features

Facilitating a Green Future? Permitting Reforms and Renewables on Public Lands

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he world is in the midst of a historic transition to a clean energy future. Indeed, the International Energy Agency projects that more renewable energy capacity will be installed in the next five years than in the last 100 years combined. Int'l Energy Agency, Renewables 2023: Executive Summary (Jan. 2024). The United States has been a leader in this transition, illustrated by the Biden-Harris administration's ambitious goals to transition to a carbon pollution-free electricity sector by 2035 and a net-zero emissions economy by 2050. Congress has supported these goals through, for example, the 2020 Energy Act's mandate for the Department of the Interior to permit 25 gigawatts (GW) of renewable electricity on federal public lands by 2025. Energy Act of 2020 § 3104, 43 U.S.C. § 3004. Even after reaching this 25 GW milestone in early 2024, the Biden-Harris administration took additional steps to expedite the decarbonization of the economy and mitigate climate change through several recent policy initiatives.

In many ways, these policy developments seek to balance the need for new renewable energy infrastructure with the risks posed to the health of our public lands and the wildlife and public resources they support. The Biden-Harris administration attempted to manage an unprecedented build-out of new infrastructure for a clean energy economy—solar and wind generation, storage, and transmission—while also ensuring the conservation and restoration of habitat for imperiled wildlife and other natural resources, which are increasingly stressed by the impacts of climate change. This article analyzes the key changes in the new regulations, forecasts how they may practically and jointly operate to shape permitting and environmental review procedures for renewable energy projects, and identifies the areas of greatest uncertainty as interested parties look toward implementation.

Environmental Review Reforms

The policy debate over the clean energy transition often focuses on "permitting reform," which many stakeholders often use as shorthand for "speeding up the NEPA process." In 1970, President Nixon signed the National Environmental Policy Act of 1969 (NEPA), 42 U.S.C. §§ 4321 et seq., following a near-unanimous bicameral vote. NEPA is unique because it does not purport to dictate any particular substantive outcome for the environment. Rather, NEPA functions procedurally, through its environmental impact statement requirement, 42 U.S.C. § 4332(C), to ensure that agencies consider environmental impacts and engage in informed decision-making. When it functions properly, the environmental review process channels the public's participation in the agency's decision-making process, ensures transparency and accountability in actions affecting public resources, and informs the agency's compliance with its substantive obligations under other environmental statutes.

The ongoing and intense debate over NEPA often focuses on the question of whether there are unreasonable delays in the permitting process and, if so, whether they are caused by the environmental review process or other factors like inadequate agency funding or missteps by project applicants. The merits of that debate are beyond the scope of this article. Importantly, however, Congress weighed in and passed some targeted amendments to NEPA in 2023 in the Fiscal Responsibility Act of 2023. Pub. L. No. 118-5, 137 Stat. 10. In doing so, Congress left intact the foundational policy objectives and requirements for environmental review while changing in certain ways how that review process is carried out.

First, Congress clarified the procedure if more than one agency is involved, providing for the designation of a lead agency and the preparation of one environmental review document to reduce duplicative work and promote interagency coordination. 42 U.S.C. § 4336a(a)–(b). Second, Congress created a one-year deadline for an environmental assessment, a two-year deadline for an environmental impact statement, and an exceptions process whereby the agency can extend the deadline "in consultation with the applicant" to take "so much additional time as is necessary." *Id.* § 4336a(g). Third, Congress mandated that agencies establish procedures allowing permittees to prepare their own environmental documents. *Id.* § 4336a(f).

In April 2024, the White House Council on Environmental Quality (CEQ) finalized a new rule that implements these changes to NEPA and makes additional revisions to the environmental review process. NEPA Implementing Regulations Revisions Phase 2, 89 Fed. Reg. 35,442 (May 1, 2024). Known colloquially as the "Phase 2 Rule," the new initiative was touted by CEQ as a way to accelerate environmental reviews while also ensuring strong environmental protections and public participation.

Notably, the legal force of the Phase 2 Rule, or any CEQ rule for that matter, is questionable as a result of a November 12, 2024, decision from the U.S. Court of Appeals for the D.C. Circuit. Although no party raised the issue, the D.C. Circuit held that CEQ lacks statutory authority to promulgate regulations implementing NEPA. *Marin Audubon Soc'y v. Fed. Aviation Admin.*, 121 F.4th 902 (D.C. Cir. 2024). The panel opinion is a major departure from more than 50 years of practice, and the parties have petitioned for rehearing *en banc*. Those petitions are still pending.

