



Recent Developments in the Federal Multipronged Approach to Solar and Wind Energy

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In the opening days of the Biden Administration, the President issued Executive Order 14008, directing the Administration to focus on actions to address climate change. In the wake of this directive, the federal government has taken actions to encourage the deployment of renewable energy and other low-carbon energy sources. Actions to expand generation and consumption of solar and wind energy are seen in three distinct arenas: (1) incentivizing renewable energy production and use, (2) increasing the use of public lands for solar and wind energy projects, and (3) expanding electricity transmission to allow utility-scale solar projects to connect to the grid and ultimately serve consumers. This Legal Sidebar identifies some legal considerations in the recent federal efforts to encourage and enhance solar energy production and consumption in each of these arenas.

Private Sector Incentives: The Inflation Reduction Act of 2022

The omnibus statute P.L. 117-169, commonly known as the Inflation Reduction Act of 2022 (IRA), included measures designed to encourage solar energy production and consumption. A key legal tool that Congress used to implement this policy was amending the Internal Revenue Code (IRC). Perhaps the most prominent of these amendments was the extension and modification of the investment tax credits (ITCs) for solar, wind, and geothermal energy projects and the companion credit for residential clean energy investments in Section 25D. Tax credits provide a dollar-for-dollar reduction of income taxes.

As amended by the IRA, Section 25D (which establishes the residential clean energy tax credit for individuals) now provides for an increased tax credit up to 30% of expenditures on certain clean energy property, depending on when the property is placed in service. The amendments also extend the credits through 2034.

Prior to passage of the IRA, Section 48 established the tax credit for businesses investing in renewable energy projects. The IRA amended Section 48 to extend the credit and adjust credit percentages, but it also adopted Section 48E, which will establish a new clean energy ITC for any projects placed into service after December 31, 2024. Rather than focusing explicitly on the technology being employed, the

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https://crsreports.congress.gov LSB11054 Section 48E ITC is technology-neutral on its face but is available only to facilities "for which the anticipated greenhouse gas emissions rate ... is not greater than zero" as determined in accordance with the standard for evaluation set forth in the IRC. The baseline Section 48E credit is 6% but can increase to 30% for facilities that satisfy certain requirements, including wage and apprenticeship requirements for employees.

In addition, the IRA seeks to incentivize renewable energy output with changes to the clean energy production tax credit (PTC). The Section 45Y production credit is available to electricity generation facilities placed into service after December 31, 2024, "for which the greenhouse gas emissions rate ... is not greater than zero." This credit, based on kilowatt-hours of electricity output, resembles the existing PTC for businesses under Section 45 of the IRC, much of which is set to be phased out after January 1, 2025. As with the ITC, the PTC increases substantially for taxpayers who satisfy the wage and apprenticeship requirements, rising from 0.03 cents per kilowatt-hour to 1.5 cents per kilowatt-hour. There are also increases for projects that serve disadvantaged "energy communities" and other policy-based adjustments as set forth in Section 45(b). Section 45Y(d) makes these adjustments applicable to the new PTC and clarifies that parties may claim only one of the ITC or PTC.

Public Land Incentives: New Rules for Wind and Solar Rights of Way

Title V of the Federal Land Policy and Management Act (FLPMA) authorizes the granting of rights of way for "systems for generation, transmission, and distribution of electric energy." This statute provides the framework for the development of solar energy and wind energy projects on federal lands managed by the Bureau of Land Management (BLM).

BLM's decisions about renewable energy resources on the lands under its purview are guided or directed by Section 207 of Executive Order 14008 and by recent legislation. For example, BLM develops "resource management plans" for areas under its purview in an effort to comply with the FLPMA mandate that lands be managed "under principles of multiple use and sustained yield." In June 2023, BLM published a proposed rule intended to "facilitate responsible solar and wind energy development on public lands managed by the BLM" within the existing framework created by FLPMA. The proposed rule would reduce costs associated with such development by reducing acreage rents and fees for existing and new wind and solar projects on federal lands, as Congress directed in Section 3004 of the Energy Act of 2020. It would also allow BLM to conduct non-competitive leasing by application (i.e., leasing without holding a public auction) in "designated leasing areas" for solar and wind energy projects. The rule would also clarify that BLM has authority to lease outside of the designated leasing areas. The comment period for this proposed rule closed on August 15, 2023.

