

**U.S. Department of Energy Grid Deployment Office
Initiation of Phase 2 of National Interest Electric Transmission Corridor (NIETC)
Designation Process: Preliminary List of Potential NIETCs
Issued Pursuant to Section 216(a) of the Federal Power Act**

May 8, 2024

NIETC Designation Process Action	Date
Phase 2: Issuance of Preliminary List of Potential NIETCs; Opening of Phase 2 Information Submission Window	May 8, 2024
Phase 2: Closing of Comment Period on Preliminary List of Potential NIETCs and Phase 2 Information Submission Window	June 24, 2024
Phase 3: In-Depth NIETC Evaluation and Preparation of Draft Designation Report(s) and NEPA Draft Environmental Document(s), As Needed	Anticipated to begin Fall 2024
Phase 4: Final Designation Report(s) and NEPA Environmental Document(s), As Needed	TBD

Transmission Facility Financing Action	Date
Issuance of Minimum Eligibility Criteria; Opening of Scoping Period	May 8, 2024
Closing of Initial Outreach Period	July 31, 2024
Anticipated Opening of Formal Application and Evaluation Process	Spring 2025

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I. General Announcement

This issuance, prepared by the U.S. Department of Energy (DOE) Grid Deployment Office's (GDO) Transmission Division, initiates Phase 2 of the nonbinding process that DOE plans to generally follow to designate National Interest Electric Transmission Corridors (NIETC) pursuant to section 216(a) of the Federal Power Act (FPA),¹ as amended by the Infrastructure Investment and Jobs Act (IIJA).² It also states minimum eligibility criteria for direct loans under the Inflation Reduction Act's Transmission Facility Financing (TFF) program and invites input about the scope of eligible projects and associated project financing requirements.³

In general, a NIETC is a geographic area where, based on its triennial National Transmission Needs Study (Needs Study)⁴ or other relevant information, DOE has identified present or expected transmission capacity constraints or congestion that adversely affects consumers, and that has been designated by the Secretary of Energy (Secretary) as a NIETC. One or more transmission projects could be located within that geographic area to alleviate such constraints or congestion. NIETC designation enables DOE and the Federal Energy Regulatory Commission (FERC) to use valuable federal financing and permitting tools to spur construction of transmission projects within a NIETC.

DOE released guidance on December 19, 2023, setting forth a NIETC designation process with four phases (NIETC Guidance).⁵ Phase 1 began with the issuance of the NIETC Guidance on December 19, 2023, and ends with this issuance. This issuance—DOE's first public announcement following the close of the Phase 1 information submission window on February 2, 2024—initiates Phase 2. This issuance, hereinafter referred to as the preliminary list of potential NIETCs, identifies which potential NIETCs DOE is continuing to consider, provides a high-level explanation of the basis for those potential NIETCs, and opens a public comment period. During the 45-day comment period (which includes a Phase 2 information submission window), DOE invites interested parties to comment on the information contained within the preliminary list of potential NIETCs and to submit additional information on geographic boundaries and potential impacts on environmental, community, and other resources based on the list included in the NIETC Guidance for Phase 2. DOE will prioritize which potential NIETCs from the preliminary list move to Phase 3 based on the available information on geographic boundaries and potential

¹ 16 U.S.C. 824p.

² Pub. L. No. 117-58 (Section 40105).

³ Pub. L. No. 117-169 (Section 50151); 42 U.S.C. 18715.

⁴ See 16 U.S.C. 824p(a)(1) (requiring DOE to conduct a triennial nationwide study of transmission capacity constraints and congestion); DOE, *National Transmission Needs Study* (Oct. 2023), https://www.energy.gov/sites/default/files/2023-12/National%20Transmission%20Needs%20Study%20-%20Final_2023.12.1.pdf (2023 Needs Study).

⁵ DOE, *Guidance on Implementing Section 216(a) of the Federal Power Act to Designate National Interest Electric Transmission Corridors*, <https://www.energy.gov/sites/default/files/2023-12/2023-12-15%20GDO%20NIETC%20Final%20Guidance%20Document.pdf> (NIETC Guidance); see also *Notice of Availability of Guidance on Implementing the Federal Power Act to Designate National Interest Electric Transmission Corridors*, 89 FR 909 (Jan. 8, 2024).

impacts on environmental, community, and other resources and preliminary review of comments.⁶ Phase 3 includes robust public engagement and DOE's preparation of draft NIETC designation report(s) pursuant to the FPA and draft environmental document(s) pursuant to the National Environmental Policy Act (NEPA),⁷ as needed. Phase 4 is the conclusion of the NIETC designation process with DOE's issuance of final NIETC designation report(s) and final environmental document(s), as needed.

Pursuant to FPA section 216(a)(2), DOE has considered the results of its 2023 Needs Study as well as other information relating to electric transmission capacity constraints and congestion to develop this preliminary list of potential NIETCs. DOE has also developed this preliminary list taking into account the preliminary finding in the NIETC Guidance that NIETC designation may be particularly valuable in geographic areas where the 2023 Needs Study identifies the need for increased interregional transfer capacity.⁸ In addition, this preliminary list was informed by numerous information submissions and recommendations from interested parties received during Phase 1 as well as DOE's internal preliminary analysis of known possible environmental, community, and other resource impacts. DOE reviewed all information submissions, recommendations, and comments and is exercising its independent judgment regarding which potential NIETCs to include in the preliminary list to initiate Phase 2. DOE will similarly review all information submissions, recommendations, and comments received during Phase 2 focused on the potential NIETCs in this preliminary list to inform its discretion as to which potential NIETCs will proceed to Phase 3, with particular focus on additional information gathered on geographic boundaries and potential impacts on environmental, community, and other resources.

The potential NIETCs included in the preliminary list, depicted on the map below and described within this issuance, focus on geographic areas where present or expected transmission capacity constraints or congestion that adversely affects consumers could be alleviated by the construction of new or upgraded transmission lines. In most cases, the potential NIETCs included in the preliminary list include one or more potential transmission projects in some stage of development where a NIETC designation could help advance development of those projects. The potential NIETCs included here each address key findings in the 2023 Needs Study, especially with regard to the need to increase interregional transfer capacity to maintain and improve reliability and resilience in response to events like extreme weather, to lower consumer costs, and to help meet future generation and demand changes. In addition, the potential NIETCs would address transmission needs identified by regional transmission planning entities in some instances, and in all cases, reflect multiple drivers of present and expected transmission capacity constraints and congestion.

DOE preliminarily finds that the geographic areas contained within these potential NIETCs constitute targeted, high-priority areas where NIETC designation is likely to catalyze

⁶ NIETC Guidance at 36 (describing DOE's technical completeness assessment and preliminary review of public comments to determine which potential NIETCs move to Phase 3).

⁷ 42 U.S.C. 4321, et seq.

⁸ NIETC Guidance at 23-30 (explaining DOE's preliminary finding).

transmission development to alleviate transmission capacity constraints or congestion and the associated adverse effects on consumers, thereby making the most efficient and effective use of DOE's resources. DOE intends to employ NIETC designation in one or more of these geographic areas to further the timely buildout of a reliable, resilient, and efficient transmission system that facilitates the achievement of national energy policy goals while reducing consumer energy costs.

With respect to the TFF program, under which DOE can provide direct loan support for transmission facilities located within a NIETC, this issuance provides additional guidance in the way of minimum eligibility criteria. DOE also invites input from transmission industry stakeholders about the scope of eligible TFF projects and associated project financing requirements, including information about specific projects in or near one of the potential NIETCs in the preliminary list. DOE will use information gathered during this scoping period to inform its formal TFF application and evaluation process, which is anticipated to open in 2025.

II. Authority

The authorizing statute for the NIETC designation process is section 216(a) of the FPA, as amended by the IIJA, codified at 16 U.S.C. 824p(a).⁹

III. Preliminary List of Potential NIETCs

A. Interpreting the Preliminary List of Potential NIETCs

Below, DOE identifies which potential NIETCs it is continuing to consider in Phase 2, provides a high-level explanation of the basis for those potential NIETCs, and opens a 45-day public comment period (including a Phase 2 information submission window) to receive additional public input specific to these potential NIETCs.

The explanation provided below reflects DOE's preliminary determination that each potential NIETC on the preliminary list, whether identified by DOE via review of the 2023 Needs Study or via review of the information submitted by interested parties during Phase 1 of the NIETC designation process, encompasses present or expected transmission capacity constraints or congestion that adversely affects consumers. It is important to emphasize that this is a *preliminary* step: a more in-depth evaluation of transmission capacity constraints or congestion and adverse effects on consumers will follow for those potential NIETCs that proceed to Phase 3 after DOE's review of information gathered during Phase 2.¹⁰ Interested parties are encouraged to submit comments and additional information focused on the potential NIETCs in the preliminary list to inform DOE's determination as to which potential NIETCs move into Phase 3.

⁹ For additional explanation of the statutory framework, see NIETC Guidance at 7-8.

¹⁰ NIETC Guidance at 36-41 (describing DOE's activities during Phase 3 of the NIETC designation process).

While DOE preliminarily finds that the potential NIETCs on the preliminary list are targeted, high-priority areas for transmission development, DOE does not conclude, preliminarily or otherwise, that areas *excluded* from these potential NIETCs are not. Rather, this preliminary list is the result of DOE's first initiation of the NIETC designation process following the 2023 Needs Study and the development of the new four-phase designation process. It reflects DOE's consideration of information submissions and recommendations from interested parties received during Phase 1 as well as internal DOE analysis. It also reflects the fact that NIETC designation, including conducting environmental reviews, is both time- and resource-intensive, for DOE, as well as for interested parties engaged in the process, creating a natural limit on the number of potential NIETCs that can reasonably proceed at this time. The potential NIETCs on the preliminary list, when considered together, offer diversity in a range of ways, including geographical location within the United States, as well as variation in size and scope. NIETCs identified in Phase 1 information submissions that are not included in this preliminary list of potential NIETCs are not moving forward in this submission window, though resubmissions are allowed in future Phase 1 information submission windows.¹¹

The geographic boundaries of any potential NIETC that proceeds to Phase 3 may ultimately differ from what is presented here. The same is true for any potential NIETC that proceeds through Phases 3 and 4 as well: the geographic boundaries may change as DOE gathers more information and conducts more analysis. In other words, the geographic boundaries of a NIETC are not final until DOE issues a final NIETC designation report, following completion of environmental review. For that reason, the maps contained within this preliminary list of potential NIETCs should be viewed as both preliminary and as rough approximations.

The geographic boundaries of potential NIETCs in this preliminary list vary in width and length due to the nature of the locations, population centers, land status, complexity associated with conducting meaningful on-the-ground surveys, physical and natural impacts, as well as transmission needs, including accounting for existing infrastructure. At this time, DOE has not conducted a full desktop analysis or a baseline assessment to confirm the presence of environmental impacts. DOE plans to conduct such an assessment and to adjust the geographic boundaries of each potential NIETC that proceeds to Phase 3 once additional environmental and community impact information is gathered during Phase 2 and DOE has a better understanding of potential implications associated with the potential NIETC designations. For example, the geographic boundaries may be narrowed or shifted based on additional information gathered in Phase 2 to allow for a more targeted potential NIETC, or similarly the length of the potential NIETC may be reduced to focus on an area of greatest utility for NIETC designation. Interested parties are encouraged to submit comments and additional information focused on the specific geographic boundaries of potential NIETCs in the preliminary list and the resources that may be located with those boundaries. Interested parties are also encouraged to identify potential

¹¹ Note that nothing in the NIETC Guidance or this preliminary list of potential NIETCs limits or forecloses a potential DOE decision to designate a geographic area that DOE determines meets the statutory requirements of FPA section 216(a)(2)-(4) as a NIETC, notwithstanding the lack of a recommendation from an interested party or departure from the four-phase process described in the Guidance. *Id.* at 60.

transmission projects under development in close proximity to or within these potential NIETCs that may warrant changes to the geographic boundaries of the potential NIETCs or otherwise factor into DOE's assessment of which potential NIETCs proceed to Phase 3. Interested parties will have the opportunity to submit comments and additional information on these issues for those potential NIETCs that proceed to Phase 3 as well.

To be clear, this preliminary list of potential NIETCs, and the public comment period that follows its issuance, does not initiate any environmental review and authorization processes, including the environmental scoping process under NEPA. The start of these processes will be addressed in Phase 3 once DOE determines which potential NIETCs will proceed and makes a decision regarding the appropriate level of environmental review required. At that time, DOE will complete a full desktop analysis or baseline assessment and prepare a Notice of Intent to formally announce DOE's proposed action and the narrow geographic area for potential NIETC designation to be assessed in Phase 3, as needed based on additional information gathered to date.

B. Relevant Discretionary Factors

To designate a NIETC, the FPA requires that DOE find that the geographic area is experiencing or is expected to experience transmission capacity constraints or congestion that adversely affects consumers.¹² DOE's high-level preliminary finding as to this aspect of NIETC designation is explained under each potential NIETC discussed below.

While the Secretary must consider the findings of the Needs Study or other pertinent information in designating one or more NIETCs in a designation report, FPA section 216(a)(4) allows the Secretary to consider several additional factors in determining whether to designate a NIETC (i.e., "discretionary factors"). DOE's preliminary assessment of the relevance of the statutory discretionary factors to the potential NIETCs in this preliminary list revealed that more information is needed for a meaningful assessment. Therefore, these discretionary factors are not discussed under each potential NIETC below. That said, the potential NIETCs in the preliminary list share a few important characteristics that will be relevant to DOE's consideration of the discretionary factors moving forward.

First, every potential NIETC in the preliminary list would further one or more national energy policy goals outlined in the NIETC Guidance, consistent with FPA section 216(a)(4)(D).¹³ For example, almost every potential NIETC would directly address the need for additional transmission capacity to maintain reliability and bolster resilience to meet the challenges of more frequent extreme weather and other disruptive events.¹⁴ By targeting areas where there are present or expected transmission capacity constraints or congestion, the potential NIETCs

¹² 16 U.S.C. 824p(a)(2).

¹³ NIETC Guidance at 11-13.

¹⁴ *Id.* at 11 (discussing the value of greater resource sharing across wider regions and increased interregional and cross-interconnection transmission capacity benefits).

naturally focus on reducing costs for consumers, expanding access to more cost-effective electricity supply.¹⁵ This is not only a national energy policy goal but also a separate discretionary factor in the statutory framework.¹⁶ These potential NIETCs also have the ability to unlock significant clean energy potential, including offshore wind generation, in furtherance of the Biden-Harris Administration’s national goals to reduce U.S. greenhouse gas emissions at least 50% below 2005 levels by 2030, including by deploying 30 GW of offshore wind energy by 2030, and to reach net zero emissions by 2050.¹⁷

In addition to national energy policy goals, many of the potential NIETCs in the preliminary list would maximize the use of existing rights of way, including utility and highway rights-of-way, and multi-function energy corridors established on federal lands under section 368 of the Energy Policy Act of 2005, and would “avoid[] and minimize[], to the maximum extent practicable, and offset[] to the extent appropriate and practicable, sensitive environmental areas and cultural heritage sites.”¹⁸ DOE intends to continue to pursue these aims as it refines the geographic boundaries of potential NIETCs in Phases 2 and 3, recognizing that the rough approximation of geographic boundaries included in this preliminary list for each potential NIETC is based only on the information that is currently available for evaluation and that additional information received in Phases 2 and 3 will help refine these boundaries.

For many of the potential NIETCs, transmission development is likely to result in improved economic vitality and development, economic growth, diversification of supply, and streamlined generator interconnection, and for some, enhanced energy independence, all of which are included in the list of discretionary factors that DOE may consider as it proceeds to NIETC designation through Phases 3 and 4 of the process.¹⁹ More detail on the discretionary factors that DOE finds are relevant to each potential NIETC designation will be included in the draft designation report(s) in Phase 3. Interested parties are encouraged to submit comments and additional information focused on the potential NIETCs in the preliminary list regarding the relevance of discretionary factors in FPA section 216(a)(4).

C. Potential NIETCs

Potential National Interest Electric Transmission Corridor (NIETC) areas across the United States map that are subject to change once additional data is obtained in Phase 2.

¹⁵ *Id.* at 11-12 (discussing reduced costs for consumers).

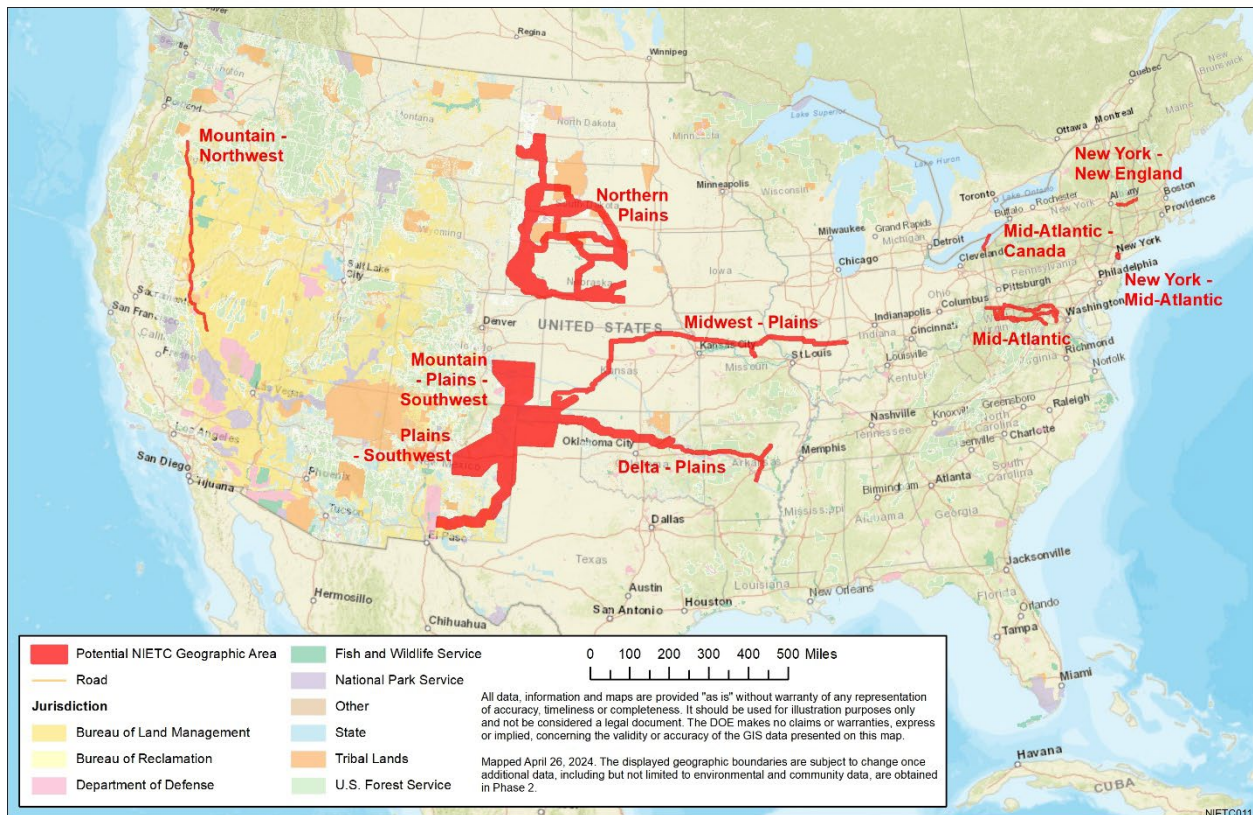
¹⁶ See 16 U.S.C. 824p(a)(4)(H) (“[T]he designation would result in a reduction in the cost to purchase electric energy for consumers.”).

¹⁷ NIETC Guidance at 12-13 (discussing clean energy goals at the national and state and local levels); see also *Fact Sheet: Biden Administration Jumpstarts Offshore Wind Energy Projects to Create Jobs* (Mar. 29, 2021), <https://www.whitehouse.gov/briefing-room/statements-releases/2021/03/29/fact-sheet-biden-administration-jumpstarts-offshore-wind-energy-projects-to-create-jobs/>.

¹⁸ 16 U.S.C. 824p(a)(4)(G).

¹⁹ See generally 16 U.S.C. 824p(a)(4) (listing all discretionary factors that the Secretary may consider in designating one or more NIETCs).

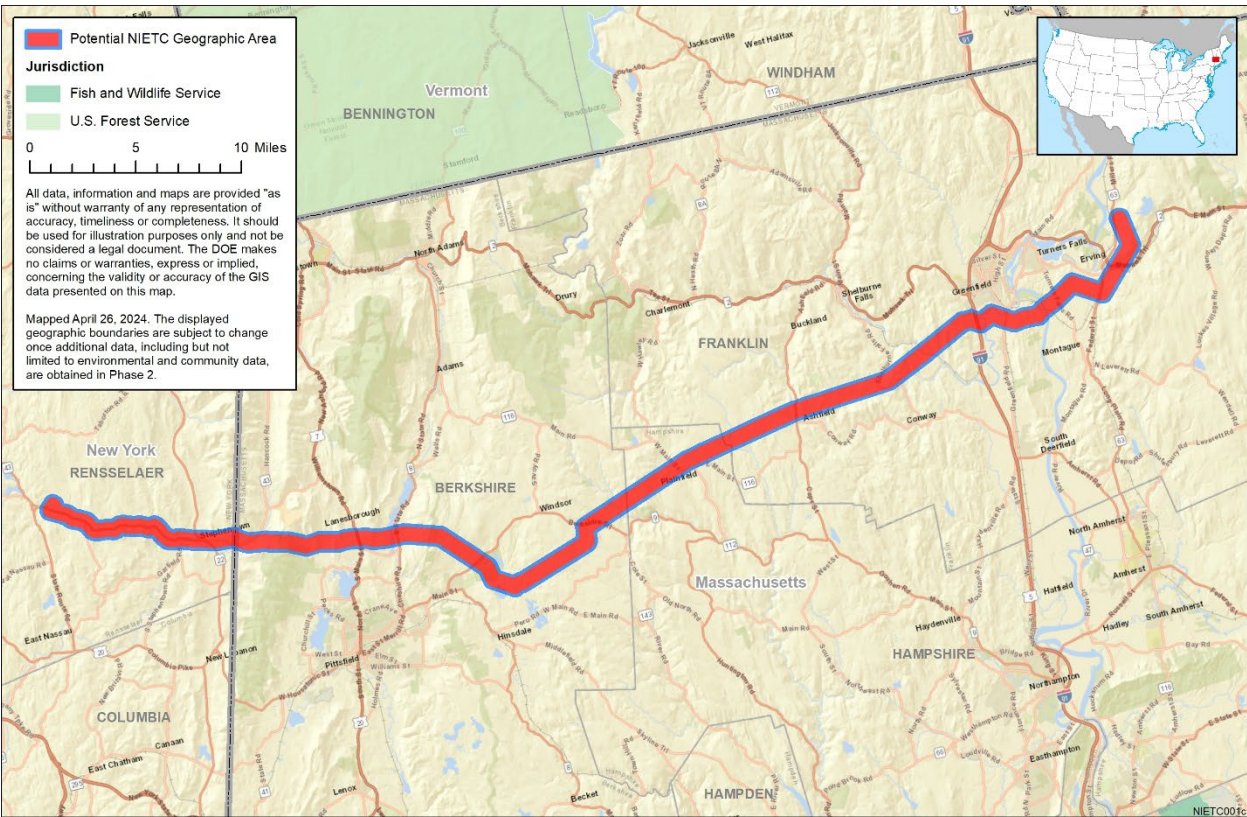
Potential NIETC Geographic Areas



This preliminary list includes the following potential NIETCs, each of which is described below, with an overview map illustrating the rough approximation of geographic boundaries, a brief geographical description, and a high-level explanation of DOE’s preliminary findings of transmission capacity constraints or congestion within the geographic area that adversely affects consumers:

1. New York-New England
2. New York-Mid-Atlantic
3. Mid-Atlantic-Canada
4. Mid-Atlantic
5. Midwest-Plains
6. Northern Plains
7. Delta-Plains
8. Plains-Southwest
9. Mountain-Plains-Southwest
10. Mountain-Northwest

New York - New England



Geography: The New York-New England potential NIETC is an approximately 1-mile-wide, 60-mile-long east-west geographic area that includes an existing state highway transportation corridor in eastern New York and high-voltage transmission right of way in western Massachusetts where new transmission capacity may be co-located. It has the potential to facilitate interregional transmission between the New York Independent System Operator, Inc. (NYISO) and ISO New England Inc. (ISO-NE) regions.

Transmission Capacity Constraints or Congestion that Adversely Affects Consumers: The New York-New England potential NIETC encompasses a geographic area where there is significant need for increased interregional transfer capacity to maintain and improve reliability and resilience, reduce congestion, meet future generation and demand growth, lower consumer costs, and integrate more clean energy resources. These preliminary findings are based on the 2023 Needs Study as well as other relevant information and are consistent with DOE’s preliminary finding in the NIETC Guidance regarding the particular value of NIETC designation where there is need for increased interregional transfer capacity.

The 2023 Needs Study identifies the need to improve system reliability and resilience through additional transfer capacity between the New York and New England regions. Needs Study findings demonstrate the NYISO system is anticipated to become increasingly stressed during

winter cold snaps by mid-2030 as electrification efforts cause the system to become winter-peaking.²⁰ NYISO finds reliance on neighboring systems will continue to be essential over the next decade as the New York system will not have adequate resources if not for emergency assistance.²¹ In the ISO-NE region, high levels of anticipated variable energy resource integration are expected to pose challenges to maintaining reliability.²² Expanding transmission to access geographically diverse energy resources would reduce future resource adequacy risks. Further, recent experience with extreme weather events, such as the January 2018 bomb cyclone event in the northeastern United States, demonstrate the value additional interregional transfer capacity would have for consumers in ensuring resilience and lowering costs by ensuring that energy can be delivered from where it is available to where it is needed during these extreme events.²³ The Needs Study presents findings that show regions affected by the bomb cyclone, including New York and New England, could have saved \$30-40 million for each additional gigawatt (GW) of transmission among themselves or other regions.²⁴

The Needs Study also assessed historic wholesale market price differences between regions, which signal areas of congestion on the transmission system that could be alleviated with additional transmission capacity. According to Needs Study analysis, the highest congestion value of interregional transmission in the Eastern Interconnection from 2012 through 2020 exists between New York and New England, with an average marginal value of transmission ranging from \$16 to \$21/megawatt-hour (MWh).²⁵ In fact, the congestion value of transmission between upstate New York and western Massachusetts—the location of this potential NIETC—ranked the highest of all interregional, non-cross-interconnection links considered in the analysis.²⁶

The Needs Study finds there is also a need for increased interregional transfer capacity between New York and New England to meet future generation and demand growth under all scenarios of future load and clean energy growth assessed in the capacity expansion modeling analysis. Under scenarios with moderate load growth and high clean energy growth future scenarios, New York will need an anticipated median increase of 5.2 GW of additional transfer capacity with New England by 2035, a 255% increase relative to the 2020 system.²⁷ Under scenarios with high load growth and high clean energy growth future scenarios—more in line with recently enacted state

²⁰ 2023 Needs Study at 89.

