
NEPA and Renewable Energy: Realizing the Most Environmental Benefit in the Quickest Time

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INTRODUCTION

The bulldozers and construction cranes are out in force again in America's wild and pristine lands again. But they are not just building dams, pumping oil or gas, or harvesting trees. They are also harvesting the sun and wind by helping to build massive solar installations in the Southwest desert and towering wind turbines along the Atlantic coast and on the Great Plains.

Developing wild lands for clean, renewable energy sometimes produces a "green vs. green" conflict, pitting renewable energy advocates and their industry partners against traditional wildlife or land protection advocates.¹ Because many renewable energy projects are built on federal lands — the largest solar thermal installation in the world is proposed for construction on federal land in California² — federal agencies must increasingly balance between renewable energy development and wildlife or land protection. This Article explores how federal agencies should balance these competing environmental interests.

This is not the first time the nation's energy projects raised serious environmental questions. Energy project developers first encountered the National Environmental Policy Act ("NEPA") and Endangered Species Act ("ESA") in the 1970s.³ These laws generated widespread and difficult questions. Should an energy project that does not pollute the air and that would lower electricity costs be built when local residents resist the project?⁴ Should protecting a small, nondescript fish species require a federal agency to stop work on an energy project that would serve an impoverished region on the eve of the project's completion?⁵

The questions asked today echo those asked in the 1970s. Should wind

¹ This Article will refer to "wildlife and land protection interests" rather than the more general "environmental protection interests." Many advocates of renewable energy development would point to the environmental protection benefits of renewable energy. Therefore, the specific environmental protection interests generally at issue in these controversies involve protecting wildlife, wildlife habitat, and leaving land in its pristine state.

² Cassandra Sweet & Siobhan Hughes, *Huge Solar-Plant Project Approved*, WALL ST. J., Oct. 26, 2010, available at <http://online.wsj.com/article/SB10001424052702303467004575574392614626562.html>.

³ NEPA was enacted in 1969 and took effect in 1970. See National Environmental Policy Act of 1969, Pub. L. 91-190 (1970). The ESA was enacted in 1973. See The Endangered Species Act of 1973, Pub. L. 93-205 (1973).

⁴ See *Calvert Cliffs' Coordinating Comm., Inc. v. Atomic Energy Comm'n*, 449 F.2d 1109 (D.C. Cir. 1971) (holding that NEPA requires a federal agency to consider environmental factors to the "fullest extent possible" when deciding whether to approve a license to construct a nuclear power plant).

⁵ See *Tenn. Valley Auth. v. Hill*, 437 U.S. 153 (1973) (holding that the ESA makes no exceptions, and that a hydroelectric dam project would be enjoined until steps are taken to protect the snail darter, a small fish about the size of an adult's index finger).

turbines be built in areas where local residents do not want them? Should the desert tortoise block solar installations? The media and activists often present these questions as diametrically opposed: one can either build a solar installation or protect tortoises but not both.⁶ One can build wind turbines, just “not in my backyard.”

It is tempting to summarily accept the saccharine statement that renewable energy development and wildlife or land protection are not mutually exclusive and that one interest can be advanced harmoniously along with the other. If solar panels are installed on a preferred site, then it will probably involve moving the desert tortoise to a new habitat.⁷ At the other extreme, the suggestion that this is a zero sum game is also incorrect. If renewable energy interests win one battle, it does not necessarily mean that wildlife or land protection interests lose completely. Although a desert tortoise population may have to be moved, it does not mean that the tortoise population’s health will be seriously jeopardized.

The truth, as usual, is somewhere between these two extremes. Both wildlife and land protection interests and renewable energy interests can be advanced together, but one interest will often advance further than the other. Problems arise when one interest advances *too* much at the expense of the other.

This Article argues that current law advances wildlife protection and land preservation interests too far at the expense of renewable energy project development. Specifically, the manner in which NEPA is commonly interpreted and applied can favor the status quo and disfavor developing land for renewable energy projects.⁸ The NEPA process is long, and the average environmental impact statement (“EIS”) — the core of NEPA — requires almost three and a half years to complete.⁹ The trend in recent years is not encouraging. The percentage of EISs completed in less than three years declined from 1998 to 2006.¹⁰ EISs can also be very expensive, usually ranging from hundreds of thousands of dollars to millions of dollars.¹¹ The lengthy time and significant

⁶ See, e.g., *Salazar Pushes Ivanpah and Other Solar, Wind Projects*, BASIN & RANGE WATCH (Nov. 5, 2009), <http://www.basinandrangewatch.org/FastTrackProjects.html> (stating that the organization will be working to ensure that a proposed solar project “does not happen at all” due to threats to the desert tortoise’s habitat).

