

**UNITED STATES DEPARTMENT OF ENERGY
GRID DEPLOYMENT OFFICE**

Notice of Intent and Request for Information:
Designation of National Interest Electric Transmission Corridors
Docket No. DOE-HQ-2023-0039-0001

COMMENTS OF PUBLIC INTEREST ORGANIZATIONS

Natural Resources Defense Council, Sustainable FERC Project, Earthjustice, Southern Environmental Law Center, Environmental Defense Fund, and Sierra Club (together “Public Interest Organizations” or “PIOs”) submit these comments in response to the May 15, 2023 Notice of Intent and Request for Information (“RFI”) to inform the designation of National Interest Electric Transmission Corridors (“NIETCs”) issued by the Department of Energy (“DOE”).¹

Introduction

PIOs appreciate the opportunity to provide input on DOE’s RFI. Designating NIETCs is an important step toward developing transmission projects that are essential to mitigate climate change, meet the nation’s climate and clean energy goals, reduce congestion, increase reliability and resilience, and protect consumers, communities, and the environment. We support DOE’s proposal to solicit information and interest from developers that will contribute to DOE’s designation of NIETCs. Developers will likely possess valuable information about pending or potential projects that may not otherwise be available to DOE.

An applicant-driven NIETC approach may help effectively address short-term, urgent needs in the transmission system, which could enable a more rapid response to reliability or congestion concerns. If properly designed and implemented, this approach can expedite project approvals, reduce delays, and accelerate construction. Thus, urgent needs can be addressed more

¹ Notice of Intent and Request for Information: Designation of National Interest Electric Transmission Corridors (“RFI”), 88 Fed. Reg. 30956 (May 15, 2023).

swiftly compared to traditional transmission planning. In addition, fewer designations may be needed if the process focuses on specific projects, as opposed to long, costly proceedings for hypothetical corridors in which no NIETC designation is ultimately needed. Further, a project-specific NIETC can allow potentially affected landowners and other stakeholders to focus on only those proceedings with a higher likelihood of actually affecting their interests instead of trying to guess whether a wider NIETC might result in a transmission line affecting them.

However, DOE must exercise independent judgment when evaluating these proposals and designating NIETC's—including consideration of potential impacts to affected communities and the environment, as well as potentially superior alternatives. Although developers' NIETC proposals may reveal where there is the greatest *commercial* interest in transmission development, there is no guarantee that developers will propose corridors that are truly in the “national interest,” as the FPA contemplates. As such, DOE must rigorously consider all relevant issues, invite input from all stakeholders, and prioritize NIETCs that encompass the maximum number of statutory criteria defining the national interest.

PIOs' responses to the RFI aim to assist DOE in soliciting and weighing developers' proposals, while also ensuring a robust, inclusive, and equitable NIETC designation process. Additionally, because NIETC designations, or projects within NIETCs, may face a heightened risk of litigation,² we recommend measures to ensure that NIETC designations are legally durable.

PIO's following responses emphasize several key recommendations: (1) DOE should ground its process for evaluating NIETCs, and any eventual designations, in the statutory factors in section 216 of the FPA; (2) DOE should use best transmission planning practices to evaluate

² See 181 FERC ¶ 61,205 at P 2 (2022) (Christie, Comm'r, concurring) (noting that the prospect that a “proposed project ends up being litigated for years before any steel is in the ground” is “a virtual certainty for a controversial project that was rejected by state regulators but imposed by FERC” as part of a NIETC).

proposed NIETCs, including scenario-based analyses that consider all the many values that transmission provides; (3) DOE should ensure that its process is equitable and minimizes harm to communities and the environment; and (4) DOE should prioritize designating NIETCs that address the most urgent, pressing needs, including the need for greater interregional transfer capacity.

First, to ensure that its NIETC designation process is grounded firmly in the FPA's statutory factors, DOE should clearly articulate a link between any criteria for evaluating NIETC proposals and the text of the FPA. If DOE wishes to consider additional factors when evaluating NIETCs beyond those listed in the FPA, the agency should explain what legal basis—such as a binding executive order—provides authority and discretion to consider those additional factors.

Second, DOE should use best practices from transmission planning to evaluate proposed NIETCs. These best practices include comprehensively assessing all of a corridor's potential benefits. Because the benefits of transmission align well with the enumerated factors in section 216, using these best practices is well-grounded in the statute. These best practices—and the FPA's enumerated factors—vest DOE with discretion to consider not only transmission projects' direct costs and benefits, but also how to promote an equitable distribution of benefits, including promoting energy equity and environmental justice.

Third, DOE's NIETC designation process should be equitable and should avoid harming communities and the environment. The agency's process should include early, frequent, and meaningful engagement with affected stakeholders. Moreover, because community support speeds successful project development, DOE should require best practices for community engagement by NIETC proponents. DOE should prioritize proposals that will benefit affected communities through job opportunities and access to affordable, clean, and reliable electricity. Similarly, DOE

should work closely with affected communities and relevant agencies to ensure that NIETCs avoid, minimize, and mitigate environmental and cultural impacts to the maximum extent practicable.

Fourth, DOE should prioritize facilitating transmission between interconnections and regions. Interregional projects can reduce costs, strengthen reliability and resilience, and allow integration of clean energy. However, interregional projects also face the most daunting siting and permitting obstacles because they cross multiple jurisdictions. Because these projects provide great benefits but face great obstacles, they provide the best opportunity for DOE to maximize the positive impacts from NIETC designations.

Finally, DOE suggests it may “also evaluate routes for NIETC designation that are not necessarily associated with any particular project under development.”³ DOE should do so. DOE is well-situated to identify corridors that are in the national interest but where private development alone may be too challenging. Hence, DOE’s independent designation of NIETCs can focus transmission development where it is most needed and most beneficial.

DOE’s questions are copied below in bold, with PIOs’ answers following each question.

- 1. Please comment on the approach to NIETC designation discussed in the NOI. What are the potential positive and negative impacts of such an approach? How could this process, especially how applications for designation are structured, be altered or improved?**

- Potential positive impacts**

The approach to NIETC designation outlined in the RFI has several potential positive impacts. Designating NIETCs on an applicant-driven, route-specific basis may help DOE identify concrete projects that can both address transmission needs and be completed more quickly through

³ RFI, 88 Fed. Reg. 30957 n.1.

federal funding and/or permitting. This approach may especially benefit merchant transmission projects, including much needed interregional HVDC lines.

Route-specific NIETC designations may also generate less opposition compared to very broad corridor designations, which involve many hypothetical lines that could go in many different places. Additionally, if multiple applicants propose similar NIETCs addressing the same need, DOE can leverage this information to ensure NIETC designations maximize net benefits. In practice, DOE could designate a NIETC broad enough to accommodate multiple projects that collectively address an identified transmission need. Alternatively, DOE may designate NIETCs for only those projects that best address identified transmission needs, including factors listed in section 216(a)(4) of the FPA, while minimizing adverse impacts.

Information gathered through NIETC applications may also help DOE identify areas where significant commercial interest in transmission development correlates with DOE-identified transmission needs. Likewise, allowing additional entities to apply for NIETC designations, including Tribal authorities, States, non-transmission-owning and transmission-dependent utilities, local governments, generation developers, or other entities, could provide additional valuable information. The information collected from applicants should enable DOE to designate project-specific NIETCs that maximize the proposed projects' net benefits. This information may also help DOE designate NIETCs that, while not associated with any particular project, would facilitate future transmission projects in the national interest.

- **Potential negative impacts**

Although PIOs generally support designating NIETCs that will facilitate the transition to a clean and equitable energy system, DOE should guard against potentially substantial downsides of its proposed applicant-driven, route-specific approach. PIOs outline these potential downsides

below and recommend measures to mitigate these risks. Most generally, DOE’s proposed approach risks conflating developers’ commercial interests with the national interest. Applicants for NIETC designations will most likely be motivated by their own private commercial interests. For example, they may hope that a NIETC designation will unlock financing that makes a transmission project easier to build or more profitable. Likewise, applicants may hope that the Federal Energy Regulatory Commission (“FERC”) will approve a project where a state’s inability to consider the project’s full benefits would render the project unsuccessful. These interests are understandable—and are valuable data for DOE to consider in weighing where transmission projects should receive federal incentives under section 216 of the FPA and financing provisions of the Infrastructure Investment and Jobs Act (“IIJA”) and Inflation Reduction Act (“IRA”). However, an applicant’s commercial interests are ultimately private interests, whereas DOE has a statutory obligation to ensure that *National Interest* Electric Transmission Corridors are in the public interest.

To address this potential issue, DOE should ensure that its NIETC designation process is based on a full consideration of the national interest and that its actual NIETC designations are well-grounded in the specific factors that Congress authorized the agency to consider. For example, DOE should ensure that its NEPA analysis is broad enough to include action alternatives that explore how to “maximize[] existing rights-of-way” and minimize impacts to “sensitive environmental areas and cultural heritage sites.”⁴ PIOs explain below how to address these factors and ensure that NIETCs are in the national interest, in response to questions 4, 5, 8, and 10.

Likewise, DOE should ensure that its review of NIETC applications, and its actual NIETC designations, are independent and rigorous, rather than a rubber-stamp exercise. DOE’s independence will be critical both to ensuring that NIETCs are truly in the national interest, and to

⁴ 16 U.S.C. § 824p(a)(4)(G).

avoiding any appearance of impropriety or favoritism regarding specific transmission projects or proposals. Although the RFI stresses that “[d]esignation of a NIETC does not constitute selection of or a preference for a specific transmission project for financial, siting, or industry purposes,” the RFI also recognizes that NIETC designations “unlock new financing and regulatory tools” as well as federal siting and eminent domain authorities that are not available to projects outside NIETCs.⁵ Because NIETCs unlock favorable financing and regulatory tools, designating a route-specific NIETC that includes only a single transmission project could easily be construed as favoring one project, or one company or utility, over other potential competitors. Grounding DOE’s actions firmly in statutory factors will help ensure that they are free from any actual or apparent undue favor for specific NIETC proponents or specific transmission projects.

Because an open and transparent process will also help ensure that NIETC designations are free from any appearance of favoritism or impropriety, DOE should ensure regular opportunities for meaningful public input. DOE should also ensure that data underlying NIETC proposals is publicly available so that states, Tribes, regional entities, and any other interested parties can scrutinize applicants’ claims and assess whether and how DOE has independently verified applicants’ submissions. PIOs provide further, specific suggestions on how to promote meaningful public participation below in response to question 11.

To further avoid apparent favoritism and ensure an accessible and equitable process, PIOs also urge DOE to allow a broader set of entities to submit proposals for NIETC designations. Although developers may sometimes have the best access to information relevant to designating NIETCs, other stakeholders may also have valuable proposals. For example, one or more states, tribes, or regional entities may wish to collaborate in identifying transmission needs, or in

⁵ Notice of Intent and Request for Information, 88 Fed. Reg. at 30957.

identifying corridors in which existing rights of way have significant transmission development potential. Similarly, states, counties, communities, tribes, and non-governmental organizations may wish to submit proposals for smart-from-the-start NIETC planning, which may identify areas where transmission development is needed or where development should be avoided due to potential adverse impacts to sensitive environmental areas or cultural resources. PIOs provide more detailed suggestions on this issue below in response to question 6.

Additionally, because PIOs support DOE designating NIETCs that will facilitate the energy transition, PIOs strongly urge DOE to ensure that NIETC designations will be legally durable. As DOE is aware, its prior NIETC designations failed because the Ninth Circuit Court of Appeals found that the agency failed to consult with states as the FPA requires and failed to conduct the environmental analysis required under the National Environmental Policy Act (“NEPA”).⁶ DOE should ensure that it complies fully with these statutory obligations in any new NIETC designations. To that end, DOE should freely share data with states and provide regular opportunities for meaningful state input into its decision-making to ensure compliance with the FPA. As to NEPA, DOE should consider all relevant information and issues and ensure that its analysis frames the purpose and need of each NIETC designation broadly enough to allow consideration of a reasonable range of action alternatives. PIOs provide more advice about NEPA compliance in response to question 10.