²¹ See NYISO, *2022 Reliability Needs Assessment*, at 12 (Nov. 2022), <https://www.nyiso.com/documents/20142/2248793/2022-RNA-Report.pdf/> (2022 NYISO RNA); NYISO, *2023-2032 Comprehensive Reliability Plan*, at 9-10 (Nov. 2023), <https://www.nyiso.com/documents/20142/2248481/2023-2032-Comprehensive-Reliability-Plan.pdf/c62634b6-cdad-31dc-5238-ee7d5eaece04> (2023-2032 NYISO Comprehensive Reliability Plan).

²² 2023 Needs Study at 54.

²³ *E.g.*, 2022 NYISO RNA at 91.

²⁴ 2023 Needs Study at 57.

²⁵ *Id.* at v, 37-38.

²⁶ Lawrence Berkeley National Laboratory (LBNL), *Empirical Estimates of Transmission Value using Locational Marginal Prices*, at 20 (Aug. 2022), <https://emp.lbl.gov/publications/empirical-estimates-transmission> (LBNL Empirical Estimates).

²⁷ 2023 Needs Study at 131–133, tbl. VI-4.

laws in New York and New England²⁸—New York will need an anticipated median increase of 17 GW of additional transfer capacity with New England by 2035, an 835% increase relative to the 2020 system.²⁹

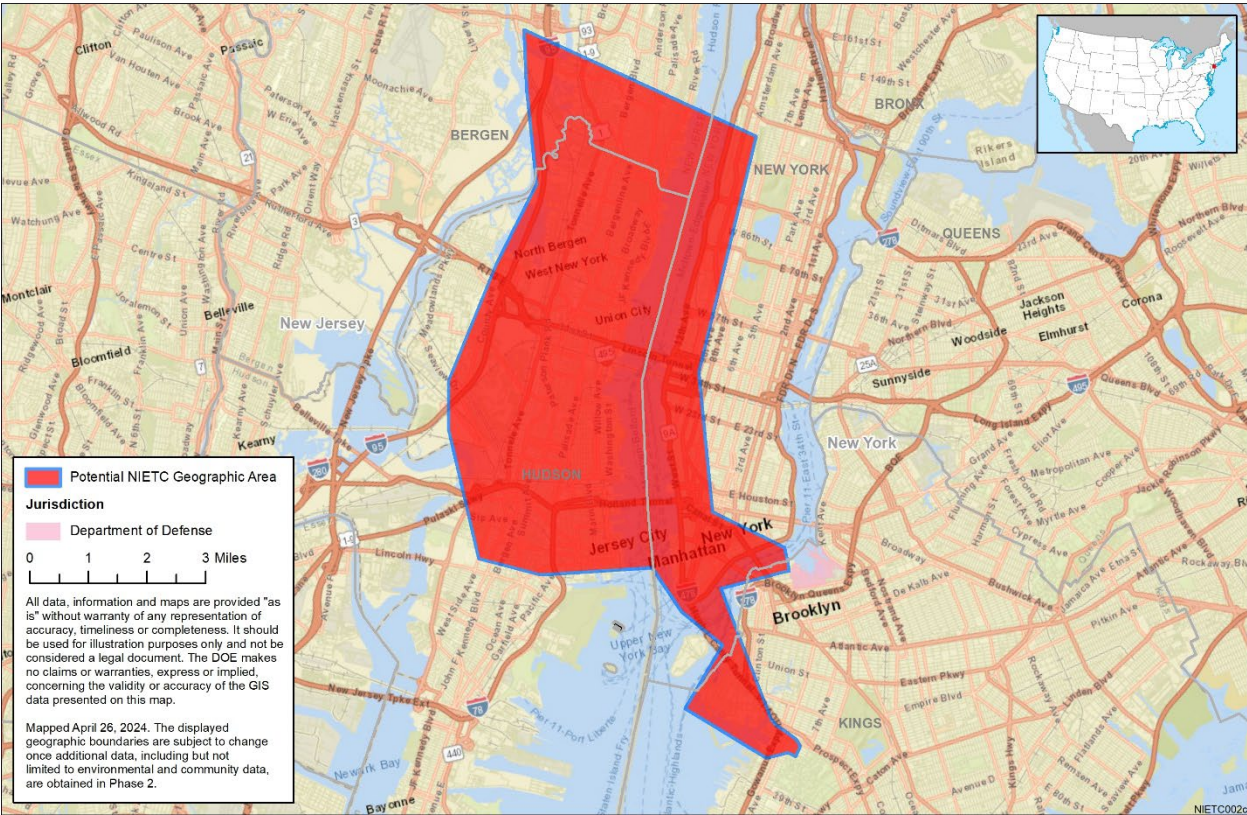
In addition to reliability and resilience benefits of resource diversification as stated above, transmission developed in this potential NIETC would lower consumer costs by enabling the integration of more low-cost generation resources in upstate New York. New transmission between these low-priced regions and high-priced regions within New England would allow load in high-priced markets to draw energy from a larger set of generators and lower their electricity costs.³⁰

²⁸ The moderate load/high clean energy growth scenario is the most likely power sector future in many regions across the United States given recently enacted laws, including the IIJA and Inflation Reduction Act. However, high load/high clean energy growth scenario findings are likely more appropriate to consider for regions with enacted state laws anticipated to further increase load and clean energy growth. For example, New York’s 2019 Climate Leadership and Community Protection Act mandates 70% renewable electricity by 2030, a zero-emissions power system by 2040, a 40% reduction in statewide greenhouse gas emissions from 1990 levels by 2030, and an 85% reduction in statewide greenhouse gas emissions from 1990 levels by 2050. *See* N.Y. State Senate, *Senate Bill S6599* (signed July 18, 2019), <https://legislation.nysenate.gov/pdf/bills/2019/S6599>. The majority of New England states also have both renewable portfolio standards and/or clean energy standards in addition to greenhouse gas reduction commitments. *See* NRRI, *State Clean Energy Tracker* (updated Aug. 2021), <https://pubs.naruc.org/pub/31CA2D90-1866-DAAC-99FB-F8F68F7E53DE>.

²⁹ 2023 Needs Study at 131-133, tbl. VI-4.

³⁰ *Id.* at 32.

New York - Mid-Atlantic



Geography: The New York-Mid-Atlantic potential NIETC is an approximately 4-mile-wide, 12-mile-long north-south geographic area that includes multiple potential points of interconnection for new transmission capacity between New York and New Jersey, focused around the border between New York City and northern New Jersey. It has the potential to facilitate interregional transmission between the NYISO and PJM Interconnection, L.L.C. (PJM) regions and to integrate offshore wind generation in the Atlantic Ocean by including multiple potential onshore points of interconnection as well as portions of the Upper New York Bay.

Transmission Capacity Constraints or Congestion that Adversely Affects Consumers: The New York-Mid-Atlantic potential NIETC encompasses a geographic area where there is significant need for increased interregional transfer capacity to maintain and improve reliability and resilience, reduce congestion, lower consumer costs, and meet future generation and demand growth. These preliminary findings are based on the 2023 Needs Study as well as other relevant information and are consistent with DOE’s preliminary finding in the NIETC Guidance regarding the particular value of NIETC designation where there is need for increased interregional transfer capacity.

The 2023 Needs Study identifies a significant present and anticipated future need for additional interregional transfer capacity between the New York and Mid-Atlantic regions. Needs Study

findings demonstrate the NYISO system is anticipated to become increasingly stressed during winter cold snaps by mid-2030 as electrification efforts cause the system to transition to winter peaking.³¹ Consequently, NYISO finds reliance on neighboring systems will continue to be essential over the next decade as the New York system will not have adequate resources if not for emergency assistance.³² Such system conditions are expected to have acute impacts in the New York City area as NYISO has identified a near-term reliability need as soon as summer 2025.³³ Impacts due to extreme weather events pose a threat to New York grid reliability, especially in New York City, in light of NYISO's reliability outlook.³⁴ Recent extreme weather events demonstrate the value additional interregional transfer capacity would have for consumers in maintaining and improving reliability and resilience and lowering costs by ensuring that energy can be delivered from where it is available to where it is needed during these extreme events. For example, the Needs Study presents findings that show regions affected by the January 2018 bomb cyclone event in the northeastern United States, including the New York and the Mid-Atlantic regions, could have saved \$30-40 million for each additional GW of transmission among themselves or other regions.³⁵ Needs Study findings also demonstrate significant value of interregional transmission between the New York and Mid-Atlantic regions during Winter Storm Elliott in 2022.³⁶

The Needs Study also assessed historic wholesale market price differences between regions, which signal areas of congestion on the transmission system that could be alleviated with additional transmission capacity. According to Needs Study analysis of historical wholesale market prices, high congestion value of interregional transmission from 2012 through 2020 exists between the New York and Mid-Atlantic regions, with an average marginal value of transmission equal to \$18/MWh.³⁷ A high congestion value indicates that additional transmission between the regions would reduce system congestion and constraints. Additionally, the New York City area has experienced persistently high wholesale market prices in the last four to five years, the longest timeframe analyzed in the Needs Study, indicating the need to deliver cost-effective generation to meet demand.³⁸ Additional transmission to bring cost-effective resources to demand would help reduce wholesale prices, which could ultimately reduce consumer costs.

The Needs Study finds there is also significant need for increased interregional transfer capacity between the New York and Mid-Atlantic regions to meet future generation and demand growth under all scenarios of future load and clean energy growth assessed in the capacity expansion modeling analysis. Under scenarios with moderate load growth and high clean energy growth future scenarios, New York will need an anticipated median increase of 2.4 GW of additional

³¹ *Id.* at 89.

³² *See* 2022 NYISO RNA at 12; 2023-2032 NYISO Comprehensive Reliability Plan at 9-10.

³³ 2023-2032 NYISO Comprehensive Reliability Plan at 30.

³⁴ *Id.* at 48.

³⁵ 2023 Needs Study at 57.

³⁶ *Id.* at 40.

³⁷ *Id.* at v, 37-38.

³⁸ *Id.* at 35-36.

transfer capacity with the Mid-Atlantic region by 2035, a 122% increase relative to the 2020 system.³⁹ Under scenarios with high load growth and high clean energy growth future scenarios—more in line with recently enacted New York state laws⁴⁰—New York will need an anticipated median increase of 8.2 GW of additional transfer capacity with the Mid-Atlantic by 2035, a 412% increase relative to the 2020 system.⁴¹

The final *Action Plan for Offshore Wind Transmission Development in the U.S. Atlantic Region*, released by DOE and the Bureau of Ocean Energy Management (BOEM) in March 2024, recommends further exploration of interregional offshore high-voltage direct current networks designed to maximize production cost savings while minimizing overall cable distances.⁴² The potential identified interlinks that would connect ISO-NE, NYISO, and PJM include multiple points of interconnection that may be located within this potential NIETC. This means that transmission within this potential NIETC may not only alleviate onshore transmission capacity constraints or congestion between NYISO and PJM but may also facilitate onshore upgrades needed for integration of offshore wind generation in the Atlantic Ocean.

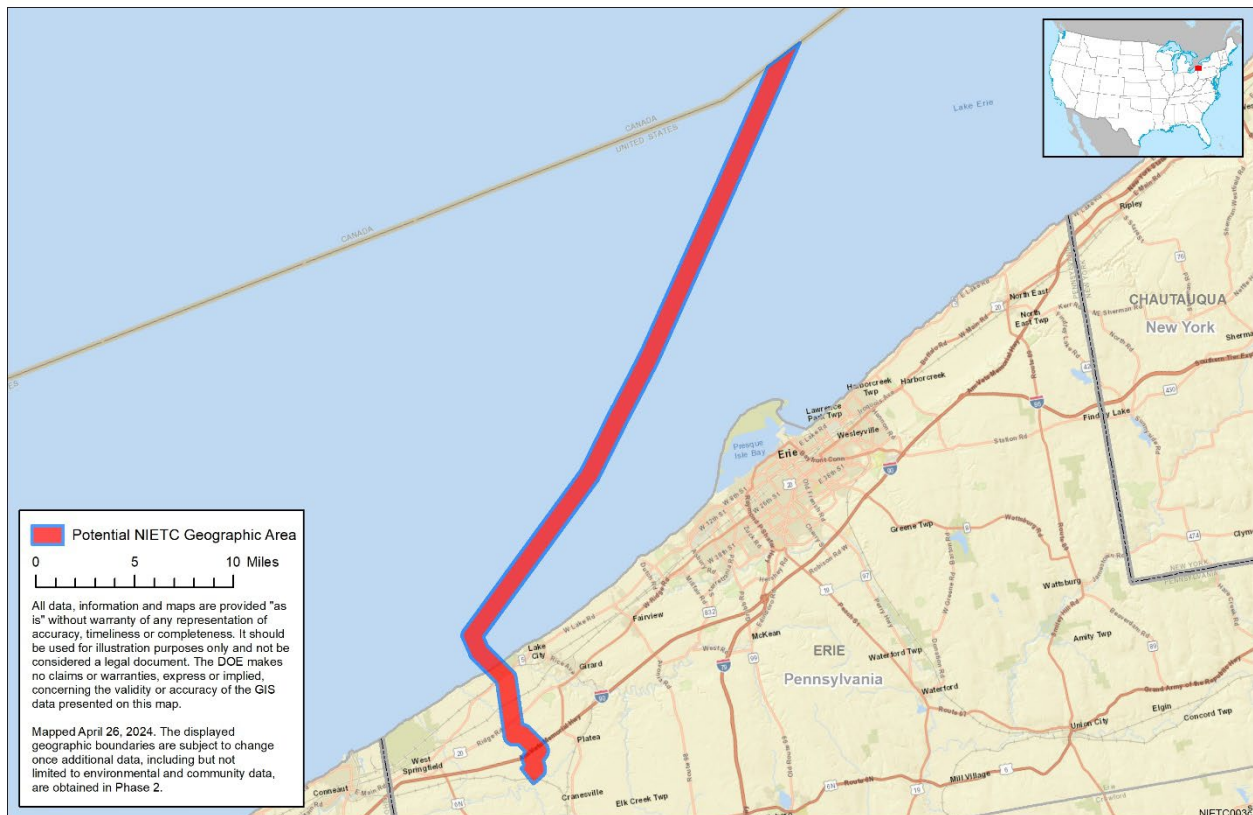
³⁹ *Id.* at 131-133, tbl. VI-4.

⁴⁰ *See supra* n.28 (describing New York’s 2019 Climate Leadership and Community Protection Act).

⁴¹ 2023 Needs Study at 131-133, tbl. VI-4. The high load and high clean energy growth scenario group assumes high load growth in all regions of the United States. Additional interregional transfer capacity will still be needed to support load growth in New York, though perhaps not as high, even if commensurate load growth is not as high in the accompanying Mid-Atlantic region.

⁴² DOE & BOEM, *An Action Plan for Offshore Wind Transmission Development in the U.S. Atlantic Region*, at 2 (Mar. 2024), https://www.energy.gov/sites/default/files/2024-03/Atlantic_Offshore_Wind_Transmission_Plan_Report_v15_Pre-Release.pdf; National Renewable Energy Laboratory & Pacific Northwest National Laboratory, *Atlantic Offshore Wind Transmission Study*, app. E (Mar. 2024), <https://www.nrel.gov/docs/fy24osti/88003.pdf> (identifying candidate points of interconnection included in the study).

Mid-Atlantic - Canada



Geography: The Mid-Atlantic-Canada potential NIETC is an approximately one-mile-wide, 42-mile-long north-south geographic area from onshore in northern Pennsylvania to the international border with Canada approximately 33 miles offshore in Lake Erie. It has the potential to facilitate international transmission between PJM and the Independent Electricity System Operator (IESO) system in Ontario, Canada.

Transmission Capacity Constraints or Congestion that Adversely Affects Consumers: The Mid-Atlantic-Canada potential NIETC encompasses a geographic area that includes a potential international connection and where there is a need to maintain and improve reliability and resilience and facilitate delivery of clean energy resources to reduce greenhouse gas emissions. These preliminary findings are based on the 2023 Needs Study as well as other relevant information and are consistent with DOE’s preliminary finding in the NIETC Guidance regarding the particular value of NIETC designation where there is need for increased interregional transfer capacity.

The 2023 Needs Study identifies the need to improve system reliability and resilience in the Mid-Atlantic region through increased transfer capacity with its neighbors. The Needs Study finds reliability risks in the PJM footprint may arise in the near term through 2030 largely due to electricity demand growth, resource retirements, and increases in intermittent and limited-

duration resource interconnection requests.⁴³ Additional transmission to increase generation imports in the near term would help serve growing load in the face of resource retirements. PJM's 2024 Load Forecast Report estimates summer and winter peak load in the PJM footprint is anticipated to increase by 1.6% and 1.9% annually, a doubling of estimates reported in its 2023 Load Forecast Report over the next decade, due to data center proliferation and electrification efforts.⁴⁴

According to the Needs Study, stronger transmission ties with neighboring regions would also support the resilience of the Mid-Atlantic region during extreme weather events, such as the January 2018 bomb cyclone and 2022 Winter Storm Elliott events. The Needs Study presents findings that show regions affected by the January 2018 bomb cyclone event in the northeastern United States, including the Mid-Atlantic region, could have saved \$30-40 million for each additional GW of transmission among themselves or other regions.⁴⁵ Needs Study findings also demonstrate significant value of interregional transmission between the Mid-Atlantic region and its neighbors during Winter Storm Elliott in 2022.⁴⁶

International energy transfers between PJM and the IESO system, which currently has a generation portfolio that is more than 90% emissions-free,⁴⁷ could also assist PJM as states and members in its region seek pathways to reduce greenhouse gas emissions. PJM finds robust transmission interconnection between systems can facilitate increased renewable resource integration by accessing geographically diverse generation resources rather than relying on clusters of renewable resources within its footprint.⁴⁸

⁴³ 2023 Needs Study at 61.

⁴⁴ PJM, PJM Resource Adequacy Planning Department, *PJM Load Forecast Report January 2024*, at 2 (revised Feb. 1, 2024), <https://www.pjm.com/-/media/library/reports-notices/load-forecast/2024-load-report.ashx> (2024 PJM Load Forecast Report); *see also* PJM, PJM Resource Adequacy Planning Department, *PJM Load Forecast Report January 2023*, at 2 (Jan. 2023), <https://wired.pjm.com/-/media/library/reports-notices/load-forecast/2023-load-report.ashx> (2023 PJM Load Forecast Report).

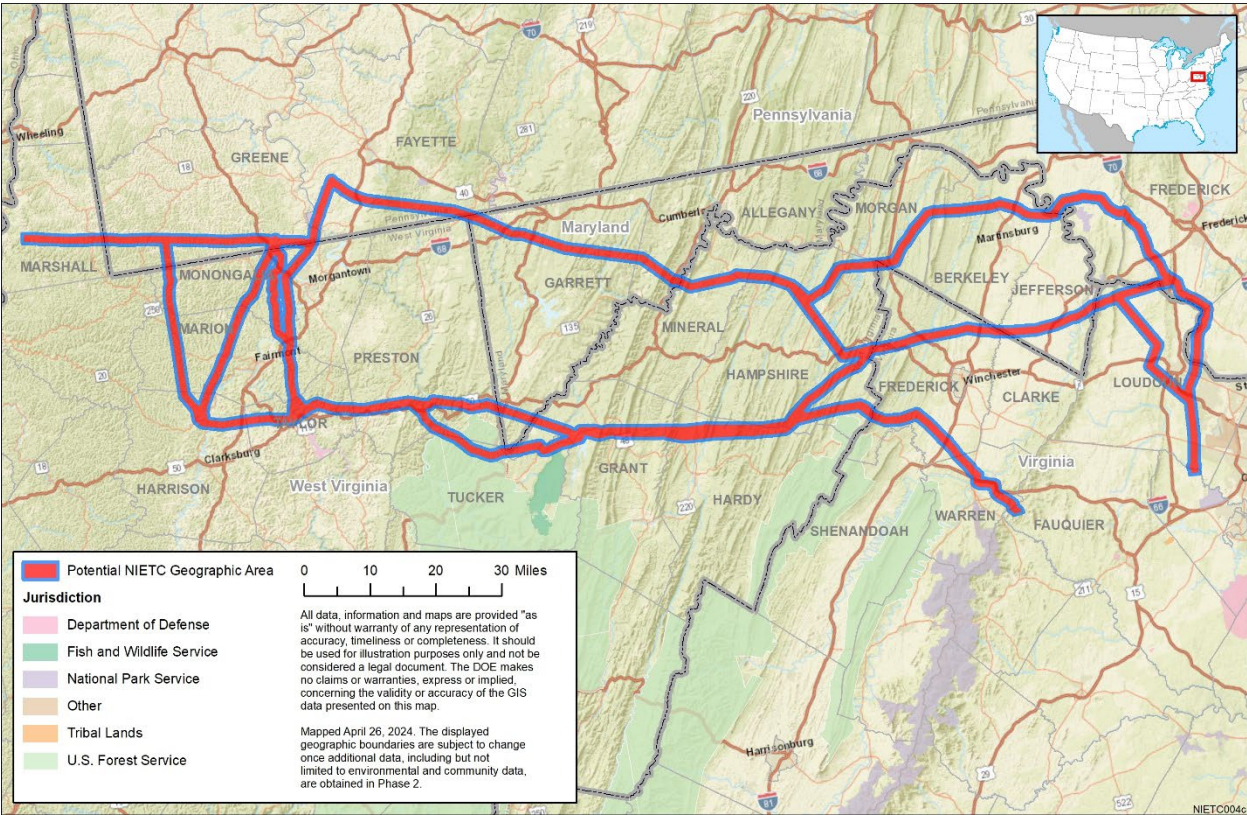
⁴⁵ 2023 Needs Study at 57.

⁴⁶ *Id.* at 40.

⁴⁷ IESO, *Pathways to Decarbonization*, at 6 (Dec. 2022), <https://www.ieso.ca/-/media/Files/IESO/Document-Library/gas-phase-out/Pathways-to-Decarbonization.pdf>.

⁴⁸ PJM, *Energy Transition in PJM: Framework for Analysis*, at 3 (Dec. 2021), <https://www.pjm.com/-/media/library/reports-notices/special-reports/2021/20211215-energy-transition-in-pjm-frameworks-for-analysis.ashx>.

Mid-Atlantic



Geography: The Mid-Atlantic potential NIETC includes multiple parallel sections, each approximately two miles wide and up to 180 miles in length, including parts of West Virginia, Pennsylvania, Maryland, and Virginia—entirely within the Mid-Atlantic region (and PJM)—east from the Ohio River to just west of Washington, DC. It extends west to the 765 kV transmission system in PJM, encompasses multiple interconnection points within the different sections, and largely parallels existing 500 kV transmission facilities, attempting to avoid areas where transmission is less likely to be built.

Transmission Capacity Constraints or Congestion that Adversely Affects Consumers: The Mid-Atlantic potential NIETC encompasses a geographic area where there is significant need for increased within-region transmission capacity in PJM to maintain and improve reliability and resilience, lower consumer costs, and meet future generation and demand growth. These preliminary findings are based on the 2023 Needs Study as well as other relevant information.

PJM’s 2022 Regional Transmission Expansion Plan (RTEP) identifies a need to both prepare for the anticipated retirement of 11 GW of fossil-fuel generators across the PJM footprint and meet a 7.5 GW increase in load in northern Virginia, located near the end terminus of the Mid-Atlantic

potential NIETC.⁴⁹ PJM notes that, despite recent new substation construction in the area to interconnect into nearby existing transmission, there continues to be a need for additional transmission to address reliability criteria violations in the face of load growth and anticipated resource retirements in the PJM footprint. PJM's 2024 Load Forecast Report estimates summer and winter peak load in the PJM footprint is anticipated to increase by 1.6% and 1.9% annually, respectively, over the next decade, a doubling of estimates reported in its 2023 Load Forecast Report, due to data center proliferation and electrification efforts.⁵⁰ PJM finds the Dominion Energy zone in northern Virginia to be driving much of this increase in anticipated peak load as summer and winter peak load is anticipated to increase by 5.5% and 5% annually, respectively, within that particular zone over the next decade.⁵¹

Similarly, the 2023 Needs Study identifies the need to improve system reliability and resilience in the Mid-Atlantic region with additional within-region transmission. The Needs Study finds reliability risks in the PJM footprint may arise in the near term through 2030 largely due to electricity demand growth, resource retirements, and increases in intermittent and limited-duration resource interconnection requests.⁵² Additional transmission and upgrades to existing transmission in the near term would help maintain resource adequacy. Needs Study findings also demonstrate the significant value of within-region transmission in the Mid-Atlantic region during recent extreme weather events, including Winter Storm Elliott in 2022. Needs Study findings demonstrate that during the event, multiple transmission constraints within PJM limited PJM's ability to support export transactions across its southern interfaces.⁵³

Needs Study findings also demonstrate the need to provide access to cost-effective generation resources to meet demand in the Mid-Atlantic region. Specifically, findings show eastern Maryland and Virginia—at the eastern terminus of the potential NIETC—have experienced persistently high wholesale market prices in recent years.⁵⁴ Additional transmission to bring cost-effective resources to demand would help reduce these wholesale prices, ultimately lowering congestion and reducing costs for consumers.

The Needs Study finds there is a moderate need for increased within-region transmission in the Mid-Atlantic to meet future generation and demand growth under certain scenarios of future load and clean energy growth assessed in the capacity expansion modeling analysis. Under scenarios with moderate load growth and high clean energy growth future scenarios, the Mid-Atlantic region will need an anticipated median increase of 3.3 GW of additional within-region transmission by 2035, a 23% increase relative to the 2020 system.⁵⁵

⁴⁹ PJM, *PJM's Role in Regional Planning/2022 RTEP Window 3* (Nov. 2023), <https://www.pjm.com/-/media/committees-groups/committees/teac/2023/20231205/20231205-pjms-role-in-regional-planning-2022-rtep-window-3.ashx>; PJM, *2022 Regional Transmission Expansion Plan*, at 222 (Mar. 2022), <https://www.pjm.com/-/media/library/reports-notices/2022-rtep/2022-rtep-report.ashx>.

⁵⁰ See 2024 PJM Load Forecast Report at 2; 2023 PJM Load Forecast Report at 2.

⁵¹ 2024 PJM Load Forecast Report at 35, 39.