⁷ See Colin Sullivan, *Solar Developer Shrinks Mojave Proposal, Gets Mixed Reviews*, GREENWIRE (Feb. 22, 2010), <http://www.eenews.net/public/Greenwire/2010/02/22/9>. For convenience, this Article refers only to “solar panels” even though in many cases the specific technology could also be concentrated thermal solar power that uses ground mounted mirrors and thermal towers instead of solar panels to generate electricity.

⁸ The ESA is also a significant roadblock to renewable energy project development, but due to the limited scope of this Article, the ESA will not be discussed here except in connection with NEPA.

⁹ Piet deWitt & Carole A. deWitt, *How Long Does it Take to Prepare an Environmental Impact Statement?*, 10 ENVTL. PRAC. 164, 164, 167 (2008).

¹⁰ *Id.* at 170, 172.

¹¹ See *id.* at 164.

cost of preparing an EIS is inconsistent with the policymaking consensus that the United States should be promoting the rapid development of renewable energy. Moreover, because renewable energy benefits the environment on balance, there is some irony that NEPA, this nation's environmental "Magna Carta,"¹² significantly delays environmentally beneficial projects.

This Article therefore argues that preparing an EIS under NEPA should be accelerated for qualified renewable energy projects.¹³ Comprehensive NEPA-streamlining proposals have had varying degrees of success in the past.¹⁴ The sector-specific approach proposed in this Article advances both legal and policy solutions because both solution types are necessary to have the greatest likelihood of success in cutting the time to prepare EISs for renewable energy projects.

As a legal solution, federal agencies should reinterpret NEPA to not only consider the environmental harms resulting from renewable energy projects, but also the environmental benefits of such projects. Although NEPA's language is neutral and simply requires federal agencies to consider the environmental "impact[s]" of a proposed action,¹⁵ in practice agencies generally focus only on *adverse* environmental impacts.¹⁶ This interpretation of NEPA is misguided. The public and policymakers can only see a complete picture of the environmental impacts of renewable energy projects by considering both the harms and the benefits of renewable energy projects. This NEPA reinterpretation would indirectly shorten the time needed to prepare EISs by helping agencies make a clearer case that a proposed renewable energy project would have more environmental benefits than harms.

Reducing the time and cost of EISs also requires policy changes. This Article discusses two policy solutions. First, the Council on Environmental Quality ("CEQ"), the federal agency that issues NEPA guidance and regulations, should encourage agencies to prepare so-called "mitigated findings of no significant impacts" ("mitigated FONSI") for renewable energy projects. Mitigated FONSI are more efficient and less extensive than EISs, but still require a project developer to address the major adverse environmental impacts of the project. Mitigated FONSI have been successfully used for so-called "shovel ready" projects that need to break ground quickly to qualify for federal funds under the American Recovery and Reinvestment Act of 2009 ("the stimulus

¹² James W. Spensley, *National Environmental Policy Act*, in ENVIRONMENTAL LAW HANDBOOK 321, 321 (J. Gordon Arbuckle et al. eds., 12th ed. 1993).

¹³ The scope of what constitutes "renewable energy" can be contentious, and an exhaustive list will not be attempted here. However, most policymakers would agree that solar, geothermal, and wind are renewable energy sources, and oil, natural gas, coal, nuclear, and hydroelectric are not renewable energy sources.

¹⁴ See deWitt & deWitt, *supra* note 9, at 174.

¹⁵ See National Environmental Policy Act, 42 U.S.C. § 4332(C)(i) (2006).

¹⁶ Dorothy W. Bisbee, *NEPA Review of Offshore Wind Farms: Ensuring Emission Reduction Benefits Outweigh Visual Impacts*, 31 B.C. ENVTL. AFF. L. REV. 349, 356 (2004).

bill”).¹⁷ The Bureau of Land Management (“BLM”) is currently using some streamlining practices, collectively termed “fast track review,” for preparing EISs for certain solar, wind, and geothermal projects that BLM determined are sufficiently advanced and that can be approved in less than one year.¹⁸ Preparing mitigated FONSIIs still provides for environmental review while significantly reducing the time delay to project developers and cost to federal agencies.

Second, although using mitigated FONSIIs is an acceptable short-term policy fix, federal agencies’ exclusive reliance on mitigated FONSIIs would risk too many insufficient environmental reviews. Legislation is therefore necessary to provide for effective and comprehensive environmental review at a fraction of the cost and time. The obstacle to this goal is not a lack of legal tools or knowledge. It is a lack of money and manpower. Again, BLM’s fast track review program provides a model of how efficient an agency can be in preparing EISs for renewable energy projects when sufficient resources and manpower are dedicated. Congress should use BLM’s fast track program as a model for renewable energy project approval and extend the program’s practices to other federal agencies that have a role in approving or financing renewable energy projects.¹⁹

This Article has three Parts. Part I reviews the wildlife and land protection interests threatened by renewable energy development as well as the current EIS process that accounts for these threats. Part II discusses the legal solution of reinterpreting NEPA to include consideration of environmental benefits as well as adverse environmental impacts. Part III discusses the policy solutions of utilizing mitigated FONSIIs and enacting legislation to devote more resources to streamline the EIS process for renewable energy projects.

