a result, offshore facilities exhibit a comparatively more stable average power output than other renewables.⁵⁰ In fact, offshore wind is the only renewable energy source that is consistent enough to be a baseload generator,⁵¹ meaning that generation is so dependable that it can be relied upon by a grid

with ranchers and farmers, and solar panels can be installed on top of existing structures, such as parking garages and factories. Bill Nussey, When it comes to land impact, does solar, wind, nuclear, coal, or natural gas have the smallest footprint?, THE FREEING ENERGY PROJECT (Apr. 11, 2020), https://www.freeingenergy.com/land-usage-comparison-solar-wind-hydro-coal-nuclear/. Renewable facilities also generally have a much longer "useful life" than their fossil fuel counterparts and have fewer harmful environmental impacts. Id. For further discussion of land use issues surrounding onshore renewables, see PIETER GAGNON ET. AL., ROOFTOP SOLAR PHOTOVOLTAIC TECHNICAL POTENTIAL IN THE UNITED STATES, TECHNICAL REPORT FOR NAT'L RENEWABLE ENERGY PROJ. (2016); Southern Alliance for Clean Energy, Study Proves Fossil Fuels Way Worse for Land Use than Renewables, CLEANENERGY.ORG (June 29, 2015), https://cleanenergy.org/blog/renewablelanduse/; Susan Tierney, et al., Setting the Record Straight About Renewable Energy, WORLD RES. INST. (May 12, 2020), https://www.wri.org/blog/2020/05/setting-record-straight-about-renewable-energy.

- 46. SAMANTHA GROSS, BROOKINGS INST., RENEWABLES, LAND USE, AND LOCAL OPPOSITION IN THE UNITED STATES 1 (2020).
- 47. Justin Gillis, *America's First Offshore Wind Farm May Power Up a New Industry*, N.Y. TIMES (Aug. 22, 2016), https://www.nytimes.com/2016/08/23/science/americas-first-offshore-wind-farm-may-power-up-a-new-industry.html ("The turbines are easier and cheaper to build on land. But the wind is also weaker on land, and the power the machines produce there is intermittent.").
- 48. Int'l Renewable Energy Agency, Future of Wind: Deployment, Investment, Technology, Grid Integration, and Socioeconomic Aspects 42 (2019).
- 49. Jennifer A. Dlouhy, *The Oil Industry Can Teach Offshore Wind Farms How to Stay Afloat*, BLOOMBERG (May 17, 2016), https://www.bloomberg.com/news/articles/2016-05-17/new-california-gold-rush-beckons-wind-developers-off-coast.
 - 50. INT'L ENERGY AGENCY, *supra* note 41, at 45.
- 51. Baseload refers to the "minimum amount of electric power delivered or required over a given period of time at a steady rate." A baseload generator is any facility "which is normally operated to take all or part of the minimum load of a system, and which consequently produces electricity at an essentially constant rate and runs continuously." *Glossary*, U.S. ENERGY INFO. ADMIN., https://www.eia.gov/tools/glossary/index.php?id=B (last visited Feb. 25, 2021).

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operator to routinely meet minimum-electricity demand.⁵² Offshore wind can help ensure system reliability during times of peak demand, and has the potential to bridge the late-afternoon gap between solar output and rising electricity consumption.⁵³

Further, offshore wind would grant coastal states greater energy independence. As many coastal states, especially those in the Northeast, are relatively small in geographic space but large in population, state regulators may face challenges in siting enough renewable capacity to meet their energy demand.⁵⁴ Even California, which is much larger than the New England coastal states, imports wind power from Wyoming to meet late-afternoon demand.⁵⁵ Offshore wind, however, would open these coastal states to a sufficiently large power source without sacrificing their limited land.⁵⁶ With this new energy independence, these coastal states could better protect their residents from disruptions to the grid and more effectively regulate their power systems.

C. Offshore Wind Would Increase the Supply of Energy and Help the Grid Respond to Growing Electricity Demand

From 2020 through 2050, electrical demand in the United States is predicted to grow by an average annual load growth of 0.66 percent.⁵⁷ Energy providers are concerned about their ability to meet this demand for a variety of reasons. First, many state renewable portfolio standards (RPS) grow increasingly stringent over time,⁵⁸ which limits sourcing opportunities. Second, natural

- 55. COLLIER, supra note 38, at 5.
- 56. *Id*.
- 57. GILMAN ET AL., *supra* note 37, at 11.

^{52.} New offshore wind projects have capacity factors of 40-50 percent, which is comparable to other baseload gas- and coal-powered plants. Furthermore, offshore wind is less variable than other renewable energy technologies and can generate electricity during "all hours of the day." INT'L ENERGY AGENCY, supra note 41, at 45.

^{53.} GILMAN ET AL., *supra* note 37, at 11; *see also* COLLIER, *supra* note 38, at 13 ("The capacity factor for offshore wind is quite high," said Karen Douglas, commissioner of the California Energy Commission and the lead state official on offshore wind planning efforts. 'Because generation from offshore wind would peak in the late afternoon and evening, it would be a helpful addition to the overall energy system."). For further discussion of the late-afternoon gap between solar output and rising electricity consumption, see Becca Jones-Albertus, *Confronting the Duck Curve How to Address Over-Generation of Solar Energy*, DEP'T OF ENERGY (Oct. 12, 2017), https://www.energy.gov/eere/articles/confronting-duck-curve-how-address-over-generation-solar-energy.

^{54.} For example, in Massachusetts, solar installations have "plummeted" due to land-use issues and resistance from rural communities. Solar developers have noted that viable sites have "already been picked over" and many remaining sites have issues that cannot be "overcome." Catherine Morehouse, *As Massachusetts solar installs plummet, stalled interconnections, land use questions are key hurdles*, UTIL. DIVE (Feb. 27, 2020), https://www.utilitydive.com/news/as-massachusetts-solar-installs-plummet-stalled-interconnections-land-use/572925/.

^{58.} For example, California's RPS Program was established in 2002 with the initial requirement that 20 percent of electricity retail sales be served by renewable sources by 2017. In 2015, the program was accelerated to 50 percent RPS by 2030. One year later, it was increased to 60 percent RPS by 2030 and 100 percent RPS by 2045. *Renewables Portfolio Standard (RPS) Program*, CAL. PUB. UTIL. COMM'N, https://www.cpuc.ca.gov/rps/ (last visited Dec. 1, 2020).

disasters exacerbated by climate change pose growing threats to transmission lines.⁵⁹ And, over the next thirty years, many of today's existing power plants are expected to reach their life expectancy and be fully decommissioned.⁶⁰ The electricity industry needs to expediently address these issues in order to provide reliable power to the U.S. grid.

With its enormous generation potential, offshore wind can play an essential role in meeting this growing demand. In California alone, offshore wind is estimated to have the potential to generate almost a terawatt of electricity,61 which amounts to thirteen times more electricity output than all land-based wind farms produce today in the United States.62 As the viable space for large-scale, land-based wind farms shrinks, offshore wind may be the key to meeting future demand.

III. LEGAL FRAMEWORK: HOW THE DEPARTMENT OF DEFENSE FITS INTO THE FEDERAL ENERGY REGULATORY SCHEME

In this Part, I provide an overview of the federal offshore wind statutory framework.⁶³ BOEM is the lead agency for offshore wind leasing and permitting, but it must collaborate with other federal and state agencies throughout the offshore wind development process to mitigate potential economic and environmental risks. Conversely, DOD has no statutory authority over offshore wind siting. However, the courts, Congress, and the president have historically treated DOD quite differently from other agencies. This special treatment has granted DOD broad discretion over its own operations and vast exemptions from some of the most basic statutory requirements that apply to all other federal agencies. Therefore, regardless of its enumerated authority, DOD may be able to use its privileged position to influence offshore wind projects.

^{59.} ANNABELLA KORBATOV, ET AL., JOHNS HOPKINS SAIS SWISS RE, LIGHTS OUT: THE RISKS OF CLIMATE AND NATURAL DISASTER RELATED DISRUPTION TO THE ELECTRIC GRID 3 (2017) ("Climate change . . . presents epistemic risks . . . to the electric grid. Climate change is expected to increase the incidence and severity of extreme weather conditions, putting the structural integrity of America's ageing electric infrastructure under greater strain . . . Above ground transmission and distribution lines are highly vulnerable to weather events . . .").

^{60.} GILMAN ET AL., supra note 37, at 11.

^{61.} MARC SCHWARTZ, ET AL., NATIONAL RENEWABLE ENERGY LABORATORY, ASSESSMENT OF OFFSHORE WIND ENERGY RESOURCES FOR THE UNITED STATES 3 (2010).

^{62.} COLLIER, supra note 38, at 13.

^{63.} This Note is only focused on offshore wind development under federal jurisdiction. Offshore wind facilities located between the coastline and three nautical miles seaward fall under state jurisdiction and are outside the scope of this Note. The federal government has jurisdiction over the Outer Continental Shelf, which covers the area between three and 200 nautical miles offshore. Submerged Lands Act 43 U.S.C. § 1301(a)(2); Federal Offshore Lands, BUREAU OF OCEAN ENERGY MGMT., https://www.boem.gov/oil-gas-energy/leasing/federal-offshore-lands (last visited Apr. 14, 2021).