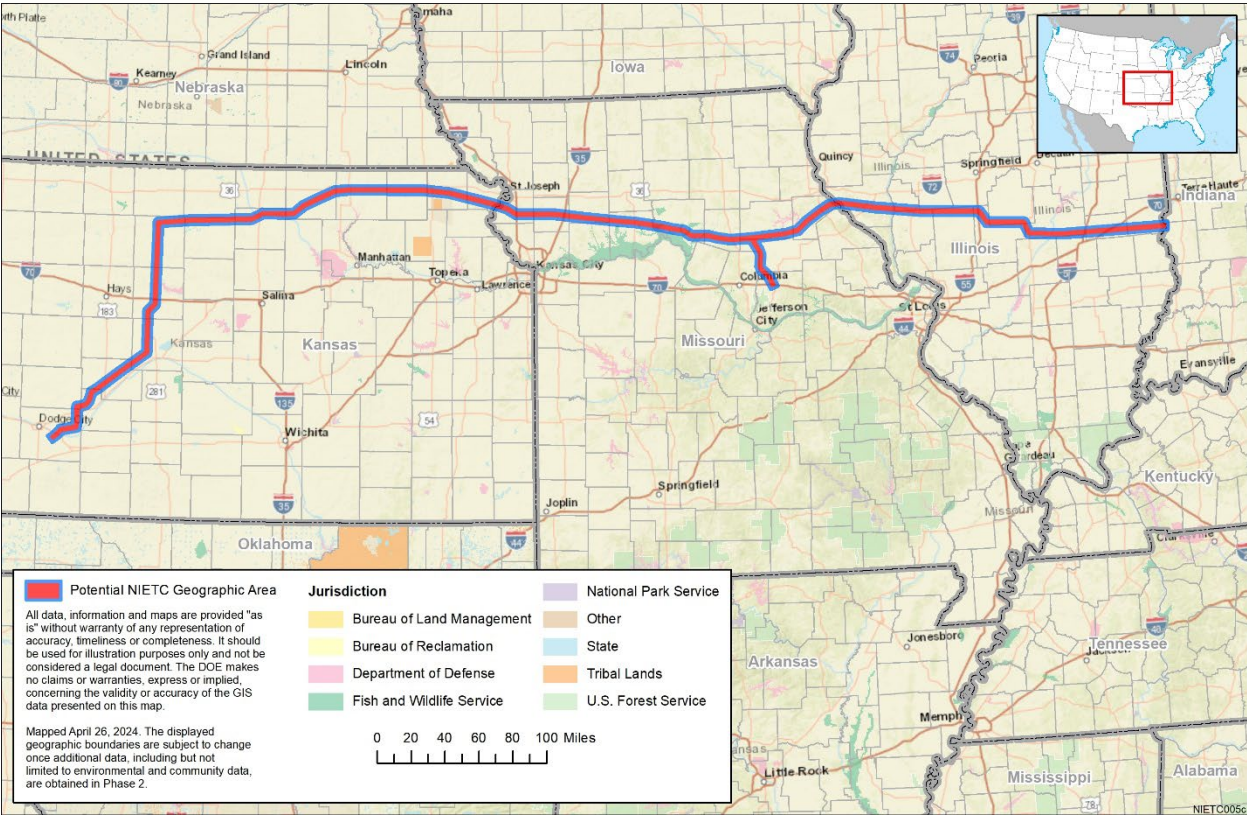
⁵² 2023 Needs Study at 61.

⁵³ *Id.* at 58.

⁵⁴ *Id.* at 35-36.

⁵⁵ *Id.* at 123-124, tbl. VI-3.

Midwest - Plains



Geography: The Midwest-Plains potential NIETC is an approximately 5-mile-wide, 780-mile-long east-west geographic area that includes parts of Kansas, Missouri, Illinois, and Indiana, and portions of an existing 345 kV transmission facility. It has the potential to facilitate interregional transmission between PJM, the Midcontinent Independent System Operator, Inc. (MISO), and the Southwest Power Pool (SPP) regions.

Transmission Capacity Constraints or Congestion that Adversely Affects Consumers: The Midwest-Plains potential NIETC encompasses a geographic area where there is a significant need for increased interregional transfer capacity to maintain and improve reliability and resilience, lower congestion and consumer costs, meet future generation and demand growth, and increase clean energy integration. These preliminary findings are based on the 2023 Needs Study as well as other relevant information and are consistent with DOE’s preliminary finding in the NIETC Guidance regarding the particular value of NIETC designation where there is need for increased interregional transfer capacity.

As discussed in the Needs Study, generator retirements in the Midwest region are anticipated to result in near-term capacity shortfalls in the absence of additional generation or import transfer

capacity additions.⁵⁶ The North American Electric Reliability Corporation (NERC) anticipates MISO will experience an estimated 4.7 GW capacity shortfall.⁵⁷ As a result, NERC has categorized the MISO region as a “high risk area” vulnerable to extreme temperatures and prolonged severe weather events.⁵⁸ Similarly, Need Study findings demonstrate reliability risks in the PJM footprint for the near term through 2030 largely due to electricity demand growth, resource retirements, and increases in intermittent and limited-duration resource interconnection requests.⁵⁹ Additional transmission to increase generation imports to the PJM footprint in the near term would serve growing load in the face of resource retirements.

Further, recent experience with extreme weather events, such as Winter Storms Uri and Elliott, demonstrate the value additional interregional transfer capacity would have for consumers in ensuring reliability and resilience and lowering costs by ensuring that energy can be delivered from where it is available to where it is needed during these extreme events. During Winter Storm Uri in February 2021, Needs Study findings show the Plains region was unable to import additional available generation capacity during the cold weather event, which negatively impacted resource adequacy and introduced high price spikes.⁶⁰ Needs Study findings also demonstrate significant value of interregional transmission between the Plains and Midwest regions, as well as between the Mid-Atlantic and its neighbors, during Winter Storm Elliott in 2022.⁶¹ Increased transfer capacities between the Plains, Midwest, and Mid-Atlantic regions would improve system reliability during extreme weather events.

Needs Study findings also demonstrate the need to alleviate transfer capacity limits between the Plains and Midwest regions. According to Needs Study analysis of historical wholesale market prices, high congestion values of transmission from 2015 through 2020 exist between the Midwest and Plains regions, ranging from \$4/MWh to \$15/MWh on average.⁶² These high congestion values have been increasing year after year since 2015.⁶³ A high congestion value indicates that additional transmission between the regions would reduce system congestion and constraints.

Needs Study findings also demonstrate the need to bring cost-effective resources to demand in the Midwest region, particularly low-cost wind resources in the southern Plains region near the Oklahoma and Kansas border.⁶⁴ High congestion at flowgates in Missouri, Kansas, and Oklahoma, however, constrain the power flows into higher-priced areas in the Midwest as

⁵⁶ *Id.* at 56, 61.

⁵⁷ NERC, *2023 Long-Term Reliability Assessment*, at 7 (Dec. 2023), https://www.nerc.com/pa/RAPA/ra/Reliability%20Assessments%20DL/NERC_LTRA_2023.pdf (2023 NERC LTRA).

⁵⁸ *Id.*

⁵⁹ 2023 Needs Study at 61.

⁶⁰ *Id.* at 39, 56-57

⁶¹ *Id.* at 40.

⁶² *Id.* at v, 37-38.

⁶³ LBNL Empirical Estimates at 22.

⁶⁴ 2023 Needs Study at 70-71.

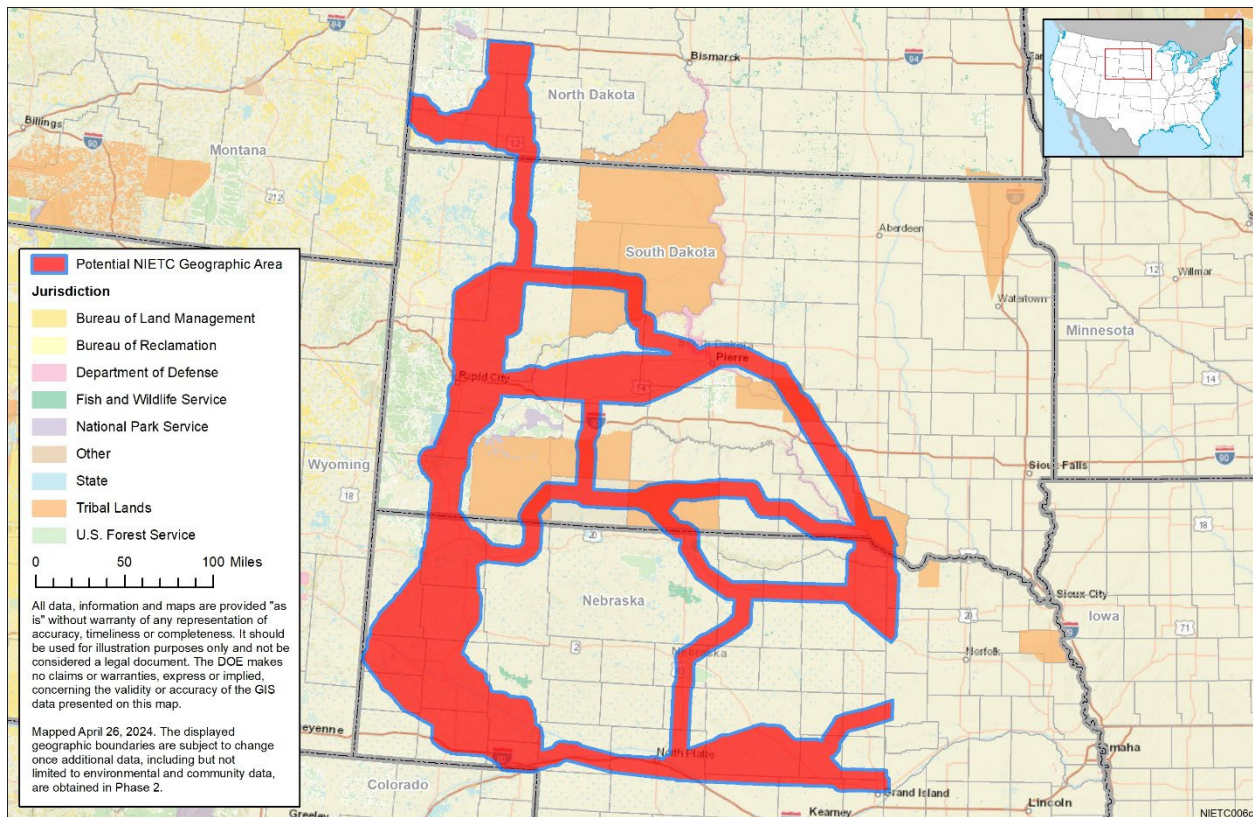
indicated by significant increases in market-to-market payments (M2M) from SPP to MISO.⁶⁵ As MISO's wind penetration continues to increase, SPP's M2M flowgates will continue to be affected and potentially lead to an increase in the M2M payments from MISO. Increased interregional transfer capacity between the Plains and Midwest regions would help alleviate congestion and facilitate delivery of lower cost resources into the Midwest.

The Needs Study finds there is also significant need for increased interregional transfer capacity between the Plains and Midwest regions to meet future generation and demand growth under all scenarios of future load and clean energy growth assessed in the capacity expansion modeling analysis. Under scenarios with moderate load growth and high clean energy growth future scenarios, the Plains region will need an anticipated median increase of 21 GW of additional transfer capacity with the Midwest region by 2035, a 175% increase relative to the 2020 system.⁶⁶

⁶⁵ *Id.*

⁶⁶ *Id.* at 131-133, tbl. VI-4.

Northern Plains



Geography: The Northern Plains potential NIETC is comprised of multiple sections, each from 10 to 50 miles wide and up to 400 miles from north to south and 300 miles from east to west, located in parts of North Dakota, South Dakota, and Nebraska. This potential NIETC includes land of several Tribal Nations and incorporates multiple interconnecting elements with SPP. The sections narrowly focus on existing 115/230 kV infrastructure that needs upgrades to address the lack of extra high-voltage transmission in this area at the western edge of SPP and the Eastern Interconnection while avoiding large areas where transmission is less likely to be built.

Transmission Capacity Constraints or Congestion that Adversely Affects Consumers: The Northern Plains potential NIETC encompasses a geographic area where there is significant need for new transmission, especially extra high-voltage transmission, to relieve system congestion, lower consumer costs, meet future generation and demand growth, increase clean energy integration, and improve energy justice among Tribal communities. These preliminary findings are based on the 2023 Needs Study as well as other relevant information.

The 2023 Needs Study identifies a significant present and anticipated future need for additional transmission within the Plains region. Findings demonstrate the need to deliver cost-effective generation to meet demand in the Plains region as indicated by low wholesale electricity prices

in the northern region and high prices to the south.⁶⁷ These price differences show that the Plains region requires additional transmission capacity to alleviate transfer capacity limits between the north and south.⁶⁸ According to the Need Study's analysis of historical wholesale market prices, high congestion value of transmission exists between the northern and southern Plains region from 2015 through 2020, with an average marginal value between the two areas equal to \$11/MWh.⁶⁹ These high congestion values have been increasing year after year since 2015.⁷⁰ A high congestion value indicates that additional transmission between the areas would reduce system congestion and constraints and reduce costs to consumers.

A large driver of this need in the Plains region is the lack of existing extra high-voltage transmission (345 kV and above) at the western edge of SPP to bring an abundance of low-cost energy resources in the potential NIETC area to meet demand. However, as referenced in the Needs Study, transmission development to bring generation in location-constrained areas with limited existing transmission infrastructure to demand may cause developers with projects to incur significant network upgrade costs to interconnect with the bulk power system.⁷¹ This dynamic disproportionately impacts Indian Tribes in the area, which have expressed a significant need and interest in developing their own energy resources, implementing energy efficiency and renewable energy technologies, stabilizing energy costs, and spurring local economic development.⁷² Further, transmission development within the region is likely to enhance system reliability on Tribal lands. DOE Office of Indian Energy survey findings show that over 54,000 American Indian and Alaska Native peoples across the United States do not have access to electricity today, and among those that do have access to electricity, respondents overwhelmingly (92%) reported regular electricity outages, often because of inadequate infrastructure or because they are serviced by a single power line that lacks redundancy.⁷³

The Needs Study finds there is also significant need for increased within-region transmission in the Plains region to meet future generation and demand growth under all scenarios of future load and clean energy growth assessed in the capacity expansion modeling analysis. Under scenarios with moderate load growth and high clean energy growth future scenarios, the Plains region will need an anticipated median increase of 8.3 GW of additional within-region transmission by 2035, a 119% increase relative to the 2020 system.⁷⁴

⁶⁷ *Id.* at 32-33.

⁶⁸ *Id.* at 32-33, 77.

⁶⁹ *Id.* at v, 37-38.

⁷⁰ LBNL Empirical Estimates at 22.

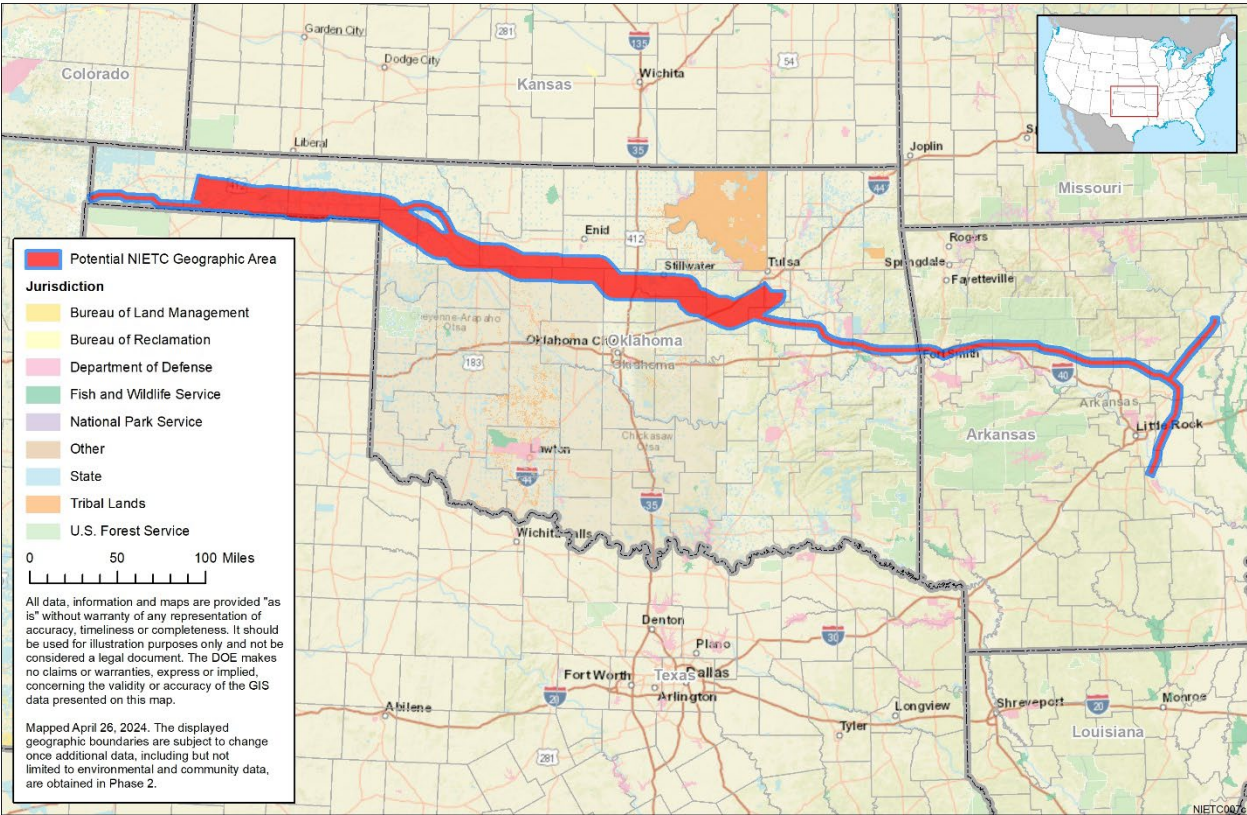
⁷¹ 2023 Needs Study at 48-49.

⁷² *Id.* at 84-88.

⁷³ *Id.* at 84-85.

⁷⁴ *Id.* at 131-133, tbl. VI-4.

Delta - Plains



Geography: The Delta-Plains potential NIETC is an approximately 645-mile-long geographic area, ranging in width from 4–18 miles, crossing Oklahoma from its western to eastern border, with a fork near Tulsa, and continuing into Arkansas, where it forks in a north-south direction. It encompasses multiple interconnection points as well as existing transmission facilities. It has the potential to facilitate interregional transmission capacity between SPP and the southern portion of the MISO region, as well as potential cross-interconnection transmission at the western end between the Eastern and Western Interconnections.

Transmission Capacity Constraints or Congestion that Adversely Affects Consumers: The Delta-Plains potential NIETC encompasses a geographic area where there is significant need for increased interregional transfer capacity to maintain and improve reliability and resilience, relieve congestion, meet future generation and demand growth, and increase clean energy integration. This potential NIETC may also increase transfer capacity between the Eastern and Western Interconnections, pending deployment of back-to-back ties. These preliminary findings are based on the 2023 Needs Study as well as other relevant information and are consistent with DOE’s preliminary finding in the NIETC Guidance regarding the particular value of NIETC designation where there is need for increased interregional transfer capacity.

As discussed in the Needs Study, generator retirements in the Delta region are anticipated to result in near-term capacity shortfalls in the absence of additional generation or import transfer capacity additions.⁷⁵ NERC anticipates MISO will experience an estimated 4.7 GW capacity shortfall due to generation retirements.⁷⁶ As a result, NERC has categorized the MISO region as a “high-risk area” vulnerable to extreme temperatures and prolonged severe weather events.⁷⁷ NERC states extreme cold, particularly in the MISO South region (which corresponds to the Delta region in the Needs Study), increases load in the region and increases associated loss of load risk.⁷⁸

Recent experience with extreme weather events demonstrates the value additional interregional transfer capacity would have for consumers in maintaining and improving reliability and resilience and lowering costs by ensuring that energy can be delivered from where it is available to where it is needed during these extreme events. During Winter Storm Uri in February 2021, Needs Study findings show that the Plains region was unable to import additional available generation capacity during the cold weather event, which negatively impacted resource adequacy and introduced high price spikes.⁷⁹ Needs Study findings also demonstrate significant value of interregional transmission between the Plains and Delta regions during Winter Storm Elliott in 2022.⁸⁰ Similarly, Hurricanes Ida and Laura exposed further weaknesses in the Delta region’s connectivity, especially in certain transmission constrained areas, some of which experienced load shedding.⁸¹ Increased transfer capacities between the Plains and Delta regions would improve system reliability during extreme weather events.

Needs Study findings also demonstrate the need to alleviate transfer capacity limits between the Plains and Delta regions. According to Needs Study analysis of historical wholesale market prices, high congestion value of transmission from 2012 through 2020 exists between the Plains and Delta regions, with an average marginal value of transmission equal to \$13/MWh.⁸² These high congestion values have been increasing year after year since 2015.⁸³ A high congestion value indicates that additional transmission between the regions would reduce system congestion and constraints and lower costs for consumers.⁸⁴ Needs Study findings show this is largely due to insufficient transmission to support low-cost wind resource delivery from the Plains region near the Oklahoma and Kansas border into the combined Midwest and Delta region to the east. High congestion at flowgates in Missouri, Kansas, and Oklahoma demonstrate the persistence of

⁷⁵ *Id.* at 56, 61.

⁷⁶ 2023 NERC LTRA at 7.

⁷⁷ *Id.*

⁷⁸ *Id.* at 41.

⁷⁹ 2023 Needs Study at 39, 56-57

⁸⁰ *Id.* at 40.

⁸¹ *Id.* at 57-58.

⁸² *Id.* at v, 37-38.

⁸³ LBNL Empirical Estimates at 22.

⁸⁴ 2023 Needs Study at 70-71.

constrained power flows into the Delta region.⁸⁵ Increased interregional transfer capacity between them would help alleviate congestion and constraints.

Transmission buildout to support additional west-to-east transfers within the SPP footprint would also likely reduce persistent congestion in southeastern SPP. As described in SPP's 2022 Annual State of the Market Report, there has been a historical lack of high-voltage transmission between western and eastern SPP, and while transmission buildout has allowed higher levels of low-cost wind generation to flow from southwestern SPP to load centers to the east, high levels of congestion remain at the southeastern edge of the region extending from northern Missouri to southern Oklahoma.⁸⁶ In Oklahoma, SPP finds persistently high levels of congestion in areas around Tulsa, Oklahoma City, and southeast Oklahoma.⁸⁷ In fact, SPP notes prices in southeast Oklahoma were some of the highest in SPP in 2022 with an average real-time price of \$98/MWh.⁸⁸

The Needs Study finds there is also significant need for increased interregional transfer capacity between the Plains and Delta regions to meet future generation and demand growth under certain scenarios of future load and clean energy growth assessed in the capacity expansion modeling analysis. Under future scenarios with moderate load growth and high clean energy growth, the Plains region will need an anticipated median increase of 20 GW of additional transfer capacity with the Delta region by 2035, a 414% increase relative to the 2020 system.⁸⁹

The Delta-Plains potential NIETC, while interregional, may have cross-interconnection implications due to its western terminus at the Eastern–Western Interconnection seam. As discussed in the Needs Study, the U.S. grid is anticipated to require a sizeable increase of transmission expansion across the interconnection seam to improve system reliability and resilience.⁹⁰ Transmission expansion across the interconnections can serve to diversify load and generation across large geographic areas, which increases system operating flexibility.⁹¹ The Needs Study finds there is significant need for increased interregional transfer capacity across the interconnection seam between the Southwest and Plains regions to meet future generation and demand growth under all scenarios of future load and clean energy growth assessed in the capacity expansion modeling analysis. Under future scenarios with moderate load growth and high clean energy growth, the Southwest region will need an anticipated median increase of 3.7 GW of additional transfer capacity with the Plains region by 2035, a 914% increase relative to the 2020 system.⁹²

⁸⁵ *Id.*

⁸⁶ SPP Market Monitoring Unit, *State of the Market 2022*, at 180 (May 2023)

<https://www.spp.org/documents/69330/2022%20annual%20state%20of%20the%20market%20report.pdf>.

⁸⁷ *Id.* at 182.

⁸⁸ *Id.* at 180.

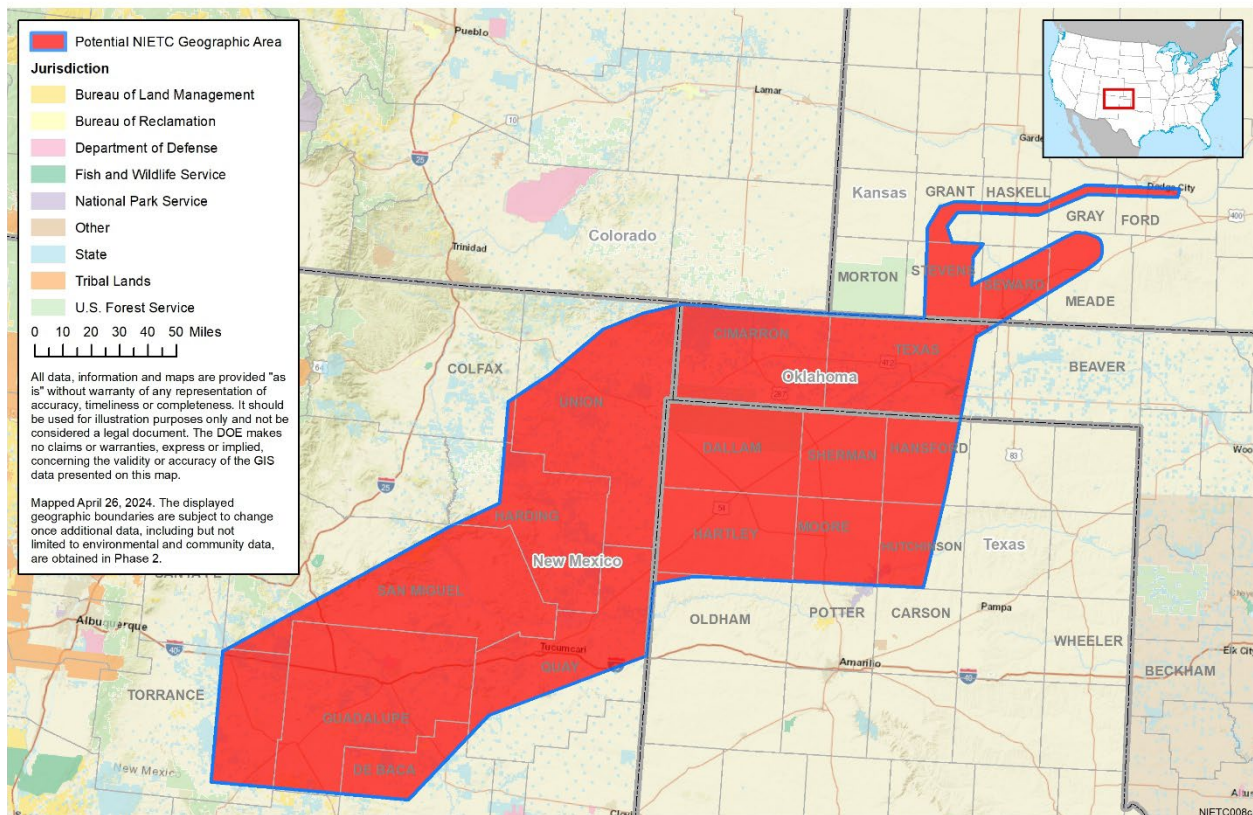
⁸⁹ 2023 Needs Study at 131-133, tbl. VI-4.