I. THE ADVERSE ENVIRONMENTAL IMPACTS OF RENEWABLE PROJECT DEVELOPMENT AND THE EIS PROCESS

Courts decide cases relating to NEPA more than any other environmental statute and NEPA jurisprudence is continually evolving.²⁰ Federal agencies charged with preparing EISs therefore operate in the shadow of court challenges. An agency must show that it both properly addressed environmental impacts and

¹⁷ Vincent S. Oleszkiewicz, *NEPA Compliance for Projects Funded Under the American Recovery and Reinvestment Act of 2009: Is Your Project “Shovel Ready”?*, DUANE MORRIS LLP (July 23, 2009), <http://www.duanemorris.com/alerts/alert3309.html>.

¹⁸ See *Renewable Energy Priority Projects*, BUREAU OF LAND MGMT. (Mar. 8, 2011), http://www.blm.gov/wo/st/en/prog/energy/renewable_energy/fast-track_renewable.html.

¹⁹ For example, the Bureau of Offshore Energy and Minerals Management (OEMM) approves offshore wind projects. See *Renewable Energy*, BUREAU OF OCEAN ENERGY MGMT. (Mar. 15, 2011), <http://www.boemre.gov/offshore/RenewableEnergy/index.htm>.

²⁰ Philip M. Ferester, *Revitalizing the National Environmental Policy Act: Substantive Law Adaptations from NEPA’s Progeny*, 16 HARV. ENVTL. L. REV. 207, 227 (1992).

followed the proper procedural requirements.²¹

A. *The Adverse Environmental Impacts of Solar and Wind Projects*

BrightSource Energy, a major solar power manufacturer and developer utilizing concentrated solar thermal technology, proposed building a utility-scale solar electricity generating facility in Ivanpah, California, located in a remote part of the Mojave Desert.²² To develop the site, the land must be totally flat and barren with wildlife and vegetation removed.²³ This requires heavy equipment to uproot all vegetation and grade the land smooth.²⁴ BrightSource will then pour concrete to provide bases for the hundreds of thousands of mirrors that will reflect sunlight onto a water tower.²⁵ Called the “Ivanpah Solar Electric Generating System,”²⁶ the facility will use an estimated 100 acre feet of water per year, obviously a scarce resource in the desert, to generate the steam that drives the turbines to generate electricity.²⁷

To the casual observer, plowing up desert, the epitome of barren land, may not appear to involve significant adverse environmental impacts. But a desert solar project like Ivanpah threatens the lives and habitat of a number of animal and plant species, including the desert tortoise, which is listed as a threatened species under the ESA.²⁸ In addition, agencies must consider the project’s impacts to the land because BrightSource will be disturbing pristine desert, as well as impacts to water and soil resources.²⁹

Wind projects also have adverse environmental impacts. The most frequently cited impact is the threat to birds from colliding with wind turbines.³⁰ On the Atlantic coast, critics of wind projects assert that wind turbines will disrupt the

²¹ See *infra* text accompanying notes 32-38.

²² See Sullivan, *supra* note 7.

²³ See generally BUREAU OF LAND MGMT., CALIFORNIA DESERT AREA CONSERVATION PLAN AMENDMENT/FINAL ENVIRONMENTAL IMPACT STATEMENT FOR IVANPAH SOLAR ELECTRIC GENERATING SYSTEM § 4.3-1 to -11 (July 2010).

²⁴ *Id.*

²⁵ BASIN & RANGE WATCH, *supra* note 6.

²⁶ See BUREAU OF LAND MGMT., *supra* note 23, title page.

²⁷ BrightSource Energy Proposes Reduced Footprint Alternative Mitigation for Ivanpah Solar Electric Generating System, GREENJOBS (Feb. 11, 2010), <http://www.greenjobs.com/pg/news/industrynews/industrynewsarticle.aspx?id=inews07421>.

²⁸ See *Final Staff Assessment Addendum: Ivanpah Solar Electric Generating System*, CAL. ENERGY COMM. (Mar. 16, 2010), <http://www.energy.ca.gov/2008publications/CEC-700-2008-013/CEC-700-2008-013-FSA-AD.PDF>, at 63.