A. BOEM Has Explicit Statutory Authority to Serve as the Lead Agency for Offshore Wind Leasing and Permitting

In 1982, DOI created the Mineral Management Service (MMS) to "ensure that all oil and gas originated on the public lands and on the Outer Continental Shelf are properly accounted for under the Secretary of the Interior, and for other purposes." The MMS oversaw all deep-sea oil and gas drilling on the Outer Continental Shelf (OCS) until the Deepwater Horizon oil spill in 2010.⁶⁴ After the spill, and in response to allegations of internal corruption, Secretary of the Interior Ken Salazar split the MMS into three new federal agencies: BOEM, the Bureau of Safety and Environmental Enforcement, and the Office of Natural Resources Revenue.⁶⁵

BOEM took over the MMS's authority to issue permits and leases for oil and gas development on the OCS.⁶⁶ BOEM's mission is to "manage development of U.S. Outer Continental Shelf energy and mineral resources in an environmentally and economically responsible way."⁶⁷ Unlike the MMS, BOEM's authority is not limited to oil and gas drilling, but rather covers all forms of energy and mineral resources on the OCS. DOI notably tasked BOEM to manage the OCS in an environmentally and economically responsible way, which suggests that BOEM has a dual-purpose mission of maximizing both environmental conservation and economic productivity.

Since its inception, BOEM has primarily been an extractive agency focused on offshore oil and gas development. However, in recent years, it has directed more of its attention to renewable energy by issuing permits and leases for offshore wind and wave energy.⁶⁸ BOEM's authority over offshore wind was solidified after the Energy Policy Act of 2005 amended the Outer Continental Shelf Lands Act (OCSLA). The amendment gave DOI authority for issuing "leases, easements, or rights-of-way for alternative energy projects" on the OCS.⁶⁹ The Secretary of the Interior subsequently delegated this authority to BOEM.⁷⁰

^{64.} For further context regarding the Deepwater Horizon oil spill, see *Deepwater Horizon – BP Gulf of Mexico Oil Spill*, EPA, https://www.epa.gov/enforcement/deepwater-horizon-bp-gulf-mexico-oil-spill (last visited June 23, 2021).

^{65.} See Henry B. Hogue, Cong. Rsch. Serv., R41485, Reorganization of the Minerals Management Service in the Aftermath of the Deepwater Horizon Oil Spill 2–3 (2010).

^{66.} Id.

^{67.} About BOEM, BUREAU OF OCEAN ENERGY MGMT, https://www.boem.gov/about-boem (last visited Oct. 13, 2020).

^{68.} For a comprehensive list of all leases and grants issued by BOEM for renewable energy projects, see *Renewable Energy Lease and Grant Information*, BUREAU OF OCEAN ENERGY MGMT, https://www.boem.gov/renewable-energy/lease-and-grant-information (last visited Mar. 8, 2021).

^{69.} Outer Continental Shelf, Headquarters, Cape Wind Offshore Wind Development 2007, 71 Fed. Reg. 30,693 (May 30, 2006).

^{70. 30} C.F.R. § 585.100 (2020).

Under OCSLA, BOEM acts as the "lead agency" for managing the offshore wind authorization process.⁷¹ However, BOEM does not wield all decisionmaking authority. First, offshore wind projects must obtain a separate permit from the Army Corps of Engineers for "obstructions" to navigation on the OCS.72 Second, OCSLA has a broad, catch-all provision which requires that BOEM consult with any states, local governments, and all "other relevant departments and agencies of the Federal Government" that could be affected by a permit at various stages of BOEM's authorization process.⁷³ This process includes four phases: (1) planning; (2) leasing; (3) site assessment; and (4) construction and operations.⁷⁴ During the planning stage, BOEM typically establishes an Intergovernmental Renewable Energy Task Force, composed of federal, state, local, and tribal officials.⁷⁵ Although this task force does not have statutory authority, it can have considerable influence on siting decisions.⁷⁶ During the site assessment stage, BOEM conducts an environmental review under the National Environmental Policy Act (NEPA) in coordination with other federal, state, and local entities.⁷⁷ Additionally, BOEM must consult with other federal agencies that have "independent sources of jurisdiction" over specific ocean resources. 78 For example, depending on the biological impacts associated with the project, BOEM may have to consult with the U.S. Fish and Wildlife Service or the National Marine Fisheries Service to ensure compliance with the Endangered Species Act, the Marine Mammal Protection Act, or the Migratory Bird Treaty Act.⁷⁹

B. DOD Has More Discretion and Fewer Requirements than Other Federal Agencies

DOD has a clear mission to "provide the military forces needed to deter war and to protect the security of our country." Under OCSLA, DOD does not have any enumerated authority over offshore wind siting. Nonetheless, BOEM may be obligated to consult with DOD on certain projects. As discussed in the previous Subpart, OCSLA's catch-all provision requires that BOEM consult with

- 71. Pub. Emps. for Envtl. Resp. v. Beaudreau, 25 F. Supp. 3d 67, 89 (D.D.C. 2014).
- 72. CONG. RSCH. SERV., R40175, WIND ENERGY: OFFSHORE PERMITTING 4 (2021).

- 75. GILMAN ET AL., supra note 37, at 35.
- 76. *Id*.
- 77. See CONG. RSCH. SERV., supra note 72, at 11.
- 78. See id.
- 79. See id.

^{73. 43} U.S.C.A. § 1337(p)(1) (2005) (West); 43 U.S.C.A. § 1337(p)(7) (2005) (West). There are many federal agencies that could be impacted by offshore wind permits, including, but not limited to, the Army Corps of Engineers, the National Oceanic and Atmospheric Administration, the U.S. Coast Guard, the U.S. Department of Defense, and the National Park Service. GILMAN ET AL., *supra* note 37, at 35.

^{74.} GILMAN ET AL., *supra* note 37, at 35. For further discussion of the offshore wind permitting process, see Robert P. Newell, *Transmission Impossible The Case for a Nationwide Permit for Offshore Wind Transmission Lines*, 47 ECOLOGY L.O. 475 (2020).

^{80.} About the Department of Defense (DOD), U.S. DEP'T OF DEF., https://archive.defense.gov/about/ (last visited Oct. 13, 2020).

any federal agency that could be potentially impacted by an offshore wind permit. 81 Therefore, when a proposed offshore wind project could interfere with DOD's mission, BOEM has a statutory obligation to consult with DOD. Additionally, OCSLA assigns to BOEM the responsibility to ensure that offshore wind development provides for the "protection of the national security interests of the United States." 82 Certainly, DOD would be in an apt position to evaluate the national security threats associated with a proposed project, and BOEM would be statutorily required to consult with DOD if any project could impact military interests. However, this statutory language should not be construed to grant DOD veto power over a particular project, as the statute solely grants BOEM, not DOD, the ultimate authority to determine whether a project provides for proper coordination with relevant federal agencies and protection of national security interests. 83

Regardless of any enumerated authority, DOD has been historically treated as an "exceptional" federal agency by the courts, Congress, and the executive branch. When the military's interests conflict with an environmental concern, the military is frequently given priority. For example, in *Winters v. NRDC*, the U.S. Supreme Court held that an injunction prohibiting the Navy from conducting sonar training exercises until it prepared an environmental impact statement under NEPA was not in the public interest. This holding came despite credible allegations that the training exercises would harm marine mammals in violation of the Marine Mammal Protection Act. This ruling may appear questionable, as DOD is not statutorily exempted from the requirements of NEPA. While NEPA has an "emergency circumstances" exemption for all federal agencies, these military exercises could hardly be described as an emergency. The fact that the Court recognized a broad public interest in national security demonstrates how DOD has considerable flexibility under environmental laws and is often exempted under the guise of national security.

Congress has also been particularly deferential to DOD's interests when crafting federal environmental laws. Under most federal environmental statutes, including the Clean Water Act, Clean Air Act, and Toxic Substances Control Act, the president may grant DOD "time-limited, renewable waivers" from

^{81. 43} U.S.C.A. § 1337(p)(4)(E) (2005) (West).

^{82. 43} U.S.C.A. § 1337(p)(4)(F) (2005) (West).

^{83. 43} U.S.C.A. § 1337(p)(4) (2005) (West) ("[BOEM] shall ensure that any activity under this subsection is carried out in a manner that provides for . . . (E) coordination with relevant Federal agencies; (F) protection of national security interests of the United States").

^{84.} See Sarah E. Light, The Military-Environmental Complex, 55 B.C.L. REV. 879, 889 (2014).

^{85.} See Winters v. Nat. Res. Def. Council, 555 U.S. 7, 22 (2008).

^{86.} Whether or not the military exercises constituted an "emergency" was a source of controversy in this case. Upon appellate review, the Ninth Circuit held that there was a "serious question" as to whether there was a "true emergency" in this case, given that the Navy had "been on notice of its obligation to comply with NEPA from the moment it first planned the . . . training exercises." *Id.* at 19. In a dissent joined by Justice Souter, Justice Ginsburg stated that she would have affirmed the Ninth Circuit's holding. *Id.* at 54 (Ginsburg, J., dissenting).

compliance obligations for DOD activities if such waivers are "in the paramount interest of the United States" or in the interest of national security.⁸⁷ In some cases, the Secretary of Defense can even make that determination independently, without further review from the executive branch.⁸⁸

Furthermore, on multiple occasions, Congress expanded these exemptions at the request of DOD. For example, DOD "easily persuaded" Congress to attach riders to the 2004 and 2005 Defense Appropriation Acts that exempted the military from the Migratory Bird Treaty Act, the Marine Mammal Protection Act, and various provisions of the Endangered Species Act for "military training and operations" purposes, even though there was "little to no empirical evidence that environmental laws encroached upon the use of the training areas." The fact that Congress was easily persuaded to further broaden DOD's exemptions from environmental laws for military readiness training, which could hardly be classified as an emergency or immediate threat, demonstrates just how deferential law makers can be to DOD's wishes.

