

Exploring Federal Jurisdiction of the Siting and Development of Renewable Energy Projects on Private Lands

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I. Introduction

Over the past several decades, as understanding of the detrimental effects of using fossil fuels for energy has grown, the United States (U.S.) has begun to develop renewable sources of energy for the purposes of providing electricity. Renewable energy (also known as renewables) production has grown over time, and, in the first six months of 2011, 14.3% of energy generated in the country came from renewable or “miscellaneous” sources.^{1 2} The amount of energy generated from renewable sources is expected to increase in the coming years as the requirements of state renewable portfolio standards become more stringent and awareness of the detrimental climate effects of using fossil fuels for energy generation increases. Federal policies that encourage renewables production, including production and investment tax credits, will contribute to the growth of renewables if they continue to be put in place.

As renewable energy production grows in the U.S., however, a host of new issues also arises. Chief among these are issues relating to the siting of these renewable energy projects—the rules governing where renewables projects may be located. For projects located on state- or federally-owned land, the rules are relatively well-known, and siting of the projects is governed by the rules of government agencies with jurisdiction over the land—usually the Department of Interior (DOI) and its associated agencies like the Bureau of Land Management (BLM). Despite

¹ This paper will largely focus on issues surrounding the siting of wind and solar photovoltaic facilities, though similar issues arise for other renewables projects. For the purposes of this paper, ‘renewable energy’ is taken to mean wind, solar thermal, solar photovoltaic, biomass, geothermal, and conventional hydroelectric energy. Nuclear energy shall not be included in the definition of ‘renewable energy’ for the purposes of this paper, though it can accurately be called a low-carbon, renewable fuel source; the unique issues surrounding nuclear energy are worthy of exploration on their own.

² U.S. Energy Info. Admin., Electric Power Monthly September 2011 1-5 (2011).

the significant potential for wind and solar generation on public lands, however, the vast majority of renewable energy generated in the U.S. comes from facilities on private lands.³

Despite the fact that most renewable energy projects are located on private lands, the rules governing their siting can be considerably less clear than for public lands. No single federal agency is tasked with overseeing the siting process for projects on private lands, and the result is that projects on private lands are often subject to myriad federal laws and regulations that originate from a variety of sources.

Too often, these laws and regulations are quite old – and, in many cases, were instituted long before renewable energy generation began in earnest in the U.S. The unintended result is that laws that were never meant to govern renewables projects now do exactly that. The goals of environmental preservation that these laws were intended to address are ironically threatened by the fact that these laws may now be complicating the process by which renewable energy is generated in the U.S. and, in turn, complicating the fight against carbon-induced climate change. The current clunky federal policy regarding the siting of renewables projects should be streamlined in order to properly spur renewables development for a low-carbon world.

II. Environmental Considerations - National Environmental Policy Act of 1969

Even if a potential renewables project is slated to be located on private lands, it is still subject to some federal government jurisdiction, just as private citizens are still subject to some federal jurisdiction while on private lands. Environmental issues are of serious importance to the federal government, and a number of steps have been put in place to ensure environmental protection, even on private lands. Chief among the country's major environmental protection

³ House Natural Resources Committee Democrats, *Renewable Energy*, <http://democrats.naturalresources.house.gov/issue/renewable-energy> (last visited April 15, 2012).

laws is the National Environmental Policy Act of 1969 (NEPA).⁴ NEPA was the first of many environmental statutes passed that reflected the increased social awareness of the late 1960s and 1970s. As the country underwent great social upheaval, with a tremendous focus on civil rights and the Vietnam War, there was also a marked increase in environmental awareness and the effects of human civilization on the environment. (Earth Day, for example, was first observed in the spring of 1970, a few months after the passage of NEPA.) Reflecting this mood in the country, Congress passed NEPA in the fall of 1969, and President Nixon signed it into law on January 1, 1970. The statute's purposes were both clearly stated and far-reaching:

To declare a national policy which will encourage productive and enjoyable harmony between man and his environment; to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man; to enrich the understanding of the ecological systems and natural resources important to the Nation; and to establish a Council on Environmental Quality.⁵

In practical terms, NEPA requires a federal agency to evaluate the possible environmental effects that may result if it takes a given action “significantly affecting the quality of the human environment.”⁶ Such an evaluation must also include the action's unavoidable environmental impacts, and alternatives to taking the action. By requiring that any potential environmental issues be clearly stated, NEPA brings these issues out into the open rather than allowing an agency to take an action without considering the environmental consequences.

NEPA was initially intended to address “the profound impact of man's activity on the interrelations of all components of the natural environment, particularly the profound influences of population growth, high-density urbanization, industrial expansion, resource exploitation, and

⁴ National Environmental Policy Act of 1969, 42 U.S.C. § 4321 (2010).

⁵ *Id.*

⁶ 42 U.S.C. § 4332.

new and expanding technological advances.”⁷ By requiring federal agencies to stop and consider the environmental impacts of their actions, NEPA aimed to rebalance the decision-making process that had previously resulted in exploitation of natural resources without regard for the effects on the environment. Any federal agency taking an action that would have a “significant” effect on the environment—an easy trigger to satisfy—would be forced to publicly state these effects and consider alternatives, bolstering the chances of environmental preservation against the human forces of expansion and exploitation.

It is somewhat ironic, therefore, that in the present day, NEPA is one of the many laws that those siting renewables projects must consider and abide by, even as they seek to create generation facilities that would move the country away from fossil fuels and slow the effects of climate change that significantly threaten environmental health.

NEPA’s broad reach means that it is often triggered by one of the many steps necessary in siting and developing a renewable energy project.⁸ A “major federal action” that triggers NEPA includes a federal agency “entirely or partly financ[ing], assist[ing], conduct[ing], regulat[ing], or approv[ing]” a project.⁹ In other words, the federal agency that provides funding, in whole or in part, for any renewables project must follow the NEPA process because the action of funding the project could be considered a “major federal action” under the statute. Given the high cost of developing renewable energy projects, and the major federal initiatives undertaken by the Obama Administration in recent years to help provide financial support for renewable energy development, this single qualification ensnares a significant number of renewables projects.

⁷ 42 U.S.C. § 4331.

⁸ It is worth noting that the NEPA process is not specific to the siting of *renewable* energy projects, but, given that this paper focuses on these projects, NEPA effects on fossil fuels projects are not considered here.

⁹ 40 C.F.R. § 1508.18(a) (2012).

Major federal actions that trigger NEPA are not limited to funding issues, however. “Approval of specific projects...includ[ing] actions approved by permit or other regulatory decision,” also falls under the qualifications of an action requiring NEPA evaluation.¹⁰ As a result of this interpretation, any renewables project requiring federal approval for even a piece of the project triggers the NEPA process in the federal agency granting approval. As will be detailed below, federal laws are such that a vast majority of renewables projects require approval from one agency or another.