²⁹ See generally *id.*

³⁰ *Wind Energy and Wildlife*, AM. WIND ENERGY ASS’N (Mar. 2009), <http://www.awea.org/learnabout/publications/loader.cfm?csModule=security/getfile&PageID=4139>; *Wind Turbine Interactions with Birds, Bats, and their Habitats: A Summary of Research Results and Priority Questions*, NAT’L WIND COORDINATING COLLABORATIVE (Spring 2010), http://www1.eere.energy.gov/windandhydro/pdfs/birds_and_bats_fact_sheet.pdf.

coastline's scenic beauty.³¹

B. A Brief Outline of the NEPA Process

An EIS comprehensively catalogues and analyzes these adverse impacts.³² The EIS has become almost synonymous with NEPA, reflecting the centrality of the EIS requirement to NEPA as a whole. NEPA requires that federal agencies prepare a “detailed statement” for “major Federal actions significantly affecting the quality of the human environment.”³³ NEPA does not include the term “environmental impact statement.” It derives from NEPA’s core requirement that an agency must prepare a “detailed statement” for major federal actions significantly affecting the environment.³⁴ A detailed statement must include, among other things, the environmental impacts of the proposed action, any “adverse environmental effects” of the proposal, and alternatives to the proposal.³⁵ Because most renewable energy projects involve some type of federal action, such as grants, loans, or permits, most projects require an EIS.³⁶

If an agency is unsure whether it should expend the resources to prepare an EIS, the agency may prepare an environmental assessment (“EA”).³⁷ An EA should include most of the requirements of an EIS, just in a shortened format. Specifically, the EA should include the scope of the affected environment, the impacts of the project and their consequences, alternatives to the proposed project, mitigation measures, and procedures for consulting with the public and other agencies.³⁸ At the conclusion of the EA, the agency can make one of two determinations. Either the agency can issue a “finding of no significant impact” (“FONSI”), or it can find a significant impact and begin preparing an EIS.³⁹

It is crucial to understand that the EA covers the same scope of information as an EIS, but in less depth. The EA is typically 50 to 200 pages for large, complex projects such as Ivanpah.⁴⁰ Complex EAs take nine to eighteen months

³¹ See, e.g., Allen Wolstenholme, *Cape Wind Would Sully National Treasure*, S. COAST TODAY, Jan. 24, 2010, available at <http://www.windaction.org/opinions/25285>.

³² See, e.g., CAL. ENERGY COMM., *supra* note 28.

³³ 42 U.S.C. § 4332(C) (2006). There are several different types of EISs. Regional EISs evaluate the regional environmental effects of an environmental action; programmatic EISs evaluate the effects of a federal policy proposal; site-specific EISs look at the effects in a specific location of a federal action. BLM has prepared programmatic EISs for wind, geothermal, and solar to determine the region-wide effects of renewable energy development. Site-specific EISs, which are required for individual sites like Ivanpah, can use the applicable programmatic EIS as a foundation.

³⁴ *Id.*

³⁵ *Id.*

³⁶ Even if a renewable energy project does not require a federal EIS, most states have state EIS equivalents. JACOB I. BREGMAN, ENVIRONMENTAL IMPACT STATEMENTS 3-4 (1999).

³⁷ See CEQ NEPA Regulations, 40 C.F.R. § 1508.9 (2006).

³⁸ *Id.*

³⁹ See BREGMAN, *supra* note 36, at 10.

⁴⁰ CEQ, *Modernizing NEPA Implementation*, in THE NEPA TASK FORCE REPORT TO THE COUNCIL ON ENVIRONMENTAL QUALITY, 65-66 (Sept. 2003), <http://ceq.hss.doe.gov/ntf/report/chap>

to complete and cost between \$50,000 and \$200,000.⁴¹ Although these are significant figures, an EIS for a comparable project would include 200 to 2,000 pages, take one to six years to complete, and cost between \$250,000 and \$2 million.⁴² The major substantive difference between EAs and EISs is that EISs contain more developed scientific analyses of the environmental impacts, whereas EAs typically describe the nature of the environmental impacts without substantial supportive scientific findings.⁴³

An average EIS takes three and a half years to prepare, which is a long time for renewable energy project developers to wait before they can break ground.⁴⁴ In the United States, a broad public consensus exists for policy that would speed renewable energy generation.⁴⁵ Both President Bush and President Obama issued Executive Orders directing federal agencies to expedite renewable energy project development.⁴⁶ An Executive Order is not a magic wand, however, and agencies must find fresh legal and policy options to make the environmental review process more efficient for renewable energy projects while minimizing harms to the environment.

II. THE LEGAL SOLUTION: AGENCIES SHOULD INTERPRET NEPA TO ALLOW AGENCIES TO CONSIDER THE ENVIRONMENTAL BENEFITS OF RENEWABLE ENERGY PROJECTS

Congress enacted NEPA to force policymakers to consider the environmental consequences of their actions.⁴⁷ At the time, the environmental consequences of human actions were almost uniformly harmful to the environment. For example, vehicle and industrial air pollution made the air in Los Angeles toxic on some days. Industrial water pollution caused the Cuyahoga River to catch fire. A chemical company's buried waste caused the neighborhood of Love Canal to sink into a toxic stew. These images reinforced the belief that humans only harmed the environment, and NEPA's purpose therefore was to stop people from harming their environment.⁴⁸

ter6.pdf [hereinafter *NEPA TASK FORCE REPORT*].