Further, DOD has received special exemptions from many non-environmental federal laws that apply to all other federal agencies. For example, the Administrative Procedure Act exempts DOD from the definition of "agency" and from judicial review "in the field in time of war."90 In yet another exemption, the National Historic Preservation Act carves out a potential exemption "in the event of . . . an imminent threat to national security."91 Even though many of these statutes only grant an exemption "in the field of war," in multiple contexts, courts have interpreted the "field of war" broadly to refer to any place "where military operations are being conducted."92

Although DOD has special exemptions from many relevant administrative laws, DOD has also received statutory instructions from Congress that support renewable energy goals. For example, the National Energy Conservation Act requires all federal agencies, including DOD, to generate or purchase electricity with increasing levels of renewable energy sources.⁹³ Although Congress has not mandated that DOD reduce its fossil fuel consumption, in the National Defense

^{87.} Hope Babcock, *National Security and Environmental Laws A Clear and Present Danger*?, 25 VA. ENV'T L.J. 105, 110 (2007) (in reference to Toxic Substances Control Act, 15 U.S.C.A. § 2621 (2018) (West); Clean Water Act, 33 U.S.C.A. § 1323 (2018) (West); Resource Conservation and Recovery Act, 42 U.S.C.A. § 6961 (2018) (West); Clean Air Act, 42 U.S.C.A. § 7418(b) (2018) (West)). For further discussion, see Light, *supra* note 84, at 888.

^{88.} See, e.g., Marine Mammal Protection Act, 16 U.S.C.A. § 1371(f) (2018) (West); Endangered Species Act, 16 U.S.C.A. § 1536(j) (2018) (West); 36 C.F.R. § 78.3 (granting any Federal Agency Head an exemption from the National Historic Preservation Act when there is an "imminent threat to . . . national security.").

^{89.} Hope Babcock, National Security and Environmental Laws A Clear and Present Danger?, 25 VA. ENV'T L.J. 105, 126–30 (2007).

^{90. 5} U.S.C.A. § 701 (2018) (West).

^{91. 54} U.S.C.A. § 306112 (2018) (West).

^{92.} Kathryn E. Kovacs, A History of the Military Authority Exception in the Administrative Procedure Act, 62 ADMIN. L. REV. 673, 714 (2010).

^{93.} See 42 U.S.C. §§ 8251-8259 (West).

Authorization Act for Fiscal Year 2009, Congress created a new Office of Operational Energy Plans and Programs within DOD, which pursues self-sustaining alternative energy sources.⁹⁴

In sum, DOD's mission is simply to protect national security. DOD does not have a statutorily defined role in offshore wind, but it has historically been able to flex authority over other federal agencies based on broad grants of deference from the courts and Congress in a variety of contexts. However, based on Congress's instruction for DOD to move towards renewable energy sources, offshore wind may be directly aligned with DOD's goals.

IV. THE CURRENT CONFLICT BETWEEN BOEM AND DOD HAS CAUSED A STALEMATE ON ALL OFFSHORE WIND DEVELOPMENT IN CALIFORNIA

Despite having a bold RPS goal⁹⁵ and impressive offshore generation potential, California is far behind its East Coast counterparts in offshore wind development.⁹⁶ Currently, California does not have any offshore wind facilities, due to both technological and regulatory constraints.⁹⁷ The OCS on the West Coast is much further from shore and in much deeper water than on the Atlantic Coast, so the fixed-bottom turbines used in Rhode Island are not feasible in the Pacific.⁹⁸ Instead, Pacific Coast projects will likely use floating turbines,⁹⁹ which historically were much more expensive than fixed-bottom turbines.¹⁰⁰ However, experts now believe that floating technology will reach price parity with fixed-bottom technology by 2030.¹⁰¹ Floating turbines have the added benefits of possible reduction of site conflicts, access to higher winds in waters further

^{94.} Duncan Hunter National Defense Authorization Act for Fiscal Year 2009, Pub. L. No. 110-417, § 902, 122 Stat. 4356, 4564-66 (2008).

^{95.} The current RPS program in California requires that 60 percent of all electricity retail sales be served by renewable resources by 2030 and "requires all of the state's electricity to come from carbon-free resources by 2045." *Renewable Portfolio Standard (RPS) Program*, CAL. PUB. UTIL. COMM'N, https://www.cpuc.ca.gov/rps/#:~:text=California's%20RPS%20program%20was%20established,a% 2050%25%20RPS%20by%202030 (last visited Mar. 8, 2021).

^{96.} There are currently sixteen active BOEM leases for forthcoming offshore-wind facilities on the Atlantic Coast, and zero in California. *State Activities*, BUREAU OF OCEAN ENERGY MGMT, https://www.boem.gov/renewable-energy/state-activities (last visited Apr. 14, 2021); Justin Gerdes, *Navy Signals Willingness to Accept Wind Farms Off California's Central Coast*, GREEN TECH MEDIA (Feb. 18, 2020), https://www.greentechmedia.com/articles/read/navy-signals-willingness-to-accept-floating-wind-farms-off-californias-central-coast ("Despite the enormous wind energy potential off California's coasts in the central and northern areas of the state, it lags far behind its East Coast peers in establishing projects.").

^{97.} Offshore Renewable Energy, CAL. ENERGY COMM'N, https://www.energy.ca.gov/programs-and-topics/topics/renewable-energy/offshore-renewable-energy (last visited Mar. 8, 2021).

^{98.} GILMAN ET AL., supra note 37, at 28.

^{99.} Floating offshore wind platforms "work by connecting the buoyant substructure of the turbine to the seabed using mooring cables." Walt Musial, *Floating Wind Turbines on the Rise NREL Offshore Wind Expert Discusses Future Powered by Floating Offshore Wind*, NAT'L RENEWABLE ENERGY LAB'Y (Apr. 2, 2020), https://www.nrel.gov/news/program/2020/floating-offshore-wind-rises.html.

^{100.} GILMAN ET AL., supra note 37, at 28.

^{101.} *Id*.

offshore, and a larger resource base.¹⁰² A recent DOE study found that approximately 60 percent of the country's offshore potential lies in waters more than 200 feet deep, most of which are located on the West Coast.¹⁰³ Now that California offshore wind projects are soon-to-be economically feasible, regulatory constraints are the biggest barrier to development.

After a joint decision with California Governor Jerry Brown to pursue offshore wind, BOEM established the California Intergovernmental Renewable Energy Task Force ("Task Force") in 2016.¹⁰⁴ The Task Force brought together federal, state, and local agencies—including DOD—as well as federally recognized tribes to discuss offshore wind potential in California.¹⁰⁵ After factoring in the discussions of the Task Force and related public comment, BOEM announced three potential sites for offshore wind development ("Call Areas"): (1) Humboldt County in Northern California; (2) Morro Bay in Central California; and (3) Diablo Canyon in Central California.¹⁰⁶ In response, fourteen developers submitted nominations to complete the work.¹⁰⁷ BOEM initially wanted to host the auction of leases in mid-2018, but a disruption by DOD in 2017 has since called into question whether offshore wind is even viable in California.¹⁰⁸

In response to BOEM's potential siting locations, DOD released a Mission Compatibility Assessment for offshore wind in California, which mostly consisted of a map of the state's coastline. 109 DOD split up the federal waters off the California coast into color-coded sections. Any area colored red was considered a "Wind Exclusion Area" in which the DOD refused to consider offshore wind siting, deeming it "incompatible" with naval missions. 110 DOD said it would consider offshore wind development in the areas colored yellow, as long as development included "site-specific" stipulations or mitigation strategies. 111 Any area colored green was deemed "compatible," and DOD would allow BOEM to site offshore wind projects there without any conflict as long as DOD received notification of any planned "lease sales and activities." 112

^{102.} Id.

^{103.} ADVANCED RSCH. PROJECTS AGENCY, U.S. DEP'T OF ENERGY, AERODYNAMIC TURBINES LIGHTER AND AFLOAT WITH NAUTICAL TECHNOLOGIES AND INTEGRATED SERVO-CONTROL 8 (2019).

^{104.} BUREAU OF OCEAN ENERGY MGMT., U.S. DEPARTMENT OF THE INTERIOR, OUTREACH SUMMARY REPORT: CALIFORNIA OFFSHORE WIND ENERGY PLANNING 3 (2018).

^{105.} Id.

^{106.} Commercial Leasing for Wind Power Development on the Outer Continental Shelf (OCS) Offshore California – Call for Information and Nominations, 83 Fed. Reg. 53096 (proposed Oct. 19, 2018).

^{107.} Gerdes, supra note 96.

^{108.} Garrett Hering, US Military Squeezes Wind Energy Development Off California's Central Coast, S&P GLOBAL: MARKET INTEL. (Mar. 13, 2020), https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/us-military-squeezes-wind-energy-development-off-california-scentral-coast-57492026.

^{109.} DOD Memorandum, supra note 4.

^{110.} Id.

^{111.} *Id*.

^{112.} *Id*.

This assessment, combined with DOD's stubborn refusal to compromise with BOEM, has had devastating impacts on the prospects of offshore wind in California. Although BOEM is hopeful that it will be able to auction leases in 2021, this interagency conflict has yet to show signs of timely resolution. 113 Even though BOEM is the lead agency for offshore wind development and DOD does not have statutory authority to veto projects, BOEM and other offshore wind stakeholders are hesitant to move forward without some form of agreement with DOD. If BOEM were to disregard the Navy's opposition to the projects, the Navy could appeal the dispute to the president. During the Trump administration, advocates were concerned that President Trump was more likely to side with the Secretary of Defense than the Secretary of the Interior, which would effectively grant DOD unofficial veto power over offshore wind decisions.¹¹⁴ Though President Biden has expressed considerable support for offshore wind, 115 he has vet to comment on the agency conflict, and no progress has been made in California since his inauguration. Despite the tremendous amount of time and resources allocated to resolving this dispute, the California offshore wind industry has made little to no progress since DOD released the Assessment in 2017. In the next three Subparts, I discuss the nature of the conflict in three geographic zones of the California coast: Southern, Central, and Northern.

A. Offshore Wind Development in Southern California Is off the Table

Although Southern California shows considerable promise for offshore wind due to its close proximity to large population centers and consistent wind potential, DOD marked the entire area south of San Luis Obispo as a red incompatible zone. The U.S. Navy regularly conducts military training operations designed to equip and maintain "combat-ready forces" within a 120,000 square-mile marine zone between Santa Barbara and San Diego. 116 DOD claims that offshore wind turbines here could interfere with radar and lowaltitude flights, as well as conflict with live-fire drills and rapid deployment

^{113.} Hering, supra note 108.