BLM has also announced new efforts to amend resource management plans and update its Programmatic Environmental Impact Statement for solar energy in the West. According to BLM, these efforts will evaluate potential changes to BLM's utility-scale solar planning for purposes of the National Environmental Policy Act, including reconsideration of BLM's land use allocations. While the initial comment period closed in February 2023, BLM continues to hold scoping meetings on the proposed changes and invites stakeholders to get involved in the ongoing process.

Finally, Congress and the BLM have established a pilot program for solar energy leasing that more closely resembles the oil and gas leasing framework that BLM has employed for decades under the Mineral Leasing Act of 1920 (MLA). This framework, set forth at 43 C.F.R. Subpart 2809, follows the MLA model for competitive leasing, under which interested parties nominate lands to be leased, detailed regulations govern lessee eligibility and bid requirements, and the government is required to award the lease to the highest qualified bidder. The renewable pilot program regulations differ from the MLA regulations in a few important respects, however. For example, lessees under the MLA are required to pay royalties on their production. In contrast, the pilot program does not feature royalties and empowers BLM

to incentivize bidding with variable offsets for winning bidders. The pilot program also establishes an initial 30-plus-year term for the lease, while the MLA regulations dictate an initial 10-year lease.

Expansion of Capacity: Reach of Electricity Transmission

The aforementioned federal efforts to increase use of solar energy focus on expanding production through incentives and opportunities. However, the deployment of more solar energy may also create a need for new high-capacity transmission lines and improved regional planning related to transmission siting. Existing rules and policy related to transmission siting result in a piecemeal approach based on state-by-state decisions. The Federal Energy Regulatory Commission (FERC) could approve the siting of a transmission facility only if the relevant state commission withheld approval for more than one year.

To address this issue, Congress, in the Infrastructure Investment and Jobs Act (IIJA) in 2021, expanded and clarified the federal "backstop" authority to site transmission facilities in certain designated corridors. Section 40105 of the IIJA gives FERC authority to approve the construction and operation of electricity transmission facilities within designated "transmission corridors" if the state commission that has authority to approve the siting of the facilities in question refuses to consider or denies the requested siting approval. Under this provision, FERC has proposed regulations that would continue and enhance its role in creating transmission infrastructure to accommodate increased solar and other renewable energy output.

Under the IIJA, FERC's ability to site transmission facilities is still limited to instances in which (1) the state does not have the authority to do so, refuses to do so, or rejects the application and (2) the proposed facility is located within a designated "national interest electrical transmission corridor." The first limitation establishes the "backstop" nature of FERC's jurisdiction, as parties seeking to construct and operate transmission facilities must still go first to state authorities, if there are any with siting jurisdiction, before going to FERC. The second limitation is meaningful because the designation of a national interest electrical transmission corridor requires an extensive administrative proceeding and is vulnerable to legal challenge. For projects outside the designated corridors, states still have siting authority, and they may not prioritize grid expansion at the same scale or in the same locations. Some legislators have sought to further expand FERC's siting authority to reduce the effect of these limitations.

Using its other existing legal authorities, FERC recently finalized another rule of particular importance to wind and solar energy projects. Order No. 2023 directs public utility transmission providers to revise their service procedures and pro forma agreements. According to FERC, these changes are intended to address the technical and logistical challenges of connecting new and varied sources of electricity generation to the electric grid. FERC noted that the growth of new sources is "triggering large interconnection queue backlogs and uncertainty regarding the cost and timing of interconnecting to the transmission system, increasing costs for consumers" and affecting reliability. While the rule change does not explicitly contemplate wind and solar power generation, many issues that the rule addresses relate to independent renewable generators. Some of the rule's provisions—including speeding up the interconnection review process, altering the review criteria, and requiring certain technological transmission service changes—would likely make the grid more amenable to certain renewable energy technologies.

Conclusion

Taken together, these efforts illustrate the Biden Administration's multipronged approach to incentivizing solar energy generation and other renewable energy sources in the United States. Changes to the legal rules concerning tax treatment of projects, access to federal land, and the development of transmission capacity all have the potential to substantially increase the country's solar energy output.

Legislators who support or oppose these efforts have a number of options available to them. Many of the authorities granted to regulators that are discussed above are discretionary in nature, including BLM's actions under FLPMA and FERC's actions under the IIJA, and are subject to further change at the level of those administrative agencies. Lawmakers who seek to ensure that those actions continue may consider legislation to make them mandatory, and those who oppose those actions can pursue legislation that would remove certain legal authorities altogether.

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