Transmission Siting Reforms in the Infrastructure Investment and Jobs Act of 2021
Executives Summary

Decarbonizing the U.S. economy requires a clean electricity sector and cleaning up the electricity sector requires a very different transmission grid than the one in place today. The existing grid must be extended to reach regions where ample sun and wind can be converted into renewable power, and the grid must be able to transfer very large volumes of energy across whole regions to keep an increasingly renewable-reliant system in balance. Among other things, this means building large transmission lines that span the boundaries of multiple states.

Building any transmission line requires siting—that is, gathering property rights and regulatory permissions for a right-of-way in which transmission towers can stand and hundreds of kilovolts of power can flow safely. Federal law leaves the governance of siting almost entirely to states. This presents special challenges for developers of interstate transmission lines, because it means gathering the necessary properties and permissions from multiple state authorities through multiple, distinct proceedings.

Before passing the Infrastructure Investment and Jobs Act (IIJA), Congress considered several proposals for how to lower the hurdles to interstate transmission siting and development. The provisions it ultimately adopted establish an exception to state authority over siting, but that exception involves navigating multiple regulatory steps that are each subject to challenge in court. Thus, Congress made it possible for federal agencies to poke holes in the wall that otherwise keeps them out of transmission siting, but opted not to take authority over the siting of large, interstate lines from states and give it to federal agencies.

This policy brief highlights IIJA provisions that are relevant to transmission siting, summarizes the changes they effectuate, and describes important implications of those changes for efforts to develop more interstate transmission capacity. It then offers a brief assessment of the IIJA’s overarching significance to such efforts, including by comparing them to a more ambitious legislative alternative.

Key implications of particular IIJA sections include:

§ 40105: Makes it easier for the Department of Energy to designate areas where state authority over siting can be superseded, and for the Federal Energy Regulatory Commission to supersede that authority.

§ 40106: Makes funds available in several ways to transmission projects, including projects that avoid state siting authority because they are developed in partnership with federal agencies.

§ 40109: Makes funds available to state agencies to help defray costs of the studies and public engagement involved in transmission project planning and development.

§ 40113: Makes funds and authority available for the development of transmission that directly and indirectly enables more clean energy to flow across the U.S-Canada border in the Northwest.
1. Background

For the United States to reduce its greenhouse gas emissions to the extremely low level required for climatic stability and called for by international agreement, it will need the electricity sector to be very clean. And, to be operationally and economically viable, a clean electricity sector will require the development of substantial amounts of long-distance, high-voltage transmission capacity. However, several features of the legal and policy context that governs transmission development stand in the way. Siting transmission, which entails the gathering of property rights and regulatory permissions necessary to assemble the linear right-of-way needed to build a transmission line, is especially challenging because it remains almost entirely subject to state jurisdiction. As a result, even if the governments of states affected by a transmission project do not oppose its siting, state law and forums for decisionmaking and dispute resolution are available to transmission project opponents, who tend to make aggressive use of them.

The Department of Energy (DOE) and Federal Energy Regulatory Commission (FERC) have made reform of transmission development a leading priority. DOE issued billions of dollars in loans in April 2021 to support transmission grid development, and has kicked off a study of options for transmission to support Atlantic coast offshore wind development. FERC has convened the Joint Federal-State Task Force on Electric Transmission and is exploring an regulatory overhaul of key elements of transmission planning, project selection, cost allocation, and generation interconnection. These efforts, while meaningful and likely to pave parts of the road to long-distance transmission development, effect no changes to federal law in relation to transmission siting.

The Institute for Policy Integrity and Center on Global Energy Policy’s December 2020 report, *Building a New Grid Without New Legislation*, focused on administrative options available to federal agencies to facilitate the siting and development of long-distance, high-voltage electric transmission capacity. But that report also made clear that legislative solutions to transmission siting challenges are welcome—and likely superior to administrative options. The Infrastructure Investment and Jobs Act (IIJA), enacted about a year after *Building a New Grid* was published, amends some of the provisions of the Federal Power Act highlighted in that report. Those amendments give federal agencies a marginally greater role in transmission siting, along the lines recommended in *Building a New Grid*.