⁹⁰ *Id.* at 62-63.

⁹¹ *Id.*

⁹² *Id.* at 131-133, tbl. VI-4.

Plains - Southwest



Geography: The Plains-Southwest potential NIETC is an approximately 345-mile-long from east to west and 220-mile-long from north to south geographic area of significantly varying width (from less than five miles to near 100 miles). The Plains-Southwest potential NIETC crosses the Eastern–Western Interconnection seam, including portions of New Mexico, Texas, Oklahoma, and Kansas. It has the potential to facilitate interregional (and cross-interconnection) transmission between the WestConnect, SPP, MISO, and PJM regions (and even to the California Independent System Operator, Inc. (CAISO) via existing or planned transmission projects under development to the west).

Transmission Capacity Constraints or Congestion that Adversely Affects Consumers: The Plains-Southwest potential NIETC encompasses a geographic area where there is significant need for increased interregional transfer capacity to maintain and improve reliability and resilience, meet future generation and demand growth, and increase clean energy integration. This potential NIETC may also increase transfer capacity between the Electric Reliability Council of Texas (ERCOT) and both the Eastern and Western Interconnections, pending deployment of back-to-back ties between ERCOT and the other interconnections. These preliminary findings are based on the 2023 Needs Study as well as other relevant information and are consistent with DOE’s preliminary finding in the NIETC Guidance regarding the

particular value of NIETC designation where there is need for increased interregional transfer capacity.

The 2023 Needs Study identifies a significant present and anticipated future need for additional cross-interconnection transfer capacity between the Southwest and Plains regions. Recent experience with extreme weather events, such as Winter Storm Uri, demonstrate the value additional interregional transfer capacity would have for consumers in ensuring resilience and lowering costs by ensuring that energy can be delivered from where it is available to where it is needed during these extreme events. During Winter Storm Uri in February 2021, Needs Study findings show the Plains region was unable to import additional available generation capacity during the cold weather event, which negatively impacted resource adequacy and introduced high price spikes.⁹³ Similarly, NERC’s 2023 Long-Term Reliability Assessment finds anticipated generation retirements and increasing demand in both the SPP and Western Electricity Coordinating Council (WECC)-Southwest regions are expected to reduce reserve margins, putting both regions at risk of resource shortfalls during extreme weather events.⁹⁴ Due to these anticipated system conditions, NERC has categorized both regions as “elevated risk areas.”⁹⁵ Transmission expansion across the interconnections can serve to diversify load and generation across large geographic areas, which increases system operating flexibility.⁹⁶ Increased transfer capacities between the Plains and Southwest regions would improve system resilience during extreme weather events.

SPP’s 2021 Integrated Transmission Planning (ITP) assessment identified the Southwestern Public Service (SPS) south region as a target area requiring additional transmission development to resolve reliability needs driven by load growth, generation retirements, and limited transmission connections with the SPP generation fleet.⁹⁷ SPP identifies three interfaces in southeastern New Mexico and the Texas and Oklahoma Panhandle area, which are anticipated to experience overloads as power flows into the SPS system to displace generation retirements and meet load growth. SPP further states the SPS south zone has been an area of focus for the last decade and concludes “[w]ithout a forward-thinking, proactive approach to transmission solutions in this area, SPP can expect to continually observe incremental needs with reactive solution proposals,” which “provide limited short-term relief to system needs where continued growth is expected to occur.”⁹⁸ Indeed, SPP has continued to identify incremental reliability needs in this area in subsequent ITP assessments released in 2022 and 2023, and SPS’s 2023 Integrated Resource Plan (IRP) finds significant levels of projected load growth in the area will require additional transmission facilities and/or local generation to address future reliability

⁹³ *Id.* at 39, 56-57

⁹⁴ 2023 NERC LTRA at 7-9.

⁹⁵ *Id.*

⁹⁶ *Id.*

⁹⁷ SPP, *2021 Integrated Transmission Planning Assessment Report & Addendum*, at 1 (Dec. 2022), <https://www.spp.org/documents/66812/2021%20itp%20report%20&%20addendum%20v2.0.pdf> (2021 SPP ITP Assessment Report).

⁹⁸ *Id.* at 106.

concerns.⁹⁹ The Plains-Southwest potential NIETC can facilitate increased power transfers between the two regions, which can simultaneously contribute to addressing future SPS-related reliability concerns while also reducing reliance on other existing, constrained pathways from the Mountain to Southwest regions, such as Qualified Path 31 located across the Colorado-New Mexico border.¹⁰⁰

The Needs Study also assessed historic wholesale market price differences between regions, which signal areas of congestion on the transmission system that could be alleviated with additional transmission capacity. This analysis, which considers data from 2012 to 2020, finds that the highest congestion value of transmission anywhere in the country is between the interconnections.¹⁰¹ Cross-interconnection congestion value between the Plains and its neighbors has been increasing year after year since 2015.¹⁰² Notably, wholesale market price differentials between the Southwest and Plains regions was not assessed in the Needs Study, but it is expected that congestion trends between these two regions would be similar to congestion values found between the Eastern and Western Interconnections.

As discussed in the Needs Study, the U.S. grid is anticipated to require a sizeable increase of transmission expansion across the Eastern and Western Interconnection seam to improve system reliability and resilience.¹⁰³ Specifically, the Needs Study finds there is a significant need for increased interregional transfer capacity between Southwest and Plains regions to meet future generation and demand growth under all scenarios of future load and clean energy growth assessed in the capacity expansion modeling analysis. Under future scenarios with moderate load growth and high clean energy growth, the Southwest region will need an anticipated median increase of 3.7 GW of additional transfer capacity with the Plains region by 2035, a 914% increase relative to the 2020 system.¹⁰⁴

The Plains-Southwest potential NIETC has additional cross-interconnection implications between ERCOT and both the Eastern and Western Interconnections should additional back-to-

⁹⁹ See *SPP 2022 Integrated Transmission Planning Assessment Report*, at 19 (Dec. 2022), <https://www.spp.org/documents/68410/2022%20itp%20report%20v1.pdf> (2022 SPP ITP Assessment Report); see also *SPP, 2023 Integrated Transmission Planning Assessment Report*, at 63 (Nov. 2023), <https://www.spp.org/documents/70584/2023%20itp%20assessment%20report%20v1.0.pdf> (2023 SPP ITP Assessment Report); Southwestern Public Service Company, *2023 New Mexico Integrated Resource Plan*, at 40-41 (Oct. 2023), <https://www.xcelenergy.com/staticfiles/xcel-responsive/Company/Rates%20&%20Regulations/Resource%20Plans/2023%20SPS-IRP%20Plan.pdf> (2023 SPS NM IRP).

¹⁰⁰ Note: Qualified Paths in the West designate transmission with the highest levels of congestion. See 2023 Needs Study at 42-44; see also WECC, *2023 Path Rating Catalog*, at 32 (2023), <https://www.wecc.org/Reliability/2023%20Path%20Rating%20Catalog%20Public.pdf> (2023 WECC Path Rating Catalog).

¹⁰¹ 2023 Needs Study at v, 37-38; see also LBNL Empirical Estimates at 20.

¹⁰² LBNL Empirical Estimates at 22.

¹⁰³ 2023 Needs Study at 62-63.

¹⁰⁴ *Id.* at 131-133, tbl. VI-4.

back ties be constructed within the potential NIETC.¹⁰⁵ Interconnection with ERCOT would include additional benefits such as improving resilience, relieving congestion, and meeting future demand growth. The Needs Study presents NERC and FERC findings that demonstrate limited interconnections between ERCOT and neighboring systems significantly affected its ability to make up for the capacity shortage experienced during Winter Storm Uri.¹⁰⁶ Improving transfer capability via increased ties with neighboring regions would increase ERCOT's ability to import power to address capacity shortages when its system is stressed under emergency conditions. Needs Study analysis of wholesale electricity prices also finds the highest congestion values of interregional transmission from 2012 through 2020 across the entire United States exists between ERCOT and the Plains region, ranging from \$15/MWh to \$69/MWh.¹⁰⁷ Similarly high congestion values of transmission exist between ERCOT and the Southwest region (\$25/MWh).¹⁰⁸

Further, the Needs Study demonstrates there is significant need for increased cross-interconnection and interregional transfer capacity between ERCOT and the Plains region to meet future generation and demand growth under all scenarios of future load and clean energy growth assessed in the capacity expansion modeling analysis. Under future scenarios with moderate load growth and high clean energy growth, ERCOT will need an anticipated median increase of 9.8 GW of additional transfer capacity with the Plains region by 2035, a 1,200% increase relative to the 2020 system.¹⁰⁹

¹⁰⁵ See ERCOT, *Area by County* (last visited Mar. 26, 2024), https://www.ercot.com/files/assets/2022/12/13/ERCOT-Maps_Area-by-county.jpg.

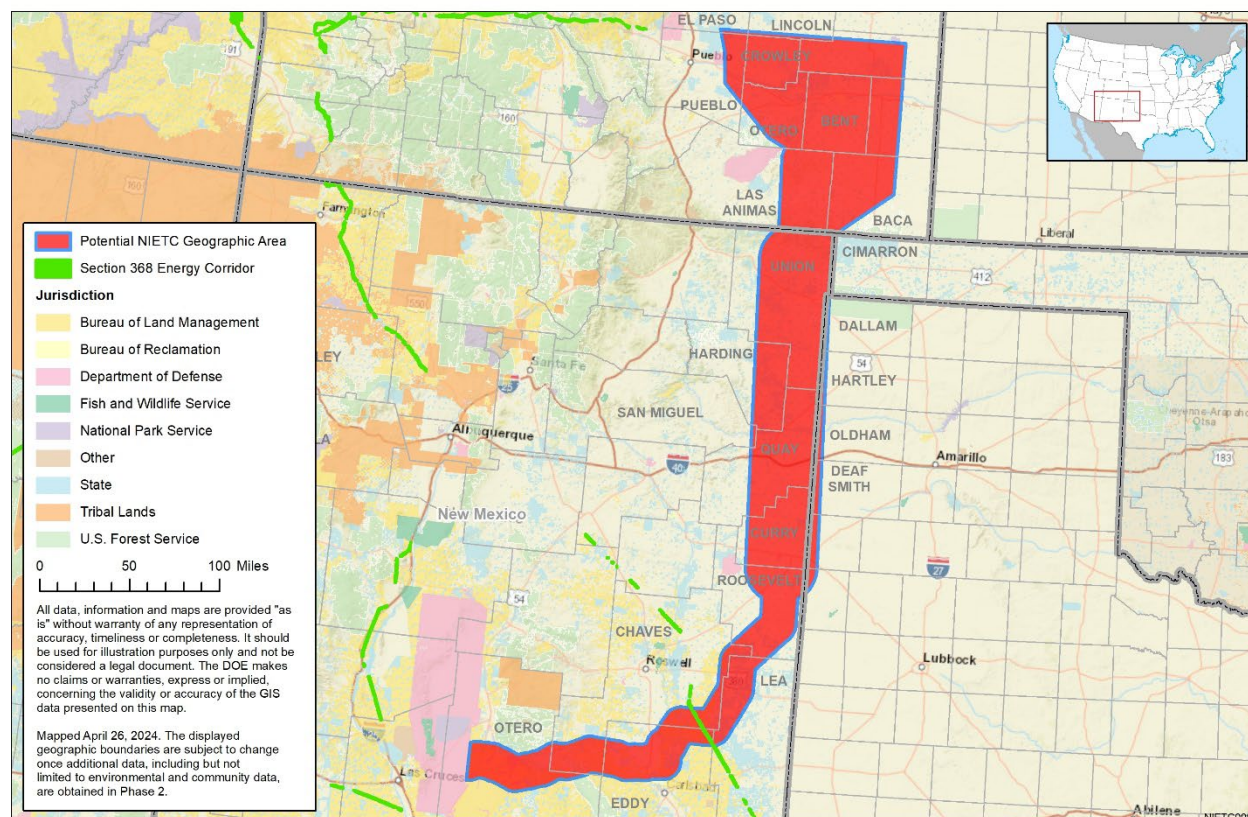
¹⁰⁶ 2023 Needs Study at 56-57.

¹⁰⁷ *Id.* at v, 37-38. Geographic region boundaries defined in the 2023 Needs Study generally align with the relevant reliability entity and transmission planning entity boundaries wherever possible. The Texas region, as defined in the Needs Study, aligns with the ERCOT and Texas reliability entity footprints. When referring to "Texas region"-specific Needs Study findings in this document, however, DOE refers to "ERCOT" rather than the "Texas region" to provide greater specificity given the narrower focus of potential NIETC geographic areas.

¹⁰⁸ *Id.*

¹⁰⁹ *Id.* at 131-133, tbl. VI-4.

Mountain - Plains - Southwest



Geography: The Mountain-Plains-Southwest potential NIETC is an approximately 20- to 100-mile-wide, 540-mile-long north-south geographic area from Colorado into New Mexico along the border with Oklahoma and then Texas. It includes multiple substations and existing transmission facilities to make a link between the Eastern and Western Interconnections possible at several locations. It has the potential to facilitate interregional transmission between WestConnect and SPP, and cross-interconnection transmission as well.

Transmission Capacity Constraints or Congestion that Adversely Affects Consumers: The Mountain-Plains-Southwest potential NIETC encompasses a geographic area where there is significant need for increased cross-interconnection and interregional transfer capacity to maintain and improve reliability and resilience, alleviate congestion, meet future generation and demand growth, and increase clean energy integration. This potential NIETC may also increase transfer capacity between ERCOT and both the Eastern and Western Interconnections, pending deployment of back-to-back ties between ERCOT and the other interconnections. These preliminary findings are based on the 2023 Needs Study as well as other relevant information and are consistent with DOE’s preliminary finding in the NIETC Guidance regarding the particular value of NIETC designation where there is need for increased interregional transfer capacity.

Recent experience with extreme weather events, such as Winter Storm Uri, demonstrate the value additional interregional transfer capacity would have for consumers in ensuring reliability and resilience and lowering costs by ensuring that energy can be delivered from where it is available to where it is needed during these extreme events. During Winter Storm Uri in February 2021, Needs Study findings show the Plains region was unable to import additional available generation capacity during the cold weather event, which negatively impacted resource adequacy and introduced high price spikes.¹¹⁰ In addition, the Southwest region is approaching system conditions that present the risk of load curtailment during extreme weather events and wildfires.¹¹¹ Increased transfer capacities between the Plains and Southwest regions would improve system resilience during extreme weather events.

SPP's 2021 ITP assessment identified the SPS south region as a target area requiring additional transmission development to resolve reliability needs driven by load growth, generation retirements, and limited transmission connections with the SPP generation fleet.¹¹² SPP identifies three interfaces in southeastern New Mexico and the Texas and Oklahoma Panhandle area, which are anticipated to experience overloads as power flows into the SPS region to displace generation retirements and meet load growth. SPP further states the SPS south zone has been an area of focus for the last decade and concludes "[w]ithout a forward-thinking, proactive approach to transmission solutions in this area, SPP can expect to continually observe incremental needs with reactive solution proposals," which "provide limited short-term relief to system needs where continued growth is expected to occur."¹¹³ Indeed, SPP has continued to identify incremental reliability needs in this area in subsequent ITP assessments released in 2022 and 2023, and SPS's 2023 IRP finds significant levels of projected load growth in the area will require additional transmission facilities and/or local generation to address future reliability concerns.¹¹⁴ The Mountain-Plains-Southwest potential NIETC can facilitate increased power transfers between the regions, which can simultaneously contribute towards addressing future SPS-related reliability concerns while also reducing reliance on existing, constrained pathways from the Mountain to Southwest region, such as Qualified Path 31 located across the Colorado-New Mexico border.¹¹⁵

The 2023 Needs Study identifies a significant present and anticipated future need for additional cross-interconnection and interregional transfer capacity at the Mountain, Southwest, and Plains regional interface. As discussed in the Needs Study, the Western Interconnection is anticipated to become more dependent on generation in the Southwest and western Mountain region by 2038 to meet future generation and demand needs.¹¹⁶ Among the drivers increasing the need for

¹¹⁰ *Id.* at 39, 56-57

¹¹¹ *Id.* at 56.

¹¹² 2021 SPP ITP Assessment Report at 1.

¹¹³ *Id.* at 106.

¹¹⁴ *See* 2022 SPP ITP Assessment Report at 19; 2023 SPP ITP Assessment Report at 63; *see also* 2023 SPS NM IRP at 40-41.

¹¹⁵ 2023 Needs Study at 42-44; 2023 WECC Path Rating Catalog at 32.

¹¹⁶ 2020 Needs Study at 71-72.

additional interregional transmission is the displacement of coal generation in the Western Interconnection and constraints on highly utilized existing pathways, which will become even more critical to expand as the eastern Mountain region transitions from a net energy exporter to a net importer.¹¹⁷

The Needs Study also assessed historic wholesale market price differences between regions, which signal areas of congestion on the transmission system that could be alleviated with additional transmission capacity. According to Needs Study analysis of historical wholesale market prices, high congestion value of transmission from 2012 through 2020 exists between the Mountain and southern Plains regions, with an average marginal value of transmission equal to \$19/MWh.¹¹⁸ The congestion value of that link continued to increase in recent years, up to \$39/MWh in 2021 and \$54/MWh in 2020.¹¹⁹ Cross-interconnection congestion value between the Mountain and Plains regions has been increasing year after year since 2015.¹²⁰

The Needs Study finds there is a significant need for increased interregional transfer capacity between the Mountain, Southwest, and Plains regions' interface to meet future generation and demand growth under certain scenarios of future load and clean energy growth assessed in the capacity expansion modeling analysis. Under future scenarios with moderate load growth and high clean energy growth, the Southwest region will need an anticipated median increase of 1.7 GW of additional transfer capacity with the Mountain region by 2035, a 41% increase relative to the 2020 system.¹²¹ Under the same scenario, the Southwest region will need an anticipated median increase of 3.7 GW of additional transfer capacity with the Plains region by 2035, a 914% increase relative to the 2020 system.¹²² Similarly, findings show the Mountain region will need an anticipated median increase of 2.7 GW of additional transfer capacity with the Plains region by 2035, a 287% increase relative to the 2020 system under moderate load growth and high clean energy growth future scenarios.¹²³

The Mountain-Plains-Southwest potential NIETC has additional cross-interconnection implications between ERCOT and both the Eastern and Western Interconnections should additional back-to-back ties be constructed within the corridor.¹²⁴ Interconnection with ERCOT would include additional benefits such as improving resilience, relieving congestion, and meeting future demand growth. The Needs Study presents NERC and FERC findings that demonstrate limited interconnections between ERCOT and neighboring systems significantly affected its ability to make up for the capacity shortage experienced during Winter Storm Uri.¹²⁵

¹¹⁷ *Id.*

¹¹⁸ *Id.* at v, 37-38.

¹¹⁹ *Id.*

¹²⁰ LBNL Empirical Estimates at 22.

¹²¹ 2023 Needs Study at 131-133, tbl. VI-4.

¹²² *Id.*

¹²³ *Id.*

¹²⁴ See ERCOT, *Area by County* (last visited Mar. 26, 2024),

https://www.ercot.com/files/assets/2022/12/13/ERCOT-Maps_Area-by-county.jpg.

¹²⁵ 2023 Needs Study at 56-57.

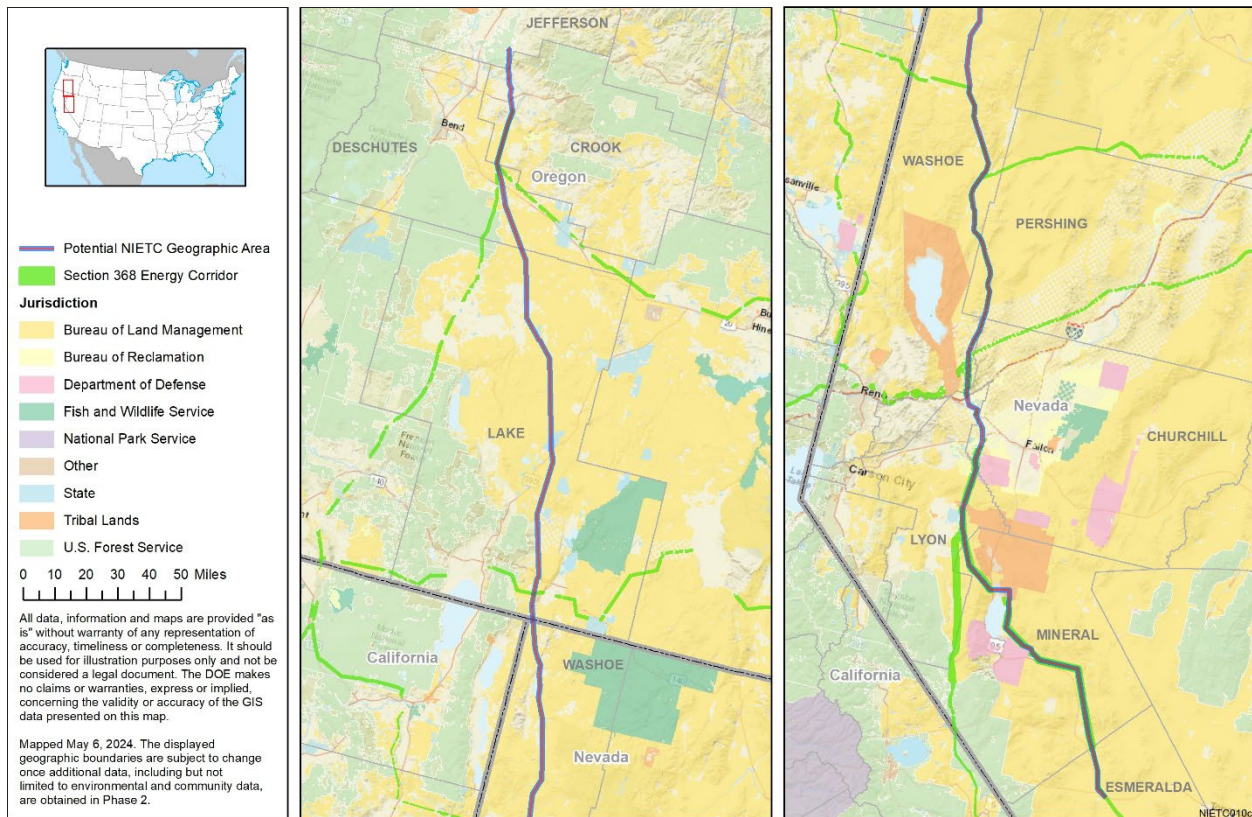
Improving transfer capability via increased ties with neighboring regions would increase ERCOT's ability to import power to address capacity shortages when its system is stressed under emergency conditions. Needs Study analysis of wholesale electricity prices also finds the highest congestion values of interregional transmission from 2012 through 2020 across the entire United States exists between ERCOT and the Plains region, ranging from \$15/MWh to \$69/MWh.¹²⁶ Similarly high congestion values of transmission exist between ERCOT and the Southwest region (\$25/MWh).¹²⁷ Further, the Needs Study demonstrates there is significant need for increased cross-interconnection and interregional transfer capacity between ERCOT and the Plains region to meet future generation and demand growth under all scenarios of future load and clean energy growth assessed in the capacity expansion modeling analysis. Under scenarios with moderate load growth and high clean energy growth future scenarios, ERCOT will need an anticipated median increase of 9.8 GW of additional transfer capacity with the Plains region by 2035, a 1,200% increase relative to the 2020 system.¹²⁸

¹²⁶ *Id.* at v, 37-38.

¹²⁷ *Id.*

¹²⁸ *Id.* at 131-133, tbl. VI-4.

Mountain - Northwest



Geography: The Mountain-Northwest potential NIETC is approximately 0.3-mile-wide (1,500 feet), 515-mile-long, north-south geographic area between Esmeralda County, Nevada, and Jefferson County, Oregon. It is co-located with existing Bureau of Land Management (BLM) Section 368 energy corridors¹²⁹ through most of Nevada and follows existing infrastructure for most of its length. It has the potential to facilitate interregional transmission between CAISO and NorthernGrid.

¹²⁹ Several agencies worked to establish multi-function (including transmission) energy corridors on federal lands in 11 western states (Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington, and Wyoming) under section 368 of the Energy Policy Act of 2005. 42 U.S.C. 15926. Section 368 directs several agencies, including DOE, to designate these multi-use corridors on federal lands. Section 368 also directs the agencies to, when designating such corridors, account for the need for upgraded and new infrastructure and to take actions to improve reliability, relieve congestion, and enhance the capability of the national grid to deliver energy. On April 20, 2022, the Bureau of Land Management, the U.S. Forest Service, and DOE released the Final Regional Review Report for the West-wide Energy Corridors, which designated 5,000 miles of energy corridors for potential placement of electricity transmission and distribution infrastructure, among other energy transport projects. On December 1, 2023, the Bureau of Land Management published a Notice of Intent to Amend Resource Management Plans for Section 368 Energy Corridor Revisions and Prepare an Associated Environmental Impact Statement, which announced a land use planning effort to evaluate modifying seven designated West-wide corridors and opened a scoping comment period.

Transmission Capacity Constraints or Congestion that Adversely Affects Consumers: The Mountain-Northwest potential NIETC encompasses a geographic area where there is significant need for increased interregional transfer capacity to maintain and improve reliability and resilience, reduce system congestion, meet future generation and demand growth, and increase clean energy integration. These preliminary findings are based on the 2023 Needs Study as well as other relevant information and are consistent with DOE’s preliminary finding in the NIETC Guidance regarding the particular value of NIETC designation where there is need for increased interregional transfer capacity.

The Needs Study finds the Northwest region faces risk of load curtailment during extreme weather events and wildfires, particularly as the region becomes increasingly reliant on variable energy resources to meet peak demand.¹³⁰ NERC’s 2023 Long-Term Reliability Assessment finds anticipated generation retirements and increasing demand in the WECC-Northwest region are expected to reduce reserve margins and put the region at risk of resource shortfalls during extreme weather events after 2024.¹³¹ Due to these anticipated system conditions, NERC has categorized the WECC-Northwest region as an “elevated risk area.”¹³² Additional transmission upgrades would reduce risks to electric reliability from extreme events.

The Mountain-Northwest potential NIETC also provides an alternative path to existing, congested pathways such as the California-Oregon Intertie, located at the intersection of the Northwest, California, and Mountain regions, as well as the Pacific DC Intertie, which extends from northern Oregon, through Nevada, and into southern California. According to CAISO, congestion on interties across all markets has increased in recent years, predominantly driven by increased congestion on these two major interties that link CAISO with the Northwest.¹³³ Needs Study findings also demonstrate the need to alleviate transfer capacity limits between the Northwest and Mountain regions. According to Needs Study analysis of historical wholesale market prices, high congestion value of interregional transmission from 2012 through 2020 exists between the Northwest and Mountain regions, with an average marginal value of transmission equal to \$14/MWh.¹³⁴ A high congestion value indicates that additional transmission between the regions would reduce system congestion and constraints and lower consumer costs.