In addition to implementing the congressional changes, the Phase 2 rule also strengthens NEPA's procedural protections for the environment in some key ways. For example, agencies must specify an environmentally preferable alternative to the proposed action, promoting informed decision-making. 40 C.F.R. § 1502.12 (2024). Agencies must independently evaluate environmental review documents prepared by applicants or their contractors. Id. § 1506.5. In the same vein of informed decision-making, the Phase 2 rule reinforces that the environmental review process encompasses potential effects on climate change and environmental justice. Id. § 1500.2(e). Further, when an agency uses measures mitigating environmental impacts as the basis for its decision to permit the project, these mitigation measures are now enforceable. Id. § 1505.2(c). Agencies relying on enforceable mitigation must create a monitoring and compliance plan to ensure those measures are implemented. Id. § 1505.3(c).

Another important regulatory change pertains to "categorical exclusions" under NEPA. A categorical exclusion (CE) is a regulatory designation for categories of actions that normally do not significantly affect the environment. Actions covered by a CE are exempt from NEPA's normal environmental review process, potentially streamlining their review and approval. Federal agencies may create their own CEs, subject to CEQ approval and other procedural requirements for rulemaking; the Phase 2 rule provides clarity on how agencies can establish CEs moving forward. Phase 2 Rule, 89 Fed. Reg. at 35,469–75.

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With these statutory and regulatory changes under NEPA, Congress and agencies have created mechanisms to reduce the time frame of environmental review while reinforcing environmental safeguards by, for instance, buttressing the need to address climate change and environmental justice effects in the review documents. Only time will tell whether these new developments will speed up the clean energy transition on public lands while ensuring robust public participation and environmental protection.

Finally, it is worth noting that we are likely to see ongoing debate over the future of NEPA under the Trump administration, both in the halls of Congress and in the courts. The current Trump administration could propose reforms to NEPA's implementing regulations (pending the outcome of the *Marin County* case), as happened during the first Trump administration, and/or Congress could target NEPA reforms in future legislative packages. The Supreme Court is also considering an important NEPA case this term in *Seven County Infrastructure Coalition v. Eagle County*, Docket No. 23-975. The field of NEPA is more dynamic now than it has been in many decades, and practitioners will likely need to closely monitor future changes.

The Department of Energy's Categorical Exclusions

With regard to renewable energy infrastructure development, the Department of Energy (DOE) finalized three new or revised CEs in 2024. NEPA Implementing Procedures, 89 Fed. Reg. 34,074 (Apr. 30, 2024). First, the DOE revised CE B5.16, which exempted solar photovoltaic (solar PV) developments from NEPA review if they were less than 10 acres in area and sited on previously disturbed lands. Now, there is no acreage limitation. 10 C.F.R. § 1021.D app. B5.16 (2024). This change reflects the fact that NEPA reviews of solar PV developments as large as 1,100 acres have found no significant impact.

Nevertheless, B5.16 is unlikely to streamline the review of utility-scale solar projects. Most utility-scale solar farms which are projected to comprise 80 to 90% of solar power generation by 2045—often extend across 3,000 acres or more, making it nearly impossible for them to exist exclusively on previously disturbed lands or avoid some environmental risk worthy of NEPA review.

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Instead, this revised CE will likely matter most to community solar projects, which are often five to 50 acres large and allow nearby residents to buy a portion of the electricity generated there. Community solar is especially useful for residents who cannot install rooftop solar, whether because they are renting, have often shaded roofs, or cannot afford the upfront costs of such installations. As of June 2024, according to the DOE, community solar projects totaled a capacity of 7.87 GW, roughly 3.5% of the 219.8 GW total solar production in the United States. Solar Energy Indus. Ass'n, Solar Industry Research Data, SEIA.org (2024). This relatively small proportion of power will be bolstered by the Inflation Reduction Act's allocation of \$7 billion to the Greenhouse Gas Reduction Fund, which is intended to target residential and community solar projects in communities with the greatest need. 42 U.S.C. § 7434(a)(1). Therefore, B5.16 may help meet the demand for community solar project developments, which frequently require somewhat more than 10 acres of land to operate economically.