This policy brief discusses those amended provisions and other IIJA provisions that relate indirectly to siting, and briefly describes the potential significance of each of them. It also notes more ambitious transmission siting legislation that was proposed alongside the IIJA but has not progressed toward passage.
Building *a New Grid* discussed three forms of affirmative federal involvement in transmission siting: (1) establishment of a National Interest Electric Transmission Corridor (NIETC) and exercise of backstop siting authority within areas designated as NIETCs; (2) public-private partnerships between DOE and the developer of a specific transmission project; and (3) federal Power Marketing Administrations’ sponsorship and/or development of transmission in line with their particular obligations. The remainder of this section summarizes each of these, which are either changed by or otherwise relate to IIJA provisions.

**NIETCs and backstop siting.** The FPA leaves siting to the states, but Congress created a procedurally elaborate exception to that general rule with section 1221 of the Energy Policy Act of 2005.\(^9\) Section 1221(a) directs DOE to conduct a triennial study of where the transmission grid is congested and so might benefit from capacity expansion, and to designate one or more NIETCs based on that study. Section 1221(b) empowers FERC to take over siting decisions and authorizes project developers to pursue eminent domain claims in federal rather than state court in instances where a transmission project has been proposed within a NIETC and a state’s response constitutes obstruction under the statute. Implementation of these provisions entails:

- a DOE study of the grid to identify congested locations—that is, locations where a lack of transmission constitutes a bottleneck that causes consumers to pay more for electricity;
- a DOE report, based in part on the study, that designates one or more NIETCs;
- a rulemaking by FERC; and
- application of that rulemaking to one or more transmission projects whose siting is being impeded by a state process.

Litigation tripped up both agencies’ initial efforts at implementation. A 2011 decision by the U.S. Court of Appeals for the Ninth Circuit faulted DOE’s 2006 congestion study and thereby invalidated its 2007 NIETC designations.\(^10\) And a 2009 decision by the Fourth Circuit vacated and remanded the regulation FERC had adopted to implement backstop authority; specifically, the court interpreted 1221(b)(1)(C)(i) as allowing FERC to take over if a state fails to make a timely determination, but not if a state agency outright rejects a transmission project siting request.\(^11\)

In addition to sections 1221(a) and (b), sections 1221(e) and (i) also deserve mention. The former of these constitutes a key piece of FERC’s backstop siting authority: it authorizes FERC to employ eminent domain in qualifying circumstances.\(^12\) The latter provides that three or more contiguous states may enter into a compact to establish a regional transmission siting agency. This alternative to individual states making siting decisions would still keep that power from FERC.

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10. Cal. Wilderness Coalition v. FERC, 631 F.3d 1072 (9th Cir. 2011).
11. Piedmont Env’t Council v. FERC, 558 F.3d 304 (4th Cir. 2009).
12. Notably, this provision authorizes FERC to seek condemnation through federal court rather than state court in the jurisdiction that would be home to a given project.
**Partnership with DOE.** Section 1222 of the Energy Policy Act provides another way around state jurisdiction over siting—​one that is very different from the backstop siting authority created by section 1221. Section 1222 authorizes partnerships between private transmission developers and DOE (acting through either the Western Area Power Administration (WAPA), or Southwestern Area Power Administration (SWPA)) for new projects located in the contiguous, adjacent territories administered by WAPA and SWPA, which together cover about half of the continental United States. (Section 1222 does not pertain to the Bonneville Power Authority (BPA) or Southeast Power Authority (SEPA); see Figure 1.) More specifically, this provision invites private entities to contribute financially and otherwise to development of a transmission line that WAPA or SWPA will own and operate. Federal ownership frees the project from the requirements of state siting and public utility laws, while also providing a basis for the exercise of federal eminent domain authority. As with section 1221’s NIETC designation step, DOE must make particular findings to justify a partnership pursuant to section 1222. These relate to the need for the project, its conformity to the relevant rules of regional grid operation, and it not duplicating the functions of existing transmission capacity.

**Power Marketing Administrations.** The nation’s four PMAs were established by Congress to market and deliver hydropower generated at federally owned dams. As explained in *Building a New Grid*, the three largest PMAs own extensive transmission networks, can develop transmission facilities without seeking state permission for siting, and were authorized by the Northwest Power Act of 1980 and the American Recovery and Reinvestment Act of 2009 to develop transmission for purposes additional to the delivery of federal hydropower.