The 2023 Needs Study identifies present and anticipated future need for additional interregional transfer capacity between the Mountain and Northwest regions due to anticipated generation mix changes and demand growth. As discussed in the Needs Study, the Western Interconnection is anticipated to become more dependent on generation in the Southwest and western Mountain region by 2038 to meet future generation and demand needs.¹³⁵ Among the drivers increasing the

¹³⁰ 2023 Needs Study at 56.

¹³¹ 2023 NERC LTRA at 9.

¹³² *Id.*

¹³³ CAISO, *2022 Annual Report on Market Issues & Performance*, at 181 (July 2023),

<https://www.caiso.com/Documents/2022-Annual-Report-on-Market-Issues-and-Performance-Jul-11-2023.pdf>.

¹³⁴ 2023 Need Study at v, 37-38.

¹³⁵ *Id.* at 71-72.

need for additional interregional transmission is the displacement of coal generation in the Western Interconnection and constraints on highly utilized existing pathways, which will become even more critical to expand as the eastern Mountain region transitions from a net energy exporter to a net importer.¹³⁶ Additionally, utilities in the Northwest region and the Bonneville Power Administration anticipate load in the region to increase by 20% over the next five years, much of which is driven by industrial load growth and electrification.¹³⁷ The Needs Study estimates need for increased interregional transfer capacity between the Northwest and Mountain regions to meet future generation and demand growth under certain scenarios of future load and clean energy growth assessed in the capacity expansion modeling analysis. Under future scenarios with moderate load growth and high clean energy growth, the Northwest will need an anticipated median increase of 3.3 GW of additional transfer capacity with the Mountain region by 2035, a 26% increase relative to the 2020 system.¹³⁸ Increased transfer capacity between the Mountain and Northwest regions would help accommodate future generation and load profiles.

IV. Comment Period and Phase 2 Information Submission Window

As explained in the NIETC Guidance, following issuance of the preliminary list of potential NIETCs to initiate Phase 2 of the NIETC designation process, DOE invites interested parties to submit comments on the preliminary list as well as additional information and recommendations on geographic boundaries and potential impacts on environmental, community, and other resources for those potential NIETCs included in the preliminary list based on the Phase 2 information submission requests listed in Section V.B.2 of the NIETC Guidance.¹³⁹ The list of information for Phase 2 is designed to assist DOE in conducting a study of environmental impacts pursuant to NEPA and examining any requirements that may apply under other federal statutes in designating one or more NIETCs. Like Phase 1, this window is open for 45 days.

A. Comments on Preliminary List of Potential NIETCs

DOE invites comments from interested parties on the potential NIETCs in the preliminary list. Interested parties are any person or entity, including States and Indian Tribes, concerned with DOE's exercise of its discretion to designate a geographic area as a NIETC. To be clear, interested parties are not limited to those persons or entities that made submissions during the Phase 1 information submission window.

To assist DOE in determining whether the geographic area of the potential NIETC designation is experiencing or is expected to experience transmission capacity constraints or congestion that

¹³⁶ *Id.*

¹³⁷ Pacific Northwest Utilities Conference Committee, *Northwest Regional Forecast of Power Loads and Resources: August 2023 through July 2033*, at 5 (May 2023), <https://www.pnucc.org/wp-content/uploads/2023-PNUCC-Northwest-Regional-Forecast-final.pdf>.

¹³⁸ 2023 Needs Study at 131-133, tbl. VI-4.

¹³⁹ NIETC Guidance at 48-56, <https://www.energy.gov/sites/default/files/2023-12/2023-12-15%20GDO%20NIETC%20Final%20Guidance%20Document.pdf>.

adversely affects consumers, DOE requested that interested parties provide in their Phase 1 submissions information on transmission needs, adverse effects on consumers, and the relevant discretionary factors in FPA section 216(a)(4). DOE continues to seek additional information that was requested during Phase 1 during Phase 2 for the potential NIETCs included in this preliminary list. The information requested for Phase 1 is available in Section V.B.1 of the NIETC Guidance.¹⁴⁰ This means that DOE invites interested parties to comment on the information contained within the preliminary list of potential NIETCs, including commenting on the present or expected transmission capacity constraints or congestion relevant to the potential NIETCs in the preliminary list as well as the adverse effects on consumers resulting therefrom (i.e., the consumer harms resulting from the lack of adequate transmission within the potential NIETCs). As noted earlier, DOE also encourages interested parties to identify potential transmission projects under development in close proximity to or within these potential NIETCs that may warrant changes to the geographic boundaries of the potential NIETCs or otherwise factor into DOE's assessment of which potential NIETCs proceed to Phase 3.

B. Phase 2 Information Submissions

The 45-day window following issuance of this preliminary list also includes the Phase 2 information submission window. DOE invites interested parties to submit additional information on geographic boundaries and potential impacts on environmental, community, and other resources based on the list included in Section V.B.2 of the NIETC Guidance for Phase 2.¹⁴¹ As noted above, interested parties are not limited to those persons or entities that made submissions during the Phase 1 information submission window.

The list of information requested for Phase 2 is organized into 13 categories (called resource reports): (1) geographic boundaries; (2) water use and quality; (3) fish, wildlife, and vegetation; (4) cultural resources; (5) socioeconomics; (6) Tribal resources; (7) communities of interest;¹⁴² (8) geological resources; (9) soils; (10) land use, recreation, and aesthetics; (11) air quality and environmental noise; (12) alternatives; and (13) reliability and safety. The Phase 2 information submission window is focused on gathering additional information on geographic boundaries and potential impacts on environmental, community, and other resources specific to the potential NIETCs in the preliminary list to facilitate DOE's environmental review, which starts in Phase 3. DOE requests that interested parties provide in their Phase 2 information submissions the following essential resource information: concise descriptions of any known or potential environmental and cumulative effects resulting from a potential NIETC designation, including visual, historic, cultural, economic, social, or health effects thereof. For example, interested parties may provide information such as the location of wetlands, recreation areas, historic

¹⁴⁰ *Id.* at 45-48.

¹⁴¹ *Id.* at 48-56.

¹⁴² As defined in the NIETC Guidance, communities of interest means the following communities that could be affected by a NIETC designation: disadvantaged communities; rural communities; Tribal communities; indigenous communities; geographically proximate communities; communities with environmental justice concerns; and energy communities. *Id.* at 15.

properties, residences and businesses, abandoned mines, and cropland within the potential NIETCs on the preliminary list. DOE also requests that interested parties identify any environmental reviews previously conducted, in progress, or planned for transmission projects within the potential NIETCs in the preliminary list. To the extent identified, interested parties may also comment on the existing environmental reviews, including how DOE can access them and their potential utility for DOE, as well as gaps or other perceived flaws in those reviews.

Interested parties may submit any level of information to help inform DOE's process of designating NIETCs under FPA section 216(a)(2). For example, an interested party may only have information that is relevant to one particular resource report, and even one particular data request within a resource report. DOE welcomes that narrow information submission. Note that there is no prohibition on the number of information submissions from an interested party. DOE values diverse perspectives in the NIETC designation process and anticipates that information and recommendations from a broad set of sources will only enhance DOE's ability to efficiently and effectively comply with its obligations under the FPA and other federal statutes applicable to NIETC designation.

C. Procedures for Comments and Information Submissions

DOE requests comments and information submissions be made by 5:00 pm ET on June 24, 2024, via email to NIETC@hq.doe.gov. Receiving timely submissions will facilitate DOE's exercise of its discretion to designate NIETCs in the most efficient and effective manner.

DOE requests submissions be provided in Microsoft Word or PDF format, except for maps and geospatial submissions. There is no page limit on submissions. Interested parties are encouraged to organize information submissions in the manner presented in the NIETC Guidance, including any relevant numbering. DOE requests that information submissions include the name(s), phone number(s), and email address(es) for the principal point(s) of contact, as well as relevant institution and/or organization affiliation and postal address.

In response to concerns about maintaining the confidentiality of certain information, including commercially sensitive information, critical electric infrastructure information (CEII), and proprietary information, pursuant to 10 CFR 1004.11, any interested party submitting information as part of the NIETC designation process that the interested party believes to be confidential and potentially exempt by law from public disclosure should submit two well-marked copies, one marked "confidential" that includes all the information believed to be confidential, and one marked "non-confidential" with the information believed to be confidential deleted or redacted. DOE will make its own determination about the confidential status of the information and treat it according to its determination. The interested party may request confidential treatment for all material sent to DOE containing location, character, and ownership information about cultural resources. Pursuant to 10 CFR 1004.13, any interested party submitting information that the interested party believes might contain CEII should submit a request for CEII designation of information. Failure to comply with these marking requirements may result in the disclosure of the unmarked information under the Freedom of Information Act

or otherwise. The U.S. Federal Government is not liable for the disclosure or use of unmarked information and may use or disclose such information for any purpose. The Government may use or disclose any information that is not appropriately marked or otherwise restricted, regardless of source.

With regard to Tribal resources, including sacred sites, DOE recognizes the vital role of proactive engagement in fostering collaborative relationships with Federally Recognized Indian Tribes and Tribal interests. DOE will follow federal law, its Policy and Order on Tribal Consultation, as well as the Best Practices Guide for Federal Agencies Regarding Tribal and Native Hawaiian Sacred Sites currently in effect, to discern potential impacts of NIETC designation on Indian Tribes and Tribal interests, for instance, impacts to Indian Land, historic homelands from which Tribes were removed, cultural sites, sacred sites, burial sites, water rights, mineral and other subsurface rights, fishing rights, and hunting rights. This includes DOE determining whether formal consultation is needed with any Indian Tribes. For the purposes of the NIETC designation process, DOE defines Tribal Resources as follows:

Any available information regarding resources or interests to a Federally recognized Indian Tribe, including but not limited to Reservation Boundaries, Fee-owned lands, treaty rights, publicly known or listed Traditional Cultural Properties or other cultural resources, any known consultation protocols for a given state or region, a list of Federally recognized Indian Tribes who have pre-contact interest or claims to a project area, and any other interest or resources that may impact a Federally recognized Indian Tribe.

At this point in the NIETC designation process, DOE is looking for specific information from interested parties concerning Tribal interests and how they may possibly impact the designation of potential NIETCs. DOE recognizes that some information may be sensitive and not publicly disclosed and therefore recommends the following:

Interested Parties:

- Interested parties are encouraged to submit only non-sensitive information necessary to sufficiently support agency actions and avoid submitting any potentially sensitive data. If DOE determines that additional information is needed to support NIETC designation, DOE will contact the interested party directly to request that data.
- Interested parties are not required to obtain sensitive data from a Federally recognized Indian Tribe, information that Tribes may be unwilling to share. For any additional information that a Federally Recognized Indian Tribe is willing to share to further the purposes of the NIETC designation, DOE may reach out to the affected Tribe directly.
- Interested parties should be aware that Section 304 of the National Historic Preservation Act of 1966 (NHPA) and Section 9 of the Archaeological Resources Protection Act of 1979 protect from public disclosure only information of certain archaeological resources and historic properties and do not guarantee that the Tribal resource information will be protected from disclosure pursuant to the Freedom of Information Act.

- If an interested party believes sensitive information exists in its submission to DOE, it should clearly mark that information as “sensitive” or “proprietary.”

DOE:

- If DOE receives any potentially sensitive information, in addition to publicly available data, DOE will take appropriate measures to protect the confidentiality of any Tribal Resources including but not limited to pursuing protection from disclosure under Section 304 of NHPA and Section 9 of the Archaeological Resources Protection Act, if applicable.
- DOE will also follow its current document retention schedule consistent with the National Archives and Records Administration requirements.
- DOE may enter into a confidentiality or data-sharing agreement with a Tribe detailing the information federal personnel may access and how they may access it, consistent with the Freedom of Information Act requirements and requirements related to documenting federal decisions related to the NIETC designation.
- DOE will develop a Tribal Engagement Plan for each potential NIETC that will serve as a framework for establishing meaningful and forthcoming partnership between DOE and the Federally Recognized Indian Tribes that may have interest in the NIETC designation.
- DOE will follow Controlled Unclassified Information Guidelines for protection of archaeological resources and historic properties as outlined here: <https://www.archives.gov/cui/registry/category-detail/archaeological-resources>.
- DOE will be transparent with Tribes regarding the limits of DOE’s ability to protect agency records containing Tribal Resources from disclosure under relevant legal authorities.
- DOE will seek only minimally required information necessary to sufficiently support agency action.
- DOE will engage with the affected Tribes prior to disclosure of any potentially sensitive information.
- DOE will endeavor to disclose Tribal Resources information (unless publicly available) in any Federal Register notice, agency website, or other federal publication only after obtaining consent from the appropriate Tribes.

V. Transmission Facility Financing

As discussed in the NIETC Guidance, the Inflation Reduction Act established a Transmission Facility Financing (TFF) program, under which DOE can provide direct loan support for transmission facilities designated by the Secretary to be necessary in the national interest under FPA section 216(a).¹⁴³ While Congress did not specify a maximum volume of loans that may be issued, Congress appropriated \$2 billion to carry out the program, which may be used to pay the

¹⁴³ Pub. L. No. 117-169 (Section 50151); 42 U.S.C. 18715.

Credit Subsidy Cost for loans made under this program.¹⁴⁴ DOE stated in the NIETC Guidance that it intends to deem transmission facilities that would be located within a NIETC designated pursuant to the NIETC Guidance eligible to receive a loan under the TFF program. DOE also stated that details about how to apply for a TFF loan were forthcoming at a later date. Additional guidance is provided below.

To be eligible for a TFF loan, applicants must meet the following minimum criteria:

- The applicant must be a non-federal borrower;
- The applicant must be constructing or modifying electric transmission facilities;
- The applicant’s project must include electric transmission facilities located within a geographic area that the Secretary of Energy has designated as a NIETC pursuant to section 216(a)(2) of the FPA;
- The construction or modification of the relevant electric transmission facilities must address the transmission capacity constraints or congestion underlying the Secretary of Energy’s designation of the associated NIETC;
- The applicant must be seeking a loan that:
 - Has a term of the lesser of 90% of the projected useful life of the facility or 30 years;
 - Does not exceed 80% of the project costs; and
 - Is subject to the condition that the direct loan is not subordinate to other financing.
- All loan disbursements to the project must occur prior to September 30, 2031.

Projects that are expected to benefit from other certain forms of federal support may not be eligible to receive a TFF loan.¹⁴⁵ Examples include such federal support as grants, cooperative agreements, or other loans or loan guarantees from federal agencies or entities. Limited exceptions may apply, which may be considered on a case-by-case basis.¹⁴⁶

DOE invites input from transmission industry stakeholders about the scope of eligible TFF projects and associated project financing requirements. DOE is also interested in hearing from utilities or project developers who are considering seeking TFF support for a specific project in or near one of the potential NIETCs identified in this issuance. DOE will use data gathered during this scoping period to inform its formal TFF application and evaluation process, which is anticipated to open in Spring 2025. Transmission developers, utilities, and other interested parties interested in providing input on the development of DOE’s formal TFF application and evaluation process may contact DOE at TFF@hq.doe.gov by July 31, 2024. After July 31, 2024, DOE may continue to gather information from transmission industry stakeholders, as needed, to complete development of the formal TFF application and evaluation process.

¹⁴⁴ See OMB Circular No. A-11, Preparing, Submitting, and Executing the Budget, Section 185.2.

¹⁴⁵ Pub. L. No. 117-169 (Sections 50151(b), 50141(d)(2)); 42 U.S.C. 18715.

¹⁴⁶ Pub. L. No. 117-169 (Section 50141(d)(3)).

As explained in the NIETC Guidance, designation of a NIETC does not constitute selection of or a preference for a specific transmission project for DOE funding purposes. Developers of transmission facilities within a NIETC may apply for DOE funding opportunities, and DOE will evaluate such applications based on the criteria for those funding opportunities, including for direct loans through the TFF program.

VI. More Information

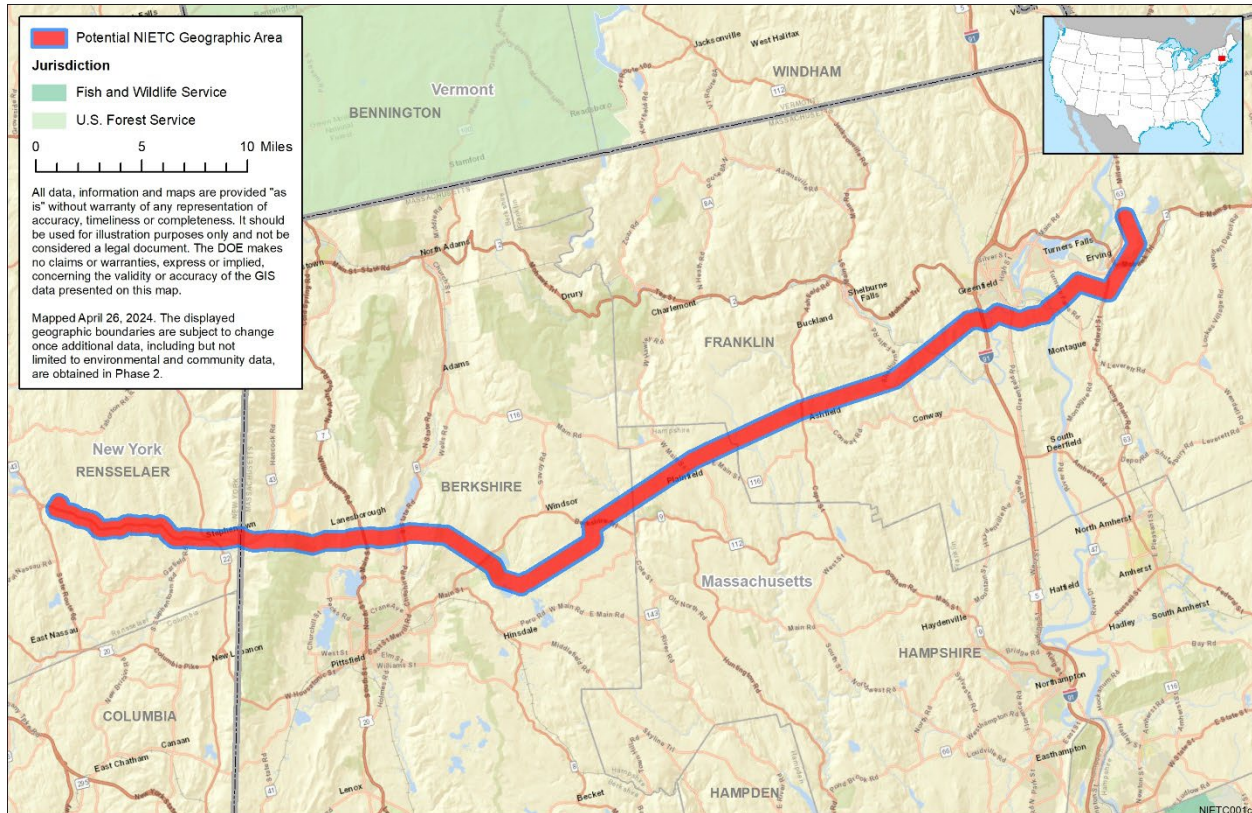
Questions regarding this preliminary list of potential NIETCs and the NIETC program more generally can be directed to NIETC@hq.doe.gov. More information on NIETCs is also available at www.energy.gov/gdo/national-interest-electric-transmission-corridor-designation-process.

Appendix A: Potential NIETC Maps – New York-New England

Disclaimer: All data, information, and maps are provided “as is” without warranty of any representation of accuracy, timeliness, or completeness. They should be used for illustration purposes only and not be considered legal documents. DOE makes no claims or warranties, express or implied, concerning the validity or accuracy of the GIS data presented on these maps. The displayed geographic boundaries are subject to change once additional data, including but not limited to environmental and community data, are obtained in Phase 2.

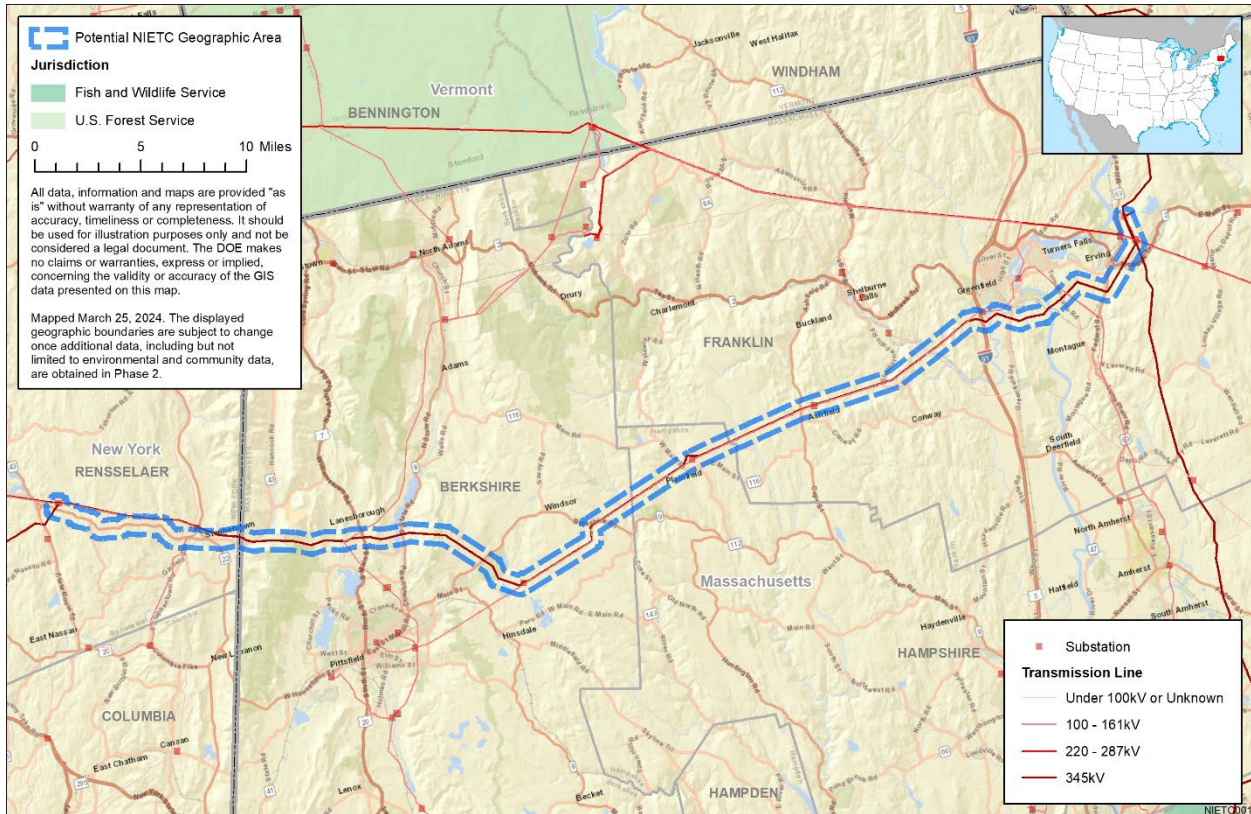
Shaded Potential NIETC Geographic Area

New York - New England



Electrical Infrastructure

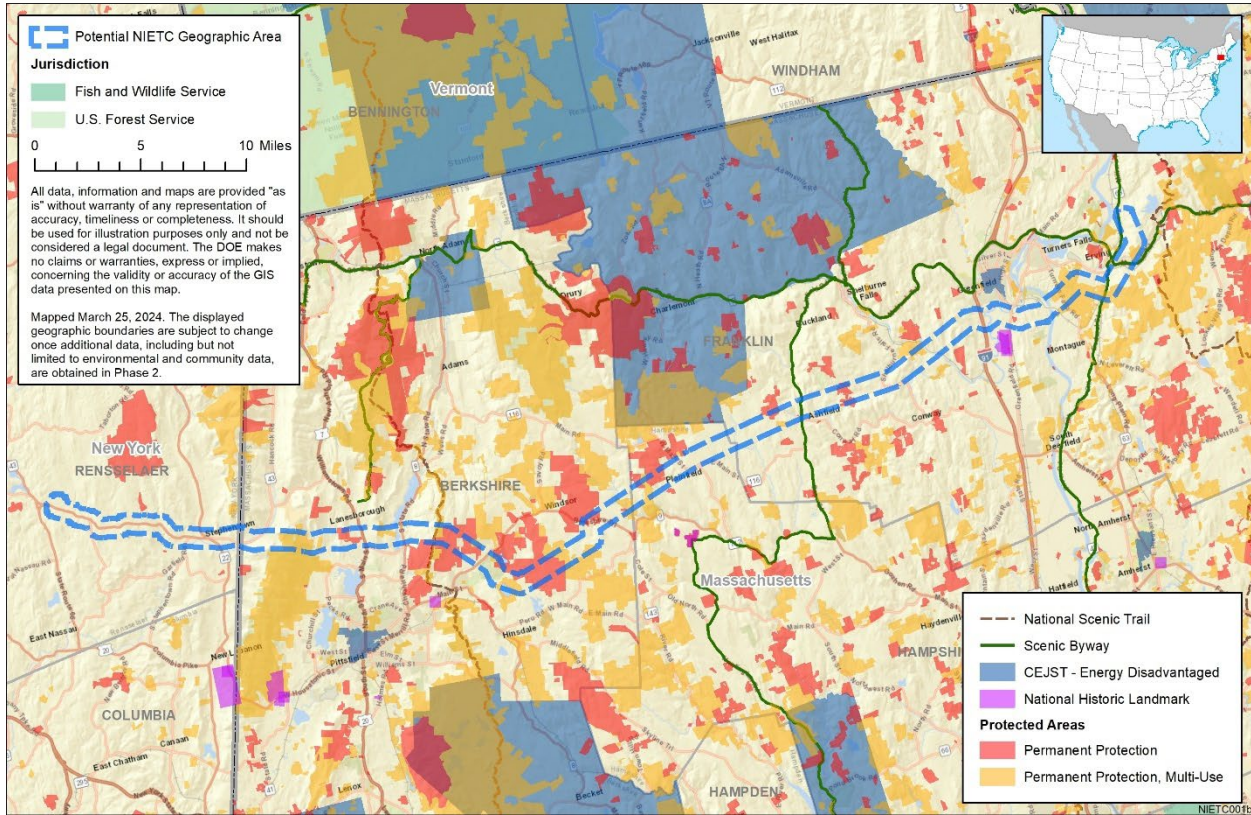
New York - New England



Environmental Information

jurisdiction

New York - New England

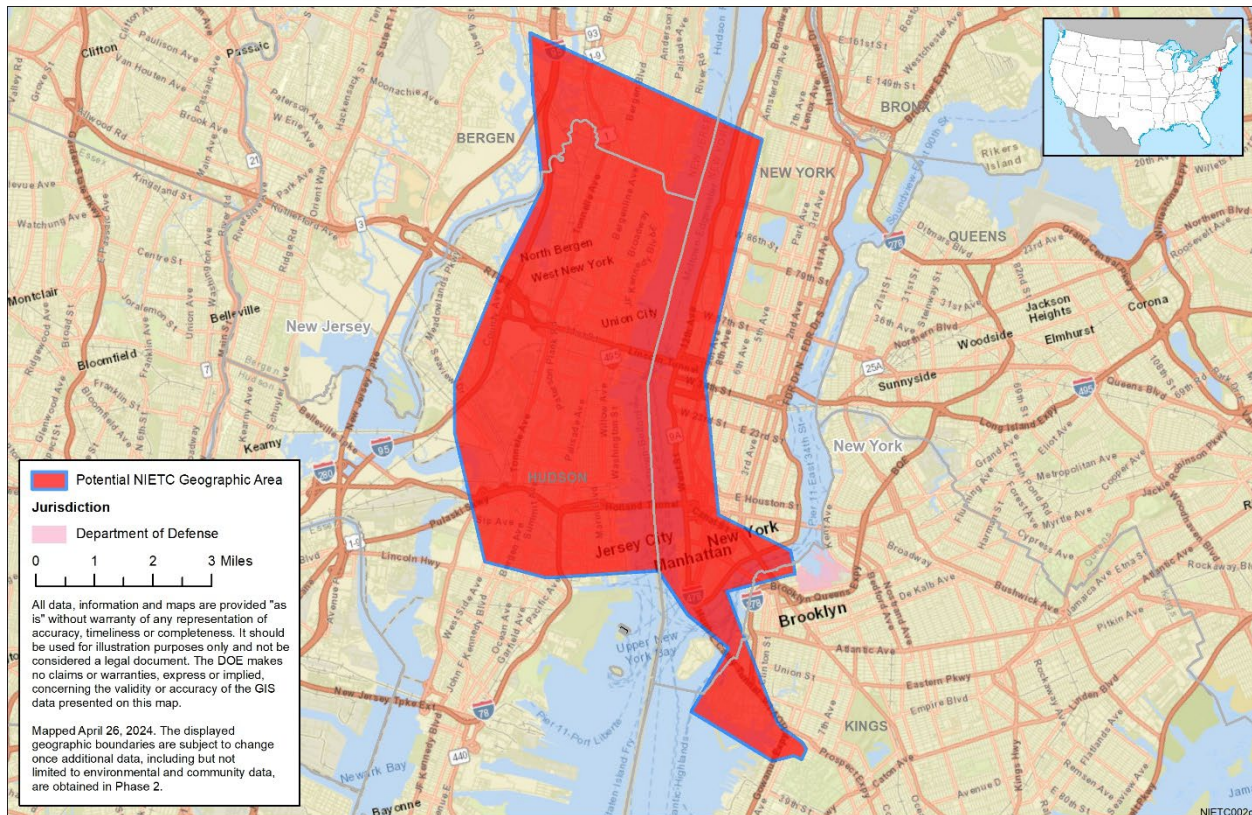


Appendix B: Potential NIETC Maps – New York-Mid-Atlantic

Disclaimer: All data, information, and maps are provided “as is” without warranty of any representation of accuracy, timeliness, or completeness. They should be used for illustration purposes only and not be considered legal documents. DOE makes no claims or warranties, express or implied, concerning the validity or accuracy of the GIS data presented on these maps. The displayed geographic boundaries are subject to change once additional data, including but not limited to environmental and community data, are obtained in Phase 2.