NEPA is quite broad, and it is fair to say that a large number of renewables projects will trigger the NEPA process within at least one federal agency. Once NEPA is triggered, a federal agency may undertake one of three levels of analysis of the proposed action’s environmental effects, depending on the severity of the potential effects.¹¹ If the federal agency, based on its previous experience, determines that there would be “no significant environmental impact” from taking the action, it may award a “Categorical Exclusion” under NEPA.¹² Over time, as agencies have undergone the NEPA process, many have developed a list of potential effects that they consider to have “no significant environmental impact,” and therefore, fall under a Categorical Exclusion. If a proposed action does not fall under the qualifications for a Categorical Exclusion, the agency “prepares a written Environmental Assessment (EA) to determine whether or not a federal undertaking would significantly affect the environment.”¹³ Should the agency determine that the undertaking would not significantly affect the environment, or should there be measures that would mitigate any potential effects, the agency will then issue a Finding of No Significant Impact (FONSI). If, in developing the EA, however, the agency determines that there are indeed

¹⁰ 40 C.F.R. § 1508.18(b) (2012).

¹¹ U.S. Env’tl. Prot. Agency, *The NEPA Process* (Oct. 12, 2011), <http://www.epa.gov/compliance/basics/nepa.html#process>.

¹² *Id.*

¹³ *Id.*

significant effects on the environment, they will prepare an Environmental Impact Statement (EIS).¹⁴ An EIS details the proposed action and its possible effects, as well as any possible alternatives and why they are not being undertaken. The EIS process is the most onerous of the NEPA processes, as it often involves the preparation of many drafts and with comments from other federal agencies and the public. It is through these public comments that many public interest groups and associations make their feelings about a particular agency action known.

It is clear that, as is the case with many major energy-related projects, NEPA will likely be triggered during the siting process for a given renewable energy project. This is particularly true given the broad range of agency actions that may trigger NEPA, including the granting of federal funding for a particular project – especially in the present day, as many renewables projects rely at least in part on federal funding given the current Administration’s stated policy of stimulating renewable energy development. The NEPA process, at least with respect to renewables projects, is largely procedural; it is likely that the potential environmental impacts specific to a renewable energy project are well known to the federal agencies that must undergo the NEPA process. Since there are common characteristics of many renewables projects and the potential sites for such projects are somewhat similar to one another (solar photovoltaic projects must be in a fairly open area with a great deal of sunshine; wind projects must be in an area with tremendous amounts of wind and often near gorges or on hills), it is less likely that a potential renewables project will present a completely new and unforeseen potential impact to a federal agency that would require it to conduct a great deal of environmental analysis. It is more likely that, if an EIS is required, it will be specific to a particular piece of the project.

¹⁴ *Id.*

Nonetheless, the NEPA process often presents a procedural hoop for renewables developers to jump through – and one that may quite easily delay the schedule for their project, especially if an EIS with public comment is required. Those opposed to renewables development, whether they are preservationists or otherwise, may use the public comment period for an EIS to register strenuous opposition to the proposed project. This, of course, will require a renewables developer to marshal similar actions in support of the project. In other words, while the NEPA process is not likely to completely derail a proposed renewables project, it may result in a siting change for a piece of the project, or, at the very least, a delay of some weeks or months while the relevant agencies conduct the requisite environmental analysis. Furthermore, should the agency not sufficiently conduct and complete the NEPA process, a project may be subject to a citizen suit resulting in an injunction preventing further work on the project until full NEPA compliance is achieved.¹⁵

III. Wildlife Considerations

A. Endangered Species Act

Just as the federal government has taken action to protect the environment through NEPA, it also has stated a policy of protection of wildlife against human interference. The federal government, over time, has identified a number of categories of wildlife that it has deemed worthy of protection and has taken action to protect these species. This protection is universal; interference is prohibited wherever the threats arise. The effects of this protection are far-reaching for those seeking to site renewables projects, especially wind projects.

In the early 1970s, as the environmental movement grew in strength and laws such as NEPA were passed, the nationwide consciousness to protect certain categories of wildlife also

¹⁵ 42 U.S.C. § 6972 (2010).; Roger L. Freeman & Ben Kass, *Siting Wind Energy Facilities on Private Land in Colorado: Common Legal Issues*, 39 Colo. Law 43, 43-54 (2010).

grew. In 1973, Congress passed the Endangered Species Act (ESA), which was intended “to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, [and] to provide a program for the conservation of such endangered species and threatened species.”¹⁶ Recognizing that “various species of fish, wildlife, and plants in the United States have been rendered extinct as a consequence of economic growth and development untempered by adequate concern and conservation,” Congress took action to protect these species before unchecked growth and development destroyed more of them.¹⁷ Given the “esthetic, ecological, educational, historical, recreational, and scientific value” to the U.S. of these species, the ESA was passed in order to ensure that these species would be in existence for years to come.¹⁸

The ESA was intended to prioritize the protection of endangered species: “Congress intended endangered species to be afforded the highest of priorities.”¹⁹ The sweeping statute set up a process by which species of different animals and plants could be deemed “threatened” or “endangered,” and appropriate protections for the ecosystems of such species in order to prevent their extinction. The practical result for renewables projects is, like in the case of NEPA, a “forced pause” in the development process, during which potential ramifications of any development must be considered rather than simply plowing ahead without consideration of the effects of one’s actions. The ESA, jointly administered by the Fish and Wildlife Service (FWS) and the National Oceanic and Atmospheric Administration (NOAA), has been largely successful,

¹⁶ Endangered Species Act of 1973, 16 U.S.C. § 1531(b) (2010).

¹⁷ 16 U.S.C. § 1531(a)(1).

¹⁸ 16 U.S.C. § 1531(a)(3).

¹⁹ *Tenn. Valley Auth v. Hill*, 437 U.S. 153, 174 (1978) (preventing the completion of the Tellico Dam in order to protect the habitat of the snail darter fish).

providing for the recovery of populations of at least twenty-three species, including the grizzly bear, gray wolf, and bald eagle.²⁰

For the purposes of siting of renewable energy projects (or any other energy projects, for that matter), the most relevant section of the ESA is § 9, which deals with the “take” of endangered species from the environment. Most siting issues under the ESA arise when a claim is made that the project will result in the taking of an endangered or threatened species from its habitat in violation of the ESA.²¹ Section 9 of the ESA makes it unlawful to “take any such species [any endangered species listed pursuant to the ESA] within the United States.”²² “Take,” as defined under the statute, means to “harass, harm, pursue, hunt, shoot, would, kill, trap, capture, or collect, or to attempt to engage in any such conduct.”²³ In order to provide further clarity around the idea of a “take” of an endangered species, FWS has promulgated further regulations regarding implementation. For the purposes of the ESA, ‘harass’ means an:

Intentional or negligent act or omission which creates the likelihood of injury to wildlife by annoying it to such an extent as to significantly disrupt normal behavioral patterns which include, but are not limited to, breeding, feeding, or sheltering.²⁴

Any act or omission that annoys wildlife and disrupts its normal life patterns can be considered an act that ‘harasses’ under the ESA and is, therefore, considered an unlawful ‘take.’ As will be discussed below, and as is logical, many of the normal activities associated with the development of a renewable energy project (construction and placement of the generation infrastructure, for instance) can, by their nature, annoy wildlife by disrupting their normal behavior and be

²⁰ U.S. Fish & Wildlife Serv. *Delisting Report* (Apr. 16, 2012), http://ecos.fws.gov/tess_public/DelistingReport.do.