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14 Zevin et al., supra note 1, at 26 (citing United States v. 14.02 Acres of Land More or Less in Fresno County, 547 F.3d 943 (9th Cir. 2008) and explaining how section 1222, in combination with the Federal Condemnation Act, effectively makes eminent domain authority available for transmission development projects).
15 42 U.S.C. § 16421(b). Notably, location of a project in an NIETC satisfies the statutory criterion for identifying need for the project. Id. § 16421(b)(1)(A).
17 Zevin et al., supra note 1, at 26–27.
2. Relevant provisions of the IIJA

This section highlights four IIJA sections: 40105, 40106, 40109, and 40113. All of these appear in Division D, Energy, Title I, Grid Infrastructure and Resiliency.

§ 40105. Siting of interstate electric transmission facilities.

This section addresses the same slice of transmission development targeted by section 1221 of the Energy Policy Act of 2005: interstate transmission facilities, which must navigate siting challenges in at least two jurisdictions. The descriptions of the excerpted provisions of the IIJA below indicate what changed and then identify key implications of those changes.

SEC. 40105. SITING OF INTERSTATE ELECTRIC TRANSMISSION FACILITIES.

(a) DESIGNATION OF NATIONAL INTEREST ELECTRIC TRANSMISSION CORRIDORS.—Section 216(a) of the Federal Power Act (16 U.S.C. 824p(a)) is amended—

1. in paragraph (1)—

(A) by inserting “and Indian Tribes” after “affected States”; and

(B) by inserting “capacity constraints and” before “congestion”;

Amended provision: 1221(a)(2)–(4)

Affected output: DOE’s Transmission Study

Changes:

- Expands study’s scope: future studies should identify “capacity constraints” as well as “congestion.”
- Consultation: DOE is to consult Indian tribes as well as states, and the level of consultation required is to be the same for both the study and designation report.

Implications: These straightforward changes ensure that DOE takes a broad view of where transmission capacity additions would be helpful (like its 2006 study did), not a narrow one (like its 2020 study did), and direct DOE to consult Indian tribes as well as states. Previously, DOE was not obligated to consult with tribes on the study.

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18 Congestion describes a situation where least-cost regional generation resources are available to serve regional demand for electricity (load), but insufficient transmission capacity means that demand can only be met using other, more expensive generation resources instead. Congestion is thus one consequence of capacity constraints. But capacity constraints can also result in other effects, such as the avoidable curtailment of renewables, the development of new generation resources, or the inability of one segment of the grid to meet demand during a disruptive event that knocks out one or more transmission lines.
Amended provision: 1221(a)(2)

Affected output: DOE’s NIETC Designation Report

Changes:

- DOE is to issue a report at least once every three years.
- DOE is authorized to issue the report “based on the study … or other information relating to electricity capacity constraints and congestion.”
- When DOE consults states and tribes, the level of consultation required is to be the same for both the study and designation report.
- Adds factors that DOE may consider when designating an NIETC, so that designation is warranted if it would:
  - contribute to “energy security;”
  - “enhance the ability of facilities that generate or transmit firm or intermittent energy to connect to the electric grid;”
  - maximize existing rights-of-way and avoid or minimize sensitive environmental areas and cultural heritage sites; and
  - “result in a reduction in the cost to purchase electric energy for consumers.”

Implications: These changes largely decouple the report in which DOE designates NIETCs from the study prescribed by section 1221(a)(1). They do so by clarifying that DOE has discretion to issue a report designating one or more NIETCs more frequently than it issues the study. The Energy Policy Act of 2005 version could be read in that way, but this removes any doubt. Now, DOE need not wait for completion of a study—a process that includes consultation with states and tribes as well as environmental review—to develop and issue a report that designates NIETCs—a process that also requires consultation and environmental review. Further, DOE may base the designations in a report on “other information,” apart from what appears in a study prescribed by section 1221(a)(1), freeing DOE to supplement a study’s findings and conclusions with credible information from any number of sources.
In addition to decoupling the report from the study, these changes also add to the original list of six factors DOE may use to justify an NIETC designation. Those additions will likely make it easier for DOE to justify a wider variety of potential NIETCs, including one or more corridors that are tightly confined to the route or routes identified for a particular transmission project. One can imagine, for instance, DOE taking an opposite approach to its extremely large 2007 NIETC corridor designations and designating one or more NIETCs for specific projects that have stumbled on siting issues. To deal with those issues, DOE might designate a corridor around a particular route on the grounds that, by maximizing existing rights-of-way and minimizing other impacts, it is the least harmful option for a readily available transmission solution to a clearly identified need.