⁴¹ *Id.*

⁴² *Id.*

⁴³ CEQ, *40 FAQs Answers to 30-40*, <http://ceq.hss.doe.gov/nepa/regs/40/30-40.HTM> (last visited Apr. 6, 2011).

⁴⁴ See DeWitt & DeWitt, *supra* note 9, at 165.

⁴⁵ See, e.g., Steven Mufson & Jennifer Agiesta, *On Energy, Obama Finds Broad Support*, WASH. POST, Aug. 28, 2009, available at <http://www.washingtonpost.com/wp-dyn/content/article/2009/08/27/AR2009082703823.html>.

⁴⁶ See Federal Leadership in Environmental, Energy, and Economic Performance, Exec. Order 13,514, 74 Fed. Reg. 52,117 (Oct. 5, 2009); Actions To Expedite Energy-Related Projects, Exec. Order 13,212, 66 Fed. Reg. 28,357 (May 18, 2001).

⁴⁷ See 42 U.S.C. § 4331(a) (2006).

⁴⁸ When Congress enacted NEPA, many believed that it would force policymakers to take substantive steps to improve the quality of the human environment. But a series of court decisions

Today is different. We now better understand how humans can have both harmful and beneficial environmental impacts. Renewable energy is generally, on balance, an environmental benefit.⁴⁹ Although renewable energy can have site-specific environmental harms, renewable energy also provides both local and general environmental benefits, principally by providing electricity without using extracted resources as fuel and without emitting air pollution.

Despite today's changed circumstances, federal agencies still can use a 1970s mentality when preparing EAs and EISs. Agencies too often focus on *adverse* environmental impacts and exclude *beneficial* environmental impacts of a proposed action.⁵⁰ This 1970s mentality is somewhat excusable because most project proposals have few environmental benefits. The largest share of EISs is prepared in connection with infrastructure projects such as roads, ports, and transmission lines.⁵¹ Yet the 1970s mentality is inexcusable when reviewing renewable energy projects. Federal agencies should balance site-specific environmental harms against local and general environmental benefits. More often than not, renewable energy projects will have net environmental benefits.

There is no legal basis, either in NEPA or in CEQ's regulations, for the 1970s mentality of looking exclusively at environmental harms. NEPA simply requires that agencies examine the "environmental impact[s]" of a proposed action.⁵² It does not require that an agency only examine adverse impacts.

In fact, there are a number of provisions in both NEPA and the CEQ's regulations that support examining the environmental benefits of a proposed project. Section 102(C)(iv) of NEPA directs agencies to consider the relationship between the short-term uses of the environment and the environment's long-term productivity.⁵³ Renewable energy project development surely can have short-term environmental harms. With Ivanpah, the desert tortoises will be relocated and vegetation will be eradicated. If built, however, Ivanpah will further the long-term benefit of delivering carbon-free electricity.

A few other provisions are also relevant. Section 101(b)(6) of NEPA also directs agencies to "enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources."⁵⁴ CEQ's regulations require that agencies "rigorously explore and objectively evaluate *all* reasonable

made clear that NEPA was a procedural, not a substantive, statute. This means that NEPA does not dictate environmental outcomes, only environmental decisionmaking procedures. See Sam Kalen, *The APA's Influence on the Development of the National Environmental Policy Act*, 23 NAT. RESOURCES & ENV'T 3 (2009).

⁴⁹ See, e.g., Union of Concerned Scientists, *Environmental Benefits of Renewable Energy*, CITIZENS & SCIENTISTS FOR ENVTL. SOLUTIONS (Oct. 28, 2002), http://www.ucsusa.org/clean_energy/technology_and_impacts/impacts/environmental-benefits-of.html.

⁵⁰ See Bisbee, *supra* note 16.

⁵¹ See BREGMAN, *supra* note 36.

⁵² 42 U.S.C. § 4332(C)(i) (2006).

⁵³ *Id.* § 4332(C)(iv).

⁵⁴ *Id.* § 4331(b)(6) (2006).

alternatives” to the proposed project.⁵⁵ All reasonable alternatives should include more than local alternatives such as whether to develop the generation site, or whether to include a certain portion of local habitat. Agencies should also consider the environmental effects due to increased dependence on fossil-fuel electricity generation if a renewable energy project is not developed. If failing to bring Ivanpah’s solar generated electricity online will require California utilities to purchase fossil-fuel fired electricity from more distant locations, the “quality of the human environment” will be harmed.

Although these provisions fall short of an explicit directive to federal agencies to consider the environmental benefits of a renewable energy project, agencies do not need such a directive. CEQ gives individual agencies broad discretion to issue their own implementing regulations, and an agency can include unique “decision points” that it will consider when preparing EAs and EISs.⁵⁶ In the context of renewable energy, the project’s environmental benefits should be a key decision point. By including environmental benefits, agencies can fulfill NEPA’s broader purpose of not only protecting the environment, but also improving the environment.