²¹ Regulations regarding endangered species under the ESA have also been extended to threatened species. 50 C.F.R. § 17.31 (2012).

²² 16 U.S.C. § 1538(a)(1)(B).

²³ 16 U.S.C. § 1532(19).

²⁴ 50 C.F.R. § 17.3 (2012).

considered harassment and an unlawful take under the ESA. Similarly, ‘harm’ under the ESA means:

“An act which actually kills or injures wildlife. Such act may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding or sheltering.”²⁵

It is equally likely that the acts associated with the development and siting of a renewable energy project may impair behavior patterns of wildlife in the area – as would be the case with most human developments. Those opposed to a given development, whether or not it is a project that generates renewable energy, often may rely on the ESA to secure an injunction and halt the progress of such a development. In such an instance, the party seeking to stop a development must show that further progress on the project would constitute a “future take” of endangered or threatened species under the ESA. (In other words, under the ESA, harm to protected wildlife can be prevented before the “damage is done”). In order to obtain an injunction to prevent such a “future take,” the party seeking the injunction must show that there is a “reasonably certain threat of imminent harm.”²⁶ Should a party successfully prove that a project (renewable or otherwise) will result in the future take of an endangered species, a court may award injunctive relief to the party, stopping the project until a solution is found. The effects on potential renewable energy projects are clear: the regulations of the ESA are quite strict and potential renewables projects must be absolutely sure that the development of their project will not result in any unlawful take of endangered or threatened species—or else they run the risk of facing serious penalties. In fact, if any person “knowingly violates” the ESA and takes a protected species, s/he may face up to a \$50,000 fine and up to one year in prison.²⁷

²⁵ *Id.*

²⁶ *Forest Conservation Council v. Rosboro Lumber Co.*, 50 F.3d 781, 787 (9th Cir. 1995).

²⁷ 16 U.S.C. § 1540(a)-(b).

There is some protection, however, for those who know that their activities may run up against the ESA. Thanks to a 1982 amendment to the ESA, a permitting process has been established for those whose prohibited taking of endangered or threatened species is “incidental to, and not the purpose of, the carrying out of an otherwise lawful activity.”²⁸ If the owner of a site, often an economic development of some kind, knows that s/he runs the risk of violating the ESA through the development of the site, s/he may apply for and obtain an Incidental Take Permit (ITP) from the Secretary of the Interior. In applying for an ITP, the applicant must detail the harm to endangered or threatened species that will result from the development of the project, the steps the applicant will take to mitigate this harm, and any alternative actions that could have been taken in a “Habitat Conservation Plan.”²⁹ If these requirements are met, the Secretary of the Interior will issue an ITP, effectively allowing an exception to the strict standards of the ESA for monitored and regulated economic development. While still providing for the ESA’s protection of endangered and threatened species, the ITP process allows for economic development. In practice, the ITP process is crucial to the successful development of renewables projects given the effects on protected species that these projects often have. It is common for companies that seek to develop renewables projects to pursue an ITP so that their project may proceed as planned.³⁰

It is evident that while the ESA made unprecedented strides in protecting the existence of endangered and threatened species, the passage of the law also had a number of unforeseen effects. At a minimum, the ESA creates certain qualifications that developers of renewables (and other) projects must consider. Wind energy projects, which entail the placement of dozens of tall,

²⁸ 16 U.S.C. § 1539(a)(1)(B).

²⁹ 16 U.S.C. § 1539 (a)(2)(A).

³⁰ *Animal Welfare Instit. v. Beech Ridge Energy, L.L.C.*, 675 F.Supp.2d 540, 544 (D. Md. 2009).

fiberglass towers, and solar photovoltaic projects that require the placement of thousands of panels in areas of strong sunshine, may both involve the “habitat modification” of protected species. The 1982 amendment to the ESA creating the ITP process was vital to ensuring the continued development of renewables projects, as well as other economic development projects. By providing an alternative for developers rather than a strict ban, the ITP process allows a way forward for projects that might run up against the ESA.

Given the harsh penalties for violating the ESA, the incentives to use the ITP process are strong. Aside from the civil fines and criminal penalties for violating the ESA, the Act provides for citizen suits to enjoin violation of the ESA, encouraging enforcement.³¹ Though it is not common for developers of renewables projects to avoid the ITP process, such actions have happened, and the ESA has been used to halt the project until the ITP process is complied with. The ESA, in other words, has indeed proven to be a hurdle for renewables developers to deal with and has been used to stop progress on such a project. The most notable instance of this action can be seen in the Animal Welfare Institute v. Beech Ridge Energy L.L.C. case, decided by the U.S. District Court for the District of Maryland in 2009. Though recent, this case is indicative of how the ESA can affect a renewables project and of the importance of an ITP in avoiding ESA complications in such a project.

The Beech Ridge Project is a wind energy project owned by Beech Ridge Energy, a subsidiary of Invenergy and a large wind developer in the North America. The project would encompass 100 turbines placed along the Appalachian Mountains in Greenbrier County, West Virginia, and, when completed, would generate 186 MW of electricity.³² Problems arose, however, with regard to the project’s effects on the habitat of the endangered Indiana bat, a very

³¹ 16 U.S.C. § 1540(g).

³² *Animal Welfare* at 548.

small bat that has been listed as endangered since the passage of the ESA. (As seen below, it is not uncommon for concerns to be raised about the effects of wind turbines on bird and bat species). There is clear evidence that wind turbines result in bird and bat mortality, though parties disagree on the degree to which this mortality is a problem. For the purposes of the Beech Ridge Project, the court relied on a study at the nearby Mountaineer wind project, which showed that each wind turbine resulted in a mortality rate of 47.53 bats.³³ The Animal Welfare Institute, an organization dedicated to reducing the pain caused by humans to animals, sued to stop progress on the Beech Ridge project, contending that continued construction and operation of the facility would result in the unlawful take of Indiana bats.³⁴

Aware of the possible presence of an endangered species at their proposed site, Beech Ridge undertook a series of environmental studies in the months leading up to construction. The company set up a series of “mist net” studies in which large nets were raised several stories into the air, and the species the nets captured were identified. These studies were conducted during the summer and did not result in the capture of any Indiana bats.³⁵ No studies were conducted during the fall, however, which is the time of year where the majority of bat mortalities occur.³⁶ Nearby caves were also surveyed during the following spring for the presence of the Indiana bats, which were known to be present in nearby locations during the spring and fall and to migrate through nearby areas during these times of year as well.³⁷ These surveys also failed to show the presence of any Indiana bats. The Fish and Wildlife Service (FWS), however, after receiving this information from Beech Ridge, found the studies incomplete and recommended

³³ *Id.* at 548.