Similarly, PIOs suggest that DOE explain why it is changing its approach from the source-and-sink method that it used for prior NIETC designations.⁷ When DOE last designated NIETCs,

⁶ See *Cal. Wilderness Coal. v. DOE*, 631 F.3d 1072 (9th Cir. 2011).

⁷ See *FCC v. Fox Television Stations, Inc.*, 556 U.S. 502, 515 (2009) (an agency departing from a prior policy must both “display awareness that it *is* changing position” and provide “good reasons for the new policy”). DOE need not show that “the reasons for the new policy are *better* than the reasons for the old one,” just that “the new policy is permissible under the statute” and “that there are good reasons for it.” *Id.*

it considered comments that suggested a project-based approach, but instead selected a source-and-sink approach.⁸ At that time, DOE reasoned that “while there may be circumstances where a project-based approach would be appropriate, in general the Department will use a source-and-sink approach to defining [NIETC] boundaries.”⁹ On rehearing, DOE elaborated that its choice of a source-and-sink approach was based in significant part on its interpretation of the FPA.¹⁰

The RFI does not acknowledge DOE’s prior approach and rationale, and it provides very little explanation for the change. DOE states that it “is considering this process for designating NIETCs in recognition of the fact that such designations would occur in areas experiencing the greatest need for immediate transmission development and would unlock new financing and regulatory tools to spur investment in those areas.”¹¹ PIOs agree that identifying areas with greatest need for transmission development and unlocking tools to spur that needed development is a good goal. However, DOE has not acknowledged that it previously opted for a source-and-sink approach over a project-specific approach or explained why it now believes that a project-specific approach is the correct mechanism for achieving this important goal.

PIOs believe that DOE can easily explain its new approach and that the appropriate time to do so is when it issues guidance for applications for NIETC designations.¹² When it issues its forthcoming guidance, DOE should acknowledge that it previously took a different approach, explain how the statute supports its current project-specific approach, and explain why current

⁸ See Draft National Interest Electric Transmission Corridor Designations, 72 Fed. Reg. 25,838, 25,847 (May 7, 2007) (describing the source-and-sink approach based on areas of supply and congestion, as well as a project-based approach that would be “banded around” a particular project’s centerline).

⁹ *Id.* at 25,848.

¹⁰ See National Electric Congestion Report; Order Denying Rehearing, 73 Fed. Reg. 12,959, 12,965 (Mar. 11, 2008) (“It would make little sense to interpret FPA section 216 as requiring DOE to designate narrowly-defined corridors that, in effect, would constitute siting decisions by DOE, since any siting authority to be exercised under FPA section 216 is plainly the responsibility of FERC, not DOE.”).

¹¹ 88 Fed. Reg. at 30,957.

¹² See *Physicians for Soc. Resp. v. Wheeler*, 956 F.3d 634, 647–48 (D.C. Cir. 2020) (declining to consider reasons for a new policy that an agency advanced for the first time in litigation).

circumstances make a project-specific approach appropriate. For example, DOE might point to statutory amendments since the last round of NIETC designations, increasingly urgent needs for transmission development in the past decade, or how its evaluation of potential transmission projects currently under design leads the agency to believe that these pending projects will better identify the areas of greatest transmission need.

- **Potential alterations/improvements to process, especially to structure of applications**

Because this RFI leaves many fundamental issues unclear—such as how broad a geographic area a NIETC applicant will have to propose, what criteria DOE will use to evaluate applications, and what weight the agency will give to various criteria—numerous potential alterations and improvements to the process remain possible. Because the RFI raises many open-ended questions, it is difficult for the public to understand how DOE’s process will function. The public’s ability to suggest refinements to DOE’s process would be greatly aided by DOE providing further information about key aspects of how it plans to accept, evaluate, and grant proposals for NIETC designations.

DOE should use its forthcoming application guidance to clarify this process. Most crucially, DOE should clarify how it will evaluate whether NIETC proposals serve the national interest, including what criteria DOE will use and the relative weight of various criteria. DOE’s upcoming guidance should explain these issues as clearly as possible. To do so, the guidance should provide DOE’s interpretation of the factors enumerated in section 216 of the FPA and explain how the agency’s metrics for evaluating proposed NIETCs are based in those factors. Providing this information upfront in the guidance will enable applicants to prepare strong proposals and better predict whether their proposals will succeed. This information will also enable more meaningful and constructive public comments on applications. At the same time, the guidance should advise developers and the public that DOE’s criteria for evaluating NIETC

proposals, or the weight of those criteria, may change over time as the agency gains experience with NIETC proposals. DOE should similarly allow developers and the public to comment on the appropriate weight of various criteria as they pertain to a specific application.

Stakeholders would particularly benefit from clarification of a few key statutory terms. Section 216(a)(2) authorizes DOE to designate NIETCs to respond to existing or expected “electric energy transmission capacity constraints or congestion” that “adversely affect[] consumers.” DOE could assist stakeholders by providing the Department’s interpretation of these two components of that threshold requirement. Stakeholders would likewise benefit from knowing in advance DOE’s views on the meaning of FPA section 216(a)(4) factors, such as how DOE interprets “the energy independence or energy security of the United States” or “sensitive environmental areas.”

Additionally, PIOs suggest potential alterations to the proposed NIETC designation process that would focus on particularly pressing needs for transmission development. For example, DOE could solicit applications for NIETC designations within a specified geographic area. By focusing on a particular area, DOE may obtain multiple applications for one or more NIETCs that could serve a given need. Receiving multiple applications would, in turn, give DOE the opportunity to assess what proposals best serve the national interest, for instance by assessing which proposed NIETCs would provide the broadest array of benefits.

There are numerous ways that DOE could provide a geographic focus for a solicitation for applications for NIETC designations. For instance, a solicitation could focus on the seam between the Western and Eastern Interconnections. Similarly, a solicitation could focus on the seams between RTO/ISOs, such as the seam between MISO and PJM. Alternatively, a solicitation could focus on a geographic area where DOE’s Needs Study has identified a significant need, such as the need for increased transmission capability between California and the Pacific Northwest. DOE

could also work with other federal agencies to identify opportunities to meet transmission needs through use of existing rights-of-way, including rail and highway corridors, and solicit applications for NIETC designations that will facilitate the use of those rights-of-way.

Another potential approach would be to focus on emerging needs, such as the need for transmission that will facilitate deployment and interconnection of offshore wind resources.

Alternatively, DOE could focus a solicitation on projects that can be completed quickly. For example, DOE could ask for proposals for NIETC designations that would encompass transmission projects that can be completed by 2030 or 2035. However, if DOE focuses on projects that can be completed quickly, it should be especially careful with its NEPA process, since it may be less likely that DOE will receive multiple applications that could inform an alternatives analysis.

2. Please comment on the information DOE intends to request as part of an application in Section III.A.iii – are elements of these requests and/or supporting rationale overly burdensome on respondents?

In general, PIOs believe that the information DOE intends to request as part of an application appears reasonable and is not overly burdensome. However, because some information may not be available when a proposal is submitted, DOE may need to consider the relative completeness of responses in prioritizing proposals, rather than requiring complete answers before considering a proposal. For example, DOE asks for the status of an application to FERC under FPA section 216(b),¹³ but such an application cannot begin until and unless a NIETC is designated.

Whether these elements are overly burdensome may depend on an applicant's identity. For example, developers that are relatively far along in planning and project design may have most information on hand. Where projects are less far along, information may not be as well developed. Applicants that are not developers, such as states, tribes, communities, or NGOs, may not have all

¹³ 16 U.S.C. § 824p(b)(1)(C).

of this information and may lack the means to obtain it. DOE should still allow these types of entities to propose NIETCs, particularly since the information in their possession may be highly valuable for evaluating various factors under section 216(a)(4). For example, states or NGOs may have significant information about sensitive environmental areas or cultural heritage sites that would help DOE identify where NIETCs should—or should not—be designated.

A 20-page limit on the Affected Environmental Resources and Impacts Summary may not be feasible and will likely depend on how developed resource data is. Condensing this information to 20 pages may be quite burdensome. While a strict page limit encourages incorporation by reference, it is not clear whether applicants should also submit underlying documentation. PIOs urge DOE to require submission of underlying documents to the extent possible, so that they are available as part of public comment on the application. In addition, while DOE does specify that GIS information be included,¹⁴ PIOs recommend that DOE be more specific in requiring the submission of underlying data, including in what format (*i.e.*, GIS, KMZ, etc.) and what layers.

3. Is there other information or types of information not listed in Section II.A.iii that should be requested to inform the evaluation and designation of NIETCs?

Given that DOE must comply with both NEPA and § 106 of the National Historic Preservation Act for any NIETC designations, PIOs recommend that DOE obtain sufficient information from applicants to ensure that if DOE designates a NIETC, the applicant will obtain all necessary approvals and build the transmission line. Put succinctly, DOE should ensure that it designates NIETCs only where a proposal can feasibly result in steel in the ground. To this end, PIOs recommend that DOE require the following additional information from applicants:

¹⁴ See RFI § IV(m): Maps and Geospatial Information and Studies in support of the information provided in the summary descriptions for the known existing environmental, cultural, and historic resources in the project area under the paragraph in this section must be included. Project proponents must provide maps as electronic data files that may be readily accessed by Federal entities and Non-Federal entities.

- The entity or entities that will construct the project. If the applicant will construct the project, then the applicant should be required to list its experience in permitting and constructing other transmission projects;
 - The entity or entities that will operate and manage the transmission line once constructed. If the applicant will do so, then the applicant should be required to list its experience with transmission O&M;
 - The anticipated timing for the beginning of construction and the project’s in-service date; and
 - For purposes of NEPA compliance, information that will allow DOE to consider siting alternatives in addition to the no-action alternative. (See question 10 for more details).
- 4. For any of the information listed in Section III.A.iii or suggested in response to the question above, what metrics and methods are available for evaluating how that information meets the statutory requirements for a NIETC described in Section II.C?**

Evaluating how information in a NIETC application meets statutory criteria, and assessing potential metrics or methods, requires understanding how DOE’s responsibilities under Section 216(a) of the FPA work in tandem. Section 216(a)(1) first directs DOE—in consultation with states, tribes, and regional entities¹⁵—to assess national electric transmission capacity constraints and congestion at least every three years.¹⁶ The National Transmission Needs Study (“Needs Study”) relies on DOE’s experience and expertise to independently assess the nation’s transmission system as a whole. This assessment includes identifying interregional needs that are often absent from regional and local planning processes but are increasingly critical to ensuring reliability in the face of changing weather patterns and diversification of generating resources.

¹⁵ Generally speaking, “regional entities” under Section 215(a) and (e) of the FPA are independent organizations that develop and enforce FERC-approved reliability standards to provide reliable operation of the bulk power system. See 16 U.S.C. § 824o, 18 C.F.R. §§ 39.1, 39.8. Currently, there are six regional entities: Northeast Power Coordinating Council, Midwest Reliability Organization, Reliability First, SERC Reliability Corporation, Texas Reliability Entity Inc., and WECC. *See* <https://www.nerc.com/news/Documents/March%202023%20NERC%20Frequently%20Asked%20Questions%20FAQ.pdf>.

¹⁶ 16 U.S.C. 824p(a)(1).

Section 216(a)(2) then directs DOE to issue a report at least every three years—based on the Needs Study or other transmission capacity and congestion information—that may designate as a NIETC any geographic area that has existing or expected transmission constraints or congestion that adversely affects consumers.¹⁷ In addition to this threshold requirement, in designating a NIETC, DOE may also consider whether:

- the economic vitality and development of the corridor, or the end markets served by the corridor, may be constrained by lack of adequate or reasonably priced electricity;
- economic growth in the corridor, or the end markets served by the corridor, may be jeopardized by reliance on limited sources of energy and a diversification of supply is warranted;
- the energy independence or energy security of the United States would be served by the designation;
- the designation would be in the interest of national energy policy;
- the designation would enhance national defense and homeland security;
- the designation would enhance the ability of facilities that generate or transmit firm or intermittent energy to connect to the electric grid;
- the designation—(i) maximizes existing rights-of-way; and (ii) avoids and minimizes, to the maximum extent practicable, and offsets to the extent appropriate and practicable, sensitive environmental areas and cultural heritage sites; and
- the designation would result in a reduction in the cost to purchase electric energy for consumers.¹⁸

As part of this report (including any NIETC designation), DOE must consult with appropriate regional entities and consider alternatives and recommendations from interested parties, including an opportunity for comment from affected States and tribes.¹⁹

¹⁷ 16 U.S.C. § 824p(a)(2).