III. THE POLICY SOLUTIONS: CEQ SHOULD ENCOURAGE AGENCIES TO PREPARE MITIGATED FONSI AND CONGRESS SHOULD PASS LEGISLATION DEVOTING MORE RESOURCES TO NEPA REVIEW

The world of policy options often divides into two categories: what is practicable and what is ideal. Using mitigated findings of no significant impact (“FONSI”) is a solution federal agencies can easily implement because it can be carried out exclusively through executive action. Using categorical exclusions, although a tempting alternative, should be rejected because they wholly bypass NEPA review. The federal government should therefore appropriate additional resources to assure efficient renewable energy project development.

A. Mitigated FONSI Properly Balance the Need for Renewable Electricity With the Need to Protect Wildlife and Pristine Lands

Mitigated FONSI occupy the middle ground between a standard FONSI (i.e. a renewable energy project does not significantly impact the land or wildlife) and a comprehensive EIS. Using BrightSource’s Ivanpah project as a

⁵⁵ 40 C.F.R. § 1502.14(a) (2008) (emphasis added).

⁵⁶ *See id.* § 1505.1(b). Most major federal agencies have unique NEPA implementing regulations, and smaller agencies or agencies that rarely are required to prepare EISs use the implementing regulations of a parent agency or a similar agency. For BLM’s implementing regulations, see *National Environmental Policy Act Handbook*, BUREAU OF LAND MGMT. (Jan. 2008), http://www.blm.gov/pgdata/etc/medialib/blm/wo/Information_Resources_Management/policy/blm_handbook.Par.24487.File.dat/h1790-1-2008-1.pdf.

hypothetical example will illustrate how a mitigated FONSI would function.⁵⁷ BLM, the lead federal agency reviewing the land and wildlife impacts of the project,⁵⁸ would first prepare an EA. To reiterate, an EA for a project like Ivanpah would be a relatively brief (50-200 page) summary of impacts drawing on existing knowledge with minimal independent analysis. At a general level, it would be relatively easy to determine the land and wildlife impacts at Ivanpah for two reasons. First, the wildlife and vegetation has already been carefully studied when the military established Fort Irwin, which is close to Ivanpah.⁵⁹ Second, BLM has been preparing a programmatic EIS for solar energy throughout the desert Southwest, and although Ivanpah is not located in one of the twenty-four solar energy study areas, the habitats are quite similar so that information learned as part of the programmatic EIS would be very relevant to the site-specific study of Ivanpah.⁶⁰

BLM would likely conclude from the EA that Ivanpah would have significant impacts, if only because of the threat to the endangered desert tortoise.⁶¹ Under normal circumstances, BLM would move on to prepare an EIS. With a mitigated FONSI, however, BLM would not prepare an EIS, but would instead propose mitigation measures based on the EA's conclusions.⁶² For example, BLM could require BrightSource to relocate the population of desert tortoises, fence the site so no wildlife can enter, preserve additional land equal to the amount of land graded for the solar arrays, and avoid grading portions of land with especially high concentrations of sensitive vegetation.⁶³

If the project developer carries out these mitigation measures, the project would be deemed to fall below the significant impact threshold.⁶⁴ Once the project falls below the significant impact threshold, BLM could issue a FONSI, which means that no EIS would be required.⁶⁵ Thus, a "mitigated FONSI" is a FONSI conditioned upon the project developer completing mitigation measures.

⁵⁷ This is hypothetical because, in reality, BLM has prepared a comprehensive EIS for Ivanpah under the fast track program. See BUREAU OF LAND MGMT., *supra* note 23.

⁵⁸ The lead state agency is the California Energy Commission. The division of responsibility between the state agency and BLM on Ivanpah is unclear.

⁵⁹ See BASIN & RANGE WATCH, *supra* note 6. The military relocated all the desert tortoises within the fort's boundaries, which is a cautionary tale for BrightSource, because many tortoises migrated back to the Fort and were killed both directly and indirectly due to habitat destruction. See *id.*

⁶⁰ See generally SOLAR ENERGY DEVELOPMENT PROGRAMMATIC EIS, <http://solareis.anl.gov> (last visited Mar. 17, 2011).

⁶¹ Again, this is a hypothetical scenario assuming that BLM has not prepared an EIS. In reality, BLM found significant impacts and prepared an EIS.

⁶² See NEPA TASK FORCE REPORT, *supra* note 40, at 69-72.

⁶³ These are in fact some of the mitigation measures recommended by the California Energy Commission. See CAL. ENERGY COMM., *supra* note 28, at 65-75.

⁶⁴ See *id.* at 82.

⁶⁵ See *id.*

Federal agencies inconsistently use mitigated FONSI⁶⁶, though mitigated FONSI^s have been used effectively to meet environmental reviews of “shovel-ready” projects that needed to break ground by the end of 2010 to qualify for funding under the stimulus bill.⁶⁷ Courts have accepted mitigated FONSI^s as meeting NEPA’s procedural requirements.⁶⁸ CEQ has also accepted the value of mitigated FONSI^s.⁶⁹ Now CEQ should designate mitigated FONSI^s as the preferred instrument to review the impacts of renewable energy projects on wildlife and land while also accounting for the environmental benefits of such projects.