³⁴ *Id.* at 542.

³⁵ *Id.* at 550.

³⁶ *Id.* at 549.

³⁷ *Id.* at 550.

more thorough surveys over the course of three years and at times of year when the Indiana bat was most likely to be present. The FWS also proposed a series of mitigation measures for the project.³⁸ Nonetheless, the Beech Ridge project received the state permit it needed to begin construction, and it moved ahead with the project without seeking an ITP, pouring the foundations for 67 of the 100 turbines and beginning turbine deliveries at the time the suit was filed.³⁹

In considering Animal Welfare’s claims, the court had to decide whether continued work on the project would result in an unlawful take of Indiana bats under the ESA (whether the project was “reasonably certain to imminently harm, kill, or wound”), and whether the bats were present at the site in the first place.⁴⁰ After weighing expert testimony, the data collected in the environmental studies, and data collected at nearby sites, the court concluded “by a preponderance of the evidence that there is a virtual certainty that Indiana bats are present at the Beech Ridge project site during the spring, summer, and fall.”⁴¹ Citing the known proximity of Indiana bat habitats to some of the turbines, the characteristics of the Beech Ridge site, and independent analysis of some data collected that resulted in a different conclusion, the court found that the presence of Indiana bats at the site was a “virtual certainty.”⁴² Furthermore, in considering expert opinions and the known fact that wind turbines result in bat mortality to at least some degree, the court concluded that “like death and taxes, there is a virtual certainty that Indiana bats will be harmed, wounded, or killed imminently by the Beech Ridge Project, in

³⁸ *Id.* at 554.

³⁹ *Id.* at 557.

⁴⁰ *Id.* at 564.

⁴¹ *Id.* at 575.

⁴² *Id.* at 575-76.

violation of § 9 of the ESA, during the spring, summer, and fall.”⁴³ It was the court’s opinion that continued work on the Beech Ridge project would result in an unlawful taking of the Indiana bat under the ESA.

Had Beech Ridge chosen to pursue an ITP from the start, this conclusion might not have been so detrimental to their project. But, despite recommendations for further studies from the FWS, Beech Ridge chose not to pursue an ITP. This approach proved detrimental to their cause, however, as the court, after finding a certain future take of the Indiana bat, stated that it did not trust Beech Ridge to effectively mitigate against harm to the species.⁴⁴ The court awarded injunctive relief to Animal Welfare, ordering that Beech Ridge halt construction on the remaining turbines until an ITP was obtained. It further ordered that work on the sixty-seven turbines under construction could continue, but that the finished turbines could only operate during the winter when the Indiana bats were in hibernation.⁴⁵ At present, the Beech Ridge turbines operate twenty-four hours a day from mid-November to April 1. During the spring, summer, and early fall, however, the turbines only operate during daylight hours, so as not to interfere with any Indiana bats in the area.

The decision in *Animal Welfare* was handed down on December 8, 2009, and Beech Ridge began seeking an ITP shortly thereafter. As of October 2012, however, the U.S. FWS was still considering the public comments it had received about Beech Ridge’s requested ITP and had not finalized an Environmental Impact Statement nor an ITP.

The *Animal Welfare* case provides an excellent insight into the effects the ESA can have on the development and siting of a renewables project. Unfortunately for Beech Ridge (and, one

⁴³ *Id.* at 579.

⁴⁴ *Id.*

⁴⁵ *Id.* at 580-81.

might argue, for those in West Virginia who want to move away from carbon-intensive energy production), the decision not to initially pursue an ITP was devastating to the Beech Ridge Project. Mitigating against the ESA takes planning and time if all goes according to plan, and if there are complications, the delays can be substantial. Beech Ridge expects a minimum of a three-year delay to their wind project as a result of the Maryland District Court's decision to halt their project. For a renewables developer that is undertaking a major construction project, such a delay can result in tremendous financial costs: the project's timeline will slip, meaning power purchase agreements and subcontracts may need to be renegotiated. At a minimum, the fees associated with renegotiating these agreements can be substantial, but if the delay results in a breach of any of the contracts, the costs can be even more severe. In this instance, Beech Ridge is not without blame for the harm its project has suffered. The Animal Welfare case made clear that the company's attitude towards the ESA was dismissive at best, as they ignored repeated recommendations by the FWS for more studies of the effects of the project on the Indiana bat and chose to move ahead without initially pursuing an ITP (an unorthodox decision). Nonetheless, the case presents a stark example of the potential effects of the ESA on a renewables project, as a two-inch-long bat effectively halted work on this \$300 million renewable energy project for some time.

The developers of the Beech Ridge project appear to have learned from their experiences in their expansion of the project, Beech Ridge Energy II. In June 2013, the West Virginia Public Service Commission granted a final permit to allow 33 more turbines to be placed near the original Beech Ridge site.⁴⁶ The expansion is contingent on what appears to be a compromise: bat mortality studies will be conducted for the three years after the new turbines are placed in

⁴⁶ Alvey, Tina. *PSC Grants Beech Ridge's Wind Farm Permit*, THE REGISTER-HERALD, June 21, 2013, available at <http://www.register-herald.com/local/x1885652168/PSC-grants-Beech-Ridge-s-wind-farm-permit>.

operation, and, if they demonstrate negative impacts on bats (and birds), mitigation efforts will be pursued.⁴⁷

In an effort to clarify the process by which wind projects can be planned and built while minimizing the effects on wildlife, the FWS is currently in the process of finalizing a set of Land-Based Wind Energy Guidelines.⁴⁸ These guidelines, which are voluntary, are the product of a five-year process in which the FWS sought comment from a variety of stakeholders, including government agencies, wildlife conservation groups, and the wind industry, including the American Wind Energy Association (AWEA).⁴⁹ The FWS released the final guidelines in March 2012, and, as expected, the document details best practices in data collection, construction, operation, and mitigation with respect to minimizing the effects of wind projects on wildlife.⁵⁰ While compliance with the guidelines is not mandatory, the process by which they have been developed represents an acknowledgement by the FWS of the need to deal with a renewed emphasis in the U.S. on the development of renewable energy while still protecting the country's wildlife.

B. Migratory Bird Treaty Act and Golden and Bald Eagle Protection Act

Though the Endangered Species Act protects plants and animals that are deemed to be threatened or endangered, there are also laws that protect specific types of wildlife—namely, migratory birds and golden or bald eagles. As is the case with the ESA, these laws have significant repercussions on renewables projects, especially wind projects.

⁴⁷ Kasey, Pam, *Beech Ridge Wind Plant Expansion on Track for Siting Certificate*, GROUNDED: A STATE JOURNAL ENERGY BLOG, Updated Mar. 30, 2013, available at <http://www.statejournal.com/story/21429785/beece-ridge-wind-plant-expansion-on-track-for-siting-certificate>.

⁴⁸ U.S. Fish & Wildlife Serv., *Guidance Regarding Use of the Wind Turbine Guidelines Advisory Comm. 's Recommendations* (Jan. 9, 2012), http://www.fws.gov/habitatconservation/windpower/wind_turbine_advisory_committee.html.