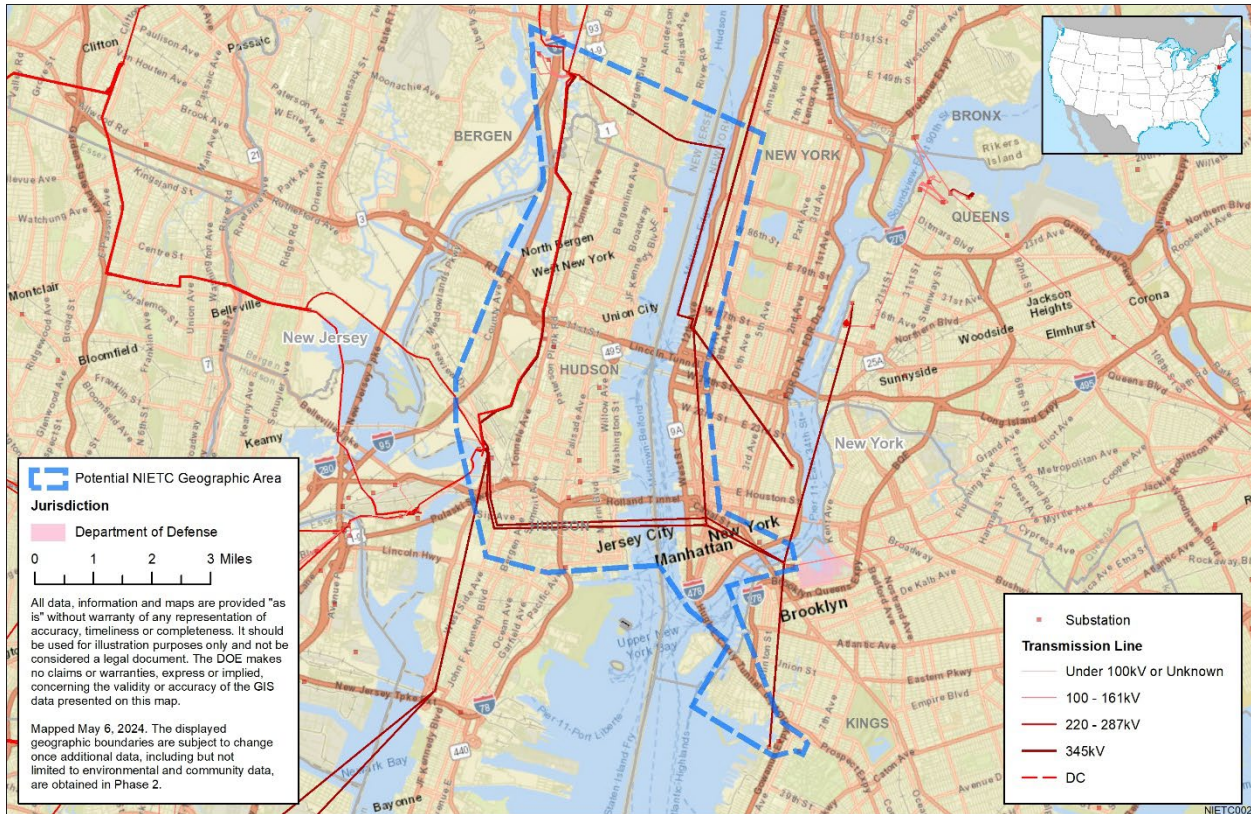
Shaded Potential NIETC Geographic Area

New York - Mid-Atlantic



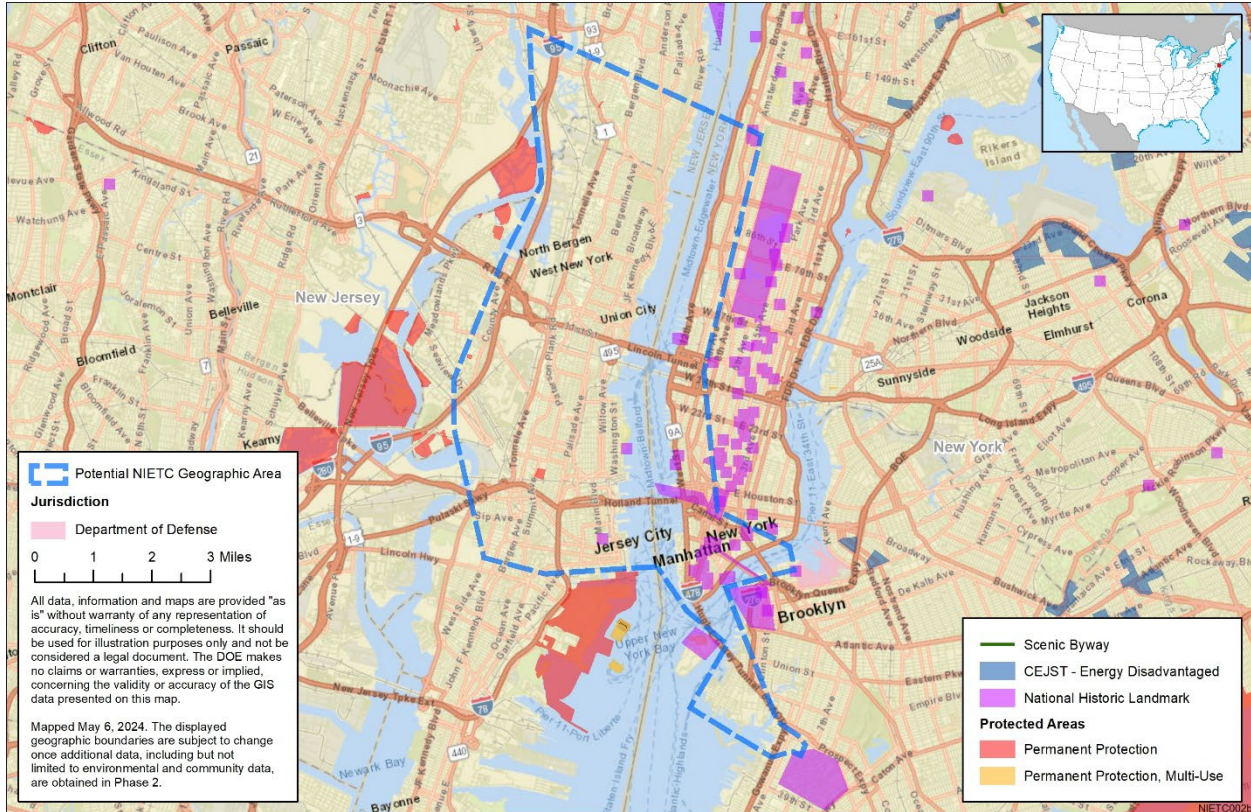
Electrical Infrastructure

New York - Mid-Atlantic



Environmental Information

New York - Mid-Atlantic



Appendix C: Potential NIETC Maps – Mid-Atlantic-Canada

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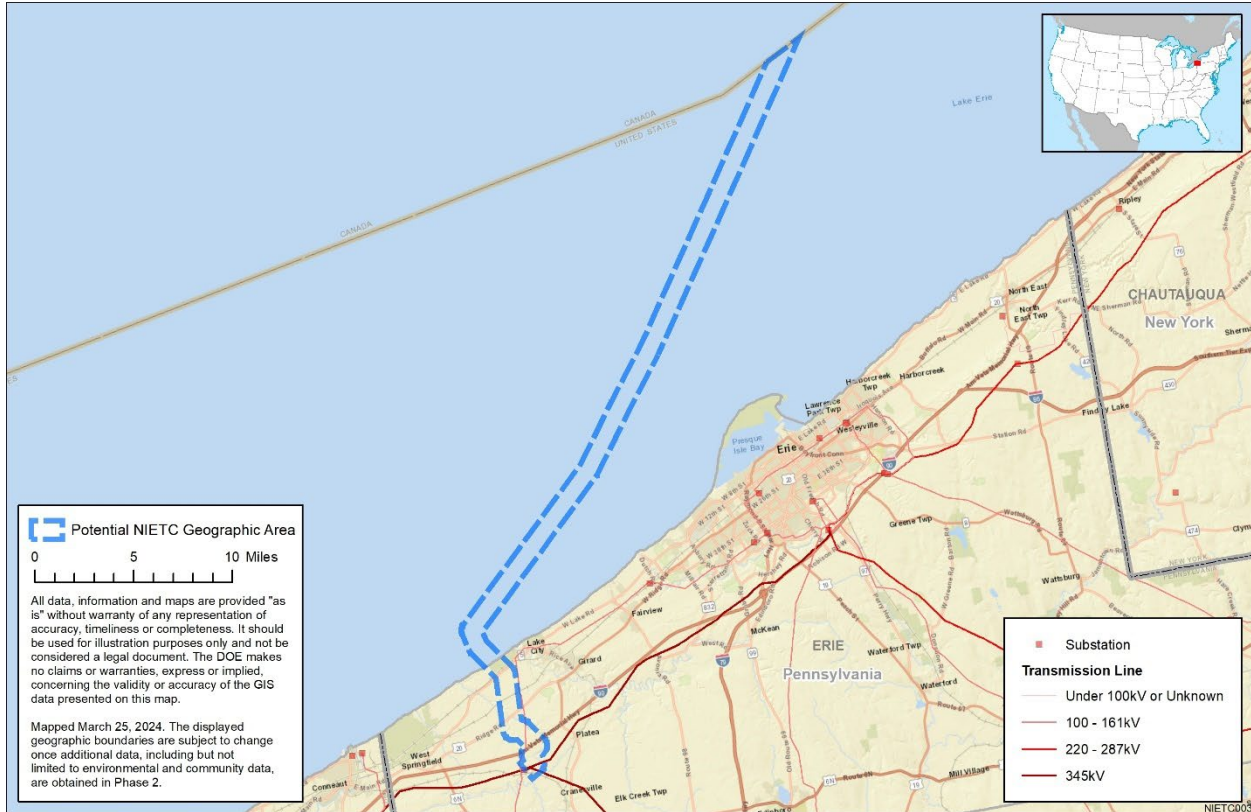
Shaded Potential NIETC Geographic Area

Mid-Atlantic - Canada



Electrical Infrastructure

Mid-Atlantic - Canada



Environmental Information

Mid-Atlantic - Canada

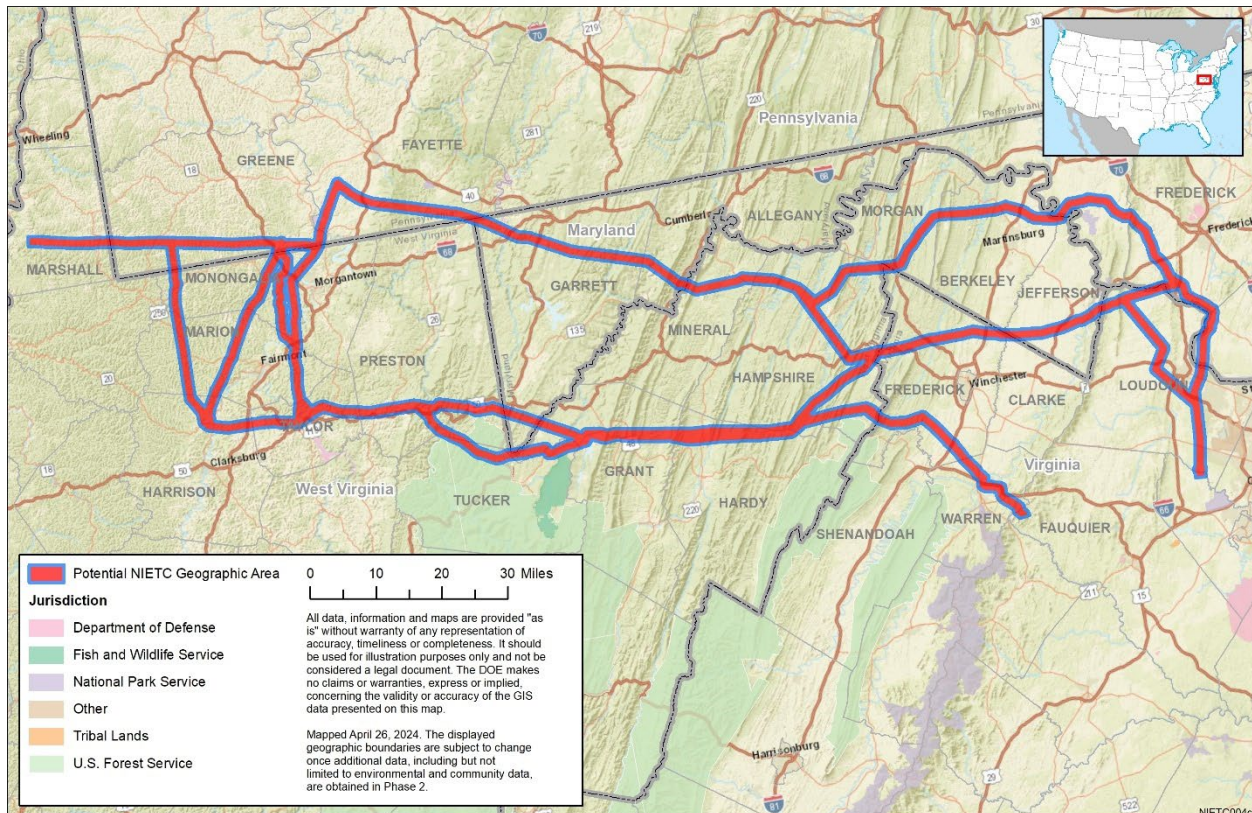


Appendix D: Potential NIETC Maps – Mid-Atlantic

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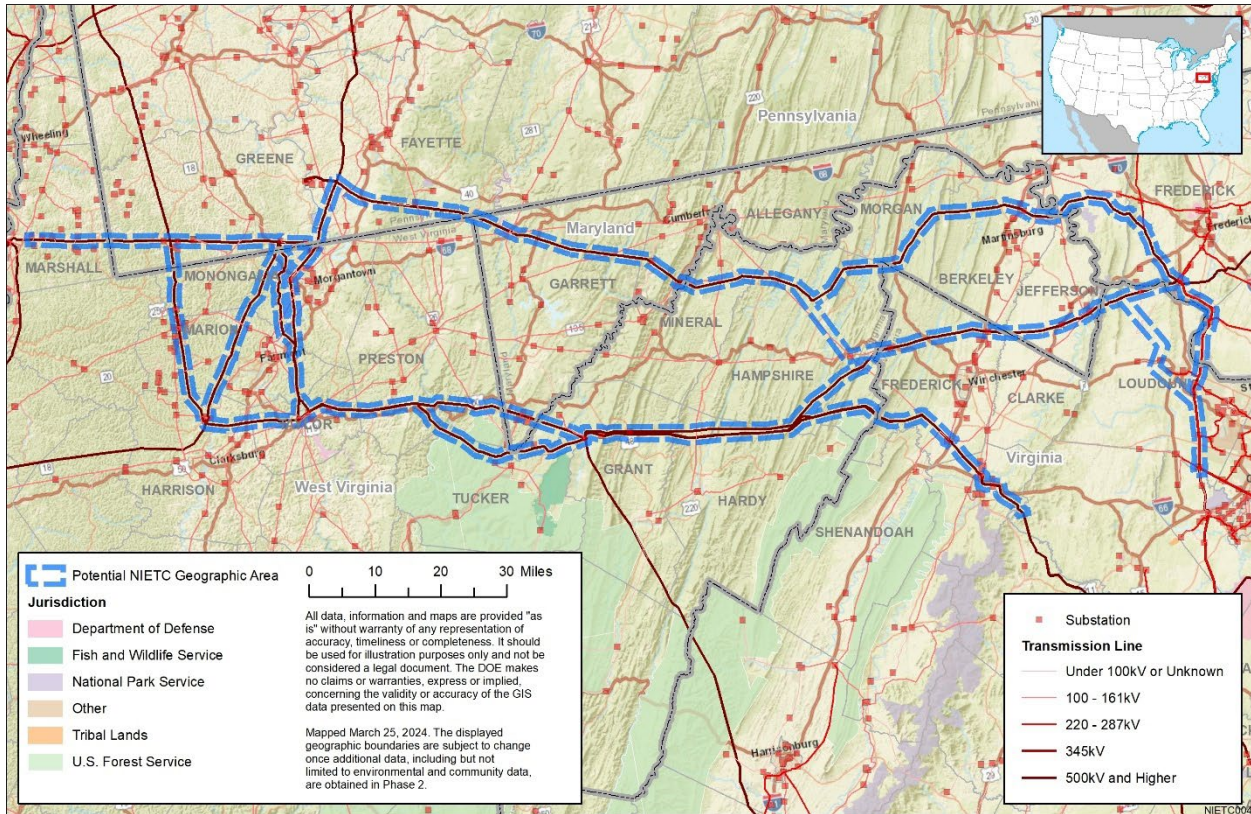
Shaded Potential NIETC Geographic Area

Mid-Atlantic



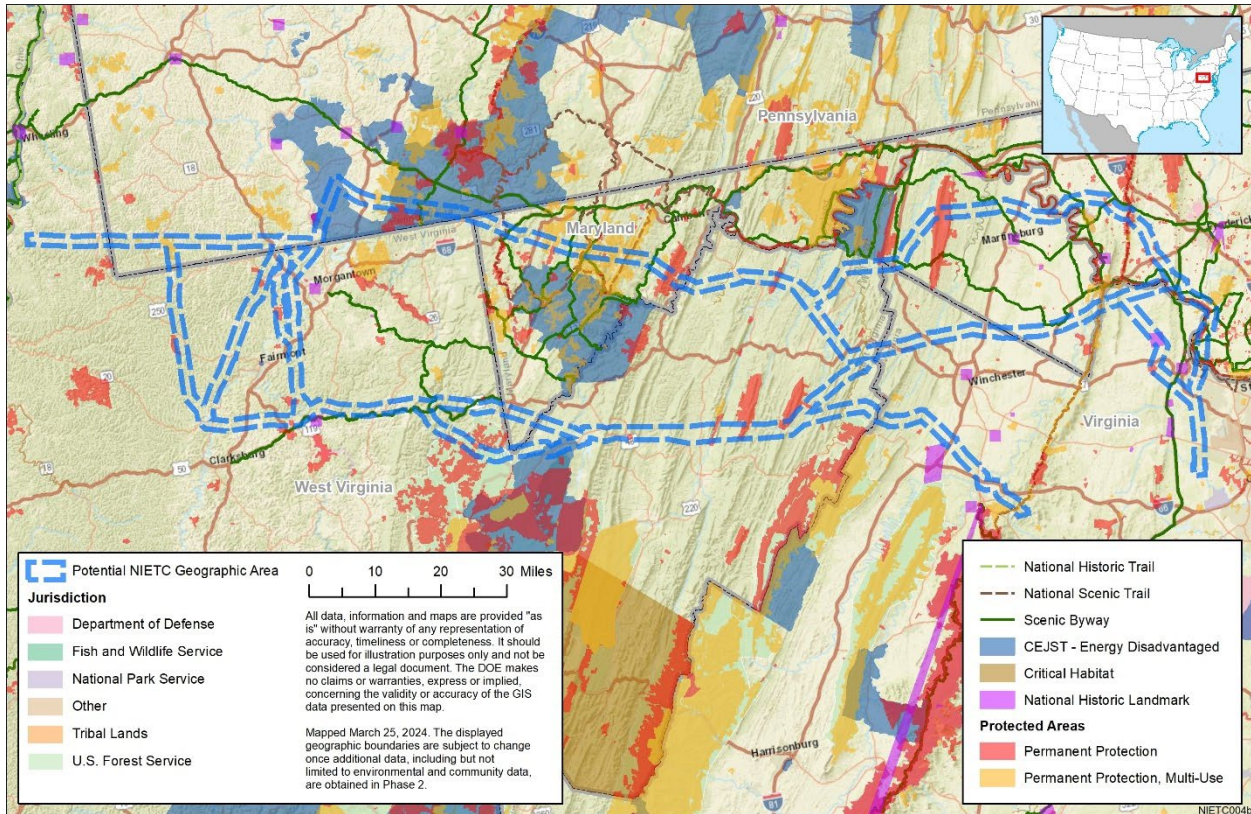
Electrical Infrastructure

Mid-Atlantic



Environmental Information

Mid-Atlantic

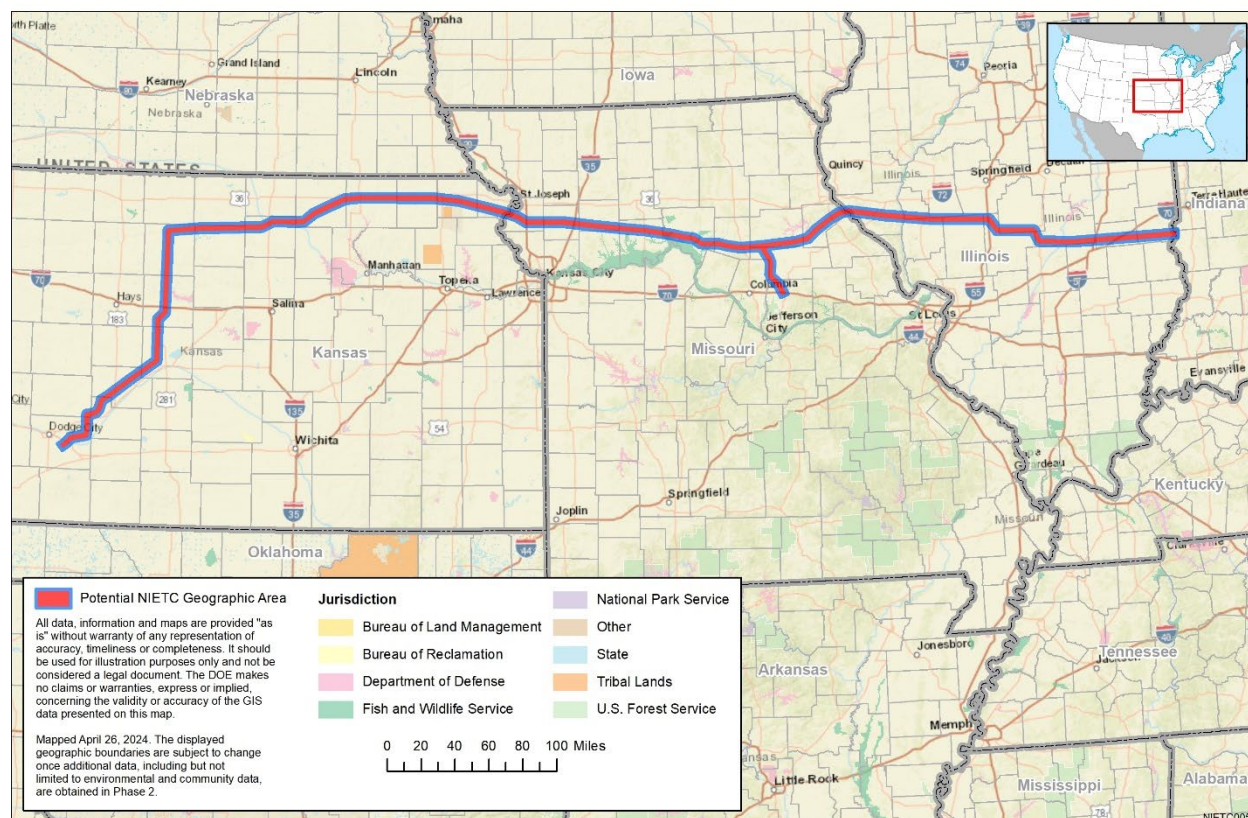


Appendix E: Potential NIETC Maps – Midwest-Plains

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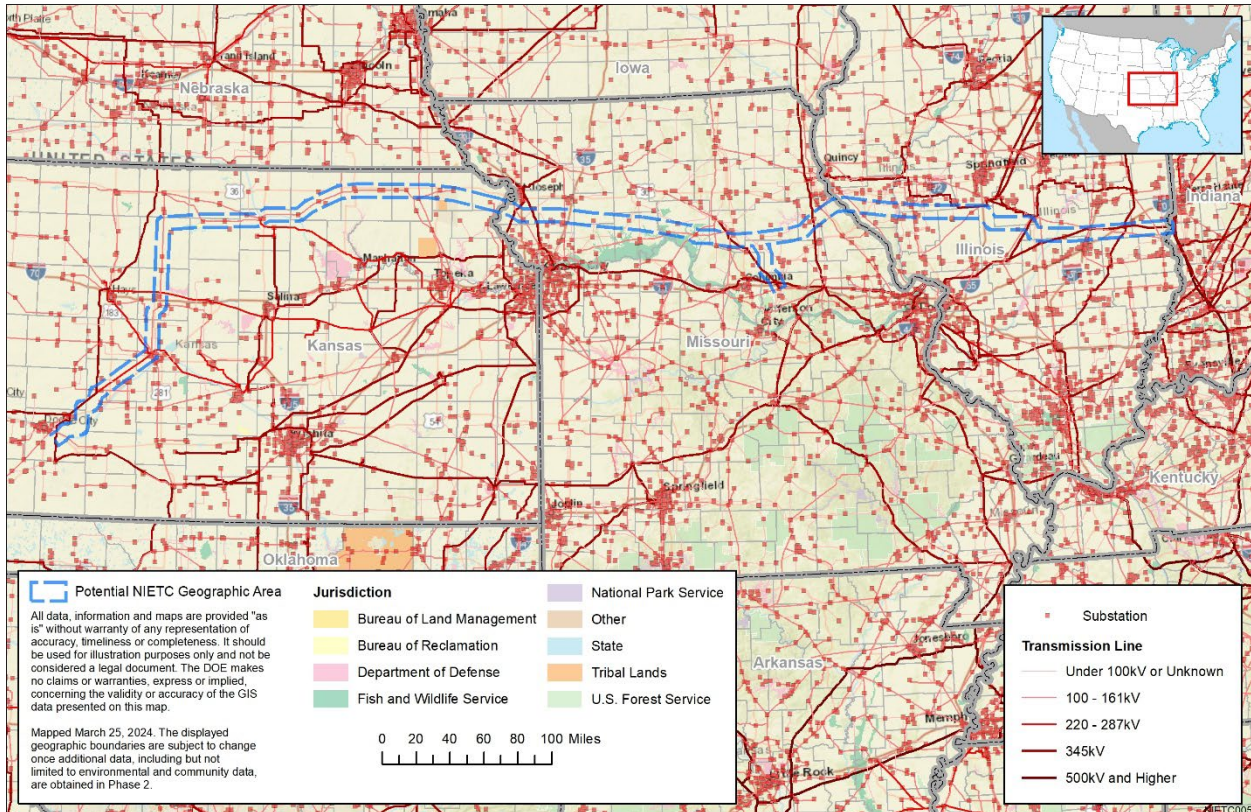
Shaded Potential NIETC Geographic Area