¹⁸ 16 U.S.C. § 824p(a)(4).

¹⁹ *See id.*

Because the Needs Study serves as a primary resource in NIETC designations, the Needs Study must provide clear information to support the NIETC decisionmaking process. To enable interested parties to propose NIETCs, DOE's Needs Study must provide as much clarity, specification, and justification for transmission needs as possible. Clarity in the Needs Study will help applicants propose corridors that address identified needs and build upon information from the Needs Study. NIETC proposals should be able to mirror the metrics and methodologies used to identify transmission needs in the Needs Study. To enable DOE, applicants, and affected stakeholders to better understand, justify, and prioritize NIETC decisionmaking, the Needs Study should explain whether and how each identified transmission need implicates any factors in Section 216(a). This explanation would be especially helpful for factors that implicate DOE or other agency expertise, such as whether addressing certain transmission needs would serve the energy security of the United States, support national energy policy; or enhance national defense and homeland security. If the Needs Study provides clear and comprehensive analysis regarding what specific transmission is needed, where it is needed, and all the categorical benefits such transmission would provide,²⁰ then addressing those needs—whether as part of transmission planning processes or as part of the NIETC designation—becomes considerably easier. This clarity would greatly facilitate the statutorily intended use of the Needs Study in guiding what corridors are best suited for NIETC designation and what methods and metrics should be used to support it.

Below, PIOs address particular methods and metrics to evaluate NIETC proposals.

- (1) Designation of any geographic area that has existing or expected transmission constraints or congestion that adversely affects consumers (Section 216(a)(2))

²⁰ While PIOs do not propose that the Needs Study itself must include a full quantification of the benefits of every need identified, it should include such information where it exists—for example, as part of a regional transmission plan or state Integrated Resource Plan, other government transmission reports, or other credible analyses.

This threshold factor for NIETC designations involves two categories of analysis: present and future transmission constraints and/or congestion; and the adverse effect on consumers.

Transmission Constraint or Congestion

As DOE’s draft Needs Study acknowledges, various methodologies and metrics can help determine whether congestion or constraint exists. DOE’s 2014 Needs Study also provided a chart laying out Transmission Constraints and Congestion: Applicability and Availability of Major Sources of Data, which analyzed data using the following metrics across transmission planning regions: Congestion Management (as shown through Administrative Procedures, Operationally Limiting Constraints, Economic Congestion Cost, Locational Marginal Prices, Wholesale Electricity Price Differentials); Resource-Driven Transmission Constraints (as shown through Local Reliability, Interconnection Queue, Renewable and Clean Energy Zones); and System Utilization.²¹

Adverse Consumer Effects

The FPA also requires that NIETCs involve only transmission congestion or constraints “that adversely affects consumers.”²² Such adverse effects can be purely economic—*e.g.*, when the system is inefficient or when consumers must buy more costly generation than they could buy if more transmission capacity were present.²³ Other adverse effects include harm to human health and the environment, discriminatory treatment of low-income and marginalized communities,

²¹ Dep’t of Energy, *Transmission Constraints and Congestion in the Western and Eastern Interconnections, 2009-2012* (2014) at pp 4-5, available at <https://www.energy.gov/oe/articles/transmission-constraints-and-congestion-western-and-eastern-interconnections-2009-2012>. (hereinafter “Dep’t of Energy Draft Needs Study”).

²² 16 U.S.C. § 824p(a)(2)(i).

²³ See The Brattle Group and Grid Strategies, *Transmission Planning for the 21st Century: Proven Practices that Increase Value and Reduce Costs*, 2-9 October 2021, available at https://www.brattle.com/wp-content/uploads/2021/10/2021-10-12-Brattle-GridStrategies-Transmission-Planning-Report_v2.pdf (hereinafter “Brattle-Grid Strategies Report”).

weakened system reliability, and lack of resilience to increasing climate and security threats.²⁴ DOE should use appropriate qualitative and quantitative metrics to identify consumer harms and, to the extent possible, quantify how a NIETC designation would reduce those adverse effects.

Because NIETCs seek to address long-term regional and interregional transmission needs, DOE should also draw from the record on this issue in FERC’s Notice of Proposed Rulemaking regarding Long-Term Regional Planning. Likewise, DOE should look to metrics and methodologies from best transmission planning practices.²⁵ To identify solutions that lower consumer costs, transmission planning must occur at the regional and interregional level and be based on multiple scenarios that reflect a range of reasonably anticipated needs—including potential extreme weather impacts, shifts in load and generation, and public policy implications.²⁶ To minimize adverse impacts on consumers, planners must maximize the efficient delivery of reliable energy at least cost, while also meeting identified needs and incurring the least harm to affected communities. To achieve this, it is critical to assess *all* of the benefits of transmission proposals designed to meet anticipated needs.

DOE’s draft Needs Study also emphasized comprehensive, scenario-based planning that evaluates all the benefits of transmission.²⁷ FERC has also proposed that long-range transmission

²⁴ See FERC, *Building the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection*, Comments of Public Interest Organizations, Docket No. RM21-17-000, (Dec 12, 2021), Access. No. 20211012-5519; Comments of Greater Grand Rapids Chapter of the NAACP, 7-10, Docket No. RM21-17-000 (Aug 17, 2022), Access. No. 20220817-5284; Joint Comments of Greater Grand Rapids Chapter of the NAACP, 3-5, Docket No. RM21-17-000 (Sept. 19, 2022), Accession No. 20220919-5178.

²⁵ See FERC, *Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection*, Docket No. RM21-17-000.

²⁶ See Dep’t of Energy Draft Needs Study at 3; Brattle-Grid Strategies Report at 24-28 and Appendix A; See *Building for the Future Through Electric Regional Transmission Planning and Cost Allocation and Generator Interconnection*, 179 FERC ¶ 61,028, 87 Fed. Reg. 27,504 (May 4, 2022) (hereinafter “Long-Range Transmission Planning NOPR”). This is also the methodology being used by DOE’s Grid Development Office in its National Transmission Planning Study. See <https://www.energy.gov/gdo/national-transmission-planning-study-webinar>.

²⁷ See Dep’t of Energy Draft Needs Study at 3.

planners conduct scenario-based planning and that planners consider quantification of twelve distinct benefits to identify the most cost-effective solutions and properly inform cost allocation:

(1) avoided or deferred reliability transmission facilities and aging transmission infrastructure replacement; (2) (a) reduced loss of load probability, or (b) reduced planning reserve margin; (3) production cost savings; (4) reduced transmission energy losses; (5) reduced congestion due to transmission outages; (6) mitigation of extreme events and system contingencies; (7) mitigation of weather and load uncertainty; (8) capacity cost benefits from reduced peak energy losses; (9) deferred generation capacity investments; (10) access to lower-cost generation; (11) increased competition; and (12) increased market liquidity.²⁸

While not exhaustive of potential benefits, this list of transmission-related benefits also has the benefit of extensive industry experience and reflects efforts by RTOs/ISOs and their stakeholders to develop quantitative approaches to estimating transmission benefits over the last decade.²⁹

However, DOE should not limit its analysis to these factors, but should instead assess any demonstrated benefit from transmission, consistent with section 216(a)'s broad mandate to reduce adverse effects, as well as the relatively broad factors in Section 216(a)(4). While various methodologies may be valid, quantifying any particular transmission benefit generally assesses the reduction in "other costs" (such as generation and outage costs) consumers would otherwise face without the proposed transmission. If the reduction in "other costs" exceeds the cost of the transmission investment, then consumers' total costs would be reduced.³⁰ Any proposal that offers a benefit-cost ratio above one (i.e., benefits exceed costs) will reduce consumers' total system-wide costs.³¹ Benefits analyses can also assess how transmission can mitigate risks over time, even if it is more costly in the short term. For example, if a proposal would avoid extremely high-cost

²⁸ See Long-Range Transmission Planning NOPR at P 185.

²⁹ See, e.g., *Comments of Pub. Interest Orgs.* at 5-12, (Aug. 17, 2022) Accession Nos. 20220817-5270 ("PIOs' NOPR Comments"), Exhibit A, Affidavit of Johannes P. Pfeifenberger on Behalf of The Natural Resources Defense Council, ¶¶ 5-8.

³⁰ See *id.* at ¶ 16.

³¹ See *id.*

but low-probability reliability events (such as extreme weather impacts), decision-makers may agree that the “insurance value” of the proposal exceeds the added cost.³²

Ultimately, NIETC proposals should provide metrics and methodologies that evaluate *all* of a proposal’s benefits. This breadth is necessary so that DOE can compare competing proposals’ potential values when designating NIETCs. This information will also be necessary for projects that ultimately go forward within a NIETC to meet legal requirements for cost-allocation.³³ Because DOE will be designating corridors and not specific projects, a complete cost-benefit analyses is unlikely to be available, but applicants should provide quantifiable estimates where available and must at least provide thorough qualitative estimates using justifiable metrics and methods. Such qualitative benefit analysis is a practice already used by several RTOs.³⁴

(2) Other Statutory Factors

Most of the FPA’s additional factors in Section 216(a)(4) can be at least partially quantified by comparing costs to consumers to achieve those goals with the proposed transmission versus achieving them without the transmission to determine whether the benefits of such transmission exceed its costs. Factors (a)(4)(C)-(E) and (G) may require inclusion of qualitative assessments that provide a more narrative-driven explanation of how a proposal would achieve policy goals such as energy independence or national security that compare likely outcomes with and without the proposal. Such qualitative analyses—such as examining how a proposal will increase diversification of resources—have been widely used by RTOs engaged in long range transmission

³² See *id.* at ¶ 35.

³³ See *Ill. Commerce Comm’n*, 576 F.3d at 477; Order No. 1000 at PP 622, 639 (requiring costs of regional transmission facilities to be allocated in a manner that is at least roughly commensurate with estimated benefits).

³⁴ See MISO Detailed Business Case at 47-49; MTEP21 Report Addendum: Long Range Transmission Planning Tranche 1 Executive Summary (2022) 71-73, *available at* <https://cdn.misoenergy.org/MTEP21%20Addendum-LRTP%20Tranche%201%20Report%20with%20Executive%20Summary625790.pdf> (hereinafter “MTEP 21 Addendum”); *see also generally* MISO’s Long Range Transmission Planning Supporting Information *available at* <https://www.misoenergy.org/planning/transmission-planning/long-range-transmission-planning/>.

planning, such as MISO.³⁵ For factor (G), which includes the use of existing rights-of-way, as discussed in more detail in response to Question 8 *infra*, using existing rights-of-way carries significant potential benefits but also requires careful review of relevant laws. Where an applicant proposes to use existing rights-of-way and includes sufficient information in its application to demonstrate that use of the rights-of-way will be an effective means to construct the project, DOE should ensure that the cost-savings and lowered impacts resulting from the use of rights-of-way are considered as part of the project's benefits. DOE should also consider proactively working with other federal agencies and state regulators to identify rights-of-way that could be effectively used for transmission infrastructure.

For those projects focused on less quantifiable objectives – such as Section 216(a)(4)(B)'s examination of whether “a diversification of supply is warranted,” applicants will need to rely on more qualitative analyses. Such analyses must still be data-driven and objective. For example, MISO's analysis of its recent Tranche 1 projects included qualitative analyses for how the proposed projects would address the ability to better balance generation resource variability across diverse resources without adverse system impacts. It supported this finding through mapping of expected future resources and power flows, along with data showing the increase in diverse and balancing resources that would be available under the proposed portfolio of projects.