⁴⁹ *Id.*

⁵⁰ *Id.*

The Migratory Bird Treaty Act (MBTA), the first part of which was passed in 1916, represents the formal implementation within the U.S. of a number of international treaties between the U.S. and other countries.⁵¹ This law, based on the treaties to protect migratory birds and their nests and eggs, was first enacted as an implementation of the agreement between the U.S. and Great Britain (acting for Canada) in 1916, and amended over the 20th century to reflect treaties between the U.S. and Mexico (1936), Japan (1972), and the Soviet Union (1976).⁵² The list of birds protected by the MBTA is extensive and includes bird species “native to the United States or its territories.”⁵³ Even with this limitation, the list of bird species covered by the MBTA numbers more than 800.⁵⁴ As with the ESA, the FWS administers the MBTA and is the agency responsible for punishing violations and adding new species to the list.

The legal structure of the MBTA is similar to the ESA, making it unlawful to “take” any of the species listed. The prohibitions under the MBTA are not limited to destruction of habitat, however, and also deal with the purposeful act of killing one of the species listed:

“It shall be unlawful at any time, by any means or in any manner, to pursue, hunt, take, capture, kill, attempt to take, capture, or kill, possess, offer for sale, sell, offer to barter, barter, offer to purchase, purchase, deliver for shipment, ship, export, import, cause to be shipped, exported, or imported, deliver for transportation, transport, or cause to be transported, carry or cause to be carried, or receive for shipment, transportation, carriage, or export, any migratory bird, any part, nest, or egg of any such bird, or any part, nest, or egg thereof.”⁵⁵

There are a few exceptions to the requirements of the MBTA, but unlike the ESA, the MBTA does not provide for an incidental take provision. Instead, the Secretary of the Interior is granted

⁵¹ U.S. Fish & Wildlife Serv., *Digest of Federal Resource Laws of Interest to the U.S. Fish and Wildlife Service* (accessed Aug. 24, 2012), <http://www.fws.gov/laws/lawsdigest/migtrea.html>.

⁵² *Id.*

⁵³ Migratory Bird Treaty Act of 1918, 16 U.S.C. § 703(b)(1) (2010).

⁵⁴ U.S. Fish & Wildlife Serv., *Birds Protected by the Migratory Bird Treaty Act* (accessed Aug. 24, 2012), <http://www.fws.gov/migratorybirds/RegulationsPolicies/mbta/mbtandx.html>.

⁵⁵ 16 U.S.C. § 703(a).

the authority to create narrow exceptions allowing for the take of protected species, whether through hunting or other means.⁵⁶

Finally, the Bald and Golden Eagle Protection Act (BGEPA), first enacted in 1940, also has direct relevance for the siting of renewable energy projects (again, usually wind projects).⁵⁷ This act, first intended to protect the bald eagle, and later amended to include the golden eagle, provides civil and criminal penalties for anyone who:

“Shall knowingly, or with wanton disregard for the consequences of his act take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or in any manner, any bald eagle commonly known as the American eagle, or any golden eagle, alive or dead, or any part, nest, or egg thereof.”⁵⁸

Unlike the ESA, however, the BGEPA’s definition of “take” is less stringent with respect to accidental disturbance of habitat. “Take” under the BGEPA is defined as, “ [to] pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb.”⁵⁹ As compared to the ESA, this definition of “take” includes purposeful acts intended to harm, and the only unintentional act included under the definition is “disturb,” which is further defined as “to agitate or bother a bald or golden eagle to a degree that causes, or is likely to cause...1) injury to an eagle, 2) a decrease in its productivity, by substantially interfering with normal breeding, feeding, or sheltering behavior, or 3) nest abandonment, by substantially interfering with normal breeding, feeding, or sheltering behavior.”⁶⁰ While the definition of “disturb” can be taken to include incidental effects on eagle habitats as a result of development, it is important to note a few things. First, until 2007, bald eagles were also protected as an endangered species under the ESA, and afforded the substantial protections thereof. Additionally, while the BGEPA does

⁵⁶ 16 U.S.C. § 704(a).

⁵⁷ Bald and Golden Eagle Protection Act, 16 U.S.C. § 668(a) (2010).

⁵⁸ *Id.*

⁵⁹ 16 U.S.C. § 668(c).

⁶⁰ U.S. Fish & Wildlife Serv., *Bald Eagle Management Guidelines and Conservation Measures* (Mar. 31, 2010), <http://www.fws.gov/midwest/Eagle/guidelines/bgepa.html>.

provide for penalties even if the take of the eagles was not purposeful, these penalties may only be civil; criminal penalties can only be assessed for intentionally causing harm to the eagles.⁶¹ Unlike the ESA, which allows a developer to secure an Incidental Take Permit, the BGEPA only allows lawful taking of eagles for specific purposes.

The protections granted for birds by the MBTA and the BGEPA mean that the repercussions of these acts for the siting of renewable energy projects are widespread. Of course, the most at-risk type of renewables project for interference with the MBTA and the BGEPA are wind projects. Wind turbines, which can reach hundreds of feet in the air, can result in increased mortality of birds and other flying animals (like bats, as detailed above). The true impact of wind turbines on birds and the actual number of birds killed by impact with wind turbines, however, are hotly debated. The various stakeholders in the debate cite different statistics regarding the number of birds killed through impacts with wind turbines every year. The American Wind Energy Association (AWEA), the country's biggest wind energy trade association, puts this number at approximately 108,000 per year and cites a U.S. Forestry Service study from 2005 to emphasize the far greater number of bird deaths through collisions with buildings (which it puts at 550 million deaths/year) or pesticides (67 million).⁶² ⁶³ The American Bird Conservancy (ABC), a nonprofit organization dedicated to conserving birds and bird habitats, on the other hand, cites a different government agency (the FWS' Fiscal Year 2013 Budget Request) to argue that bird mortalities from wind turbines actually number 440,000 per year, and are expected to

⁶¹ 16 U.S.C. § 668(a).

⁶² Press Release, Am. Wind Energy Ass'n, Rhetoric vs. Reality: Wind Energy and Birds (Mar. 1, 2011) (available at http://dev.awea.org/newsroom/realstories/release_030111_2.cfm).

⁶³ Wallace P. Erickson, Gregory D. Johnson & David P. Young, Jr., *A Summary and Comparison of Bird Mortality from Anthropogenic Causes with an Emphasis on Collisions*, 1 U.S. Forest Serv. Gen. Tech. Rep. 1029 (2005).

grow to more than 1 million deaths per year by 2030.⁶⁴ ⁶⁵ Needless to say, far more research must be done before these numbers can be conclusively agreed upon, but the issue of bird strikes and bird mortality is an important one for those planning wind energy projects.