Midwest - Plains



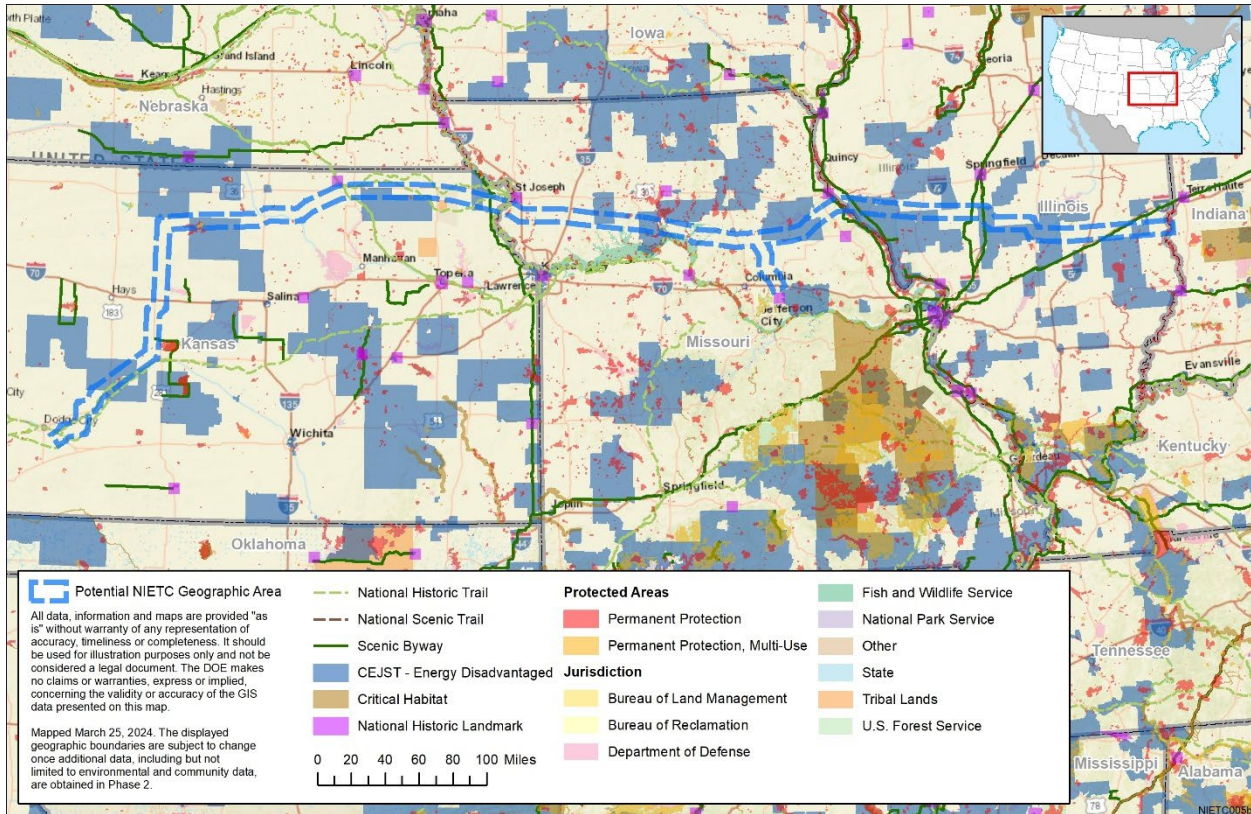
Electrical Infrastructure

Midwest - Plains



Environmental Information

Midwest - Plains

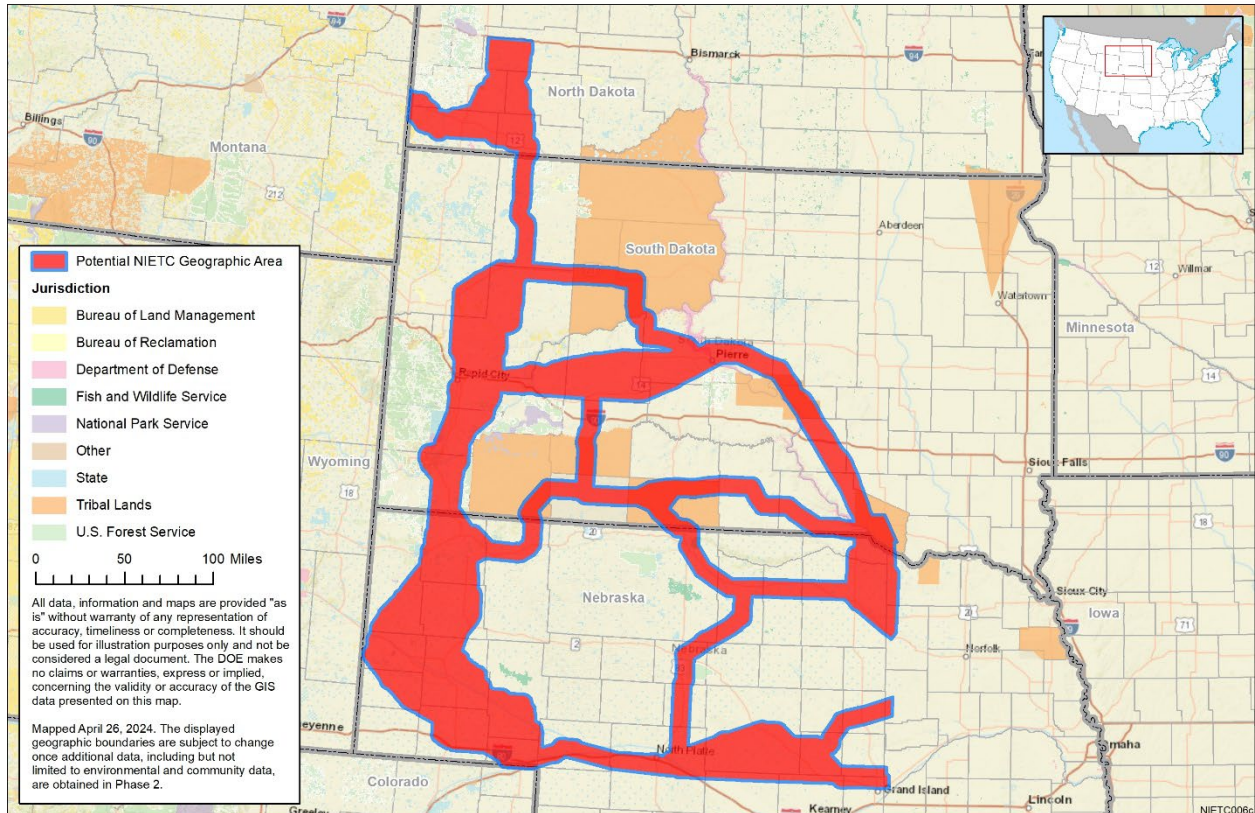


Appendix F: Potential NIETC Maps – Northern Plains

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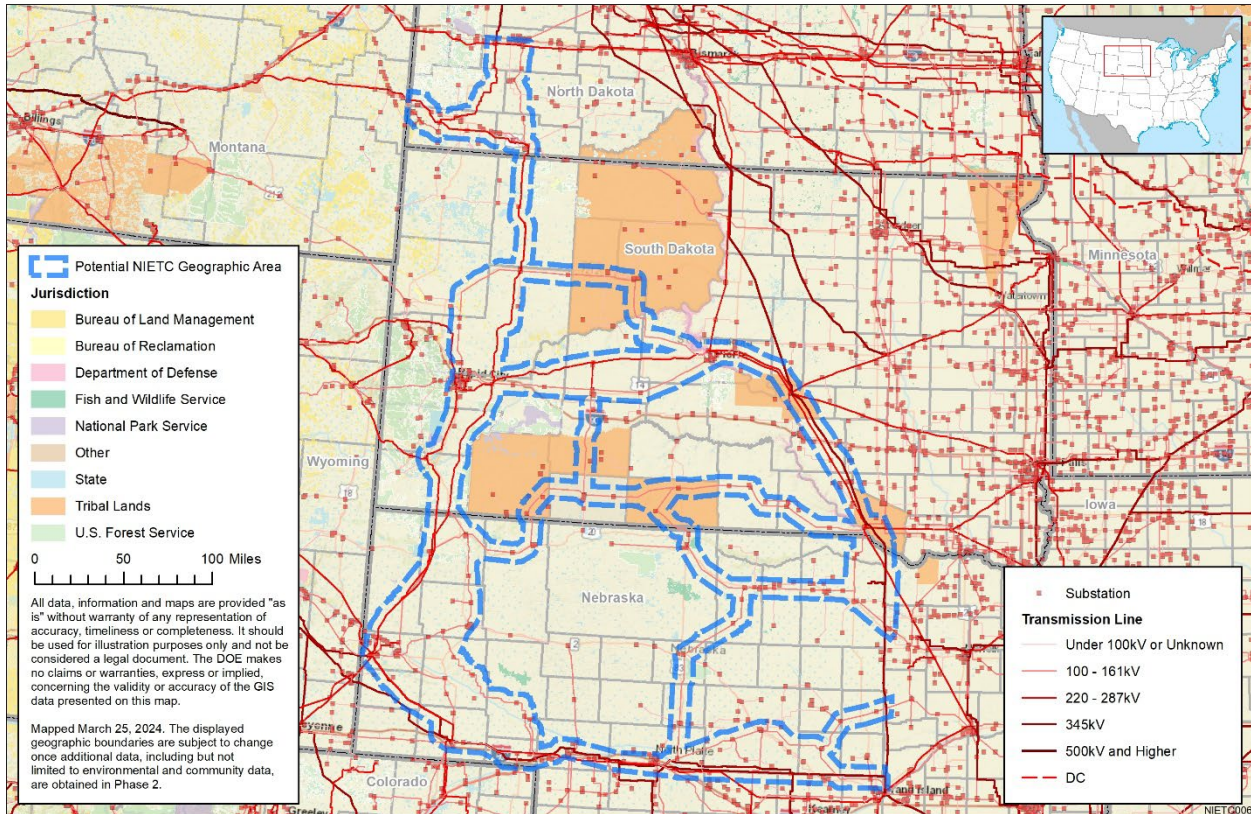
Shaded Potential NIETC Geographic Area

Northern Plains



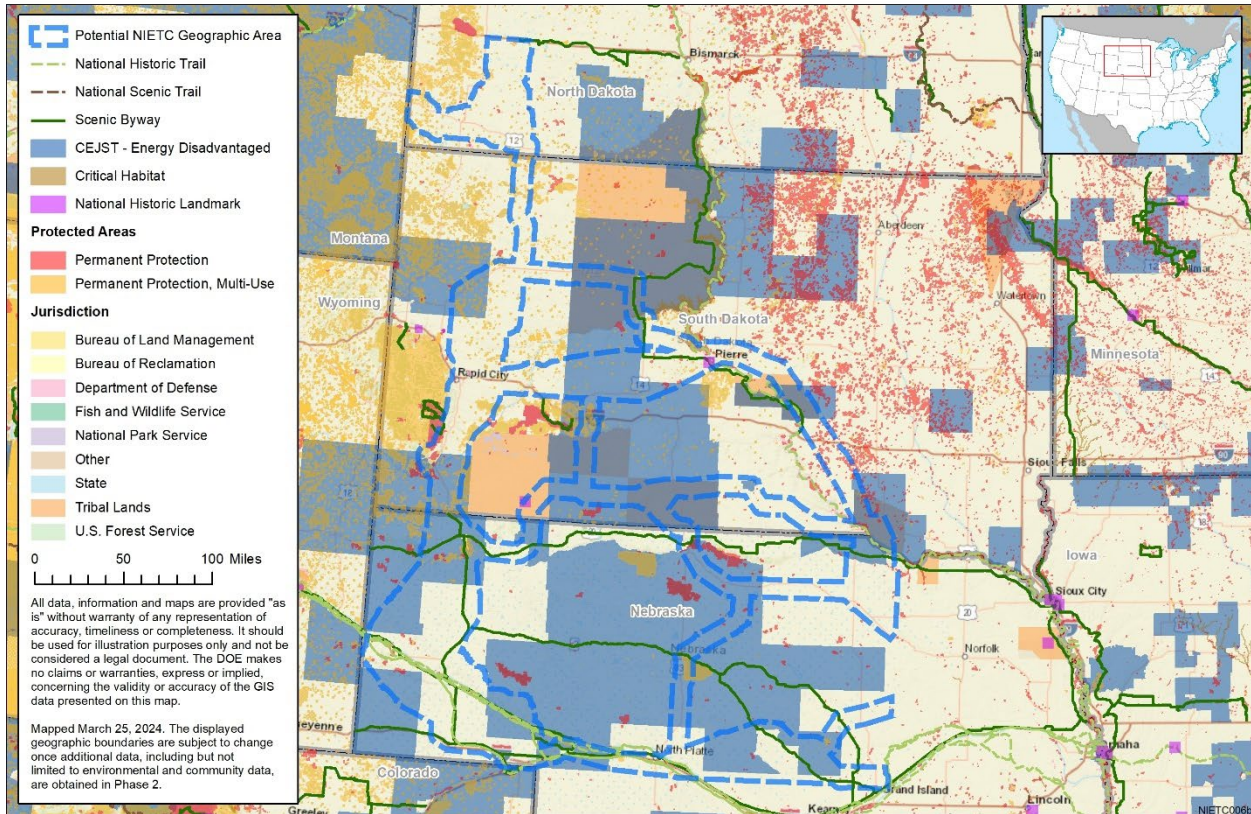
Electrical Infrastructure

Northern Plains



Environmental Information

Northern Plains

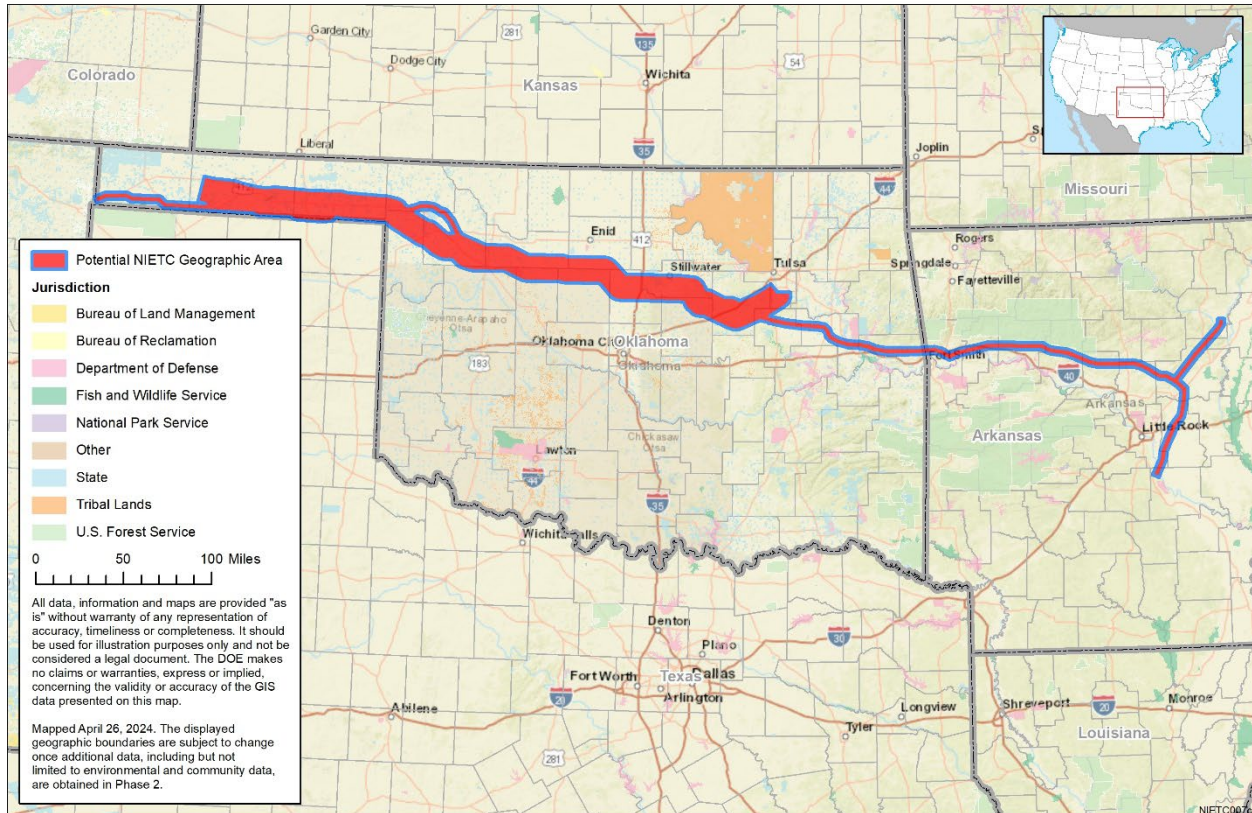


Appendix G: Potential NIETC Maps – Delta-Plains

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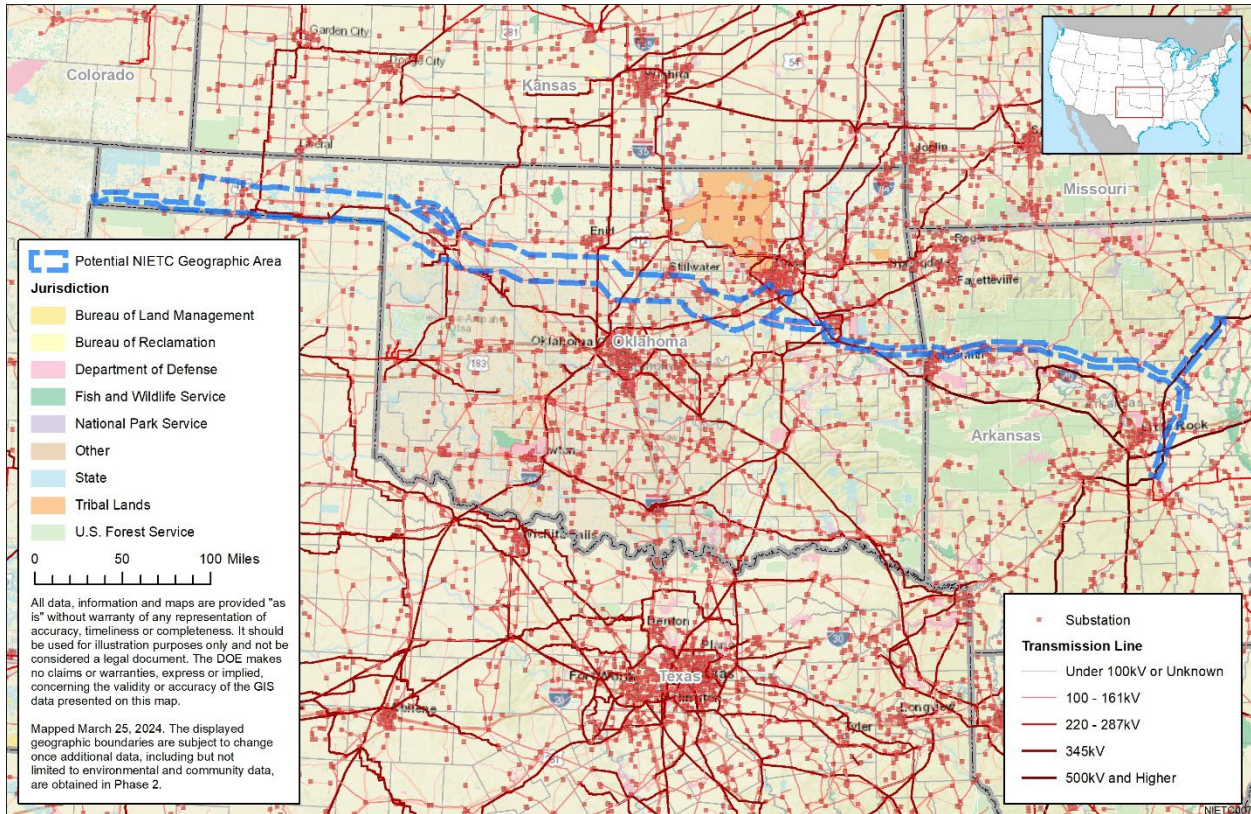
Shaded Potential NIETC Geographic Area