- 5. When considering the merits of corridor designation applications, how should DOE evaluate and weight the impact that a proposed corridor and any associated potential project(s) may have on:**
 - a. Alleviating congestion or transmission capacity constraints and/or responding to concerns identified in the Needs Study,**
 - b. Grid reliability and resilience,**
 - c. Reducing greenhouse gas emissions,**

³⁵ *Id.*

- d. Generating host community benefits,**
- e. Encouraging strong labor standards and the growth of union jobs and expanding career-track workforce development in various regions of the country,**
- f. Improving energy equity and achieving environmental justice goals,**
- g. Maximizing the use of products and materials made in the United States, and**
- h. Maintaining or improving energy security? How should DOE evaluate eligible projects that include benefits that may vary across any of the above set of preferred impacts? To what extent should DOE consider other related outcomes like cumulative impacts from a potential corridor? What information should DOE seek to inform such considerations? What metrics and methods are available for conducting such evaluations?**

Question 5 identifies various benefits that designated NIETCs and associated potential projects can facilitate. These benefits comprise a cohesive vision—articulated in national energy policy documents—for future transmission buildout and an equitable clean energy transition.

Overwhelming evidence shows that transmission projects can deliver multiple benefits by addressing congestion and capacity constraints, strengthening grid reliability and resilience, reducing greenhouse gas emissions, enhancing energy security, and lowering energy costs. DOE’s RFI thus correctly recognizes that transmission development can accelerate “incorporation of clean energy resources”—including resources stuck in clogged interconnection queues—and “expand energy resource diversity, promote resilience and reliability of the Nation’s electricity grid, and lower costs to consumers by adding new low cost electricity supply.”³⁶ DOE can best advance those goals by prioritizing long-distance, high-voltage, regional or interregional transmission projects that will connect new clean energy. Such projects will likely deliver significant benefits across these categories and are among the most difficult to plan, site, and build across multiple jurisdictions. That is the precise problem that Congress intended section 216 to solve.

³⁶ 88 Fed. Reg. at 30,957–58.

Planning and siting processes that center energy equity and environmental justice advance, rather than impede, those projects. Early, continuing, and meaningful engagement—particularly with historically overburdened environmental justice communities and Tribes—results in better designed projects, increases stakeholder support, and promotes projects getting built faster. Hence, DOE should establish a central role for equitable processes and outcomes in designating NIETCs.

DOE can also ensure that NIETC designations fulfill the national promise of a clean energy transition that benefits affected communities, both through affordable, clean, and reliable electricity, and through good job opportunities. These “win-win” benefits help redress historic inequities, strengthen the economy, and build support for project development.

Finally, transmission projects can and should be sited in a manner that minimizes environmental and cultural impacts. PIOs underscore that Congress empowered DOE to determine whether a NIETC “maximizes existing rights-of-way” and avoids, minimizes, and mitigates impacts to “sensitive environmental areas” and “cultural heritage sites.”³⁷

Below, PIOs examine DOE’s identified impacts in greater detail, including the ample legal authority for DOE to consider and prioritize those factors. Critically, DOE must articulate the statutory basis for any impacts it incorporates into guidelines and decision-making.³⁸ PIOs also highlight available metrics and methods for evaluating certain impacts. Finally, PIOs urge DOE to evaluate all benefits on a holistic basis, consistent with best transmission planning practices.

Alleviating Congestion and Capacity Constraints; Needs Study Concerns

In evaluating NIETC proposals, DOE should begin by assessing the potential to alleviate congestion or transmission capacity constraints and/or respond to concerns identified in the Needs

³⁷ 16 U.S.C. § 824p(a)(4)(G).

³⁸ See *Motor Vehicle Mfrs. Ass’n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 43 (1983) (agency action is arbitrary and capricious if “agency has relied on factors which Congress has not intended it to consider” or “entirely failed to consider an important aspect of the problem”).

Study, because Congress gave these factors a primary role in the statutory scheme.³⁹ As discussed above in response to question 4, DOE can evaluate effects on congestion or constraint using the same metrics that the Needs Study uses to identify their existence in the first instance.

Grid Reliability and Resilience

PIOs cannot overstate the critical threats to grid reliability and resilience in the face of the rapidly increasing and record-shattering impacts of extreme weather on the nation's ability to reliably generate and deliver energy to its citizens when they most need it. As discussed more fully in response to Question 8 below, the inadequacy of today's energy system to meet the challenges of climate change has been demonstrated in tragic loss of life and multi-billion dollar costs to consumers from weather-related outages in every season across the entire country.⁴⁰ From Superstorm Sandy and Hurricane Ida to the 2014 polar vortex and Winter Storms Uri and Elliott, what was once a one-in-one-thousand year storm stretching across an entire region is quickly becoming the new normal.⁴¹ As has been demonstrated repeatedly from grid outages due to equipment failures and frozen coal piles, gas wells, and pipelines from California to Texas to Pennsylvania, fossil fuels are vulnerable to extreme weather. The risk of and consequences from extreme weather outages will only become graver as the nation's load growth steadily increases from the expansion of electric vehicles, building electrification, and data centers. Threats to reliability and resilience not only have the greatest adverse effects for consumers,⁴² but also

³⁹ 16 U.S.C. § 824p(a)(2).

⁴⁰ See, e.g., Rebecca Leber, Vox, *Winter storms put the US power grid to the test. It failed*, (Dec 27, 2022), available at <https://www.vox.com/energy-and-environment/2022/12/27/23527327/winter-storm-power-outages>.

⁴¹ See, e.g., Dareonna Davis, Forbes, *U.S. Has Seen Four 1-In-1,000 Year Rainfall Events This Summer* (Aug 10, 2022), available at <https://www.forbes.com/sites/darreonnadavis/2022/08/10/us-has-seen-four-1-in-1000-year-rainfall-events-this-summer/?sh=6f018e965a40>.

⁴² 16 U.S.C. § 824p(a)(2)(i).

implicate a host of other statutory factors considered as part of the NIETC designation process, such as national energy policy, national security, and consumer costs.⁴³

As these storms have also demonstrated, the ability to draw energy across a diverse portfolio of resources and across regions keeps the lights on when major storms strike.⁴⁴ Moreover, DOE's own Draft Needs Study reviewed over 50 reports from the last five years and found that most regions need to increase transmission deployment to accommodate the changing resource mix, meet demand growth, and maintain reliability.⁴⁵ The Draft Needs Study found that for the moderate load and high clean energy scenarios evaluated, the U.S. requires growing transmission capacity by 57% over today's system by 2035, and in the high load and high clean energy scenarios evaluated, the U.S. needs to double transmission capacity by 2040.⁴⁶ Yet studies have also shown that high voltage and interregional transmission investments have declined in the last decade. For example, a Grid Strategies report that found "the U.S. dropped from installing an average of 1,700 miles of new high-voltage transmission miles per year in the first half of the 2010s, to averaging only 645 miles per year in the second half of the 2010s,"⁴⁷ Only 675 miles of high-voltage transmission (345 kV+) were built in 2022, a record low.⁴⁸ Since 2014, the U.S. has

⁴³ *Id.* § 824p(a)(4)(D)-(E), (H).

⁴⁴ See FERC-NERC, Presentation on February 2021 Cold Weather Grid Operations: Preliminary Findings and Recommendations, at Slide 7 (Sept. 23, 2021) ("Overall, MISO's and SPP's ability to transfer power through their many transmission ties with adjacent Balancing Authorities in the Eastern Interconnection helped to alleviate their generation shortfalls, preventing more severe firm load shed."), available at https://www.naesb.org/pdf4/Feb2021_cold_weather_grid_operations_preliminary_findings_recommendations_0923_21.pdf. See also Grid Strategies, *Transmission Makes the Power System Resilient to Extreme Weather*, July 2021; Americans for a Clean Energy Grid, *Macro Grids in the Mainstream: An International Survey of Plans and Progress* 5 (Nov. 2020), available at <https://cleanenergygrid.org/wp-content/uploads/2020/11/Macro-Grids-in-the-Mainstream-1.pdf> (hereinafter "Macro Grids in the Mainstream").

⁴⁵ See Dep't of Energy, "National Transmission Needs Study: Draft for Public Comment," Feb 2023, at 106, available at: <https://www.energy.gov/sites/default/files/2023-02/022423-DRAFTNeedsStudyforPublicComment.pdf>. ("National Transmission Needs Study").

⁴⁶ See *id.* at 106-107.

⁴⁷ Caspary, et al., Grid Strategies, *Fewer New Miles: The U.S. Transmission Grid in the 2010s*, 2022, at 1, available at https://gridprogress.files.wordpress.com/2022/08/grid-strategies_fewer-new-miles.pdf.

⁴⁸ See American Clean Power, *Clean Power Annual Market Report 2022* at 27, available at <https://cleanpower.org/resources/clean-power-annual-market-report-2022/#download-report>.

only installed 7 GW of interregional transmission capacity, compared to 44 GW in Europe and 260 GW in China.⁴⁹

Consequently, PIOs urge DOE to place the greatest weight on project proposals that provide the greatest and most immediate benefits in terms of increasing interregional transfer capacity and diversification of regional resources to speed the development of wind, solar, and storage resources that are generally concentrated in geographic locations distant from load centers and across regional footprints. Transmission corridors that unlock the ability to connect resilient, reliable, and competitive clean energy resources to the grid and across regional footprints are necessary not only to ensure resilience and reliability but to transition away from dependence on a primary source of climate-changing emissions that cause these existential threats in the first instance. These types of transmission projects will also result in extensive greenhouse gas reductions, as discussed below.

As this question shows, DOE has already taken note of MISO's methodology for evaluating transmission projects that increase the diversification of resources. DOE can also use methodologies and metrics such as those that were employed as part of ERCOT's effort to maximize transmission as part of its Competitive Renewable Energy Zones project, which used scenario-based planning and geographic analysis to evaluate benefits offered by different transmission projects.⁵⁰ DOE can evaluate project proposals that would increase interregional capacity consistent with the definition set forth in 18 CFR 37.6(b)(1)(vi), and using metrics and methodologies such as those discussed as part of FERC's recent Staff-Led Workshop on Establishing Interregional Transfer Capability Transmission Planning and Cost Allocation

⁴⁹ Macro Grids in the Mainstream at 5.

⁵⁰ See, e.g., ERCOT Systems Planning, *Competitive Renewable Energy Zones Transmission Optimization Study*, ERCOT (April 2, 2008) available at <https://www.nrc.gov/docs/ML0914/ML091420467.pdf>.

Requirements, Docket No. AD23-3-000,⁵¹ RTO evaluations of different project proposals such as MISO’s Tranche 1 analysis,⁵² and expert reports such as Grid Strategies’ recent report *Quantifying A Minimum Interregional Transfer Capability Requirement*.⁵³

Greenhouse Gas Reductions

DOE has ample authority to consider greenhouse gas (“GHG”) reductions. Section 216 makes clear that DOE should consider whether a NIETC would advance the “national energy policy”⁵⁴ of achieving dramatic and necessary GHG reductions, including a transition to “a carbon pollution-free electricity sector by 2035.”⁵⁵ Further, Congress instructed DOE to place significant weight on GHG reductions in facilitating transmission development. In establishing the IJA’s Transmission Facilitation Program, which creates financing tools to support high-capacity transmission lines,⁵⁶ Congress directed DOE to “prioritize” four factors “to the maximum extent practicable,” including a project’s “contribut[ion] to national or subnational goals to lower electricity sector greenhouse gas emissions.”⁵⁷ The IJA thus sets a clear national policy for DOE to prioritize GHG reductions when facilitating transmission.

⁵¹ Video and transcript available at <https://www.ferc.gov/news-events/events/staff-led-workshop-establishing-interregional-transfer-capability-transmission>.

⁵² See, e.g., MTEP21 Addendum *passim*; MISO, *MISO Transmission Expansion Plan: MTEP21 Addendum – LRTP Tranche 1 Report Overview* (Apr. 13, 2022), available at <https://cdn.misoenergy.org/20220413%20PAC%20Item%2002%20MTEP21%20LRTP%20Tranche%201%20Overview623967.pdf>.

⁵³ Michael Goggin et al., *Quantifying A Minimum Interregional Transfer Capability Requirement*, May 2023, available at https://gridstrategiesllc.com/wp-content/uploads/2023/05/GS_Interregional-Transfer-Requirement-Analysis-final54.pdf.

⁵⁴ 16 U.S.C. § 824p(a)(4)(D).

⁵⁵ Exec. Order No. 14,057, § 101, 86 Fed. Reg. 70,935, 70,935 (Dec. 8, 2021); see also NOI/RFI, 88 Fed. Reg. at 30,957 & n.2 (citing Exec. Order No. 14,008, 86 Fed. Reg. 7619 (Feb. 1, 2021)).