Despite the three main laws in place to protect wildlife, as of the end of 2011, “no wind energy company has been prosecuted by federal wildlife authorities in connection with the death of birds protected by the [MBTA], [or] the Bald and Golden Eagle Protection Act.”⁶⁶ This lack of prosecution may represent a struggle between priorities and a recognition of the need to clarify the legal framework regarding the growing field of renewable energy. As renewables have grown as a share of energy production in the United States over the past decade, and as the government has signaled its intent to support this industry, the competing interest of bird protection has been threatened. In an interesting turn of events, conservation groups like the ABC often oppose wind projects, unless protections for birds are emphasized. As much as it has done with wildlife concerns more broadly, the FWS has begun to focus on resolving these competing interests and creating a paradigm in which renewables are supported and bird concerns are also addressed. As it has done with its Voluntary Land-Based Wind Energy Guidelines, the FWS has also engaged industry stakeholders, developers, and conservation groups to develop an Eagle Conservation Plan Guidance document. This draft guidance, issued in February 2011, calls for wind developers to consult the FWS at virtually every stage of the planning process, to work with the FWS to assess potential impacts on eagles, and to plan

⁶⁴ Am. Bird Conservancy, *Birds and Wind Farms*, http://www.abcbirds.org/abcprograms/policy/collisions/wind_farms.html (last visited April 16, 2012).

⁶⁵ U.S. Fish & Wildlife Serv. Fiscal Year 2013 President’s Budget, <http://www.fws.gov/budget/2013/FY%202013%20FWS%20Greenbook%20Final.pdf> (proposed Feb. 13, 2012).

⁶⁶ Louis Sahagun, *Bird Advocates Urge Mandatory Standards for Wind Energy Projects*, L.A. Times, Dec. 14, 2011, <http://articles.latimes.com/2011/dec/14/local/la-me-gs-bird-advocates-urge-mandatory-standards-for-wind-energy-projects-20111214>.

appropriate mitigation measures.⁶⁷ Assuming developers do indeed work with the FWS throughout the process, the agency has also expressed in these draft guidelines a willingness to issue limited take permits for eagles, in instances where the take is “associated with but not the purpose of an otherwise lawful activity.”⁶⁸ In fact, one such permit may be in the works for the 104 MW West Butte wind project in Oregon.⁶⁹ Having demonstrated that the West Butte project was “compatible with eagle preservation,” and that the take of eagles was “unavoidable,” even after implementing “advanced conservation practices,” the FWS has begun the process to issue the project a permit to take three golden eagles over a five-year period.⁷⁰ Securing such a take permit will be difficult for developers in the future, and, if this permit is any indication, the leeway granted will not be broad. But this first step towards issuance of a take permit for eagles is a significant one to bring the same kind of clarity to eagle protection and renewables development as is already the case for endangered species protection under the ESA. This process is still in its early stages, and the wrinkles are still being ironed out. It is evident, however, that clearer rules must be put in place if renewables development is to expand—and these permits and the Draft Eagle Conservation Plan are the first steps in that process. The alternative scenario, in which renewables projects continue to lie in a legal gray area where the threat of prosecution looms, is counterproductive to encouraging a business environment in which renewables development can thrive. It appears that the FWS acknowledges this as well and may move towards revising some of its regulations to be less onerous on wind projects. As of mid-April 2012, the FWS proposed extending the five-year period for limited take permits to

⁶⁷ U.S. Fish & Wildlife Serv., *Draft Eagle Conservation Plan Guidance* (Feb. 2011), http://www.fws.gov/windenergy/docs/Draft_Eagle_Conservation_Plan.pdf.

⁶⁸ *Id.*

⁶⁹ Andrew Spielman & Margaret Parish, *Industry Awaits FWS Decision on First Eagle Take Permit*, *North American Windpower*, Apr. 2012, at 38.

⁷⁰ *Id.*

thirty years.⁷¹ Such a move would be a clear indication that the agency is prioritizing renewables development.

The Land-Based Wind Energy Guidelines, finalized by the FWS in March 2012, also contain suggestions for avoiding interference with eagles and migratory birds. The guidelines, though voluntary, call for collaboration and consultation between wind developers and the FWS.⁷² Through early and constant consultation, the FWS believes, developers will be more easily able to identify “species of concern that may potentially be affected by their proposed project, including migratory birds; bats; bald and golden eagles and other birds of prey; prairie and sage grouse.”⁷³ The thought process behind the guidelines is that, if developers consult with the FWS early in their planning process, they will take bird (and other wildlife) considerations into account early on and plan renewables projects accordingly—causing less of a threat to birds, and saving money on future mitigation costs.⁷⁴ While it remains to be seen whether developers will actually consult the FWS as requested, (and what possible responses the FWS will take towards developers that do not consult), the guidelines represent, at a minimum, an effort by the DOI to acknowledge the conflicting priorities of stakeholders, and to try to resolve them while continuing renewables development. Though the guidelines are voluntary, the FWS does have some leverage in encouraging developers to follow them – and to eliminate from their

⁷¹ Kathleen Hart & Laura D’Alessandro, *Streamlined Eagle Preservation Permitting Process Could Aid Wind Project Financing*, SNL Financial, Apr. 13, 2012, <http://www.snl.com/Interactivex/article.aspx?CdId=A-14638639-11562>.

⁷² Press Release, U.S. Fish & Wildlife Serv., Fact Sheet: Final Voluntary Land-Based Wind Energy Guidelines (Mar. 23, 2012) (available at <http://www.doi.gov/news/pressreleases/loader.cfm?csModule=security/getfile&pageid=285748>).

⁷³ *Id.*

⁷⁴ NAW Staff, *DOI Releases New Guidelines to Streamline Wind Energy Development While Protecting Wildlife*, North American Windpower, Mar. 26, 2012, available at http://www.nawindpower.com/e107_plugins/content/content.php?content.9582.

consideration areas that pose high risks to birds.⁷⁵ According to Director Dan Ashe of the FWS, wind developers who follow the guidelines and whose projects still result in bird deaths are unlikely to be prosecuted under the MBTA or BGEPA.⁷⁶ It is clear that though the FWS guidelines are voluntary, the agency intends for them to become the standard operating procedure for planning of new wind projects. Short of prosecuting the developers of a given wind project and “making an example” of them for bird deaths, these guidelines may be the best tool in the FWS arsenal to protect birds at this point.

IV. Military and Aviation Considerations

Wind projects in particular are subject to another level of regulation apart from environmental and wildlife concerns: possible interference with federally controlled airspace. Wind turbines, which can reach several hundred feet in the air, often draw attention from the Federal Aviation Administration (FAA), which is responsible for the safety of all civil aviation within the U.S., and from the Department of Defense (DOD), which is responsible for safeguarding U.S. airspace. There have been a number of instances in which proponents of wind projects have clashed with the FAA and DOD, but, as will be detailed below, the process by which these organizations make their concerns known and ensure that turbines do not interfere with radar and airspace is improving as wind energy becomes more prevalent.