Second, the DOE created CE B4.14 to allow the construction, operation, upgrade, and decommissioning of electrochemical-battery storage systems within previously disturbed or developed areas. 10 C.F.R. § 1021.D app. B4.14 (2024). This new CE clearly works in tandem with the expanded scope of CE B5.16 because electrochemical storage is the most common storage method for solar PV farms. In addition, B4.14 may benefit existing utility-scale projects that are expanding their storage capacity within a previously disturbed area.

Electrochemical storage sites typically require just 1% of the acreage that an equally rated solar PV farm requires. Given their modest footprint, they are unlikely to implicate any extraordinary environmental circumstances that would preclude use of this CE if sited on previously disturbed areas.

Third, the DOE revised CE B4.13, *id*. § 1021.D app. B4.13, which previously allowed upgrading and rebuilding existing power lines less than 20 miles long. Now there is no mileage limitation, and these transmission rights-of-way may be widened to comply with current electrical standards. Id. Because 98% of transmission lines are less than 50 miles long, removing the 20-mile limit is unlikely to materially increase environmental risk, although sensitive site-specific conditions may still make this CE inapplicable. However, many of the activities that will invoke this CE are relatively environmentally benign, such as reconductoring existing powerlines. By some estimates, reconductoring can double the transmission capacity of our electrical grid simply by replacing existing conductors with advanced conductors, which have a higher capacity and are much more efficient. Emilia Chojkiewicz et al., Accelerating Transmission Capacity Expansion by Using Advanced Conductors in Existing Right-of-Way, 121 PNAS: Proc. Nat'l Acad. Sci. e2411207121 (Sept. 23, 2024).

In any case, expanding transmission capacity is critical to support our increasing electricity demands as renewable energy production grows. The DOE estimates we will need to expand transmission systems by 60% by 2030 and may need to triple those systems by 2050 to keep pace. DOE Off. of Policy, *Queued Up... But in Need of Transmission* (Apr. 2022).

While this CE applies only to existing powerlines, the DOE is also endeavoring to reduce the permitting time lines for new transmission projects. In a rule titled "Coordination of Federal Authorizations for Electric Transmission Facilities," the DOE aligned with the congressionally mandated two-year permitting time line—half of the average four-year time line for transmission projects. To achieve this speed, the rule, among other things, creates a pre-application process to reduce incomplete permit applications, which delay the process, and to ensure that relevant agencies may consider applications in parallel rather than sequentially.

Preserving the Health of Public Lands

The clean energy transition, especially in the American West, depends on public lands entrusted to the care of the Bureau of Land Management (BLM), which oversees more than 245 million acres in the United States. The Federal Lands Policy and Management Act (FLPMA), 43 U.S.C. §§ 1701 *et seq.*, provides the BLM with a "multiple use, sustained yield" mandate that includes protection of ecological and environmental values along with extractive uses like range, timber, and minerals.

To implement FLPMA's multiple-use, sustained-yield mandate, the BLM finalized a new rule that will guide the agency's management of public lands and play an important role in balancing development of clean energy infrastructure with the protection and restoration of natural resources. Conservation and Landscape Health, 89 Fed. Reg. 40,308 (May 9, 2024). At a high level, the BLM recognized in the new rule that its ability to meet FLPMA's multiple-use, sustained-yield mandate depends on the resilience of public lands to withstand disturbance and threats like climate change without suffering permanent impairment to productivity. The new rule, therefore, clarifies and formalizes regulatory tools for protecting intact, functioning landscapes; restoring degraded habitats and ecosystems; and managing projects, like clean energy infrastructure, that may impact environmental values.

This Public Lands Rule has been controversial and is predictably embroiled in litigation. Much of the debate focuses on the fact that BLM designated conservation as a use on par with other multiples uses. "Conservation" is defined as the "management of natural resources to promote protection and restoration," referring to "actions [that] are effective at building resilient lands." 43 C.F.R. § 6101.4(b). The BLM is explicit in the rule that it is seeking to balance conservation uses with other uses like energy production. Conservation Health, 89 Fed. Reg. at 40,320.