⁵⁶ See 42 U.S.C. § 18713.

⁵⁷ *Id.* § 18713(j)(8)(D). The remaining priorities are whether the project (A) “use[s] technology that enhances the capacity, efficiency, resiliency, or reliability of an electric power transmission system”; (B) “will improve the resiliency and reliability of an electric power transmission system”; and (C) “facilitate[s] interregional transfer capacity that supports strong and equitable economic growth.” *Id.* § 18713(j)(8).

DOE should also highly prioritize GHG reductions in NIETC designations because they “enhance national defense and homeland security” by addressing climate change.⁵⁸ Climate change is a national security threat.⁵⁹ As the White House’s National Security Strategy explains, “[o]f all of the shared problems we face, climate change is the greatest and potentially existential for all nations.”⁶⁰

DOE also recognizes that incorporating “clean energy resources facilitated by additional transmission development will also expand energy resource diversity, promote resilience and reliability of the Nation’s electric grid, and lower costs to consumers by adding new low-cost electricity supply.”⁶¹ Hence, facilitating GHG reductions also advances other statutory priorities.⁶²

Finally, as explained below in response to question 10, NEPA also requires DOE to evaluate and disclose the climate impacts of its NIETC designations. PIOs offer suggestions on appropriate metrics and methods for assessing GHG impacts in response to that question.

Improving Energy Equity and Achieving Environmental Justice Goals

PIOs wholeheartedly support DOE using NIETC designations to improve energy equity and promote environmental justice.⁶³ Abundant authority supports this approach. Recent Executive Orders have consistently emphasized these elements as cornerstones of national energy

⁵⁸ 16 U.S.C. § 824p(a)(4)(E).

⁵⁹ See, e.g., Dep’t of Homeland Sec., *Addressing Climate Change*, available at <https://www.dhs.gov/climate-change> (last visited June 15, 2023) (“The climate crisis threatens homeland security in the United States.”); Dep’t of Def., *Tackling the Climate Crisis*, available at <https://www.defense.gov/spotlights/tackling-the-climate-crisis/> (last visited June 15, 2023) (“DOD is elevating climate change as a national security priority, integrating climate considerations into policies, strategies, and partner engagements”); Gov’t Accountability Off., *Climate Change Risks to National Security*, available at <https://www.gao.gov/assets/gao-22-105830.pdf>.

⁶⁰ White House, *National Security Strategy* 9 (Oct. 2022), available at: <https://www.whitehouse.gov/wp-content/uploads/2022/10/Biden-Harris-Administrations-National-Security-Strategy-10.2022.pdf>.

⁶¹ 88 Fed. Reg. at 30,957–58; see also Dep’t of Energy Draft Needs Study at 52 (“Increasing the diversity of both resource fuel-type and resource geographic location improves the electric system’s ability to produce affordable, reliable energy while increasing the operational flexibility and reliability of the grid. The reviewed reports name other important benefits of integrating clean energy generation, such as lowered electricity prices and system costs, avoided climate damages, and air quality improvements for frontline communities.”).

⁶² See 16 U.S.C. § 824p(a)(4)(A)-(E), (H).

⁶³ See *id.*

policy. For example, Executive Order 13990 set a policy “to prioritize both environmental justice and the creation of well-paying union jobs” in tackling the climate crisis.⁶⁴ Executive Order 14008 reiterated the promise to “deliver an equitable, clean energy future,” directing a “Government-wide approach that reduces climate pollution in every sector of the economy,” “delivers environmental justice,” and “spurs well-paying union jobs and economic growth.”⁶⁵ In setting priorities for implementing the IRA, Executive Order 14082 highlighted “advancing environmental and climate justice” and “promoting construction of clean energy generation, storage, and transmission, and enabling technologies through efficient, effective mechanisms that incorporate community engagement.”⁶⁶ Recently, Executive Order No. 14096 stressed ensuring that “every person has safe, clean, and affordable options for housing, energy, and transportation,” while “facilitating an equitable transition of the workforce as part of a clean energy future.”⁶⁷

Other section 216(a)(4) factors reinforce the propriety of these considerations. Congress evinced concern with a “lack of adequate or reasonably priced electricity” or detrimental effects from “reliance on limited sources of energy.”⁶⁸ Likewise, Congress specifically highlighted reducing consumers’ electricity costs.⁶⁹ DOE can appropriately consider whether cost reductions

⁶⁴ Exec. Order No. 13990, § 1, 86 Fed. Reg. 7037, 7037 (Jan. 20, 2021).

⁶⁵ Exec. Order No. 14008, § 201, 86 Fed. Reg. 7619, 7622 (Jan. 27, 2021). (A federal district court has held invalid a different section (section 208) of Executive Order 14008, which paused oil and gas leasing under other statutes. *See Louisiana v. Biden*, 622 F. Supp. 3d 267, 289–90 (W.D. La. 2022).)

⁶⁶ Exec. Order No. 14082, § 2(c), (d), 87 Fed. Reg. 56,861, 56,862 (Sept. 12, 2022); *see also id.*, § 2(i), 87 Fed. Reg. at 56,862 (also prioritizing “effectively coordinating with State, local, Tribal, and territorial governments, as well as with private-sector stakeholders and nongovernmental organizations, in implementing the critical investments outlined in this section to build sustainable, resilient communities”).

⁶⁷ Exec. Order No. 14096, § 1, 88 Fed. Reg. 25,251, 25,251 (Apr. 21, 2023); *see also* Exec. Order No. 14030, § 1, 86 Fed. Reg. 27,967, 27,967 (May 20, 2021) (addressing climate-related financial risk; articulating policies of “accounting for and addressing disparate impacts on disadvantaged communities and communities of color,” “spurring the creation of well-paying jobs,” and achieving “a net-zero emissions economy by no later than 2050”); Exec. Order No. 14,017, § 1, 86 Fed. Reg. 11,849, 11,849 (Feb. 24, 2021) (setting policy to “strengthen the resilience of America’s supply chains,” which will also “advance the fight against climate change” and “encourage economic growth in communities of color and economically distressed areas”).

⁶⁸ 16 U.S.C. § 824p(a)(4)(A), (B)(i).

⁶⁹ 16 U.S.C. § 824p(a)(4)(H).

will benefit communities with the heaviest energy burdens.⁷⁰ For instance, a project that lowers energy costs for a low-income community will have a greater impact on those consumers than a project that lowers energy costs by the same amount for a wealthier community. Similarly, Congress empowered DOE to consider a corridor’s effects on “sensitive environmental areas and cultural heritage sites,”⁷¹ which squarely raises environmental justice issues.

Consistent with this national energy policy and other statutory directives, energy equity and environmental justice should feature prominently in DOE’s evaluation of proposed NIETCs. DOE should also prioritize these considerations as a practical matter. DOE has a significant opportunity to advance equity in facilitating transmission buildout. As the draft Needs Study highlights, “[e]quitable investments made with a lens of energy justice in areas with higher cumulative burden may mitigate existing harms and increase benefits to frontline communities facing high energy burden, longer-duration outages, and higher levels of environmental hazards.”⁷² Additionally, prioritizing early and meaningful stakeholder engagement—consistent with environmental justice principles—can help speed transmission projects.⁷³ By prioritizing applications that demonstrate and commit to an equitable process for project development, DOE can make it more likely that projects in NIETCs actually get built.

⁷⁰ See Off. of Energy Efficiency & Renewable Energy, *Energy Equity and Environmental Justice*, available at: <https://www.energy.gov/eere/energy-equity-and-environmental-justice> (last visited June 15, 2023) (acknowledging that “the benefits of [DOE’s] research have not reached all Americans, often leaving out Black, Brown, Indigenous, and low-income communities,” which has “resulted in higher rates of pollution, health impacts, and a higher energy burden in these communities relative to white, higher-income communities”).

⁷¹ 16 U.S.C. § 824p(a)(4)(G)(ii).

⁷² Dep’t of Energy Draft Needs Study at iii.

⁷³ See Marian Swain, *Managing Stakeholder Conflicts Over Energy Infrastructure: Case Studies from New England’s Energy Transition* 93-95 (2019) (Master’s Dissertation, Mass. Inst. Tech. available at <https://dspace.mit.edu/bitstream/handle/1721.1/123922/1140072907-MIT.pdf?sequence=1&isAllowed=y>); Paul Joskow, *Facilitating Transmission Expansion to Support Efficient Decarbonization of the Electricity Sector*, MIT Ctr. For Energy and Env’t. Policy Rsch. Working Paper Series), June 2021, at 44-47.

DOE’s evaluation of proposals through this equity lens must include both substantive and procedural components. Substantively, DOE should consider at least three outcomes: (1) reducing high energy burdens and increasing resiliency in vulnerable communities; (2) promoting community economic development; and (3) avoiding impacts to environmental justice communities and mitigating prior disproportionate burdens. These outcomes are consistent with DOE’s priorities for implementing the Justice40 Initiative,⁷⁴ including decreasing “energy burden” and “environmental exposure and burdens,” and increasing access to clean energy and economic opportunities.⁷⁵ Though a NIETC designation is not a direct financial investment, Justice40 priorities can properly inform DOE’s decision-making here, especially because part of the purpose of designation is to unlock investment tools.⁷⁶ Thus, PIOs support DOE’s proposal to require applicants to submit information on how potential projects would achieve these Justice40 priorities.⁷⁷

In addition, DOE must incorporate cumulative impacts into its decision-making, particularly when assessing environmental justice impacts. To the extent DOE is uncertain whether it should consider “cumulative impacts from a potential corridor,”⁷⁸ the answer is clearly yes.

⁷⁴ See Exec. Order No. 14008, § 223, 86 Fed. Reg. at 7631–32.

⁷⁵ See Dep’t of Energy, *General Guidance for Justice40 Implementation*, at 10 (July 25, 2022), available at: <https://www.energy.gov/sites/default/files/2022-07/Final%20DOE%20Justice40%20General%20Guidance%20072522.pdf> ([hereinafter, “DOE Justice40 Guidance.”]). DOE’s guidance identifies eight policy priorities:

- (1) a decrease in energy burden;
- (2) a decrease in environmental exposure and burdens;
- (3) an increase in the clean energy jobs, job pipeline, and job training for individuals;
- (4) increases in clean energy enterprise creation and contracting (e.g., minority-owned or disadvantaged business enterprises);
- (5) an increase in energy democracy;
- (6) an increase in access to low-cost capital;
- (7) increased parity in clean energy technology access and adoption; and
- (8) an increase in energy resiliency.

Id.

⁷⁶ See 88 Fed. Reg. at 30,958.

⁷⁷ See *id.* at 30,961.

⁷⁸ *Id.* at 30,962.

Executive Order 14096 specifically directs agencies to address disproportionate human health and environmental burdens, including “cumulative impacts of environmental and other burdens on communities with environmental justice concerns.”⁷⁹ And the Order confirms agencies’ obligations under NEPA to “analyze[] direct, indirect, and cumulative effects of Federal actions on communities with environmental justice concerns.”⁸⁰

A meaningful cumulative impacts assessment must include an integrated analysis of environmental and non-environmental stressors, including disparities and inequities perpetuated by racial, economic, and social injustice. That assessment must analyze various factors, including heat vulnerability, cancer clusters, asthma rates, community resilience and social vulnerability, and other pre-existing health and environmental indicators. There are examples of this holistic review in other federal contexts. For example, EPA described cumulative impact assessments as “a process of evaluating both quantitative and qualitative data representing cumulative impacts to inform a decision.”⁸¹ EPA further noted that elements of a cumulative impact assessment include:

combined impacts across multiple chemical and non-chemical stressors; multiple sources of stressors from the built, natural, and social environments; multiple exposure pathways across media; community vulnerability, sensitivity; adaptivity, and resilience; exposures to stressors in the relevant past and future, especially during vulnerable life stages; distribution of environmental burdens and benefits; individual variability and behaviors; and health and well-being benefits/mitigating factors”⁸²

Procedurally, DOE should prioritize NIETC proposals that emerge from an equitable process that includes early, frequent, and meaningful engagement with affected communities,

⁷⁹ Exec. Order No. 14096, § 3(i), (ii), 88 Fed. Reg. at 25,254; *see also id.*, § 3(vi) (requiring agencies to address “adverse effects—including cumulative impacts of environmental and other burdens—already experienced by such communities”).