^{114.} Rob Nikolewski, Offshore Wind Farms Coming to California – But the Navy Says No to Large Sections of the Coast, SAN DIEGO UNION-TRIB. (May 6, 2018), https://www.sandiegouniontribune.com/business/energy-green/sd-fi-offshore-wind-20180506-story.html (stating "Technically, the Navy is just yet another stakeholder. De facto they are, of course, the 800-hundred (sic) pound gorilla . . . If BOEM were to simply ignore the Navy then the Navy would essentially appeal this and the appeal would go all the way to the president's cabinet. And who's got more power, the Interior secretary or the Defense secretary?").

^{115.} For example, President Biden believes offshore wind provides an "enormous opportunity" to both "address the threat of climate change" and "create millions of good-paying, union jobs." Press Release, White House, FACT SHEET: Biden Administration Jumpstarts Offshore Wind Energy Projects to Create Jobs (Mar. 29, 2021), https://www.whitehouse.gov/briefing-room/statements-releases/2021/03/29/fact-sheet-biden-administration-jumpstarts-offshore-wind-energy-projects-to-create-jobs/. For further discussion of the Biden administration's actions on offshore wind, see Subpart VI.B below.

^{116.} Nikolewski, supra note 114.

missions.¹¹⁷ When asked whether offshore wind development was even conceivable in California, Steve Chung, the Navy Region Southwest Encroachment Program Director, stated that he did not see any "realistic, conceivable manner" where offshore wind could "coexist" with military operations in Southern California.¹¹⁸

The Southern California region has received very little press coverage, and it does not appear to be a subject of the negotiations within the Intergovernmental Task Force. Therefore, it is unlikely that offshore wind projects will be sited there in the near future.

B. Most of the Conflict Centers around the Two Call Areas in Central California

As mentioned above, BOEM and other stakeholders chose to name two Call Areas in Central California, one in Morro Bay, and the other in Diablo Canyon. These areas are well-suited for offshore wind development for multiple reasons. First, the area has well-connected existing transmission infrastructure and is conveniently located between the two large population centers of Los Angeles County and the San Francisco Bay Area. In addition, offshore wind could meet the energy output of two decommissioned power plants in the area. Power Plant will be fully decommissioned by 2025. Offshore wind projects could also help mitigate local job losses associated with the decommissionings and stimulate investment in the local economy.

Developers also showed interest in these two Call Areas. For example, in August 2019, Monterey Bay Community Power, a community-choice aggregator, signed an MOU with an offshore wind developer, Castle Wind, LLS,

^{117.} Stas Margaronis, California Offshore Wind Farm Auction Could Begin in 2021 Creating Economic Development for Ports, AM. J. TRANSP. (July 23, 2020), https://ajot.com/insights/full/ai-california-offshore-wind-farm-auction-could-begin-in-2021-creating-economic-development-for-ports.

^{118.} Nikolewski, supra note 114.

^{119.} California Energy Commission, Updated Notice of Availability of Outreach on Additional Considerations for Offshore Wind Energy off the Central Coast of California (May 7, 2020), https://efiling.energy.ca.gov/GetDocument.aspx?tn=232933&DocumentContentId=6538; Kavya Balaraman, California's last nuclear plant is poised to shut down. What happens next?, UTIL. DIVE (Mar. 23, 2021) https://www.utilitydive.com/news/californias-last-nuclear-plant-is-poised-to-shut-down-what-happens-next/596970/ (""Since the [Diablo Canyon] facility is such a major generating asset, there are massive transmission configurations coming out of it, with feeder lines traveling north and south,' said Michael Colvin, director of regulatory and legislative affairs at the Environmental Defense Fund. As a result, it has served as a major junction for moving power around the state. Once the facility retires, California will have additional headroom on those lines").

^{120.} California Energy Commission, *supra* note 119, at 3 ("Existing transmission infrastructure on the Central Coast is designed to reliably deliver the output of both the Diablo Canyon Power Plant (~2,000 MW) and the retired Morro Bay Power Plant (~1,000 MW). Offshore wind from the Central Coast is an opportunity for a source of clean energy in proximity to existing transmission infrastructure and energy consumers.").

^{121.} Balaraman, supra note 119.

^{122.} See Collier, supra note 38, at 21.

to explore buying electricity from a 1000-megawatt offshore wind facility in the area.¹²³ The proposed Castle Wind Offshore Project would consist of 100 floating wind turbines approximately thirty miles off the coast.¹²⁴

Despite all of this momentum, offshore wind development in both Call Areas was effectively halted after DOD released its Mission Compatibility Assessment in 2017. DOD claimed that Diablo Canyon was a "non-starter," because it would overlap with DOD weapons testing and live-fire drills, and marked the whole area as red. 125 This was of particular disappointment to local proponents, many of whom had become increasingly hopeful for offshore wind development as there is still uncertainty as to how the output of the Diablo Canyon Power Plant will be met after the decommissioning is completed in 2025. 126

DOD initially stated in its 2017 Assessment that turbines "might be able to coexist" with its operations in the Morro Bay Call Area, marking it yellow, but later "backpedaled" in early 2018 and updated the map, marking Morro Bay red. 127 Nevertheless, BOEM still expressed cautious optimism about Morro Bay in its 2018 Call, suggesting that it would be able to collaborate with DOD to determine potential compatible areas or mitigating measures to alleviate conflicts. 128 BOEM proposed certain stipulations for developers in Morro Bay, such as: "(1) hold and save harmless agreements; (2) mandatory coordination with DOD on specified activities; (3) restrictions on electromagnetic emissions; (4) curtailment of wind farm operations during specific DOD events; and (5) evacuation procedures from the lease area for safety reasons when notified by the DOD." 129

Since then, however, BOEM and DOD have not come to any public agreement on these mitigation measures, although both parties have engaged in a series of closed-door negotiations.¹³⁰ In early 2020, DOD signaled that areas of the Morro Bay Call Area were back on the table for discussion, and compromises have been proposed.¹³¹ However, as discussed in Subpart IV.D below, BOEM and DOD have yet to make any meaningful steps towards resolution.

^{123.} Gerdes, supra note 96.

^{124.} St. John, *supra* note 44.

^{125.} Iaconangelo, supra note 1; see also DOD Memorandum, supra note 4.

^{126.} Iaconangelo, supra note 1.

^{127.} Id

^{128.} Commercial Leasing for Wind Power Development on the Outer Continental Shelf (OCS) Offshore California – Call for Information and Nominations, 83 Fed. Reg. 53096 (proposed Oct. 19, 2018).

^{129.} Id.

^{130.} Iaconangelo, supra note 1.

^{131.} *Id*.

C. The Conflict in Central California May Also Render Offshore Wind Development in Northern California Economically Infeasible

Unlike the rest of the state, DOD found wind energy development off far Northern California to be free of conflicts. In fact, the only areas DOD marked green in its Assessment were located north of Mendocino.¹³² In light of this, the Humboldt County Call Area should be able to proceed to auction without issue.

However, BOEM is unlikely to move forward with the Humboldt County Call Area without the Morro Bay or Diablo Canyon Call Areas. First of all, Humboldt County is a relatively rural area, and would require significant investment in transmission lines to bring the energy to the population centers of the state. The state may be able to limit the amount of transmission infrastructure required if it invests in a "fairly significant amount of local storage," but it is unclear whether storage will be any more cost effective. In addition, building infrastructure takes time, which may result in unanticipated delays in bringing an offshore wind facility to the grid.

To make matters worse, developers are unlikely to invest considerably in California offshore wind development until the agency conflicts are resolved. For developers, the limited geographic area may not be large enough to justify the investment, and the uncertainty surrounding Central California may diminish developer confidence in their ability to expand in the future. The Hoem has said that the state will need to support multiple projects sized 1000 MW or larger to fill the existing capacity and maximize project economics. Without clarity on the negotiations in Central California, developers and investors may be unwilling to finance the necessary infrastructure for a Humboldt County project. All of the above has called the economic viability of a Humboldt County project into question. As BOEM's regional supervisor, Doug Boren, aptly said, "it's safe to say we're not quite there yet." 137

D. Recent Legislative Proposals in Congress Are Unlikely to End the Stalemate between BOEM and DOD.

In 2020, negotiations with DOD became increasingly hostile, provoking promising but ultimately ineffective legislative proposals in Congress. Although conversations between the relevant parties have largely occurred behind closed doors, on February 7, 2020, the California Energy Commission signaled that the Morro Bay Call Area may be "back on the table" by publishing a draft map and

^{132.} Nikolewski, supra note 114.

^{133.} Hering, supra note 108.

^{134.} Justin Gerdes, *Unlocking Northern California's Offshore Wind Bounty*, GREEN TECH MEDIA (Sept. 30, 2019), https://www.greentechmedia.com/articles/read/unlocking-northern-californias-offshore-wind-bounty.

^{135.} Hering, supra note 108.

^{136.} Id.

^{137.} *Id*.

a solicitation for public comments on offshore wind development in the Call Area. This suggested that negotiations had moved forward, and DOD may have softened its position with respect to Morro Bay. A few weeks later, the local congressman, Representative Salud Carbajal, who had played a key role in the closed-door negotiations, publicly floated a compromise, which would have opened up the Morro Bay and Diablo Canyon Call Areas in exchange for an official moratorium on all offshore wind development in the red zones south of San Luis Obispo. DOD officials begrudgingly agreed to consider the compromise, but emphasized they wanted a full ban on turbines in nearby waters that "might conflict with its operations," while refusing to specify particular locations.