As attention turns towards implementing the Public Lands Rule, there are two key provisions that are particularly relevant to renewable energy development, and they work hand-inhand. First, the rule builds on the BLM's existing mitigation program by directing the BLM to apply a mitigation hierarchy when reviewing and approving projects that may involve adverse impacts on public resources. Id. at 40,318. The hierarchy is to avoid, minimize, and then compensate for those impacts, a framework for reviewing projects that is consistent with how CEQ defines mitigation under NEPA. 43 C.F.R. § 6102.5.1(a). Thus, the Public Lands Rule helps to ensure that mitigation requirements in FLMPA land management plans and project approvals will integrate easily with environmental review documents under NEPA. The rule also provides parameters for compensatory mitigation, requiring that those projects be durable, additional, and timely. *Id.* § 6102.5.1(c)(5). Finally, the rule authorizes the payment of funds to a third-party mitigation fund holder as a form of compensatory mitigation. Id. § 6102.5.1(d).

Second, the rule creates a new management tool—restoration and mitigation leases. *Id.* § 6102.4. Mitigation leases, in particular, are intended to "offset impacts to resources resulting from other land use authorizations," like a renewable energy project. *Id.* § 6102.4(a)(1)(ii). The rule states that the term of mitigation leases should be commensurate with the impact to be addressed, and it clarifies that such leases will be subject to valid existing rights. The leasing process is triggered by an application for a particular mitigation use. Authority to approve or deny the lease rests with the state BLM office, at least for the first year of the program. The BLM has published an Instruction Memorandum on the restoration and mitigation leasing program (IM2024-038 (Aug. 6, 2024)), but there are many unknowns that will be addressed as the project is implemented.

These provisions of the new Public Lands Rule provide the BLM with the apparent flexibility to approve the development of new infrastructure on public lands, with impacts to wildlife habitat or other sensitive natural resources, if the applicant commits to meaningful offsite mitigation. While the rule channels projects towards previously disturbed lands through its definition of mitigation, it is likely that these provisions will be tested by large, utility-scale renewable energy projects in areas that contain sensitive resources. When that happens, the BLM and the public will be closely scrutinizing offsite mitigation plans and mitigation leases.

Protecting Threatened and Endangered Species

The transition to a clean energy economy will impact landscapes that support threatened and endangered species. In places like the Great Basin of the western United States, new utility-scale solar, wind, and geothermal projects can potentially impact imperiled species listed under the federal Endangered Species Act (ESA), 16 U.S.C. §§ 1531–1544, like the desert tortoise and the greater sage grouse, underscoring the need for careful siting of projects and thoughtful regulatory oversight. For those projects that may impact a listed species, the U.S. Fish and Wildlife Service (FWS) will play a key role as a consulting agency under Section 7, *id*. § 1536, and will work with the permitting authority to ensure that renewable energy projects do not jeopardize the continued existence of any listed species or adversely modify critical habitat.

In April 2024, FWS published a final rule amending the regulations that govern the section 7 process under the ESA, which includes new provisions relating to mitigation. Regulations for Interagency Cooperation, 89 Fed. Reg. 24,268 (Apr. 5, 2024). When the FWS issues a biological opinion for actions that do not jeopardize a species, the incidental take statement includes reasonable and prudent measures (RPMs) necessary or appropriate to minimize the impact of the action on the species. In the 2024 rule, the FWS expanded the scope of RPMs to allow for "measures implemented inside or outside of the actions area that avoid, reduce, or offset the impact of incidental take." 50 C.F.R. § 402.14(i)(2). The regulations clarify that avoiding or reducing the extent of incidental take is the priority, but these new provisions allow for offsite mitigation where necessary. Allowing offsite mitigation may work to align the ESA consultation process with the other recent initiatives discussed above—such as the BLM's new mitigation leasing program under FLPMA. In the past, RPMs were more limited in their scope because they were cabined to onsite activities that did not alter the basic design of the action. Now, RPMs may entail offsite mitigation activities that still do not alter the action's design but provide an avenue for minimizing harm where onsite mitigation is not viable.