⁸⁰ *Id.*, § 3(ix)(A).

⁸¹ Environmental Protection Agency, *Cumulative Impacts Research: Recommendations for EPA’s Office of Research and Development*, at vii (Sept. 30, 2022), available at https://www.epa.gov/system/files/documents/2022-09/Cumulative%20Impacts%20Research%20Final%20Report_FINAL-EPA%20600-R-22-014a.pdf.

⁸² *Id.* at 5.

particularly environmental justice communities and Tribes. PIOs agree with DOE’s proposal to require applicants to submit a “summary of engagements to date and future outreach planned with Communities of Interest.”⁸³ DOE’s guidelines should also articulate minimum standards and best practices for applicants to follow in engaging with those communities—before, during, and after NIETC designation. DOE may draw from applicable guidance documents, including DOE’s own Justice40 Guidance for stakeholder engagement plans⁸⁴ and Executive Order 14096’s recent guidance on “provid[ing] opportunities for the meaningful engagement of persons and communities with environmental justice concerns.”⁸⁵ DOE should also align its guidelines with any similar requirements that FERC imposes on section 216(b) permit applicants.⁸⁶ PIOs provide additional recommendations on outreach and consultation below in response to Question 11.

Generating Host Community Benefits; Labor Standards, Union Jobs, Career-Track Workforce

DOE should also prioritize projects that generate host community benefits and good jobs. As discussed above, these factors are critical elements of the national energy policy goal of achieving an equitable clean energy transition. Directing transmission projects’ benefits to host communities also aligns with section 216’s purpose to overcome siting obstacles arising from fragmented decisionmaking processes.⁸⁷ Indeed, in section 50152 of the IRA, Congress recognized that host community benefits play an important role in “facilitat[ing] the siting of interstate electricity transmission lines.”⁸⁸ To that end, Congress appropriated \$760 million for DOE to issue

⁸³ 88 Fed. Reg. at 30,961.

⁸⁴ See DOE Justice40 Guidance at 22-27.

⁸⁵ Exec. Order 14096, § 3(vii); 88 Fed. Reg. at 25,254.

⁸⁶ See Backstop Siting NOPR, 88 Fed. Reg. at 2774–75 (proposing to require applicants to develop and file an Environmental Justice Public Engagement Plan).

⁸⁷ See 16 U.S.C. § 824p(b)(1)(A)(ii) (providing that FERC can issue siting permits with NIETCs where a State cannot “consider the [project’s] interstate or interregional benefits”); S. Rep. 109-78, at 8 (2005) (“Siting challenges [for transmission], including a lack of coordination among States, impede the improvement of the electric system.”).

⁸⁸ 42 U.S.C. § 18715a.

grants for siting authorities and “for economic development activities for communities that may be affected by the construction and operation of a covered transmission project.”⁸⁹

To evaluate benefits to host communities and labor impacts, DOE can draw on its existing guidance, as well as comments that DOE received in response to its Request for Information regarding implementation of IRA section 50152.⁹⁰ Affected communities must play an active role from the outset in designing and selecting community benefits proposals, and DOE should prioritize proposals that provide such opportunities.⁹¹

Moreover, DOE requires applicants seeking IIJA and IRA funding to submit Community Benefits Plans based on priorities of “investing in America’s workforce”; “engaging communities and labor”; “advancing diversity, equity, inclusion, and accessibility”; and “implementing Justice 40.”⁹² DOE can reasonably incorporate those principles into its evaluation of NIETC proposals, given that corridor designation is a precursor to certain IIJA and IRA funding eligibility.⁹³ PIOs thus support DOE’s proposal to require submission of this information.⁹⁴ DOE also maintains a Community Benefit Agreement Toolkit,⁹⁵ which provides an additional basis for evaluating proposals to generate host community benefits and promote community workforce development.

Energy Security and Maximizing Use of Domestic Products and Materials

DOE can appropriately consider impacts on energy security and maximizing use of domestic products and materials. Section 216 expressly identifies “energy independence or energy

⁸⁹ *Id.* § 18715a(b)(2).

⁹⁰ See Request for Information, 88 Fed. Reg. 5870 (Jan. 30, 2023).

⁹¹ See PIOs Response to DOE RFI on Transmission Siting Grants at 10, 11, 13, 16 (Feb. 28, 2023), available at <https://sustainableferc.org/wp-content/uploads/2023/03/Public-Interest-Organizations-Responses-to-RFI-on-Transmission-Siting-Grants.pdf>.

⁹² Dep’t of Energy, *About Community Benefits Plans*, available at <https://www.energy.gov/infrastructure/about-community-benefits-plans> (last visited June 16, 2023).

⁹³ See 88 Fed. Reg. at 30,958.

⁹⁴ See *id.* at 30,961.

⁹⁵ See Dep’t of Energy, *Community Benefit Agreement (CBA) Toolkit*, available at <https://www.energy.gov/diversity/community-benefit-agreement-cba-toolkit> (last visited June 16, 2023).

security” as a relevant consideration.⁹⁶ DOE should explain its interpretation of “energy security” to provide clarity to applicants and interested parties. The use of domestic products and materials is consistent with national policies to maintain “resilient, diverse, and secure supply chains to ensure our economic prosperity and national security,”⁹⁷ and to reach a carbon pollution-free electricity sector in a manner that “expand[s] American technologies, industries, and jobs.”⁹⁸

Environmental and Cultural Impacts

DOE should also prioritize proposed NIETCs that avoid and mitigate environmental and cultural impacts. PIOs are concerned that the RFI omits any clear reference to this factor in Question 5’s list of “preferred impacts”⁹⁹ and from DOE’s list of relevant information that applicants should submit regarding the corridor’s boundaries and impact on section 216(a)(4) criteria.¹⁰⁰ While DOE proposes requirements that applicants submit information regarding such impacts for NEPA purposes,¹⁰¹ it should clarify to applicants and other interested parties the role that those considerations will play in DOE’s decisionmaking on corridor proposals.

Relevant history reinforces DOE’s obligation to take seriously these impacts at the corridor siting stage. In vacating DOE’s initial designations on NEPA grounds, the Ninth Circuit rejected the Department’s position “that because the NIETCs do not approve any specific sites [for corridors], they have no meaningful environmental impact.”¹⁰² And when Congress subsequently amended section 216, Congress specifically gave DOE the authority to make designation decisions

⁹⁶ 88 Fed. Reg. at 30,962.

⁹⁷ Exec. Order No. 14017, § 1, 86 Fed. Reg. 11,849, 11,849 (Feb. 24, 2021) (“Resilient American supply chains will revitalize and rebuild domestic manufacturing capacity, maintain America’s competitive edge in research and development, and create well-paying jobs.”).

⁹⁸ Exec. Order No. 14057, § 101, 86 Fed. Reg. at 70,935.

⁹⁹ 88 Fed. Reg. at 30,960.

¹⁰⁰ *Id.* at 30,962.

¹⁰¹ *See id.*

¹⁰² *Cal. Wilderness Coal. v. DOE*, 631 F.3d 1072, 1103 (9th Cir. 2011).

based on these considerations at the outset of the process.¹⁰³ Avoiding impacts to sensitive environmental areas and cultural heritage sites from the start sensibly promotes transmission development by building local support and reducing opposition.

6. Are there other potential applicants beyond those listed in Section III.A.i that should be considered when developing final guidance, or whose specific needs should be considered when developing this process?

DOE should allow broad participation both in proposing NIETCs and in providing input on proposals. DOE should allow entities other than developers to propose corridor designations, including but not limited to Tribal authorities, States, non-transmission-owning and transmission-dependent utilities, local governments, generation developers, or other entities.

However, other entities should not have the same initial filing requirements as developers, given that developers are typically specialized entities with specific expertise and resources dedicated to infrastructure development. Other entities, such as States, local governments, and Tribes, may not have the same technical expertise or financial resources. Imposing identical filing requirements on all entities is likely to create barriers to entry and limit the diversity of proposals. However, allowing flexibility in these initial requirements and providing DOE assistance to fill in technical information necessary to determine whether NIETC designation is warranted can encourage innovative solutions and alternative approaches to NIETC designations. Non-developer entities may bring unique perspectives and ideas that could lead to more sustainable, community-oriented, or environmentally friendly proposals.

By not imposing identical filing requirements, DOE can also foster collaborative partnerships between developers and other entities. Developers can leverage the expertise and local

¹⁰³ See 16 U.S.C. § 824p(a)(4)(G) (providing for consideration whether “(G) the designation--(i) maximizes existing rights-of-way; and (ii) avoids and minimizes, to the maximum extent practicable, and offsets to the extent appropriate and practicable, sensitive environmental areas and cultural heritage sites”).

knowledge of community-based organizations and States or local governments, leading to more comprehensive and community-centered corridor proposals, such as smart-from-the-start NIETC planning, which may identify areas where transmission development is needed or areas where development should be avoided.

7. Should DOE accept proposals or recommendations for NIETCs on an annual basis, on some other defined frequency, or on a rolling basis? How long should defined request periods be open?

PIOs recommend an application process that accommodates the greatest number of applications while reducing the risk of duplicative or redundant processes that could lead to a delay in NIETC designations. As discussed in more detail below, proposals for transmission projects that bridge interconnections or serve multiple regions should be prioritized. To ensure such prioritization, DOE should accept proposals that will address these priorities on a rolling basis.

For all other proposals, PIOs recommend a two-phase approach. First, for an initial transition period (e.g., one or two years), DOE should process applications for all proposals on a rolling basis. A transition period is appropriate because this applicant-driven process was not previously available. Accordingly, strong proposals could come from across the country, and DOE should retain flexibility to prioritize the most promising ones.

Second, following that transition period, DOE should accept applications for NIETCs that do not address multiple regions or interconnections on an annual basis, with quarterly deadlines divided up according to region and consistent with Order No. 1000 planning region timelines for interconnection queues and transmission planning. With the ample lead time provided by a transition period, this process can ensure that multiple proposals within the same area and designed to serve the same needs are not filed in a serial manner that hinders cross-proposal comparison and delays decision-making. It will also improve environmental review processes by ensuring that,

where there are multiple proposals to address a particular need, the environmental impacts and benefits of those proposals can be compared in a single NEPA review.

8. Should DOE explicitly seek NIETC corridor proposals that facilitate the development of certain kinds of transmission projects or that meet specific identified transmission needs (e.g., interregional transmission projects)?

NIETC designations will be essential to resolving transmission bottlenecks that compromise the stability and affordability of the grid by facilitating necessary transmission projects that may otherwise be unable to move forward. Transmission projects that bridge interconnections or serve multiple regions are not currently being built despite having some of the highest cumulative benefits.¹⁰⁴ To ensure that these projects are given adequate weight and timely reviewed, DOE should consider creating an applicant track for transmission projects that bridge interconnections, or serve multiple regions, or multiple states with critical unaddressed needs.

DOE should explicitly seek these types of proposals for two reasons.¹⁰⁵ First, extensive evidence shows that interregional transmission projects maximize net consumer benefits.¹⁰⁶ For example, increased interregional transmission helps balance generation and load with less installed capacity, due to load and generation diversity, and increases operating flexibility; these projects have “benefit-to-cost ratios ranging from 1.2 to 2.9, indicating significant value to increasing the transmission capacity between the interconnections and sharing generation resources for of all the cost futures studied.”¹⁰⁷ Likewise, “inter-state coordination and transmission expansion [including

¹⁰⁴ To this end, DOE should look to both its final Needs Study as well as the results of the National Transmission Planning Study once they are each completed.

¹⁰⁵ DOE should identify needs and opportunities for and solicit such projects, including through public solicitations and through engagement with RTOs, utilities, and the transmission development community.

¹⁰⁶ See, e.g., Johannes Pfeiffenberger, *The Benefits of Interregional Transmission: Grid Planning for the 21st Century*, Prepared for DOE Build a Better Grid Initiative (Mar. 15, 2023) pp. 8-12; MIT Energy Initiative, Patrick Brown & Audun Botterud, *The Value of Inter-Regional Coordination and Transmission in Decarbonizing the US Electricity System*, available at [https://www.cell.com/joule/fulltext/S2542-4351\(20\)30557-2](https://www.cell.com/joule/fulltext/S2542-4351(20)30557-2) (“MIT 2021”).