Mitigated FONSI^s appropriately account for net environmental impacts, they require project developers to mitigate adverse impacts, they take significantly less time to complete, and they cost less money to prepare.

B. Categorical Exclusions Are Inappropriate For Renewable Energy Projects Because They Ignore Wildlife and Land Protection Interests

Some policymakers have advocated using categorical exclusions to streamline environmental review of renewable energy projects.⁷⁰ But categorical exclusions fail to review adverse environmental impacts at all; they allow federal agencies to skip review of adverse impacts. This advances renewable energy interests too far at the expense of wildlife and land protections interests. Categorical exclusions really *do* create a zero sum game.

A categorical exclusion refers to “a category of actions which do not individually or cumulatively have a significant effect on the human environment” as determined in the sole discretion of the federal agency overseeing the proposed project.⁷¹ In effect, an agency decides that a certain action *never* has significant adverse environmental impacts, so that an EA is never required, much less an EIS.

Categorical exclusions have gained renewed currency in the environmental policymaking debate after their increased use by the Bush Administration. Much to the dismay of environmental protection advocates, however, the Bush Administration used categorical exclusions to excuse environmental review of such projects as controlled burns and salvage logging in federal forests.⁷²

Although these critics focused on the environmental damage that may result

⁶⁶ *See id.*

⁶⁷ *See Oleszkiewicz, supra* note 17.

⁶⁸ *See, e.g., City of Auburn v. United States*, 154 F.3d 1025, 1033 (9th Cir. 1998).

⁶⁹ *See NEPA TASK FORCE REPORT, supra* note 40, at 69.

⁷⁰ *See generally* Michael C. Blumm & Sherry L. Bosse, Norton v. SUWA and the Unraveling of Federal Public Land Planning, 18 DUKE ENVTL. L. & POL’Y F. 105, 155-158 (2007); Stephanie Young, *Categorical Exclusions: Are Agencies Silencing the Public’s Voice?*, 23 NAT. RESOURCES & ENV’T 39 (2009) (arguing that the Bush Administration overused categorical exclusions).

⁷¹ CEQ NEPA Regulations, 40 C.F.R. § 1508.4 (2008).

⁷² *See Young, supra* note 70, at 40-42.

from projects that fail to account for adverse environmental impacts, a perhaps greater problem with categorical exclusions as applied to renewable energy projects is that they exclude the public from the decision-making process. The public will live next to, look at, and graze their livestock next to renewable energy projects. The public's voice therefore should not be silenced.

Congress's intent was clear in enacting NEPA — that it wanted to provide increased access for the public to the nation's environmental decisionmaking.⁷³ The Senate committee report noted that “public desires and aspirations are seldom consulted” in federal environmental decisionmaking.⁷⁴ The chairman of the committee reinforced a key objective of NEPA that actions impacting the environment “will have to be justified in light of public scrutiny.”⁷⁵ This legislative history was formalized in § 101(a) of NEPA, where Congress stated: [I]t is the continuing policy of the Federal Government, in cooperation with State and local governments, *and other concerned public and private organizations . . .* to create and maintain conditions under which man and nature can exist in productive harmony, and fulfill the social, economic, and other requirements of present and future generations . . .⁷⁶

“Concerned public and private organizations” have surely exasperated renewable energy project developers, including BrightSource.⁷⁷ Yet excluding the public entirely from renewable energy siting decisions, which would result from the use of categorical exclusions, would do more harm than good. The entire process would lose legitimacy. Categorical exclusions should therefore not be used for renewable energy projects both because adverse environmental impacts should be considered and because public involvement is necessary to the legitimacy of the process.

C. Congress Should Pass Legislation Using BLM's Fast Track Program as a Model to Best Balance Between Wildlife and Land Protection Interests and Efficient Renewable Energy Development

Perhaps the greatest obstacle to renewable energy project development is also the most banal obstacle: not enough staff and not enough money. BLM's fast track program recognizes this obstacle and takes the obvious approach: BLM invests significant resources preparing EISs for proposed projects. At the same time, both the Secretary of the Interior and the BLM Director have assured that

⁷³ See generally Lorna Jorgensen, *The Move Toward Participatory Democracy in Public Land Management Under NEPA: Is it Being Thwarted by the ESA?*, 20 J. LAND RESOURCES & ENVTL. L. 311 (2000).

⁷⁴ 115 CONG. REC. 19,010 (1969).

⁷⁵ *Id.* at 19,009 (statement of Sen. Jackson).

⁷⁶ 42 U.S.C. § 4331(a) (2006) (emphasis added).