Back-door negotiations continued for the next few months but stalled again in May 2020. According to Representative Carbajal, the Assistant Secretary of the Navy for Energy, Installations, and Environment once again backpedaled, stating that the DOD opposed all wind development off the coast of Central California "without providing any supporting analysis" or acknowledgement of prior negotiations. 142 Frustrated with the lack of progress, in July 2020, Representative Carbajal authored a rider addressing the conflict hidden in the House version of the National Defense Authorization Act (NDAA).¹⁴³ The amendment claimed that the Navy ignored negotiation efforts and made a "unilateral decision" that offshore wind would be "entirely incompatible with military activities."144 The amendment enumerated three key terms, all of which apply solely to offshore wind development in Central California: (1) the Office of the Under Secretary of Defense for Acquisition and Sustainment would handle all negotiations with the rest of the Working Group instead of the Navy;¹⁴⁵ (2) the Secretary of Defense would have to provide a detailed briefing to Congress on the status of DOD's efforts to find at least two compatible offshore wind leasing areas near Morro Bay within six months; 146 and (3) the Secretary of

^{138.} Iaconangelo, supra note 1; California Energy Commission, supra note 119.

^{139.} Iaconangelo, supra note 1.

^{140.} Id.

^{141.} *Id.* ("We absolutely support many of the [state's] goals, whether they're renewable energy, or economic vitality with regard to jobs,' said Steve Chung, a liaison on compatibility and readiness for the Navy's southwest region. 'But we also want to ensure as we move down this road that we don't do anything that can compromise our national security interest and ability to implement national defense strategy."").

^{142.} H.R. 6395, 116th Cong. § 236 (as passed by House, July 21, 2020).

^{143.} *Id*.

^{144.} Id.

^{145.} *Id.* ("(b) All interaction on behalf of the Department of the Navy with the California Energy Commission, Federal agencies, State and local governments, and potential energy developers regarding proposed offshore wind energy off the central coast of California shall be performed through the Office of the Under Secretary of Defense for Acquisition and Sustainment.").

^{146.} *Id.* ("(c)(1) No later than 180 days after the date of the enactment of this Act, the Secretary of Defense shall provide to the Committees on Armed Services and the Committee on Natural Resources of the House of Representatives a briefing on status of the review by the Offshore Energy Working Group of the request to locate at least two offshore wind lease areas proximate to and within the Morro Bay Call

Defense could not issue a final assessment that proposes wind exclusion areas, nor object to an offshore wind project in Central California until fully briefing Congress.¹⁴⁷ The House of Representatives passed the bill on July 21, 2020.¹⁴⁸

After the amendment passed, the Navy resumed negotiations and offered a formal commitment with respect to the Morro Bay Call Area, presumably in exchange for the removal of Representative Carbajal's amendment from the final NDAA bill before it could be passed by the Senate. ¹⁴⁹ In a letter from Secretary of Navy Kenneth Braithwaite to Representative Carbajal, the Navy changed its position once again and stated that development in the "vicinity" of Morro Bay would be an acceptable risk, so long as there would be a "long-term moratorium on further wind energy development in military operations" in exchange. ¹⁵⁰ Carbajal's amendment was subsequently removed from the NDAA before its passage. ¹⁵¹

Few updates have been shared with the public since the announcement of the agreement between Secretary Braithwaite and Representative Carbajal. The Offshore Wind Working Group has resumed its monthly meetings and claims to be searching for a "suitable region" that appearses all parties.¹⁵²

This arduous chronicle of deliberations demonstrates how inefficiently and arbitrarily DOD has acted with respect to offshore wind development: The agency changed its position on Morro Bay multiple times without providing justification or reasonable efforts at mitigation. DOD's most recent commitment enumerated in Secretary Braithwaite's letter is still incredibly vague and has yet to provide any meaningful results. Unless serious changes are made to DOD's review process, California's offshore wind industry is unlikely to succeed. Representative Carbajal properly articulated the direness of DOD's behavior in his NDAA amendment: "Stakeholder confidence in the Department of Defense review process is paramount. Abrupt and unilateral changes of course erode

Area. Such briefing shall include: (A) a detailed map that shows any areas identified; (B) proposed mitigations that would enable compatible development in the areas identified; and (D) any other terms of the agreement reached with the California Energy Commission, other Federal agencies, State and local governments, and potential energy developers.").

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^{147.} *Id.* ("(c)(2) The Secretary of Defense may not issue a final offshore wind assessment that proposes wind exclusion areas and may not object to an offshore energy project in the Central Coast of California that has filed for review by the . . . Clearinghouse until the Secretary provides the briefing required under paragraph (1).").

^{148.} See generally id.

^{149.} Press Release, U.S. Congressman Salud Carbajal, Carbajal Reconvenes Offshore Wind Working Group, Secures Commitment from Navy (Oct. 1, 2020).

^{150.} Letter from Secretary Kenneth J. Braithwaite to Representative Salud Carbajal (Sept. 28, 2020).

^{151.} H.R. 6395, 116th Cong. § 236 (as passed by House, July 21, 2020); to review the codified law, see William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021, Pub. L. No. 116-283, 134 Stat. 3388 (to be codified as amended in scattered sections of 10 U.S.C.).

^{152.} Melissa Newman, Renewed interest in offshore wind energy could bring a site to the Central Coast, KSBY NEWS (Mar. 30, 2021), https://www.ksby.com/news/local-news/renewed-interest-in-offshore-wind-energy-could-bring-a-site-to-the-central-coast.

confidence and undermine the [s]tate, local, and industry trust in a fair, transparent, and predictable adjudication of potential conflicts."153

V. DOD'S RESISTANCE TO OFFSHORE WIND DEVELOPMENT IS IRRATIONAL AND MISGUIDED

In order to achieve its mission of protecting American national security interests, DOD should reconsider its approach to offshore wind development. DOD has resolved similar agency conflicts in the past, and offshore wind should not be treated any differently. Instead, DOD should recognize that it has overestimated the burdens of offshore wind to its mission and underestimated the benefits.

A. DOD's Resistance Is Contrary to Its Public Commitments

On two separate occasions, DOD has made commitments to DOI and DOE that it would be a team player with respect to offshore wind development. First, DOD signed an MOU on "Renewable Energy and a Renewable Energy Partnership Plan" with DOI in July 2012.154 The MOU provided that the two agencies would cooperate to "facilitate appropriate, mission-compatible renewable energy development on public lands withdrawn for defense-related purposes . . . and other onshore and offshore areas near or adjacent to DOD military installations." The MOU also recognized the importance of renewable energy development, stating that "energy security is critical to our national security." 156

DOD also committed to cooperating with DOI on offshore wind when it joined the California Intergovernmental Task Force. 157 DOD's firm opposition to the Central California Call Areas may have caught some stakeholders offguard given that DOD representatives played an active role in the Task Force. 158 DOD has since taken a more conservative position with respect to the Diablo Canyon and Morro Bay Call Areas, and failed to raise serious concerns until after the Call Areas were established. 159 At best, this behavior demonstrates a serious

^{153.} H.R. 6395, 116th Cong. § 236 (as passed by House, July 21, 2020).

^{154.} Memorandum of Understanding between The Department of Defense and The Department of the Interior on Renewable Energy and a Renewable Energy Partnership Plan (July 20, 2012), https://perma.cc/RPD2-5J2N.

^{155.} *Id*.

^{156.} Id.

^{157.} BUREAU OF OCEAN ENERGY MGMT., supra note 104, at 15.

^{158.} *Id*.

^{159.} In the version of the NDAA that passed the House of Representatives on July 21, 2020, Congress made a finding that

[[]i]n May 2020, the Assistant Secretary of the Navy for Energy, Installations, and Environment notified stakeholders that despite the previous year of negotiations, it was in his view that any wind energy developments off the Central Coast of California may not be viewed as being compatible with military activities. This unilateral decision was made abruptly, without providing any supporting analysis or acknowledgement of the progress and commitments made

lack of transparency within the agency. At worst, it demonstrates a bad-faith tactic to prevent development.

DOD has expressed very little willingness to compromise with offshore wind stakeholders. Though DOD claims to recognize the importance of renewable energy development to its national security mission, 160 its actions suggest serious internal resistance. This resistance is not only harmful to the offshore wind stakeholders but will ultimately hold DOD back from achieving its national security mission.

B. The Military Has Been Able to Resolve Conflicts with Renewable Energy Development in the Past

DOD's resistance to offshore wind is not unprecedented, as the agency also expressed serious concerns with onshore wind approximately fifteen years ago, claiming that wind turbines were likely incompatible with military operations. ¹⁶¹ Unlike offshore wind on the OCS, states generally have the authority to grant permits for onshore turbines. ¹⁶² The tension between promotion of renewable energy and concerns over national security created a massive headache for states hosting military bases. Given the unequal balance of power between the U.S. military and state governments, some state and local officials have felt pressured to strictly limit wind energy siting to avoid potential conflicts with any military activity. ¹⁶³ Many state legislatures subsequently passed bills that severely

during previous negotiations, and was not in the spirit of cooperation and collaboration that had driven the previous 9 months of stakeholder engagement.

H.R. 6395, 116th Cong. § 326 (as passed by House, July 21, 2020).

160. For example, DOD officials serving the last three American presidents have recognized climate change as a national security threat in some capacity. See OBAMA WHITE HOUSE, FINDINGS FROM SELECT FEDERAL REPORTS: THE NATIONAL SECURITY IMPLICATIONS OF A CHANGING CLIMATE 2 (2015) ("Climate change will affect the Department of Defense's ability to defend the Nation and poses immediate risks to U.S. national security . . . impacts increase the frequency, scale, and complexity of future defense missions, requiring higher costs of military base maintenance and impacting the effectiveness of troops and equipment in conflict."); OFFICE FOR THE UNDER SEC'Y OF DEFENSE FOR ACQUISITION AND SUSTAINMENT, REPORT ON EFFECTS OF A CHANGING CLIMATE TO THE DEPARTMENT OF DEFENSE 2 (2019) ("The effects of a changing climate are a national security issue with potential impacts to [the] Department of Defense . . . DOD must be able to adapt current and future operations to address the impacts of a variety of threats and conditions, including those from weather and natural events."); Aaron Mehta, Climate change is now a national security priority for the Pentagon, DEFENSE NEWS (Jan. 27, 2021), https://www.defensenews.com/pentagon/2021/01/27/climate-change-is-now-anational-security-priority-for-the-pentagon/ (reporting that Defense Secretary Lloyd Austin stated that "[t]here is a little about what the Department does to defend the American people that is not affected by climate change. It is a national security issue, and we must treat it as such.").