¹⁰⁷ NREL, *The Value of Increased HVDC Capacity Between Eastern and Western U.S. Grids: The Interconnections Seam Study*, 7, October 2020, available at <https://www.nrel.gov/docs/fy21osti/76850.pdf>.

across regions and interconnections] reduces the system cost of electricity in a 100%-renewable US power system by 46% compared with a state-by-state approach, from 135 \$/MWh to 73 \$/MWh.”¹⁰⁸ Further, “[i]nterregional and regional transmission links reduce congestion and expand opportunities for trade,” and while “[m]any links have hourly average pricing differences that exceed \$15/MWh – equivalent to \$130 million per year for a 1000 MW link,” “[i]nterregional links (\$24/MWh in the median case in 2021) have greater value than regional links (\$11/MWh in the median case in 2021) – though many high-value regional links exist.”¹⁰⁹ Interregional, meshed offshore wind networks are particularly important to support offshore wind development. Multiple studies have shown the value and need for interregional solutions to offshore wind, which would provide enormous consumer savings as well as reliability benefits.¹¹⁰

Second, current and future reliability and resilience depend on a grid that is bigger than the weather.¹¹¹ As shown by sometimes-catastrophic outages caused by recent extreme weather events, the nation’s current generation fleet—including thermal resources—is already weather-dependent. Winter Storm Elliott caused rolling blackouts in the Southeast and brought several

¹⁰⁸ MIT 2021 at 115.

¹⁰⁹ LBNL Empirical Estimates of Transmission Value using Locational Marginal Prices (August 2022) at 3, available at https://eta-publications.lbl.gov/sites/default/files/lbnl-empirical_transmission_value_study-august_2022.pdf.

¹¹⁰ See, e.g., Dep’t of Energy, Atlantic Offshore Wind Transmission Literature Review and Gaps Analysis, Oct. 2021, available at <https://www.energy.gov/sites/default/files/2021-10/atlantic-offshore-wind-transmission-literature-review-gaps-analysis.pdf>. 2021. See also Johannes Pfeifenberger et al., The Benefit and Urgency of Planned Offshore Transmission: Reducing the Costs of and Barriers to Achieving U.S. Clean Energy Goals (Jan. 24, 2023), available at https://www.brattle.com/wp-content/uploads/2023/01/Brattle-OSW-Transmission-Report_Jan-24-2023.pdf; Kelly Smith et al., Offshore Wind Transmission and Grid Interconnection Across U.S. Northeast Markets, available at <https://createsolutions.tufts.edu/wp-content/uploads/2021/08/OSW-Transmission-and-Grid-NE.pdf>.

¹¹⁰ This study is available at <https://www.pjm.com/-/media/library/reports-notice/special-reports/2021/20211019-offshore-wind-transmission-study-phase-1-results.ashx>.

¹¹¹ See Dep’t of Energy, Draft Transmission Needs Study, 88 Fed. Reg. 13811 at p. 3 (March 6, 2023).

large RTOs to the brink of shedding load.¹¹² Along with Winter Storm Uri,¹¹³ this marked the second significant loss of load event in less than two years, and adds to a growing tally of other rolling blackouts and near-misses due to severe weather: the 2011 cold snap that caused rolling outages in ERCOT and the Southwest, the 2014 Polar Vortex, the 2018 Bomb Cyclone, the 2018 South Central cold snap event, the 2019 Polar Vortex, Hurricane Ida in 2021,¹¹⁴ and Western heat waves in 2020 and 2022.¹¹⁵ All of these events involved outages primarily involving thermal resources. Expanded interregional transmission could have greatly reduced if not eliminated reliability risks during these events.

Winter Storm Uri provided a stark example of the value of interregional transmission for electric reliability and resilience. Regions with strong interconnections to neighbors, like MISO, weathered the storm with minimal loss of load, while those with weak transmission ties, like ERCOT, fared far worse. During Uri, MISO imported 15 times as much power as ERCOT.¹¹⁶

¹¹² See, e.g., *Winter Storm Elliott Info*, PJM (July 17, 2023), available at <https://www.pjm.com/markets-and-operations/winter-storm-elliott>. See also Astin Massie & Sarah Toth, *Wasted Wind and Tenable Transmission During Winter Storm Elliott*, RMI (Feb 16, 2023), available at <https://rmi.org/wasted-wind-and-tenable-transmission-during-winter-storm-elliott/>.

¹¹³ See, e.g., Peter Aldhous et al., *The Texas Winter Storm And Power Outages Killed Hundreds More People Than The State Says*, BuzzFeed News (May 26, 2021), available at <https://www.buzzfeednews.com/article/peteraldhous/texas-winter-stormpower-outage-death-toll>. In addition to the lives lost in Uri, power outages due to extreme weather events also led to the deaths of over 1,000 people in Puerto Rico from Hurricane Maria. See Eliza Barclay, Vox, *1,427 deaths: Puerto Rico is coming clean about Hurricane Maria's true toll*, (Aug. 9, 2018), available at <https://www.vox.com/2018/8/9/17670762/puerto-rico-hurricane-maria-death-toll-congress>.

¹¹⁴ Eleven people are estimated to have died as a result of power outages in New Orleans during Hurricane Ida linked to the failure of all 8 transmission lines serving the city as well as the natural gas plant Entergy claimed would serve as a blackstart resource. See Max Blau et al., *Entergy Resisted Upgrading New Orleans' Power Grid. Residents Paid The Price*, NPR (Sept. 22, 2021), available at <https://www.npr.org/2021/09/22/1039110522/entergy-resisted-upgrading-new-orleans-power-grid-residents-paid-the-price>.

¹¹⁵ See, e.g., A root cause analysis of the event determined that while there was energy availability in the north that could have alleviated the crisis, “transmission constraints ultimately limited the amount of physical transfer capability into the CAISO footprint.” See The Brattle Group and Grid Strategies, *Transmission Planning for the 21st Century: Proven Practices that Increase Value and Reduce Cost*, at 10 (Oct. 2021) (citing California Independent System Operator (CAISO), California Public Utilities Commission (CPUC), and California Energy Commission (CEC), *Root Cause Analysis: Mid-August 2020 Extreme Heat Wave*, Final, January 13, 2021, p 48, available at <http://www.caiso.com/Documents/Final-Root-Cause-Analysis-Mid-August-2020-Extreme-Heat-Wave.pdf>).

¹¹⁶ See FERC-NERC, Presentation on February 2021 Cold Weather Grid Operations: Preliminary Findings and

Severe weather is increasingly harming electric reliability, and threats from physical and cyber-attacks and other unexpected events have also increased recently. Because these threats tend to have a limited duration and geographic scope, transmission ties that increase the ability to import power from neighboring regions are critical, and DOE should prioritize such proposals in the NIETC designation process.

Several attributes make transmission uniquely well-suited to address such risks. Transmission can deliver electricity in both directions, so both connected regions benefit. For example, transmission flows flipped from westward to eastward as Winter Storm Elliott moved across the country, as also happened during past severe weather events. Similarly, power flows into the Southeast during Elliott were in the opposite direction of those during Uri, when the Southeast was largely unaffected by the extreme cold and was exporting power to the west. Second, transmission is a far less costly and superior solution to building additional capacity resources. Especially during extreme weather or potential infrastructure disruptions, fossil-based resources offer a reduced capacity contribution due to their reliance on fuel deliveries. Consequently, new or existing fossil generators offer little marginal reliability value in addressing these kinds of reliability threats because they are fueled from the same gas fields and pipelines that are subject to disruptions and capacity constraints. In contrast, the capacity of transmission lines increases during cold and windy conditions. Moreover, transmission's reliability and resiliency benefits against extreme weather outages will also serve a critical balancing function as the nation's generation fleet transitions to clean energy resources.

Recommendations, at Slide 7 (Sept. 23, 2021) (“Overall, MISO’s and SPP’s ability to transfer power through their many transmission ties with adjacent Balancing Authorities in the Eastern Interconnection helped to alleviate their generation shortfalls, preventing more severe firm load shed.”) *available at* https://www.naesb.org/pdf4/Feb2021_cold_weather_grid_operations_preliminary_findings_recommendations_092321.pdf.

Despite this clear need for interregional transmission, most if not all existing transmission planning processes consider only normal system conditions by assuming typical weather year conditions and do not adequately consider infrequent, extreme events. However, extreme events account for about half of the total value of transmission.¹¹⁷ Yet with a few notable exceptions, most regions currently fail to conduct proactive multi-value transmission planning, and do not broadly allocate the cost of regionally beneficial transmission to all beneficiaries. Interregional transmission planning processes face the same problems, as well as even thornier issues due to inconsistent planning assumptions between regions and disputes over cost allocation. As one example, in March 2023 MISO and PJM decided that a “long-term Interregional Market Efficiency Project (IMEP) study will not be conducted in 2023 because no interregional constraints were identified after RTOs coordinated modeling updates,”¹¹⁸ despite abundant real-world evidence of transmission constraints between those two RTOs. MISO and PJM’s interregional planning processes decision reflects what is referred to as the “triple hurdle problem,” in which planned transmission must separately pass each of the two connected regions’ particular (and often very different) benefit-cost analyses, as well as the benefit-cost analysis for the combined footprint of both regions. Many of these planning processes fail to consider all the benefits of such transmission projects, which results in the rejection of net beneficial transmission projects. NIETC designation—and financial incentives provided by the IRA/IIJA—could greatly reduce barriers and incentivize development of critically important interregional transmission projects.

DOE should also seek proposals that take advantage of existing transmission and transportation rights-of-way, under its authority to designate NIETCs that “maximize[] existing

¹¹⁷ See LBNL, “The Latest Market Data Show that the Potential Savings of New Electric Transmission Was Higher Last Year than at Any Point in the Last Decade” (Feb. 7, 2023), *available at* <https://emp.lbl.gov/news/latest-market-data-show-potential-savings-new> (“LBNL 2023”).

¹¹⁸ See March 24, 2023 email to stakeholders from MISO and PJM (available upon request).

rights-of-way.”¹¹⁹ Use of existing federal or state rights-of-way can have the potential to significantly reduce environmental and social impacts. As land within existing rights-of-way has typically been cleared of trees, vegetation, and other obstacles, and is also set back from residential development, use of existing rights-of-way can result in reduced environmental and social impacts through reduced need for clearing of land or acquisition of land adjacent to residential development or communities. DOE could also facilitate such proposals by working with other federal agencies, including the Department of Transportation, and with states to identify and publish specific opportunities to leverage rights-of-way to meet identified transmission needs.

Use of existing rights-of-way can also result in a faster siting and approval process for transmission development. Rights-of-way are typically granted by a state, local, or the Federal government for a particular purpose such as to site transportation infrastructure, such as railroads and highways, or utility lines, including electrical transmission. In most cases, a state or federal agency retains the authority to approve of additional uses for the right-of-way, as long as they do not interfere with the operations of existing grantees. While the exact authority will differ by jurisdiction, many states have detailed public procedures for applying to site a project within a right-of-way. In addition, if a project is approved, these same agencies will require further coordination of transmission developers. Where siting and permit approval can be accomplished with the same agency, there is the potential for further streamlining and a faster approval process.

Not all existing rights-of-way, however, offer these same benefits. For example, with existing railroad rights-of-way, the party authorized to approve of a transmission project will depend on several factors including the identity of the grantor, the year that the grant was made, and the state where the land parcels are situated.¹²⁰ An existing rail corridor traversing multiple

¹¹⁹ 16 U.S.C. § 824p(a)(4)(G).

¹²⁰ See Congressional Research Service, *Federal Railroad Rights of Way*, Library of Congress, May 3, 2006.

states could be a patchwork of land that is owned in fee simple by the railroad, or where a railroad merely holds an easement entitling it to activities that serve a railroad purpose.¹²¹ In such a situation, the process of siting a transmission facility in an existing right-of-way may not provide the same time saving benefits that other existing rights-of-way may. In contrast, in 2021 the Federal Highway Administration published policy guidance encouraging state departments of transportation to promote the siting of clean energy projects, including electric transmission facilities, by updating state policy leveraging highway rights-of-way for Federal aid or direct Federal highway projects to accommodate such projects as utilities, or as an alternative right-of-way use.¹²²

Further, some rights-of-way may not have enough cleared space away from existing operations sufficient to adequately site transmission facilities. For example, Federal railroad land grants made between 1850 and 1875 varied significantly in the width of the right-of-way.¹²³ Rights-of-way with more limited widths may lack the dimensions necessary to co-locate electric transmission facilities without interfering with existing uses.