The FAA has authority to review and approve any structure that is constructed and more than 200 feet above ground level. In reviewing such structures, the FAA seeks to determine “whether the aeronautical effects of the specific proposal and, where appropriate, the cumulative impact resulting from the proposed construction or alteration when combined with the effects of

⁷⁵ Matthew Daly, *New Wind Tower Guidelines Aim to Lower Bird Deaths*, ASSOCIATED PRESS, Mar. 23, 2012, available at <http://www.google.com/hostednews/ap/article/ALeqM5jiKmSzcKGqzHTC-YkF1UIWpnJP2A?docId=e12474d82cc64c0b8510639d24dfdc06>.

⁷⁶ *Id.*

other existing or proposed structures, would constitute a hazard to air navigation.”⁷⁷ In the case of large wind projects, each individual turbine is assessed independently, and the cumulative effects of the dozens or hundreds of turbines in the project are also assessed. The FAA, in order to ensure that the turbines do not pose a hazard to flight safety, will evaluate:

- a. “The impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules;
- b. The impact on arrival, departure, and en route procedures for aircraft operating under instrument flight rules;
- c. The impact on existing and planned public use airports;
- d. Airport traffic capacity of existing public use airports and public use airport development plans received before the issuance of the final determination;
- e. Minimum obstacle clearance altitudes, minimum instrument flight rules altitudes, approved or planned instrument approach procedures, and departure procedures;
- f. The potential effect on ATC radar, direction finders, ATC tower line-of-sight visibility, and physical or electromagnetic effects on air navigation, communication facilities, and other surveillance systems;
- g. The aeronautical effects resulting from the cumulative impact of a proposed construction or alteration of a structure when combined with the effects of other existing or proposed structures.”⁷⁸

In order to be able to proceed past the planning stage and begin construction, each proposed structure that is evaluated must be granted a Determination of No Hazard to Air Navigation by the FAA. After evaluating the proposed structure according to the criteria above and assessing the likely impact on navigation, radar, and the like, a Determination of No Hazard will be granted if “aeronautical study concludes that the proposed construction or alteration will exceed an obstruction standard but would not have a substantial aeronautical impact to air navigation.”⁷⁹

In the case of wind projects, the FAA is granted broad leeway in determining whether turbines are granted Determinations of No Hazard, and the FAA’s decision in this evaluation can determine whether a proposed wind project will proceed. For developers, there is no alternative

⁷⁷ 14 C.F.R. § 77.25(b) (2012).

⁷⁸ 14 C.F.R. § 77.29(a) (2012).

⁷⁹ 14 C.F.R. § 77.31(d) (2012).

but to undergo the FAA evaluation process, and, if the agency grants a Determination of Hazard to Air Navigation for a given turbine, the developer must find a mitigation solution, whether by moving the turbine or even scrapping it altogether. It is also worth noting that, as construction on a wind project proceeds, turbine heights are often adjusted by a few feet for any number of reasons incidental to a normal construction process.⁸⁰ If a turbine's final height differs by more than a single foot from the data given to the FAA to make its No Hazard Determination, the information must be resubmitted to the FAA, and a new determination based on this new information must be made.

The FAA's jurisdiction over the country's airspace has massive ramifications for the siting of wind projects. The FAA only has jurisdiction over civilian airspace, however; the DOD is responsible for ensuring the security of the country's airspace. In part, the DOD accomplishes this goal through widespread use of military radar across the country to detect any incoming threats to airspace security and to ensure the safety of missions undertaken at military bases. This mission to secure airspace has led to conflicts with developers of wind projects whose turbines may appear on military radar. These two stakeholders are increasingly interested in the same areas of land, as well. Large portions of the western U.S. are owned by the federal government and used by the military either for military installations or training missions, while many of these same areas are of particular interest to wind developers because of their ideal conditions for a wind energy installation.

Perhaps the most meaningful change in the DOD approval process for wind projects in the U.S. came as a result of a dispute surrounding the Shepherds Flat wind project in central Oregon. This project, which provides 845 MW of wind energy, is one of the largest in world,

⁸⁰ Interview with Derrel Grant, Vice President of Development, Caithness Energy, in N.Y., N.Y. (Jan. 25, 2011).

comprising 338 turbines. Though a project the size of Shepherds Flat underwent multi-year permitting and approval processes, DOD objections in the spring of 2010 threatened to indefinitely delay or even scuttle the project.

The FAA, in its evaluations of the potential hazards of wind turbines and other structures, seeks the input of other government agencies before deciding whether to grant a Determination of No Hazard.⁸¹ In the case of Shepherds Flat, the project's developers were in the process of final preparations in March 2010 to begin groundbreaking when they received notice that all turbines for the project had received Determinations of Presumed Hazard from the FAA, based on objections from the U.S. Air Force through the DOD. Aside from the very late timing of these objections, they were particularly troublesome and surprising given the long back-and-forth the developers had undertaken with the U.S. Navy during the project's permitting process, to allay some of that branch's concerns. In other words, the developers felt that the project had already undergone DOD scrutiny and had already been altered as a result of DOD concerns. The nearby locations of a number of operating wind projects made the Air Force objections even more curious. Under the old DOD process for reviewing renewables projects, however, this late objection was not out of order, despite the massive ramifications it had for the Shepherds Flat project.⁸² In fact, perhaps because DOD simply had not yet considered that renewables projects share a common set of potential issues and likely should be reviewed under their own set of processes, regard for the effects of their objections on the Shepherds Flat projects meant little to the Air Force at the time. In other words, it is fair to say that during this time the Air Force saw Shepherds Flat and other wind projects as a problem rather than considering the potential

⁸¹ Rebekah L. Sanders & Ryan Randazzo, *Arizona's Solar Energy Plans Vex Military*, Ariz. Republic, Apr. 7, 2012, <http://www.azcentral.com/arizonarepublic/news/articles/2012/03/23/20120323arizona-solar-energy-plans-military.html>.

⁸² Karen Parrish, *Pentagon Streamlines Approval for Energy Projects*, AMERICAN FORCES PRESS SERVICE, July 26, 2011, available at <http://www.defense.gov/news/newsarticle.aspx?id=64814>.

benefits of renewables projects for the military. Only after the involvement of a number of members of Congress who supported the Shepherds Flat project did the Air Force specify that their objections were based on concerns about interference with nearby radar facilities, which were decades old. These lawmakers helped broker a solution that was satisfactory to all parties, but perhaps the most lasting effect of the Shepherds Flat conflict was seen in the revision of DOD guidelines the following year.

Partially as a result of the experience at Shepherds Flat, the DOD introduced a new “siting clearinghouse” for renewables projects in the fall of 2011.⁸³ This clearinghouse, which will serve as the sole DOD gatekeeper for evaluating the effects of renewables projects, aims to bring together the various DOD branches and engage early in the development process with developers and other stakeholders to ensure that any concerns are made clear early on, and that solutions can be found.⁸⁴ Though it is still too early to evaluate the effectiveness of this new system, initial signs are promising. The clearinghouse immediately set forth to evaluate 249 backlogged projects, and, as of the summer of 2011, has approved 229 of them.⁸⁵ At a minimum, the clearinghouse represents a step in the right direction—an acknowledgement that renewables projects present a unique set of issues for DOD and that a comprehensive solution for all stakeholders should be found, rather than simply knee-jerk objections.