161. Eric Niiler, *The Military is Locked in a Power Struggle with Wind Farms*, WIRED (May 28, 2019, 8:00 AM), https://www.wired.com/story/the-military-is-locked-in-a-power-struggle-with-wind-farms/.

162. Dillon Hollingsworth, *Tilting at Windmills Reconciling Military Needs and Wind Energy Initiatives in the 21st Century*, 4 OIL AND GAS, NAT. RES. & ENERGY J. 7, 21 (2018).

163. *Id.* at 10 ("Now that the Department of Defense has developed concerns about wind farms and their effect on defense readiness—with more states beginning to listen—that decision could ultimately hurt the nation's long-term goal of endorsing alternative energy sources. The current regulatory scheme of those

limited wind farm permitting,¹⁶⁴ and North Carolina even opted to ban all new wind-energy projects altogether.¹⁶⁵

However, as demand for renewables increased around the country and extensive studies confirmed that national security concerns with wind turbines could be sufficiently mitigated, DOD softened its position. 166 The Pentagon established the Military Aviation and Installation Assurance Siting Clearinghouse in 2011 (Clearinghouse), which established a streamlined, formal process for DOD to review proposed renewable energy projects for potential conflicts with military operations. 167 The process was designed to "ensure that the robust development of renewable energy sources... move forward... while minimizing or mitigating any adverse impacts on military operations and readiness." 168 Developers considering projects that either reach 199 feet above ground level, 169 or within military training routes or "special use airspace" are required to obtain Clearinghouse approval before moving forward with a project. 170 Developers may also seek an informal review of any project, regardless of height or location, at their own discretion to identify potential compatibility concerns. 171

The Clearinghouse's formal review framework has alleviated many of the prior conflicts associated with onshore wind projects for a few reasons. First, the Clearinghouse offers more uniform decision making by serving as the "single point of contact" for any interested parties, such as wind energy developers,

states who have addressed the issue evidence a split showing that at least some state legislatures, when left to their own devices on the issue, will choose defense over energy . . .").

- 165. Hollingsworth, supra note 162, at 7.
- 166. Niiler, supra note 161.
- 167. Mission Compatibility Evaluation Process, 32 C.F.R. § 211 (2014).
- 168. *Id.* § 211.4.

^{164.} For example, Texas passed a law that "prohibit[ed] tax abatements" for new wind projects within thirty nautical miles of a military facility on the grounds that "it does not make sense to use taxpayer dollars to subsidize an activity that threatens our military mission, our jobs, and our economy in such a drastic manner." Donna Campbell, We Must Protect Texas' Military Installations from Encroaching Wind Turbines, THE DALLAS MORNING NEWS (Apr. 19, 2017), https://www.dallasnews.com/opinion/commentary/2017/04/19/we-must-protect-texas-military-installations-from-encroaching-wind-turbines; S.B. 277, 85th Leg. (Tex. 2017).

^{169.} For context, it is worth noting that most modern wind turbines far surpass this height, whether onshore or offshore. Since 2012, the average height of installed wind turbines has been approximately 280 feet. Sarah Hoff et al., Wind turbine heights and capacities have increased over the past decade, U.S. ENERGY INFO. ADMIN. (Nov. 29, 2017), https://www.eia.gov/todayinenergy/detail.php?id=33912#:~:text=The%20project%20has%20a%20combined,as%20tall%20as%20280%20feet. Offshore wind turbines can be even taller than their onshore counterparts. For example, General Electric, which had a 41.4 percent market share of the U.S. offshore turbine market at the end of 2018, sells an offshore wind turbine that stands nearly 850 feet tall. Bob Woods, US has only one offshore wind energy farm, but a \$70 billion market is on the way, CNBC (Dec. 13, 2019), https://www.cnbc.com/2019/12/13/us-has-only-one-offshore-wind-farm-but-thats-about-to-change.html.

^{170.} Military Aviation and Installation Assurance Siting Clearinghouse Reviews, OFFICE OF THE ASSISTANT SEC'Y OF DEFENSE FOR SUSTAINMENT (last visited Feb. 20, 2021), https://www.acq.osd.mil/dodsc/contact/dod-review-process.html.

^{171.} Id.

government agencies, or state and local governments.¹⁷² Second, the review must be supported by evidence and conducted in a timely manner: Upon receiving a formal application for a proposed wind project, DOD must conduct technical and operational studies and determine whether a project would have an "adverse impact on military operations or readiness" within thirty days.¹⁷³ Finally, and most crucially, the Clearinghouse's review process requires DOD to collaborate with key stakeholders and try to mitigate any potential risks before it seeks an outright rejection of a project.¹⁷⁴ If DOD review determines the project poses an "adverse impact" to military operations, it must ask the applicant to participate in a partnership called a "Mitigation Response Team" to consider potential mitigation options.¹⁷⁵ Both parties are encouraged to consider an extensive list of mitigation options in the hopes of finding a solution that works for all parties.¹⁷⁶

This review framework has generally been proven to be successful for parties on both sides of the application. Since the establishment of the Clearinghouse, the Pentagon has not rejected any wind farm proposals, but it has recommended developers make certain changes, such as building fewer turbines, lowering the height of the turbines, or moving the location.¹⁷⁷

DOD should consider the following takeaways based on the success of the Clearinghouse. First, DOD could avoid lengthy negotiations over renewable energy projects by providing a centralized, streamlined, and evidence-based review process. Second, the fact that DOD has not outright rejected any energy projects since the establishment of the Clearinghouse suggests that many of DOD's primary concerns over renewable energy projects are capable of effective mitigation. Finally, the success of the Clearinghouse may indicate that consensus between DOD and BOEM is possible and may provide a helpful framework for offshore wind moving forward.

C. DOD Has Overestimated the Risks of Renewables

As discussed above, DOD still has not publicly explained why it has taken such a strong stance against offshore wind on the West Coast. This undisclosed

^{172.} Military Aviation and Installation Assurance Siting Clearinghouse, OFFICE OF THE ASSISTANT SEC'Y OF DEFENSE FOR SUSTAINMENT (last visited Feb. 20, 2021), https://www.acq.osd.mil/dodsc/.

^{173.} Mission Compatibility Evaluation Process, 32 C.F.R. § 211.6 (2014).

^{174.} *Id*.

^{175.} Siting Clearinghouse Frequently Asked Questions, OFFICE OF THE ASSISTANT SEC'Y OF DEFENSE FOR SUSTAINMENT (last visited Feb. 20, 2021), https://www.acq.osd.mil/dodsc/about/faq.html.

^{176.} For example, DOD is asked to consider certain mitigation techniques, such as "modifications to radars or other items of military equipment," or "modifications to military test and evaluation activities, military training routes, or military training procedures." Applicants are also asked to consider certain mitigation techniques, such as "modification of the proposed structure, operating characteristics, or the equipment in the proposed project" or "providing a voluntary contribution of funds to offset the cost of measures undertaken by the Secretary of Defense to mitigate adverse impacts of the project on military operations and readiness." Mission Compatibility Evaluation Process, 32 C.F.R. § 211.9 (2014).

^{177.} Hollingsworth, supra note 162, at 7.

opposition suggests that DOD may be overestimating the risks of offshore wind. Southern California, for example, is home to the two busiest ports in the United States.¹⁷⁸ The Navy is already accustomed to dealing with both temporary impediments, such as commercial barges and large fishing ships, as well as permanent structures, such as offshore oil rigs.¹⁷⁹ However, DOD has failed to explain why offshore wind facilities cannot coexist as well.

This form of blind opposition can have serious consequences. For example, in early 2017, repeated conflicts between wind developers and officials representing military bases in North Carolina prompted the state's governor to sign into law a bill that placed an eighteen-month moratorium on the issuance of permits for all onshore wind farms in the state. However, before the bill was even signed, military officials in North Carolina publicly stated that no pending projects at the time would have interfered with their training operations. And shortly after the bill was implemented, a Pentagon-commissioned study found that the 104 turbines at Amazon's North Carolina wind farm did not interfere with a local Naval radar facility, despite claims by state legislators insisting otherwise. Even though wind farms did not end up interfering with DOD interests in the state, overreactions caused the state to fall behind in renewables development. Similarly, DOD has overestimated the risks of renewables and is missing out on many of the ways renewable energy can support its mission.

D. DOD Has Underestimated the Benefits Renewable Development Will Provide to its Mission

The agency's emphasis on conservative decision making has impeded consideration of the benefits of renewable energy. DOD should recognize that renewables help serve its mission of protecting national security in multiple ways.

Even though DOD has been skeptical of supporting renewable energy development, it has clearly recognized that climate change is a national security threat. For instance, in the February 2010 Quadrennial Defense Review Report, DOD concluded that "climate change could have significant geopolitical impacts around the world, contributing to poverty, environmental degradation, and the further weakening of fragile governments. Climate change will contribute to food and water scarcity, will increase the spread of disease, and may spur or

^{178.} The two busiest ports in the United States are the Port of Los Angeles and the Port of Long Beach, both of which are located in Southern California. *Five busiest ports in the US*, PORT TECH. INT'L (Jan. 27, 2020), https://www.porttechnology.org/news/top-5-ports-in-the-usa/.

^{179.} Collier, supra note 3.

^{180.} Hollingsworth, *supra* note 162.