Amended provision: 1221(b)

Affected output: FERC-issued construction permits

Changes:

- Authorizes FERC to intervene if a state agency lacks authority to consider either interstate or interregional benefits of a transmission project.
- Clarifies the trigger for FERC intervention related to state agency delay by replacing “withheld approval” with “has not made a determination”
- Adds a new trigger: a state agency’s denial of an application.

Implications: The Energy Policy Act of 2005 authorized FERC to intervene if a given state’s law directed the state agency responsible for transmission permitting to consider only the in-state benefits of a proposed project. These changes expand the scope of benefits that state law must allow a permitting agency to consider if that agency is to keep FERC from taking over permitting authority for interstate transmission project proposals in NIETCs. Specifically, if an agency may not
consider *interregional* benefits—such as the added resilience available from transmission that spans two transmission planning regions\(^{21}\)—as well as merely out-of-state benefits, FERC may step in. These changes limit states’ ability to narrow the scope of what a public utility commission may consider when evaluating whether a proposed project would meet the relevant standard—generally being “in the public interest” or meeting a “public need.” It also pushes states toward a more homogeneous approach to assessing the benefits of local and interstate transmission projects.

These changes also eliminate the language that gave rise to the issue that the U.S. Court of Appeals for the Fourth Circuit resolved against FERC in *Piedmont*.\(^ {22}\) In that case, the court was asked to decide whether the act of withholding approval encompassed affirmatively denying approval; it decided, over a sharp dissent, that it did not.\(^ {23}\) This meant that, according to the Fourth Circuit, Congress had preserved states’ veto over transmission siting despite crafting an elaborate process of NIETC designation and application of backstop authority. By clarifying that FERC may intervene in a given transmission siting decision in both cases—a failure to decide for over a year or an affirmative denial—the IIJA provision removes the statutory basis for the *Piedmont* decision and with it states’ access to an ultimate veto over transmission siting.

**Amended provision: 1221(e)(1)**

**Affected output:** Exercise of eminent domain

**Changes:** Adds to what a party seeking a permit for transmission development must do before FERC may authorize the exercise of eminent domain.

**Implications:** Parties seeking FERC’s permission to use eminent domain must first make “good faith efforts to engage with landowners . . . early in the applicable permitting process.” This appears to codify what is simply good practice, and thereby introduces a check against siting efforts that seek to wholly ignore both landowners and state authorities and preemptively ask FERC to defeat any opposition to a project.


\(^{22}\) Piedmont Env’t Council v. FERC, 558 F.3d 304 (4th Cir. 2011).

\(^{23}\) *Id.* at 304
(d) INTERSTATE COMPACTS.—Section 1221(i) of the Federal Power Act (16 U.S.C. 824p(i)) is amended—

(1) in paragraph (2), by striking “may” and inserting “shall”; and

(2) in paragraph (4), by striking “the members” and all that follows through the period at the end and inserting the following: “the Secretary determines that the members of the compact are in disagreement after the later of—

“(A) the date that is 1 year after the date on which the relevant application for the facility was filed; and

“(B) the date that is 1 year after the date on which the relevant national interest electric transmission corridor was designated by the Secretary under subsection (a).”.

Amended provision: 1221(i)

Affected output: Interstate compacts

Changes: Simplifies grounds for DOE to determine that an interstate compact has failed.

Implications: States might try to avoid FERC’s authority to disregard an affirmative denial of a transmission developer’s application by joining an interstate compact but then not allowing that compact to authorize transmission development. This change simplifies the grounds on which DOE can determine that a compact has failed such that FERC may disregard it and take over siting authority within an NIETC.

§ 40106. Transmission facilitation program.

This section of the IIJA does not amend an existing law but makes a great deal of funding available for transmission development, whether in the form of a capacity contract between DOE and a project developer, a loan from DOE, or participation by DOE in “designing, developing, constructing, operating, maintaining, or owning an eligible project.”

SEC. 40106. TRANSMISSION FACILITATION PROGRAM.