V. Conclusions and Policy Recommendations

It is somewhat ironic that many of the very laws initially intended to protect wildlife and the environment now present obstacles for the development of renewable energy projects, which will help move the U.S. away from fossil fuels and mitigate the effects of climate change.

⁸³ Dave Belote, *The DoD Siting Clearinghouse* (2011), http://www1.eere.energy.gov/femp/pdfs/fupwg_fall11_belote.pdf.

⁸⁴ *Id.*

⁸⁵ Karen Parrish, *Pentagon Streamlines Approval for Energy Projects*, AMERICAN FORCES PRESS SERVICE, July 26, 2011, available at <http://www.defense.gov/news/newsarticle.aspx?id=64814>.

Considering the immediacy of the effects of climate change, it is increasingly clear that serious action should be taken to promote renewable energy production.⁸⁶ The “conventional wisdom” in Washington, D.C. is that the likelihood of enacting legislation to institute a carbon tax or a federal renewable portfolio standard is low. Therefore, the most immediate, practical way to reduce the country’s carbon consumption on the federal level may be by encouraging the private development of renewable energy projects. Emphasis should be placed on the promotion of this development wherever possible while still preserving the policy goals of environmental laws.

Laws like NEPA, the ESA, the MBTA, and the BGEPA are monumentally significant pieces of legislation, the intent of which cannot be ignored. These laws must be reconciled, however, with the need to promote the development of renewable energy projects in order to stem climate change. The political branches of government have already begun this process, and there appears to be at least some acknowledgement of the need to modify environmental laws in order to promote renewable energy development. To date, most of these efforts are specific to federal lands. The Department of the Interior’s “Smart From the Start” initiative, introduced in late 2010, aims to “facilitate siting, leasing, and construction” of offshore wind projects in the Atlantic Ocean, and the Bureau of Land Management (BLM) has undertaken a similar effort for solar projects on federal lands it administers in the Western U.S.⁸⁷ By conducting preliminary Environmental Impact Statements on potential solar and offshore wind sites, these agencies ensure that the development timeline is accelerated once specific projects are initiated (those projects can then build on these preliminary EIS; a good deal of the environmental study will

⁸⁶ Deborah Zabarkeno, *July was hottest month ever for continental U.S.: NOAA*, REUTERS, August 8, 2012, available at <http://in.reuters.com/article/2012/08/08/us-usa-heat-july-idINBRE8770Y220120808>.

⁸⁷ Press Release, U.S. Dept. of the Interior, Salazar Launches ‘Smart From the Start’ Initiative to Speed Offshore Wind Development off the Atlantic Coast (Nov. 23, 2010) (available at <http://www.doi.gov/news/pressreleases/Salazar-Launches-Smart-from-the-Start-Initiative-to-Speed-Offshore-Wind-Energy-Development-off-the-Atlantic-Coast.cfm>).

have already been conducted). This approach is commendable for areas in which the federal government controls vast swaths of potentially useful land. But it is less translatable to the promotion of renewables projects on private lands, where the specifics of a potential renewables project may not yet be known. Congress and the Administration may wish to look towards several bills that have already been introduced as models for streamlining the environmental review and siting processes.

There have been a number of industry-specific pieces of legislation introduced in Congress that could serve as a basis for promoting private renewables development more generally, while still preserving environmental laws. While no single piece of legislation is a perfect solution, several are potentially promising, especially when coupled with one another. The Renewable Energy Permitting Act of 2009, for example, would have established a pilot project in which experts in NEPA, the ESA, and other environmental laws would have worked as part of a team to analyze proposed energy projects in Western states.⁸⁸ By gathering experts from various federal agencies to work together in the environmental review process, this bill sought to eliminate unnecessary delays in the environmental review process for projects on federal lands. A similar paradigm for projects sited on private lands could be beneficial for developers seeking to abide by environmental review, but to do so in the most efficient way possible. In other words, rather than putting the onus on developers of renewables projects to determine whether their project will trigger the NEPA process (and then proceed through that process), whether to seek an ITP under the ESA, etc., the burden could be shifted to the government. By creating a “one-stop shop,” comprised of experts on NEPA, the ESA, the MBTA, and other environmental laws, to review proposed renewables projects, the government could provide more clarity to

⁸⁸ Renewable Energy Permitting Act of 2009, H.R. 2362 §§ 3(a)-(e), (2009).

developers and accelerate the placement of these projects, all while preserving the environmental review process.

It is also worth examining whether small renewables projects should be exempt from the NEPA and ESA review processes entirely. While ensuring a mechanism to prevent developers from using a series of smaller entities to avoid the environmental process entirely is imperative, an exemption might be worthwhile if it can be demonstrated that the increase in renewable energy produced as a result would outweigh the potential threat to endangered species and the environment. Legislation in this vein is somewhat common, and has been introduced with specificity for some renewables industries. The Hydropower Regulatory Efficiency Act of 2012, for example, which passed the House of Representatives by a unanimous 372-0 vote, directs the Federal Energy Regulatory Commission (FERC) to exempt from its licensing requirements hydropower facilities of up to 10 MW (the previous exemption was for facilities up to 5 MW).⁸⁹ While this bill dealt with FERC's licensing requirements, and not environmental laws, a similar approach could be taken for small renewables projects of various types. Such an effort might spur the development of localized renewable energy production—perhaps in more densely populated areas—by removing some of the licensing and permitting obstacles in the way and could even promote more creative placement of renewable energy facilities. It is also worth noting that making the siting process for small renewables projects clearer does not have to mean stripping environmental protections entirely. Perhaps there is a happy medium, in which renewables projects smaller than 25 MW (for example) are exempted from the NEPA process while still abiding by the protections of the ESA and the MBTA/BGEPA. Alternatively, NEPA

⁸⁹ Hydropower Regulatory Efficiency Act of 2012, H.R. 5892 (2012). It is worth noting that a “companion” piece of legislation, the Hydropower Improvement Act of 2011, S. 629, was passed by the Senate Energy Committee in May 2011. Though the Senate did not pass the bill before the 112th Congress adjourned, nearly identical legislation was passed by both houses in the 113th Congress and signed into law on August 9, 2013.

could be modified such that small renewables projects face a less stringent review process. Such an effort would send a clear signal that the government supports the development of more renewable energy and might help spur the necessary changes to move the country away from fossil fuels.

If we are serious about the need to stem the effects of climate change, legislative or policy actions to promote renewable energy development are vital. If sweeping legislation is too difficult to enact, smaller steps to facilitate siting can be taken—while still preserving the environmental review process.⁹⁰

⁹⁰ *See generally*, American Clean Energy and Security Act of 2009 (ACES), H.R. 2454 (2009). This bill passed the House of Representatives and stalled in the Senate. It is well accepted that comprehensive climate legislation is unlikely in the current Congress.