^{181.} Matthew Burns, *Bill Would Prohibit New Wind Farms in Coastal Swath*, WRAL.COM (Mar. 27, 2019, 5:12 PM), https://www.wral.com/bill-would-prohibit-new-wind-farms-in-coastal-swath/18288073/.

^{182.} Niiler, supra note 161.

exacerbate mass migration."¹⁸³ All of these impacts certainly put the security of the United States at risk. Furthermore, climate change does not only cause threats, but is also a "threat multiplier," exacerbating the destruction associated with existing threats.¹⁸⁴ A shift towards renewable energy could help mitigate the worst effects of climate change.

In addition, climate change is already posing tangible threats to military bases. The naval station in Norfolk, Virginia floods approximately ten times per year, blocking roads and cutting off docked ships from the power supply. 185 The sea level at Norfolk has risen 14.5 inches since it was built during World War I, and flooding will only worsen as the planet continues to warm. 186 In Alaska, sea level rise and thawing permafrost has eroded the shoreline and damaged several Air Force radar early warning and communication installations. 187 Experts have projected that conservative sea-level rise estimates would threaten 128 coastal military bases by 2100, valued at over \$100 billion. 188 DOD officials appeared to be receptive to these findings. In response to the study, Air Force Lieutenant Colonel Eric Badger stated that "we recognize climate change impacts and their potential threats represent one more risk that we must consider as we make decisions about our installations, infrastructure, weapons systems and most of all, our people." This consideration of climate change impacts should extend to decisions about offshore wind siting as well.

Renewable energy also leads to greater American energy independence. Former Trump administration Secretary of Defense James Mattis has declared that DOD must "unleash us from the tether of fuel" in order to protect American interests, referencing the seemingly endless international conflicts over Middle Eastern oil imports.¹⁹⁰ Expanding renewable energy would allow the United States to wean off its dependency on foreign oil, thereby reducing the necessity

^{183.} U.S. DEP'T OF DEF., QUADRENNIAL DEFENSE REVIEW REPORT 85 (2010).

^{184.} Light, *supra* note 84, at 886; U.S. DEP'T OF DEFENSE, QUADRENNIAL DEFENSE REVIEW REPORT 8 (2014) ("Climate change poses another significant challenge.... As greenhouse gas emissions increase, sea levels are rising, average global temperatures are increasing, and severe weather patterns are accelerating. These changes ... will devastate homes, land, and infrastructure. Climate change may exacerbate water scarcity and lead to sharp increases in food costs. The pressures caused by climate change will influence resource competition while placing additional burdens on economies, societies, and governance... These effects are threat multipliers that will aggravate stressors abroad such as poverty, environmental degradation, political instability, and social tensions—conditions that can enable terrorist activity and other forms of violence.").

^{185.} Laura Parker, *Who's Still Fighting Climate Change? The U.S. Military*, NAT'L GEOGRAPHIC (Feb. 7, 2017), https://www.nationalgeographic.com/news/2017/02/pentagon-fights-climate-change-sea-level-rise-defense-department-military/.

^{186.} Id.

^{187.} Id.

^{188.} *Id*

^{189.} Meghann Meyers, *Rising Oceans Threaten to Submerge 128 Military Bases Report*, NAVY TIMES (July 29, 2016), https://www.navytimes.com/news/your-navy/2016/07/29/rising-oceans-threaten-to-submerge-128-military-bases-report/.

^{190.} COLONEL GREGORY J. LENGYEL, AIR FORCE OFFICER PROF'L EDUC. CTR., DEPARTMENT OF DEFENSE ENERGY STRATEGY: TEACHING AN OLD DOG NEW TRICKS 12 (2008).

of American military presence abroad.¹⁹¹ By limiting the need for American involvement in the global oil market, energy independence could save millions in the DOD budget and save the lives of countless American servicemembers.¹⁹²

Furthermore, renewable energy can help insulate the U.S. military from disruptions to the power-grid. Currently, many military installations and facilities are connected to the national grid, which means that military operations are increasingly vulnerable to grid disruptions caused by natural disasters or cyber-attacks.¹⁹³ Given that the military is the largest consumer of energy in the United States, a dependable and secure supply of energy is of enormous importance.¹⁹⁴ Rather than risk these disruptions, the military could instead develop an unconnected, independent grid on each of its bases, which would save money and protect from these disruptions.¹⁹⁵ An independent grid would be nearly impossible with traditional fossil fuels, but is completely achievable with a diverse portfolio of renewable resources.

VI. THE DOD MUST REFORM ITS CURRENT APPROACH TO OFFSHORE WIND TO INCREASE TRANSPARENCY, CONSISTENCY, AND EQUITY

DOD's current approach to offshore wind is unacceptable. American leadership must make critical changes to the current framework in order to ensure that the nascent offshore wind industry has the opportunity to succeed in the United States. This Part provides a series of recommendations that would simultaneously support offshore wind development and DOD's mission to protect national security. Fortunately, there are multiple avenues to bring about these key changes. Critical reform could come from DOD itself, Congress, the executive branch, or through the joint efforts of two or more of these groups. Each can contribute to offshore wind development in different ways through the group's unique authority. However, in line with earlier discussions of the inadequacies of DOD's current procedures, DOD's improved procedure should center around three key principles: transparency, consistency, and a balance of interests that accurately accounts for the benefits of offshore wind. A procedure in line with these principles would not only allow the offshore wind industry to flourish, but also allow DOD to meaningfully engage in offshore wind siting decisions while simultaneously reaping the national security benefits of renewable energy.

First, leadership should seek to improve DOD's transparency with respect to offshore wind. At present, DOD's review procedure is unclear. For example,

^{191.} See id. ("The United States' unique ability to project military power anywhere on the globe requires incredible quantities of liquid hydrocarbon fuel. The primary source of fuel is imported oil from an economically and politically unstable world oil market . . . that so much of the United States' and other countries' energy needs rely on imported oil creates foreign policy and economic vulnerability").

^{192.} Id.

^{193.} Light, *supra* note 84, at 894.

^{194.} Id.

^{195.} Id.

in response to BOEM's proposed California offshore wind siting in 2017, DOD released a Mission Compatibility Assessment, which supposedly outlined all of the potential military use conflicts with offshore wind in California. 196 DOD continues to reference this Assessment in public fora; however, the Assessment does not appear to be accessible to the public. After months of research, I have been unable to locate the Assessment anywhere on the internet. Military sources also reference to the Department of the Navy for Energy, Environment and Climate Change website.¹⁹⁷ However, until approximately March 2021, the website had not been updated in years, and all documents were inaccessible. 198 This was due to the Trump administration's decision to "quietly" discontinue the Navy's Task Force on Climate Change in March 2019 without assigning the task force's "area of responsibility" to another naval office. 199 At present, the website has been updated to reflect the change in administration, but the relevant documents associated with the California offshore wind agency conflict are still not listed.²⁰⁰ This lack of transparency is unacceptable for a federal agency and will have the practical effect of further stalling offshore wind development. Without insight into DOD's decision-making process, offshore wind developers, advocates, and local officials will be unable to adjust or accommodate DOD's concerns.

Furthermore, this lack of transparency also gives the impression that DOD is inconsistent with its decision making. Because DOD has failed to articulate its procedures for reviewing offshore wind projects, some may see DOD decisions as arbitrary—regardless of whether these procedures are consistent or not. For example, Dominion Energy has already secured the lease and installed a pilot project associated with its Coastal Virginia Offshore Wind Project near Virginia Beach, Virginia.²⁰¹ Despite the fact that the Virginia Beach region is home to nine major military installations, including the world's largest naval base, DOD has not reacted with the same vague opposition as they have in California, and the agency did not prevent the siting or leasing from moving forward.²⁰² Instead, DOD chose to provide a \$775,000 grant to Old Dominion University in Norfolk, Virginia to "help create a wind energy siting solution, to mitigate the effects of

^{196.} BUREAU OF OCEAN ENERGY MGMT., supra note 104, at 15.

^{197.} Assistant Secretary of the Navy (Energy, Installations, and Environment), DEP'T OF DEFENSE, https://www.secnav.navy.mil/eie/Pages/default.aspx (last visited Apr. 14, 2021).

^{198.} *Id*.

^{199.} Philip Athey, *Navy quietly shut down climate change task force*, E&E NEWS (Aug. 7, 2019), https://www.eenews.net/stories/1060877355.

^{200.} It is worth noting that other documents relevant to the Department are accessible. However, many of the documents were prepared by the Obama administration and have little relevance to the subject of this Note. Assistant Secretary of the Navy (Energy, Installations, and Environment), supra note 197.

^{201.} Coastal Virginia Offshore Wind Project, BUREAU OF OCEAN ENERGY MGMT., https://www.boem.gov/renewable-energy/state-activities/coastal-virginia-offshore-wind-project-evow (last visited Feb. 10, 2021).

^{202.} Military, VIRGINIA BEACH ECONOMIC DEVELOPMENT, https://www.yesvirginiabeach.com/Business-Environment/workforce/Pages/military.aspx (last visited Mar. 10, 2021).

the location decision on military training, readiness, and research."203 Given that DOD has yet to provide a cognizable justification for its opposition in Morro Bay, the stark contrast between the California and Virginia projects is even more perplexing. Therefore, in improving the transparency, the public will have a better idea of whether DOD's current review procedure is consistent and fair.

Finally, leadership should seek to change DOD's approach to offshore wind in order to ensure a balance of interests that accurately accounts for the benefits of offshore wind. In the following Subparts, I offer recommendations to DOD, Congress, and the executive branch, respectively, that could better streamline DOD's offshore wind review process.

A. DOD's Current Offshore Wind Review Procedures Do Not Adequately Reflect Its Mission and Should Be Reformed Internally

Ideally, DOD leadership could make direct changes to its own procedures based on its own recognition that renewable energy development is crucial to its mission of protecting national security interests. This will likely lead to the best outcomes for offshore wind, as DOD officials are more likely to "buy in" and adjust more quickly if the decisions come from internal leadership.