It is possible that these offsets will function through in lieu fee programs or conservation banks, where developers effectively fund conservation activities like habitat restoration. There also may be opportunities to integrate ESA recovery plans into the mitigation process by using those plans as a guide for identifying high-priority, offsite habitat restoration opportunities. To clarify these uncertainties and provide practical guidance for the implementation of RPMs, the FWS plans to revise its Consultation Handbook in the near future. Finally, it is important to remember that such offsets will be somewhat rare, only applicable in the context of no jeopardy actions with unavoidable impacts to species that cannot be addressed with onsite RPMs, and likely where established mitigation programs exist for the impacted species.

Outstanding Questions and Environmental Risks

Given the many regulatory changes affecting renewable energy infrastructure development, it is natural that questions remain, especially as to the environmental risks projects may pose and how permitting may change moving forward. Market forces are driving a historic shift to a clean energy economy, and the federal government has been attempting to facilitate this transition while also conserving sensitive resources. This is a delicate balance, and many renewable projects—especially on the utility-scale—will likely face legal challenges, delaying or even precluding operation.

While these recent regulatory initiatives provide agencies and project applicants greater flexibility during the environmental review process and in shaping mitigation programs, there are many areas of uncertainty. NEPA time lines still can be extended. Offsite mitigation plans can be disputed. The mitigation lease program is brand new and untested. Given all of these factors, developers would be wise to site projects as prudently as possible—near existing transmission corridors and on degraded and previously developed land. Developers who instead try to use offsets to justify development in more intact ecosystems are much more likely to run into potential litigation and costly delays. Where developers site prudently, however, these new regulatory tools should help expedite the permitting process and balance new infrastructure with the protection or restoration of wildlife habitats.

In this regard, large-scale restoration plans involving active management already have been controversial in areas like the Great Basin. The BLM, for example, has proposed "chaining"or removal of pinyon and juniper trees-across a 380,000-acre planning area to restore sage brush habitat and reduce fire risk. Conservation groups recently challenged the South Spring Valley and Hamlin Valley Watershed Restoration Plan in federal court, alleging negative environmental impacts of the proposed active management activities on sensitive habitats and wildlife species. Complaint at 2, W. Watersheds Project v. U.S. Dep't of the Interior, 2023 WL 6880397 (D. Nev. Mar. 23, 2023) (No. 2:23-cv-00435). The case illustrates that restoration projects in sensitive landscapes are often controversial and mitigation plans that rely on vegetation removal and other intensive management actions are more likely to generate controversy and litigation.

Even when there is a consensus that mitigation activities may be beneficial in some circumstances, they can still generate controversy. For example, offsite mitigation may not benefit an endemic species that relies on habitat in a specific geographic location. Further, allowing development on a certain stretch of land if a separate area of land is protected from development does not necessarily add a meaningful offset because the protected land may not have been suitable for development anyway. How can mitigation leases under FLPMA or RPMs under the ESA provide benefits on environmental values approximately equivalent to the impacts caused by development? How will mitigation plans ensure that the project benefits are durable, additional, and timely? How will project developers, conservation groups, members of the public, and agencies resolve disputes about proposed mitigation activities? There are many areas of uncertainty that will be illuminated through site-specific proposals, future agency guidance, and litigation.

Further, it remains to be seen how funding for agency permitting and environmental review will play out. All this work will require well-funded and well-staffed agencies that can review projects, work with developers, manage public engagement, and complete environmental reviews. If Congress is serious about facilitating the clean energy transition, it must make agency funding a top priority, which may be more difficult under the Trump administration.

The Biden-Harris administration catalyzed an interagency effort to facilitate the rollout of renewable energy infrastructure on public lands while emphasizing conservation of wildlife habitat and other natural resources that are already under stress. Nevertheless, because the initiatives discussed above leave several questions unanswered, particularly regarding environmental and permitting risks, stakeholders should monitor the implementation and stay tuned for any further agency guidance.

Notably, the Trump administration and 119th Congress are likely to continue to focus on permitting reform—but as a way to speed up more traditional forms of energy development like oil and gas drilling, with potentially variable impact on renewable energy projects. The Biden administration's regulatory changes could be rolled back, or the Republican-controlled Congress could instead take up further proposals for permitting reform and amendments to NEPA. However, in some cases, like DOE's new CEs that provide mechanisms to streamline environmental review, the Biden administration's changes could remain in place.

Nonetheless, long-term market forces will continue to drive interest in new renewable energy projects on public lands. As a result, interested stakeholders are likely to see ongoing changes to the legal and policy framework. ^(h)

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