Delta - Plains



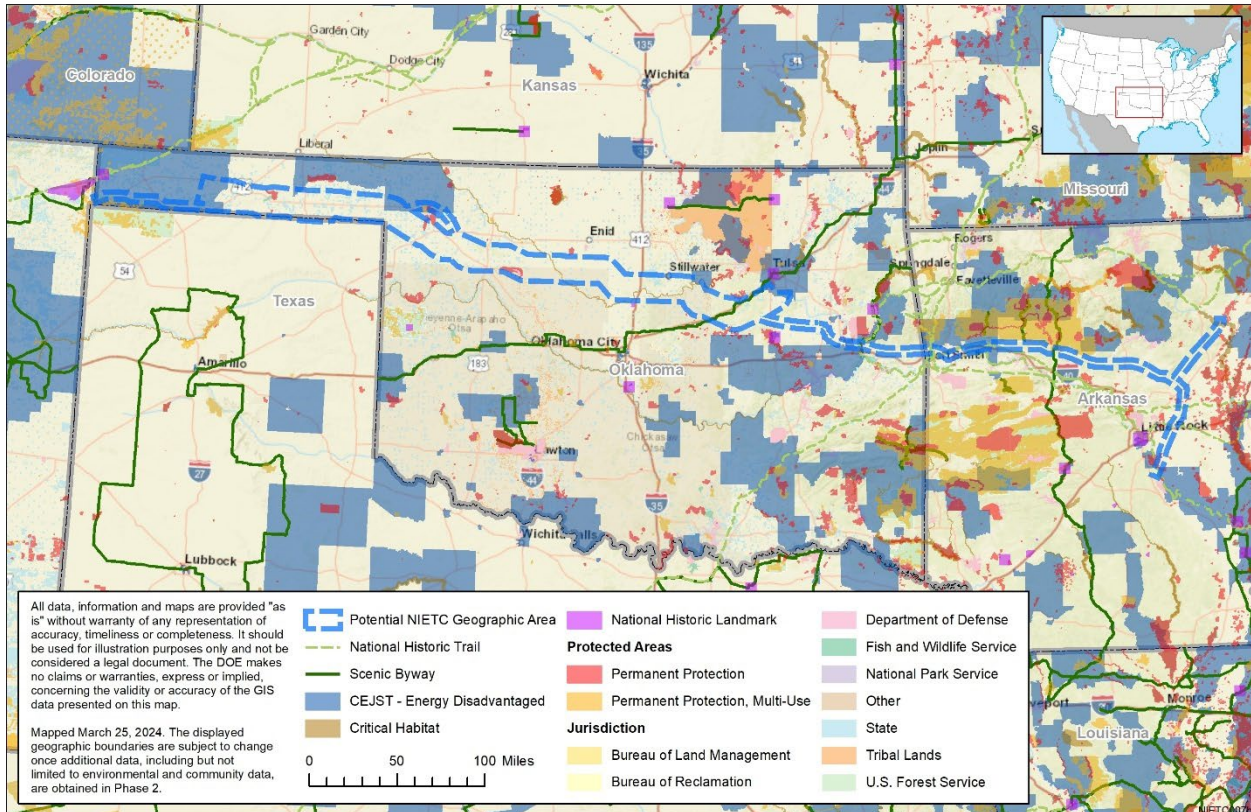
Electrical Infrastructure

Delta - Plains



Environmental Information

Delta - Plains

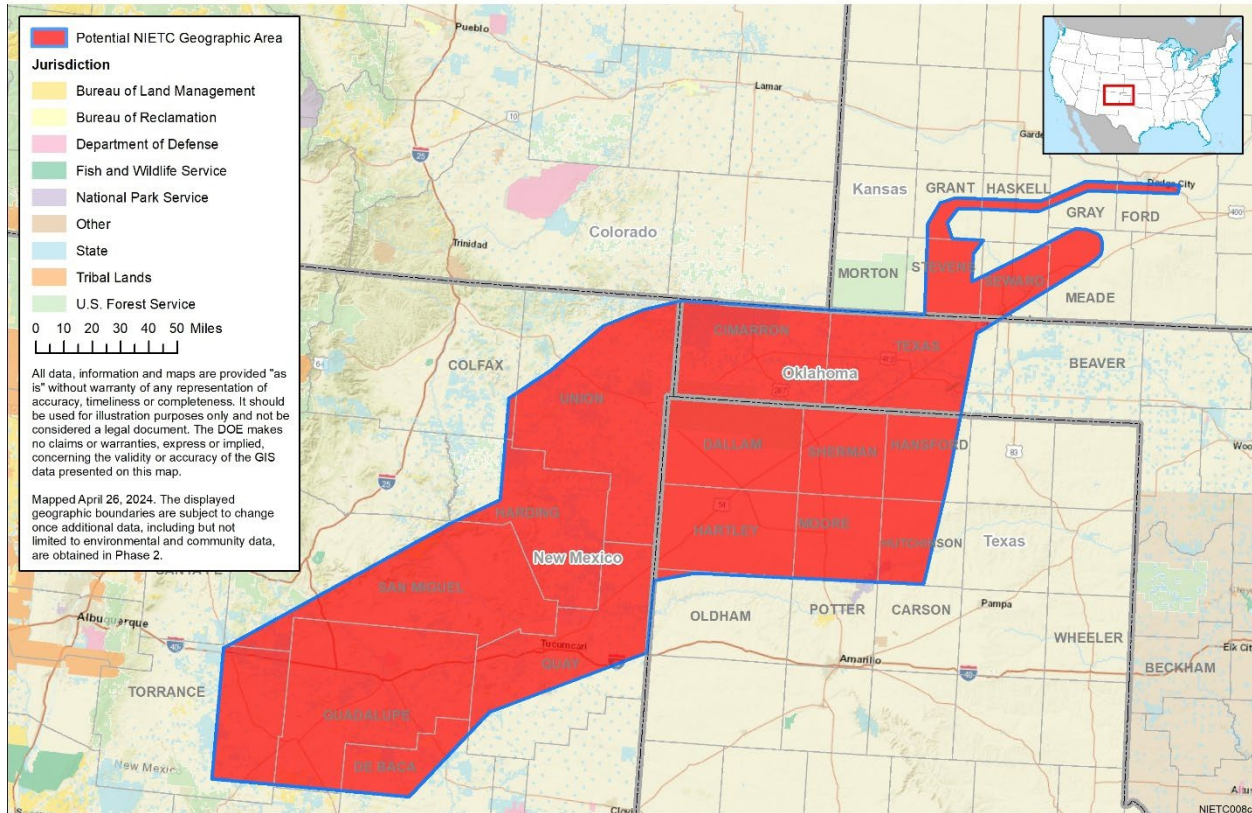


Appendix H: Potential NIETC Maps – Plains-Southwest

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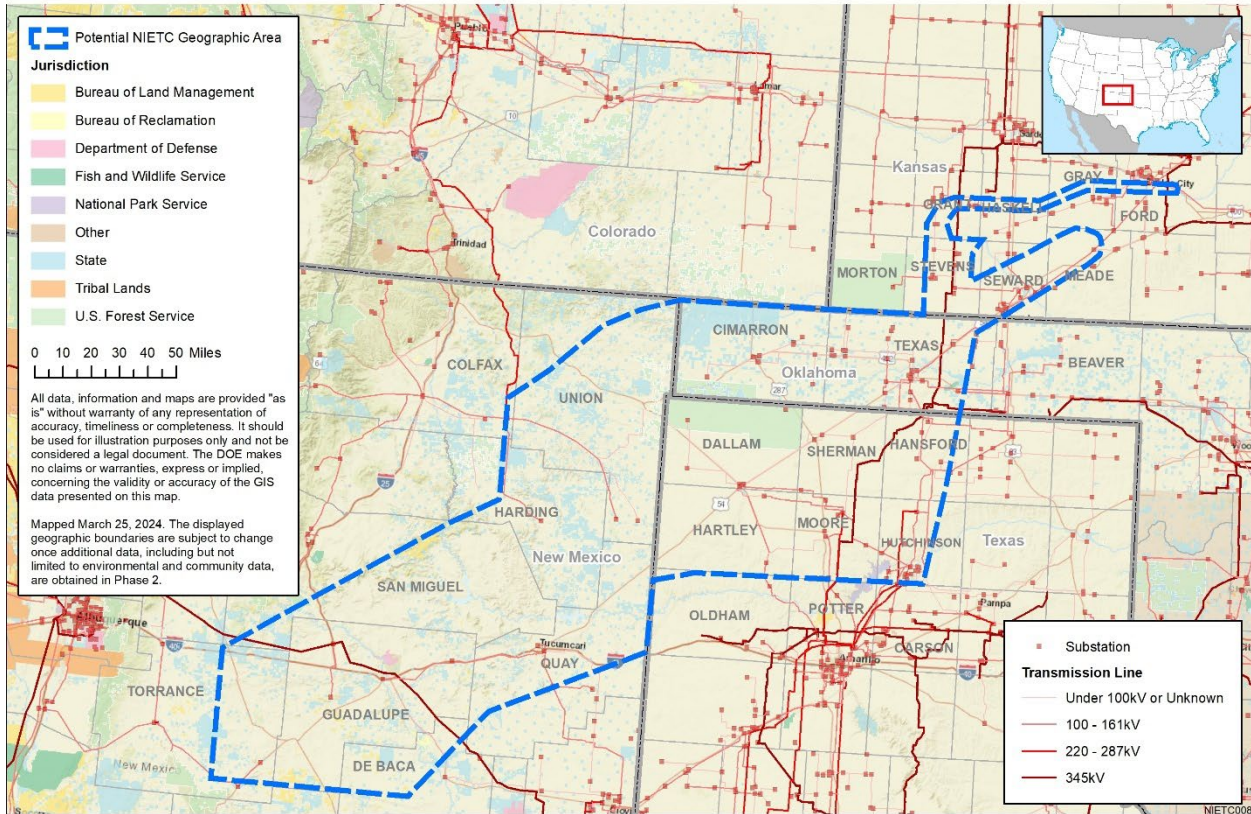
Shaded Potential NIETC Geographic Area

Plains - Southwest



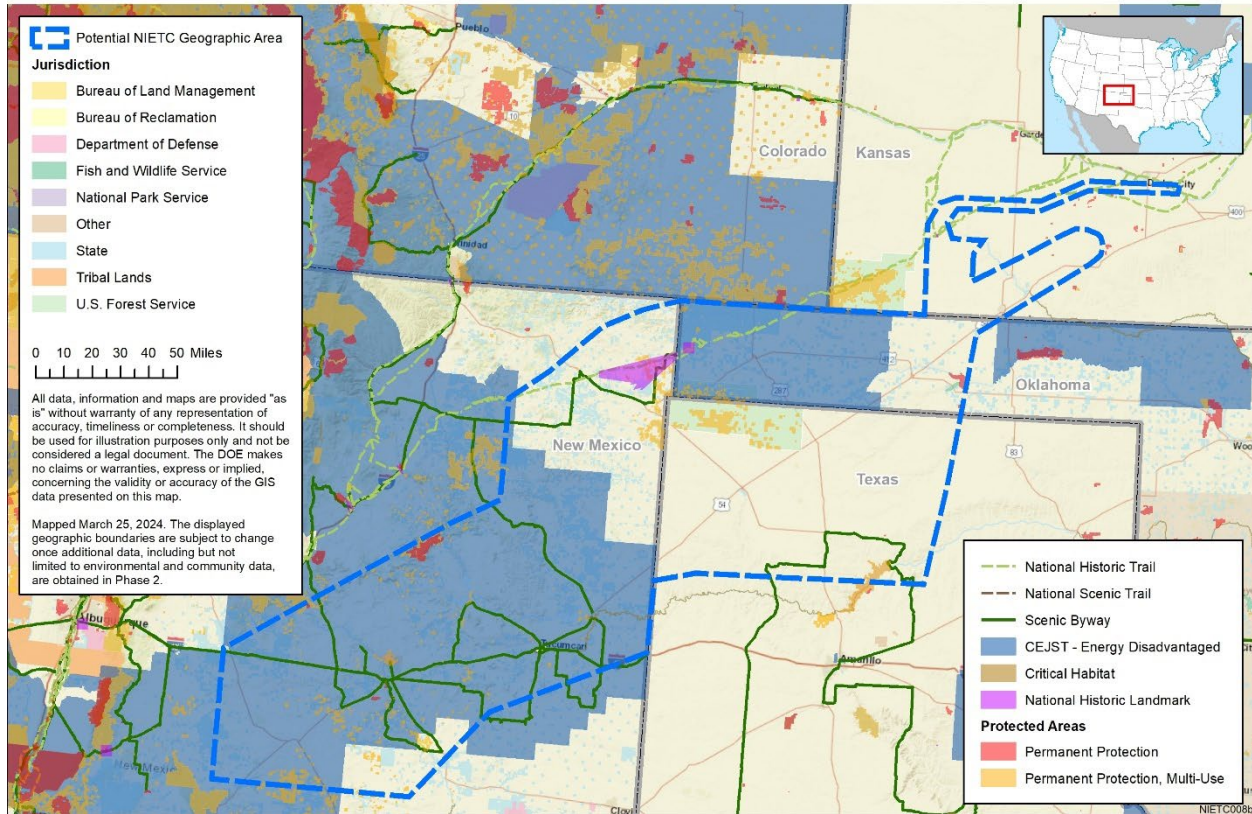
Electrical Infrastructure

Plains - Southwest



Environmental Information

Plains - Southwest

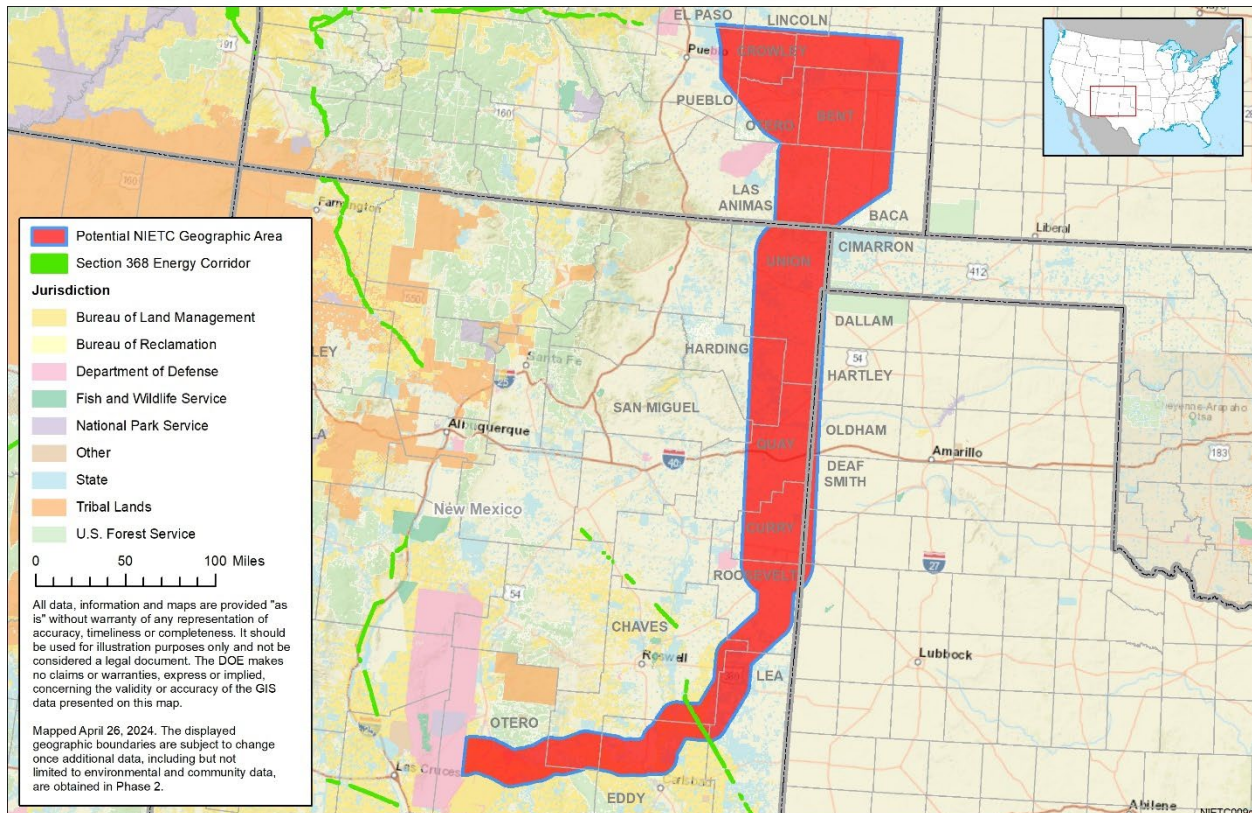


Appendix I: Potential NIETC Maps – Mountain-Plains-Southwest

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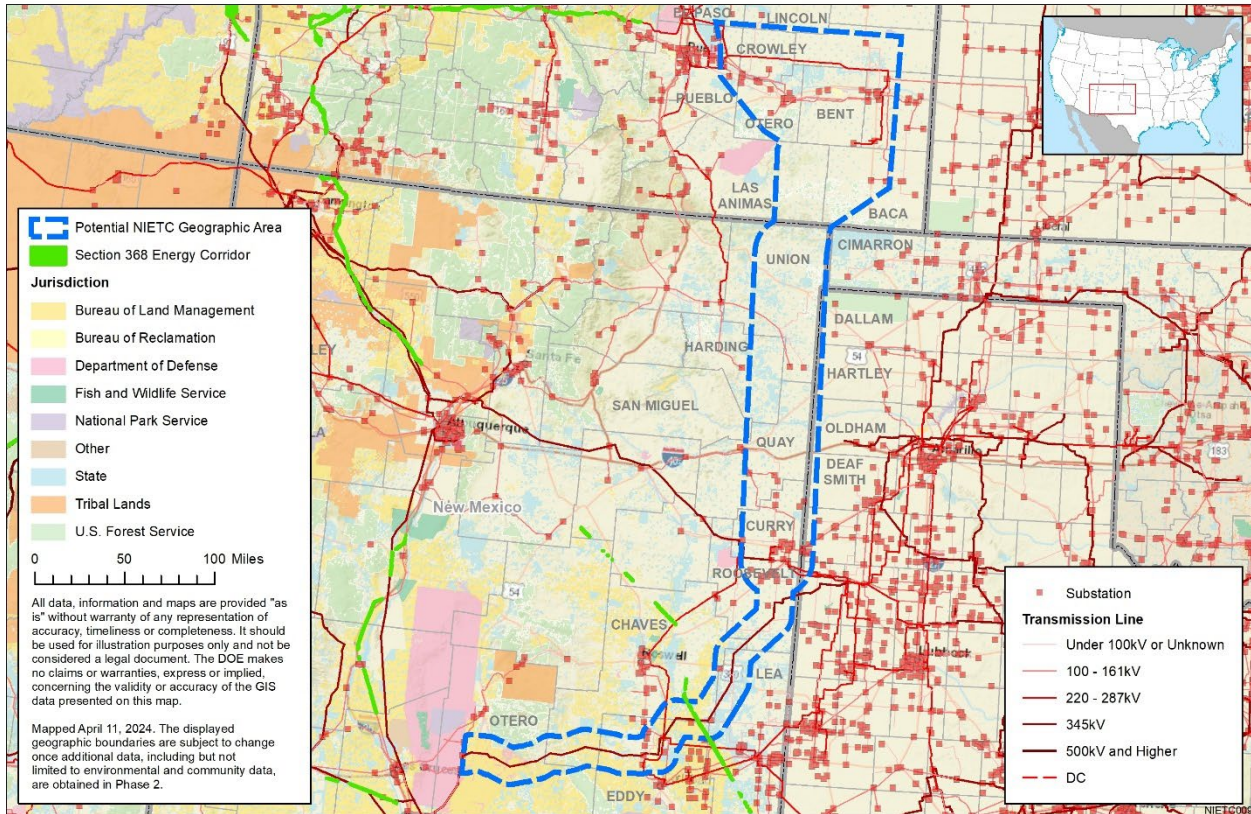
Shaded Potential NIETC Geographic Area

Mountain - Plains - Southwest



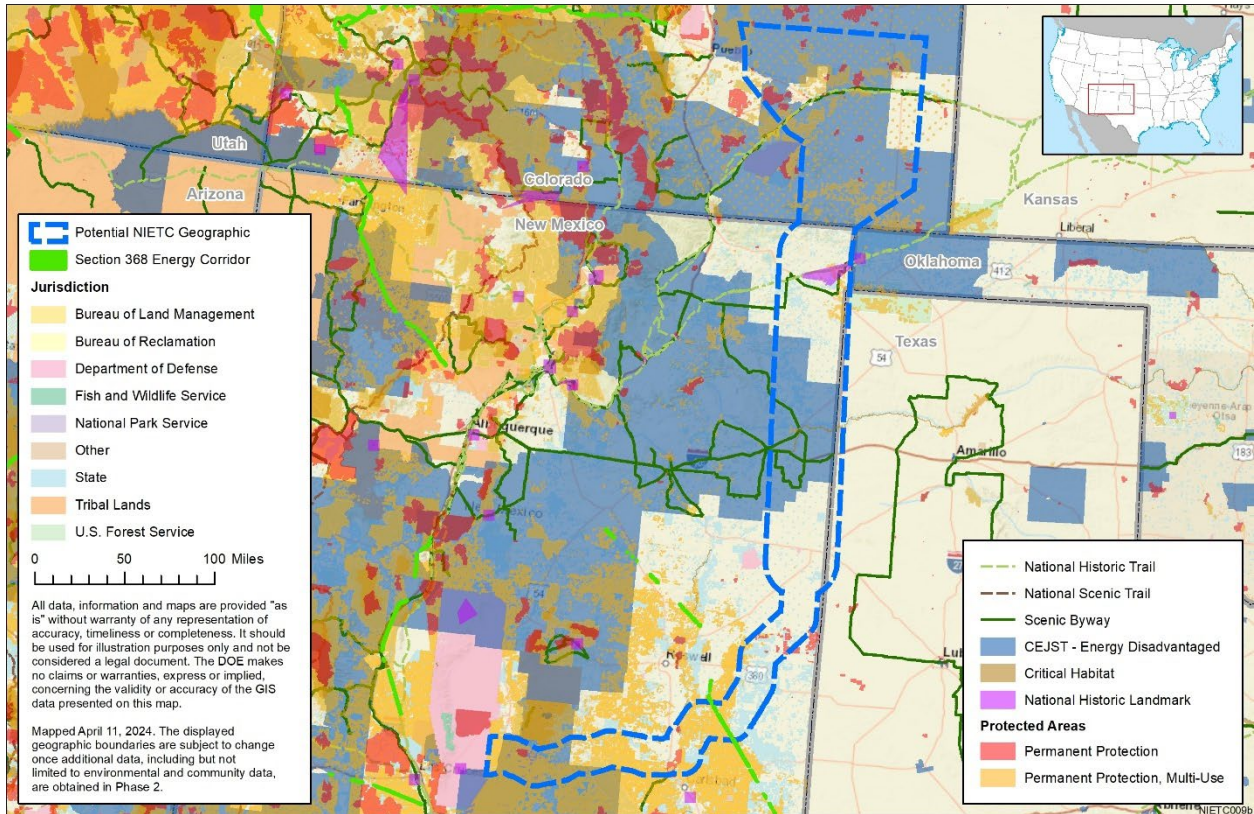
Electrical Infrastructure

Mountain - Plains - Southwest



Environmental Information

Mountain - Plains - Southwest

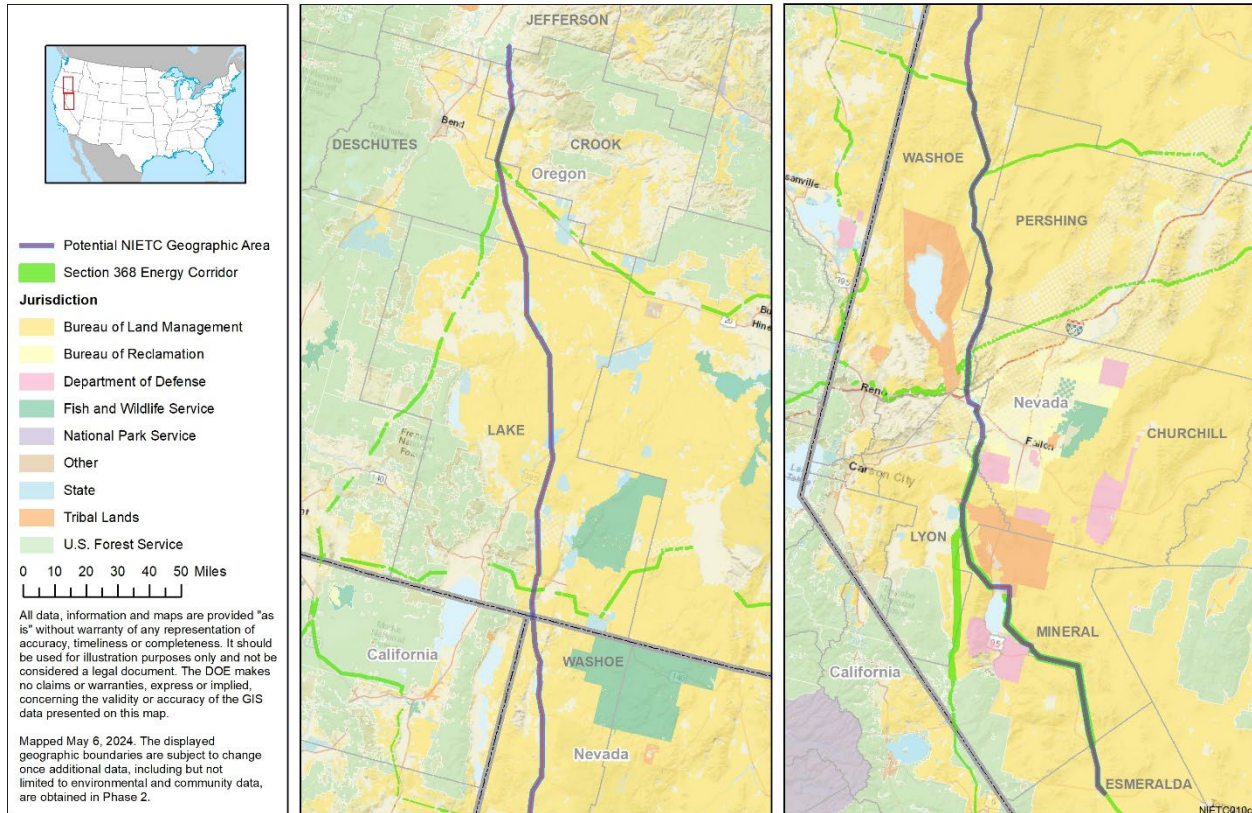


Appendix J: Potential NIETC Maps – Mountain-Northwest

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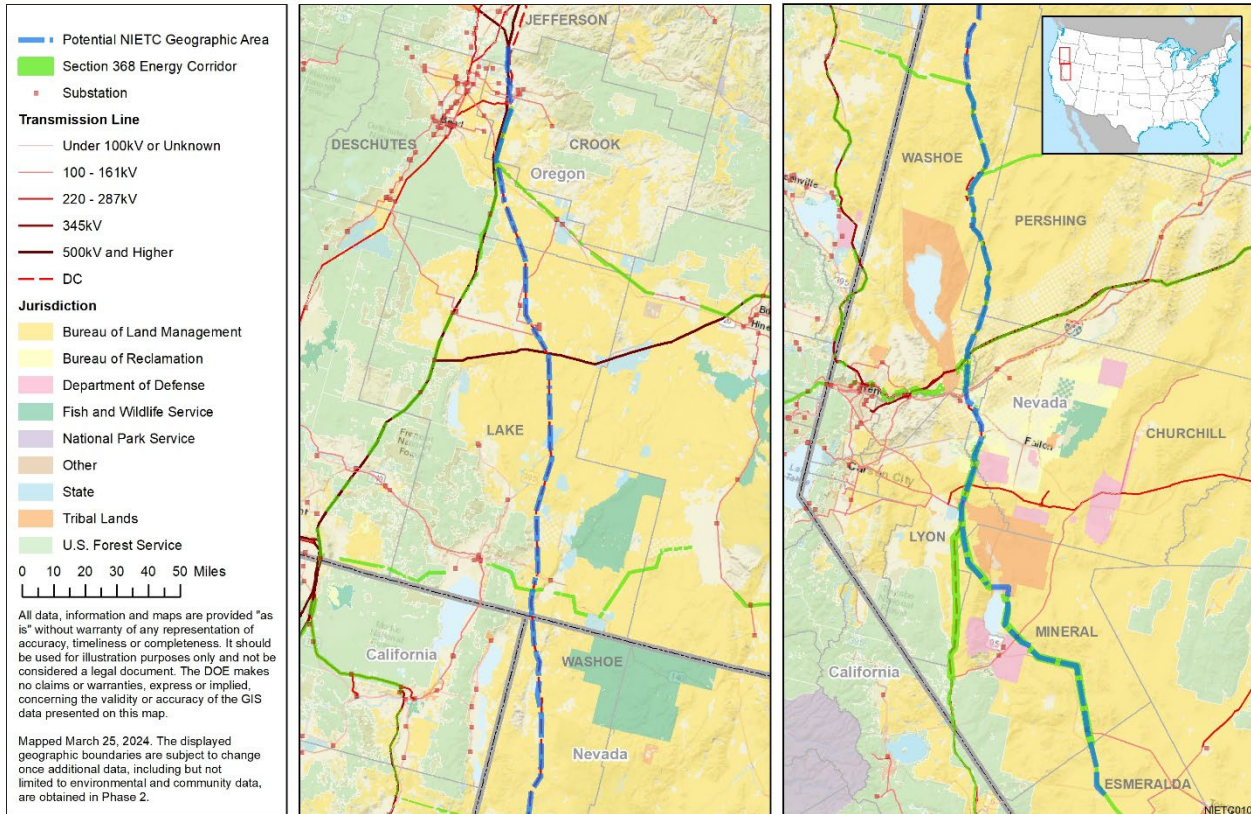
Shaded Potential NIETC Geographic Area

Mountain - Northwest



Electrical Infrastructure

Mountain - Northwest



Environmental Information

Mountain - Northwest