(b) Establishment.—There is established a program, to be known as the “Transmission Facilitation Program”, under which the Secretary shall facilitate the construction of electric power transmission lines and related facilities in accordance with subsection (e).

(e) Facilitation of Eligible Projects.—

(1) In general.—To facilitate eligible projects, the Secretary may—

(A) subject to subsections (f) and (i), enter into a capacity contract with respect to an eligible project prior to the date on which the eligible project is completed;

(B) subject to subsections (g) and (i), issue a loan to an eligible entity for the costs of carrying out an eligible project; or

(C) subject to subsections (h) and (i), participate with an eligible entity in designing, developing, constructing, operating, maintaining, or owning an eligible project.

IIJA § 40106(e)(1)(A)–(C).
Implications: Congress expressly authorized here that projects developed in partnership with DOE pursuant to Energy Policy Act section 1222 can participate in the Transmission Facilitation Program, and so access its funding mechanism. Whereas section 1222 anticipates that private entities will finance some or all of a given project, this additional authorization means that substantial public financing is now also potentially available to projects that can avoid state siting requirements by dint of their ownership by WAPA or SWPA.

§ 40109. State energy program.

Whereas sections 40105 and 40106 focus on federal agencies, section 40109 focuses on states. Specifically, it addresses state energy programs that were established to receive funding and technical assistance pursuant to the Energy Policy Conservation Act of 1975 (EPCA), as amended.

SEC. 40109. STATE ENERGY PROGRAM.

(a) COLLABORATIVE TRANSMISSION SITING.—Section 362(c) of the Energy Policy and Conservation Act (42 U.S.C. 6322(c)) is amended—

(1) in paragraph (5), by striking “and” at the end;
(2) in paragraph (6), by striking the period at the end and inserting “; and”;
(3) by adding at the end the following:
“(7) the mandatory conduct of activities to support transmission and distribution planning, including—
(A) support for local governments and Indian Tribes;
(B) feasibility studies for transmission line routes and alternatives;
(C) preparation of necessary project design and permits; and
(D) outreach to affected stakeholders.”.

(b) STATE ENERGY CONSERVATION PLANS.—Section 362(d) of the Energy Policy and Conservation Act (42 U.S.C. 6322(d)) is amended by striking paragraph (3) and inserting the following:
“(3) programs to increase transportation energy efficiency, including programs to help reduce carbon emissions in the transportation sector by 2050 and accelerate the use of alternative transportation fuels for, and the electrification of, State government vehicles, fleet vehicles, taxis and ridesharing services, mass transit, school buses, ferries, and privately owned passenger and medium- and heavy-duty vehicles.”.

(c) AUTHORIZATION OF APPROPRIATIONS FOR STATE ENERGY PROGRAM.—Section 365 of the Energy Policy and Conservation Act (42 U.S.C. 6325) is amended by striking subsection (f) and inserting the following:
“(f) AUTHORIZATION OF APPROPRIATIONS.—
“(1) IN GENERAL.—There is authorized to be appropriated to carry out this part $500,000,000 for the period of fiscal years 2022 through 2026.
“(2) DISTRIBUTION.—Amounts made available under paragraph (1)—

“(A) shall be distributed to the States in accordance with the applicable distribution formula in effect on January 1, 2021; and

“(B) shall not be subject to the matching requirement described in the first proviso of the matter under the heading ‘DEPARTMENT OF ENERGY’ in title II of the Department of the Interior and Related Agencies Appropriations Act, 1985 (42 U.S.C. 6323a).”.

Id. § 40106(h) (“Public-Private Partnerships”) & (j)(6) (“Third-Party Finance”).
Amended provision: EPCA § 362(c)

Affected output: State Energy Plans

Changes:

- Directs all states that operate state energy plans pursuant to EPCA are to incorporate transmission planning into their plans.

- Provides $500 million to support implementation of transmission planning activities, which include feasibility studies, permitting, and outreach to affected stakeholders. Those funds are not subject to any matching requirements; states do not need to contribute their own funding, only carry out eligible activities.

Implications: The costs to states of merely preparing for possible development of transmission capacity can be substantial. They include commissioning studies of economic and environmental impacts, convening meetings and public hearings, and conducting other forms of technical preparation and outreach to stakeholders. Defraying those costs removes a potentially meaningful barrier for the state agencies involved in the transmission development process.