First, the Pentagon should be reviewing proposed offshore wind projects, not local military officials. The Pentagon is in the best position to perform the proper cost-benefit analysis for offshore wind decisions. Local officials are inclined to a form of quasi-NIMBYism²⁰⁴ as they are likely to observe more costs from local offshore wind development than benefits. The benefits of renewables are distributed broadly to countless stakeholders, while the burdens of a local offshore wind project will be felt disproportionately by a local military base which has to adjust its naval routes, flight plans, and sonar devices. The Pentagon, conversely, is in a better position to consider how a particular offshore wind project would benefit renewable energy development and burden coastline defense at the federal level. This would result in improved siting negotiations with BOEM and, ultimately, a fairer distribution of offshore wind projects around the United States. A Pentagon review process would also better assure that offshore wind projects are reviewed consistently around the country, providing clarity to key stakeholders such as local government officials, investors, and developers.

Next, DOD should set up a siting clearinghouse for offshore wind. As discussed in Subpart V.B., onshore wind farms were a source of conflict for the

^{203.} Mike Gooding, *ODU wins DOD grant to study offshore wind siting impact on military training*, 13 NEWS NOW (Aug. 26, 2020, 6:37 PM), https://www.13newsnow.com/article/news/local/mycity/virginia-beach/helping-military-to-coexist-with-offshore-energy-development-in-atlantic/291-e1cd5ee2-6ba4-4278-b4fb-405fcd2737bb.

^{204. &}quot;NIMBYism," a colloquial term derived from the phrase "not in my back yard," generally describes the "opposition of current residents to incursions of 'different' people or activities into a neighborhood." Peter W. Salsich, Jr., *Affordable Housing Can Nimbyism Be Transformed into Okimbyism*?, 19 St. LOUIS U. PUB. L. REV. 453 (2000).

military until the establishment of the Siting Clearinghouse in 2011.²⁰⁵ The clearinghouse could streamline review by establishing formal deadlines, requiring DOD to provide a rationale for rejection, and granting developers an appeals process. Rather than permitting DOD to outright accept or deny a project, the siting clearinghouse could create a negotiation process to the benefit of both parties. For example, a neutral committee could enumerate a list of pre-approved, reasonable mitigation techniques. DOD could then request the appropriate mitigation techniques from developers in response to a siting proposal. This clearinghouse could provide much-needed clarity to developers and more fairly balance the authority between DOD and BOEM.

Finally, DOD should enter into an MOU with DOI to formally recognize a joint commitment to supporting offshore wind development. There is precedent for such an agreement. As discussed above, DOD and DOI entered into an MOU regarding land-based wind farms in 2012.²⁰⁶ Even though the MOU was written primarily with land-based wind farms in mind, the MOU states that the two agencies would cooperate to "facilitate appropriate, mission-compatible renewable energy development on public lands withdrawn for defense-related purposes . . . and other onshore and offshore areas near or adjacent to DOD military installations."²⁰⁷ Given that this MOU already recognizes offshore wind development, DOD and DOI should either update and reissue this MOU, or draft an entirely new MOU which formally recognizes the joint commitment to offshore wind.

B. Congress Should Update the Offshore Wind Statutory Framework to Streamline the Offshore Wind Decision-Making Process

If DOD fails to take the above action, Congress could choose to mandate such changes statutorily. Congress may be more amenable than DOD to supporting the nascent offshore wind industry. As mentioned above, Representative Carbajal included a rider in favor of offshore wind development in the House version of this year's NDAA bill.²⁰⁸ Even though the rider was removed before it could be passed by the Senate, its uncontroversial passage in the House demonstrates that some congressional support exists. Furthermore, in March 2021, members of Congress announced the creation of a new bipartisan Congressional Offshore Wind Caucus, focused on "improving offshore wind technology, investing in the offshore wind workforce, and making the United States a clean energy leader."²⁰⁹ Therefore, Congress may have the momentum

^{205.} Niiler, supra note 161.

^{206.} Memorandum of Understanding between The Department of Defense and The Department of the Interior on Renewable Energy and a Renewable Energy Partnership Plan, *supra* note 154.

^{207.} Light, *supra* note 84, at 917.

^{208.} David Iaconangelo & Heather Richards, *Political Push Could Save First West Coast Offshore Wind Farms*, ENERGY WIRE (July 16, 2020), https://www.eenews.net/stories/1063571481.

^{209.} Press Release, U.S. Congressman Salud Carbajal, supra note 149.

to make the changes discussed in the previous Subpart before DOD chooses to do so internally.

Regardless of whether DOD chooses to take internal action, Congress should provide a clearer statutory framework for offshore wind that properly delineates the powers and limitations of DOD. The lack of statutory guidance in this area has had the practical effect of granting DOD unofficial, arbitrary veto power over offshore wind power without an appeals process.

First, Congress should make it clear that DOD will not be granted exemption from the Administrative Procedure Act and other relevant federal environmental laws with respect to offshore wind, absent an identifiable, specific national security threat. When DOD believes an exemption is appropriate, it should be required to seek congressional approval, rather than making its own unilateral decisions. Congress should also clarify what qualifies as a "threat of war" to prevent DOD from using a vague threat as a blanket tool for blocking development. Further, Congress should explicitly recognize that offshore wind projects cannot qualify as an "emergency," as DOD will have many opportunities to challenge a project over the course of years it takes to complete the project. To alleviate concerns about security, Congress may opt for all hearings and communications related to offshore wind development to be confidential when appropriate.²¹⁰ However, congressional review of non-emergency activities such as routine training exercises should always be available to the public, in line with the activities of other federal agencies. By holding DOD accountable to federal environmental laws and the Administrative Procedures Act, Congress could open up DOD actions to public comment and judicial review. This would result in more clarity for stakeholders, prevent DOD from arbitrarily curbing offshore wind development, and require DOD to more properly operate in accordance with the legislative intent of these federal statutes.

Additionally, Congress should amend OCSLA and clarify DOD's role in development. Congress made other agencies' authority and limits explicit in OCSLA, and DOD should not be treated any differently. By granting DOD formal authority under OCSLA, Congress can simultaneously ensure that DOD's interests are properly weighed in siting decisions while preventing DOD from flexing an unofficial veto power.

^{210.} For example, the U.S. House of Representatives Committee on Armed Services follows Security Procedures which allow the Committee Chairman to, with the "approval of a majority of the Committee, establish such procedures as in his judgment may be necessary to prevent the unauthorized disclosure of any national security information that is received . . ." The Committee also presumes that any national security information "bearing a classification of Confidential or higher" must be given appropriate safekeeping from the public. HOUSE ARMED SERVS. COMM., 116TH CONG., RULES OF THE COMM. ON ARMED SERVS. (2019).

C. The Executive Branch Should Mandate That Offshore Wind Development is a Priority in the Fight against Climate Change

Even if neither DOD nor Congress choose to take action with respect to offshore wind, the executive branch could implement certain changes through executive order, or through a direct mandate to DOD by the President. Given the delicate balance of power in Congress until the mid-term elections in 2022, President Biden may be in a better position to take action with regard to offshore wind development. The Biden Plan for a Clean Energy Revolution and Environmental Justice calls for 100 percent clean energy and net-zero emissions by 2050 and seeks to "incentiviz[e] the rapid deployment of clean energy innovations across the economy."²¹¹ Offshore wind could play an essential role in the transition to 100 percent clean energy and in the broader fight against climate change—President Biden could incentivize rapid deployment by streamlining DOD's offshore wind review process.

The Biden administration has already demonstrated that it is amenable to offshore wind. In fact, in President Biden's first climate-related executive order in January 2021, he called on the Secretary of the Interior to "review siting and permitting processes . . . in offshore waters to identify . . . steps that can be taken . . . to increase renewable energy production."²¹² In March 2021, President Biden announced a shared goal between DOI, DOE, and the Department of Commerce to deploy 30 gigawatts of offshore wind by 2030 by accelerating permitting of projects off the Atlantic Coast and opening up new Call Areas in New York and New Jersey.²¹³ Although this is certainly great news for the wind power industry, it is unlikely to have a bearing on the California siting conflict. The Biden administration will need to address DOD's role in offshore wind siting in order to ensure the viability of the industry in California.

Regardless of whether DOD or Congress chooses to implement the above incentives, President Biden should explicitly mandate that DOD prioritize offshore wind development. This mandate would make it clear to DOD that supporting offshore wind development is required, not just recommended.

CONCLUSION

Agency conflicts are common when two agencies with opposing missions have overlapping jurisdiction over federal lands or federal water. These conflicts not only stifle efficiency but may also end up having devasting effects in the long run. In the case of *Cowpasture*, an agency conflict ended up costing the developers, and subsequently the ratepayers, millions of dollars for a pipeline that was never even built.

^{211.} The Biden Plan for a Clean Energy Revolution and Environmental Justice, BIDEN HARRIS 2020, https://joebiden.com/climate-plan/# (last visited Dec. 2, 2020).

^{212.} Exec. Order No. 14,008, 86 Fed. Reg. 7619 (Jan. 27, 2021).

^{213.} FACT SHEET: Biden Administration Jumpstarts Offshore Wind Energy, *supra* note 115.

Similarly, if BOEM and DOD do not resolve their conflict soon, the United States may never meet the crucial clean energy targets necessary to prevent climate change. However, unlike the agencies involved in *Cowpasture*, BOEM and the DOD have arguably aligned missions, making the offshore wind conflict easier to fix.

Offshore wind is an essential component in the fight against climate change—one of the greatest threats to the United States today. DOD has already recognized that climate change is a serious national security threat. Supporting BOEM in developing offshore wind facilities may be the only way for DOD to achieve its mission before the worst impacts of climate change become insurmountable.