⁷⁷ In response to public opposition to Ivanpah, BrightSource recently reduced the scale of the solar array site. See Sullivan, *supra* note 7.

BLM staff are not curtailing the EIS process in any way.⁷⁸ In other words, BLM's fast track program is the best of both worlds. It expeditiously prepares EISs in less than a year that are as comprehensive in breadth and scope as EISs that take multiple years.

There are currently nineteen renewable energy projects that are being fast tracked.⁷⁹ BLM fast tracked these projects because they were sufficiently advanced in the planning stages that BLM could approve them in less than one year.⁸⁰ The advanced state of preparation also makes it possible for BLM to prepare EISs because BLM knows the scope of the impacts of each project.

The problem with the fast track program is that it is probably unsustainable. It was designed to process projects before the end of 2010 to meet stimulus funding requirements, and BLM accomplished this by reassigning staff to prepare EISs and opening Renewable Energy Coordination Offices throughout the West to further expedite the process.⁸¹ Congress should not let business return to usual. There is broad consensus that our current fossil-fuel oriented energy generation practices are unsustainable and that sustainability requires more renewable sources. With so many other unmet priorities, devoting more resources to accelerate renewable project development is a difficult proposition as the United States emerges from recession with so many other unmet priorities. This fact is why spending funds on extra staff is the "ideal" policy solution.

Increased investment is not the only way to accelerate renewable project development. BLM has completed or is in the process of completing programmatic EISs for wind, solar, and geothermal in specific areas in the West.⁸² To oversimplify, these programmatic EISs will provide a basis of knowledge of environmental impacts of renewable energy project development within specified "study areas." Project developers would be able to take advantage of this knowledge and have their site-specific EISs prepared very efficiently if they locate their project within a study area.⁸³

⁷⁸ *BLM Concentrating on Renewable Energy Projects That Could Meet Stimulus Funding Deadline*, BUREAU OF LAND MGMT. (Dec. 29, 2009), <http://www.blm.gov/wo/st/en/info/newsroom/2009/december/0.html>.

⁷⁹ *See Renewable Energy Priority Projects*, BUREAU OF LAND MGMT. (Mar. 8, 2011), http://www.blm.gov/wo/st/en/prog/energy/renewable_energy/fast-track_renewable.html.

⁸⁰ *See id.*

⁸¹ *See id.*; *BLM Opens Second RECO Office to Help Fast-Track Renewable Projects*, THINK GEOENERGY (Oct. 12, 2009), <http://thinkgeoenergy.com/archives/2663>.

⁸² *See Geothermal Resources Leasing Programmatic EIS*, BUREAU OF LAND MGMT. http://www.blm.gov/wo/st/en/prog/energy/geothermal/geothermal_nationwide.html (last visited Mar. 17, 2011); *THE WIND ENERGY DEVELOPMENT FINAL PROGRAMMATIC EIS*, <http://windeis.anl.gov/eis/index.cfm> (last visited Mar. 17, 2011); *Solar Energy Development Programmatic Environmental Impact Statement*, BUREAU OF LAND MGMT. & DEP'T OF ENERGY, <http://solareis.anl.gov/index.cfm> (last visited Mar. 17, 2011).

⁸³ Ironically, Congress borrowed this idea to accelerate development of oil shale, tar sands, and other unconventional fossil fuels. *See* *The Oil Shale, Tar Sands, and Other Strategic Unconventional*

Due to these programmatic EISs, the impacts of renewable energy development on land and wildlife are becoming better understood. Now Congress needs to devote funds and staff to leverage this knowledge base to accelerate approval of renewable energy projects.

CONCLUSION

This Article has presented three legal and policy solutions to address the problem of how to develop renewable energy projects both efficiently and in an environmentally responsible manner. First, federal agencies should consider environmental benefits as well as adverse environmental impacts when preparing EAs and EISs for renewable energy projects. Second, the CEQ should further encourage federal agencies to utilize mitigated FONSIIs to efficiently conduct environmental reviews while reducing the threats of adverse environmental impacts. Finally, if Congress is serious about making renewables a greater part of this nation's energy sources, then it must match that desire with money. Although loan guarantees and other financial incentives will help, Congress should learn from the apparent success of BLM's fast track program and devote greater financial and staff resources to processing EISs for renewable energy projects. Although these three solutions will not solve all renewable energy project development problems, adopting them will help ensure that the bulldozers and construction cranes building tomorrow's renewable energy projects contribute to the greatest possible environmental benefits in the quickest time.

Fuels Act of 2005, 42 U.S.C. § 15927 (2006). President Obama recently directed the Secretary of the Interior to stop granting leases under The Unconventional Fuels Act because accelerating fossil fuel extraction was not in keeping with his Administration's policy of developing renewable sources. See Noelle Straub, *Interior Moves to Restrict Fast-Track Drilling Permits*, GREENWIRE (Apr. 1, 2010), <http://www.eenews.net/public/Greenwire/2010/04/01/3>.