§ 40113. Columbia Basin power management.

This section also does not amend an existing statute. The main thrust of this section aims at the development of transmission to improve flows of hydropower and other forms of clean energy across the border between Canada and the United States. But it only conditions its authorization of and funding for transmission development throughout the BPA region on that development “directly or indirectly facilitat[ing] non-carbon emitting electric power transactions between the western United States and Canada.” Thus, a transmission project could qualify if it alleviated an intra-regional capacity constraint responsible for curtailing the operation of existing renewables or preventing the development and interconnection of new renewable facilities.

SEC. 40113. COLUMBIA BASIN POWER MANAGEMENT.

(b) Transmission Coordination and Expansion.—

(1) Establishment.—There is established in the Treasury an account for the purposes of making expenditures to increase bilateral transfers of renewable electric generation between the western United States and Canada.

(2) Criteria.—

(A) In general.—The Administrator may make expenditures from the Account for activities to improve electric power system coordination by constructing electric power transmission facilities within the western United States that directly or indirectly facilitate non-carbon emitting electric power transactions between the western United States and Canada.

26 IIJA § 40109.
3. Assessment

The IIJA’s transmission siting provisions represent a modest but potentially important update of existing law. These provisions offer new funding for transmission development—whether undertaken by private or federal entities, or a combination of the two—and new authority to FERC to site privately developed interstate transmission. Providing funds to PMAs, giving DOE more flexibility in its designation of NIETCs, and dispensing with the barrier erected by Piedmont could all help move interstate transmission siting efforts ahead. Further, the IIJA also provides funding for efforts by states to conduct the studies and outreach that are critical to developing transmission without simply running roughshod over affected communities.

When viewed alongside other, more ambitious legislative proposals, the likely impact of the IIJA’s siting provisions appears fairly modest and regionally spotty. The Streamlining Interstate Transmission of Electricity (SITE) Act, for instance, which has been proposed in the Senate but has not progressed toward passage, provides an illustrative contrast. It would take a more direct and thorough approach to the task of balancing priorities related to transmission siting, including energy transition, state versus federal jurisdiction, fairness, and environmental protection. Most importantly, the SITE Act would give FERC siting authority over all transmission lines that (1) traverse at least two states, and (2) have a capacity of at least one gigawatt. In addition, procedural requirements would be leaner and focused on specific projects, rather than corridors in which projects might eventually be built. So, whereas the IIJA’s provisions make it possible for FERC to claim authority over transmission siting in select instances after multiple steps are followed and numerous criteria met, the SITE Act would simply make federal authorities responsible for the siting of large interstate lines, while state authorities would continue to be responsible for the siting of lines that are smaller, intrastate, or both.

Will the IIJA’s provisions make it possible for DOE (or its PMAs) and FERC to pave the way for (or rescue) projects like the Northeast Clean Energy Corridor line that would pass through Maine to connect Hydro Quebec’s reservoirs to the Boston region? If FERC adopts an implementing regulation and DOE hurries through the steps required for corridor designation, perhaps those agencies could deprive utility and grass roots transmission opponents of the means to impede interstate transmission development. However modest the IIJA’s siting-related provisions appear next to the SITE Act, in the absence of an alternative, and given the urgency, necessity, and difficulty of long-distance transmission development, federal agencies should make full use of what the IIJA grants them.

27 That bill, S. 2651, was co-sponsored by Senators Heinrich, (D-NM), Hickenlooper (D-CO), and Whitehouse (D-RI), and, as of this writing, has not yet been the subject of a vote in the Senate’s Energy and Natural Resources Committee.

28 See Iaconangelo, supra note 2.

29 In the case of the Northeast Clean Energy Corridor, one issue that might make the IIJA provisions insufficient is the location of state-owned land under the most contentious segment of the project. As attorneys at Vinson & Elkins have pointed out, the IIJA does not clearly enable FERC to bypass state authority with respect to state-owned land. Michael Wigmore, Brandon Tuck & Kelly Rondinelli, Feds May Need Power to Take State Lands for New Grid, Law360 (Oct. 20, 2021) (noting that the FPA provision for eminent domain—in contrast to the relevant provision in the Natural Gas Act—explicitly disallows use of eminent domain over state-owned lands).