As a result, DOE should prioritize NIETC proposals that identify with particularity how projects sited within the right-of-way will lead to decreased impacts on the environment, and whether the particular property dimensions, interests and approval processes for the identified right-of-way will result in an expedited siting process. This should include but not be limited to, the nature of the existing right-of-way, the name of the party that has authority over the right-of-

¹²¹ *Id.* See also Darwin P. Roberts, *The Legal History of Federally Granted Railroad Rights-Of-Way and The Myth of Congress's "1871 Shift"*, 82 U. COLO. L. REV. 89-90 (2016).

¹²² See FHWA, Memorandum: Subject: State DOTs Leveraging Alternative Uses of the Highway Right-of-Way Guidance, Apr. 27, 2021, https://www.fhwa.dot.gov/real_estate/right-of-way/corridor_management/alternative_uses_guidance.cfm.

¹²³ Compare Land Grant Act of 1850, 9 Stat. 466 (1850) ("Provided that the right of way shall not exceed one hundred feet on each side of the length thereof") with Pacific Railway Act of 1862, 12 Stat. 489 (1862) ("[S]aid right of way is granted to said railroad to the extent of two hundred feet in width on each side of said railroad where it may pass over the public lands").

way, a description of the right-of-way including dimensions and any pertinent geographic qualities, any regulations or policies within the jurisdiction that could impact the siting approval process and a narrative explanation as to how siting within the right-of-way will expedite electric transmission development while reducing environmental impacts.

If, as discussed above, DOE expands its application process to allow for submissions by non-developers with deep knowledge and understanding of state rights-of-way law and policy, state transportation agencies could be ideal sources of proposals that leverage existing rights-of-way.

- 9. Should DOE create separate tracks for those applicants who are interested in backstop siting and financing versus those interested in only access to DOE commercial facilitation and finance tools? In your response, please address how the environmental review and other review processes—including with FERC, other federal agencies, and state regulatory bodies—might differ, the relative timing and urgency for siting corridors versus financing corridors, differences in when in the project development cycle an applicant may seek a financing or siting corridor, and conversion between corridor types.**

DOE should not create separate tracks for NIETC designations. While “financing-only” NIETCs may have some benefits, this approach also has significant legal and practical drawbacks.

First, DOE’s authority to create financing-only NIETCs is unclear. Section 216 of the FPA does not contemplate NIETCs that only provide financing. Instead, the statute indicates that once DOE designates a NIETC, developers will have the right to seek permits from FERC and that FERC will have the responsibility to consider their applications. It is unclear how DOE could short-circuit these statutorily created processes by designating a financing-only NIETC that would not allow access to FERC’s siting process. That approach appears contrary to the structure, language, and intent of section 216. To claim the authority to designate financing-only NIETCs that restrict access to statutorily created siting processes, DOE would need to undertake a rulemaking in which it would define the term NIETC to include “financing-only” NIETCs and

“siting” NIETCs. Such a process would take time and resources and, due to the apparent inconsistency with the structure of section 216, could be vulnerable to legal challenge.

Designating financing-only NIETCs also appears impractical. Under the system described in this RFI, NIETC proposals will require applicants to dedicate significant resources. Once an applicant dedicates those resources, and especially if a project is far along in the design process, the applicant will likely want to ensure that the project actually gets built. FERC’s siting authority may be extremely important to that end. For example, if a state lacks the ability to consider a project’s benefits, or if a state unreasonably denies a permit, the developer will likely want to seek a permit from FERC. A financing-only NIETC would preclude that prospect.

Further, financing-only NIETCs do not make sense from a taxpayer perspective. DOE should not set up a system where the designation of a corridor allows taxpayer dollars to fund a project, but any state still retains the ability to block the project. FERC’s siting authority seems especially valuable from the perspective of not wasting taxpayer money where taxpayer funds made available by the IJA or IRA are being spent on projects sited in NIETCs.

10. To the extent practicable, DOE anticipates leading the coordination of NEPA reviews with other agencies to support their NEPA documentation and to streamline their responsibilities related to facility permitting as well as coordinating with any other Federal agency required to participate in NIETC designations. To support and facilitate environmental review, DOE anticipates requiring that proposed “route-specific corridors” include or are supported by, to the extent practicable, existing environmental data and analyses that any federal agency may require to complete its environmental review. In particular, where projects in NIETCs indicate an intention to seek siting permits from FERC under section 216(b) of the FPA, DOE anticipates that it will coordinate with FERC to avoid redundancy and promote efficiency in environmental reviews. Accordingly, DOE intends to request a scope and level of detail similar to what FERC would require pursuant to its responsibilities.

PIOs appreciate DOE’s intent to coordinate with other agencies regarding NEPA reviews for NIETC designations, as well as for transmission projects sited within NIETCs. Coordinated NEPA reviews are consistent with the FPA’s requirement that DOE “consult regularly” with FERC

and coordinate environmental review efforts with other federal agencies, as well as state, tribal, and regional entities. Interagency coordination may also promote an efficient and effective NEPA process, which would in turn help successfully develop transmission projects.

PIOs encourage DOE to ensure an equitable NEPA process by providing early and frequent opportunities for public input. An equitable process will foster support for NIETC designations, as well as for specific transmission projects within NIETCs, and will reduce litigation risk.

The best way to proceed would likely be preparing a Programmatic Environmental Impact Statement (“PEIS”) to consider, at a broad scale, the programmatic environmental impacts associated with NIETC designations.¹²⁴ This approach would be consistent with DOE’s prior practice for energy corridor designations and other issues, and related actions of other agencies.¹²⁵ A PEIS would promote efficiency by allowing DOE to tier to, or incorporate by reference, this analysis in later NIETC designations.

In any event, DOE’s NEPA analysis must reflect the statutory distinction between designating NIETCs and siting and permitting transmission projects. To reflect this distinction, DOE must frame the purpose and need of any NIETC designation broadly enough to accommodate a meaningful analysis of action alternatives. Similarly, DOE must ensure that its designation of

¹²⁴ See 40 C.F.R. § 1502.4 (noting that EISs “may be prepared for programmatic Federal actions, such as the adoption of new agency programs” and that these programmatic analyses may be appropriate for “actions that have relevant similarities, such as common timing, impacts, alternatives, methods of implementation, media, or subject matter”); see also 10 C.F.R. § 1021.104 (defining “Programmatic NEPA document” as “a broad-scope EIS or EA that identifies and assesses the environmental impacts of a DOE program”).

¹²⁵ See *Cal. Wilderness Coal. v. DOE*, 631 F.3d 1072, 1104–05 (9th Cir. 2011) (discussing DOE’s prior preparation of a PEIS to consider designation of “West-wide Corridors for federal lands in eleven western states” under section 368 of the Energy Policy Act of 2005); see also Dep’t of Energy, *EIS-0236: Programmatic Environmental Impact Statement for Stockpile Stewardship and Management*, available at <https://www.energy.gov/nepa/eis-0236-programmatic-environmental-impact-statement-stockpile-stewardship-and-management> (listing one of several PEISs that DOE prepared for the management of nuclear weapon production sites); Bureau of Land Management, *Notice of Intent to Prepare a Programmatic Environmental Impact Statement to Evaluate Utility-Scale Solar Energy Planning and Amend Resource Management Plans for Renewable Energy Development*, 87 Fed. Reg. 75,284 (2022) (describing the Bureau of Land Management’s plan to prepare a PEIS for solar energy development on public lands).

NIETCs does not unduly restrict the authority and discretion of the states or FERC to site and permit transmission projects within NIETCs. In short, DOE must take care that its applicant-driven, route-specific approach to NIETC designation does not constrain the analysis of reasonable alternatives or predetermine the outcome of subsequent siting processes.

During the NEPA process, the statement of a proposed action's purpose and need is critical because it dictates the range of reasonable alternatives an agency must consider.¹²⁶ While agencies have "considerable discretion to define the purpose and need of a project . . . an agency cannot define its objectives in unreasonably narrow terms."¹²⁷ Thus, "[a]n agency may not define the objectives of its action in terms so unreasonably narrow that only one alternative from among the environmentally benign ones in the agency's power would accomplish the goals of the agency's action, and the EIS would become a foreordained formality."¹²⁸

DOE has consistently and correctly recognized that the purpose and need of NIETC designations is significantly broader than siting or permitting any specific transmission project. For example, this RFI describes the "Purpose of Designating NIETCs" in broad terms:

Designation of a NIETC is a prerequisite to the ability of DOE and FERC to use statutory tools to advance the development of transmission facilities necessary to relieve current and expected capacity constraints and congestion and spur the buildout of a reliable and resilient national transmission system that facilitates the achievement of national and subnational greenhouse gas emissions reductions goals and reduces the cost of delivered power for consumers.¹²⁹

¹²⁶ See *National Parks Conservation Ass'n v. Bureau of Land Management* ("NPCA v. BLM"), 606 F.3d 1058, 1071 (9th Cir. 2010) (noting that the agency's "definition of the project's purpose will necessarily affect the range of alternatives considered, because when the purpose is to accomplish one thing, it makes no sense to consider the alternative ways by which another thing might be achieved").

¹²⁷ *Id.* at 1070.

¹²⁸ *Id.*

¹²⁹ Request for Information at 8–9.

DOE's draft National Transmission Needs Study also confirms that NIETCs serve broad needs, because even the most granular need identified in the study is significantly broader than any specific site or route for a single transmission project.

The RFI's broad description of the purpose of designating NIETCs, and the draft Needs Study's recognition that NIETCs serve broad needs, reflect DOE's consistent recognition that NIETC designations have a broader purpose and need than siting or permitting any particular transmission project. For example, in 2006, DOE recognized "that its role under FPA section 216 is not to site specific transmission lines or facilities," but instead "is to designate geographic area[s] experiencing transmission congestion or constraints so that parties can work with appropriate state permitting authorities and the FERC to site, construct, and operate any needed transmission facilities."¹³⁰ Similarly, DOE noted that "the geographic boundaries" of a NIETC "must be tailored to the transmission constraints or congestion giving rise to the designation while also being large enough so as not to unduly restrict the choice of solutions, or unduly constrain potential siting and permitting activities by FERC under section 216(b)."¹³¹

Notably, DOE's consistent recognition that NIETC designations serve a broader purpose and need than the siting and permitting of any particular transmission project is grounded in the language and structure of the FPA. For example, in 2008, DOE responded to comments that urged a narrow approach to NIETC designations by explaining that "narrowly-defined corridors [] in effect, would constitute siting decisions by DOE," but that the FPA made clear that "any siting authority to be exercised under FPA section 216 is plainly the responsibility of FERC, not DOE."¹³² Similarly, DOE reasoned that "if Congress had intended a [NIETC] designation to

¹³⁰ U.S. Dep't of Energy, National Electric Transmission Congestion Study 60 (2006).

¹³¹ *Id.* at 59.

¹³² 73 Fed. Reg. 12,959-02, 12,965 (2008).

pertain only to a specific electric transmission project, and had intended DOE to select specific routings, it seems likely that Congress would have authorized DOE to both make the [NIETC] designation and issue the construction or modification permit,” but that “Congress did not do so.”¹³³ Further, DOE found that “a project-based approach” could wrongly render “largely meaningless” the FPA’s “phrase ‘1 or more permits’ in FPA section 216(b),”¹³⁴ which provides that FERC should be able to permit one *or more* transmission *facilities* within a NIETC.¹³⁵ Congress’s choice of plural terms indicates that a NIETC should be able to encompass multiple transmission lines.

DOE should adhere to the FPA’s statutory framework and the agency’s own consistent understanding of the broad purpose and need of designating NIETCs when implementing its proposed applicant-driven, route-specific approach. To do so, DOE must ensure that its NEPA analysis for any NIETC designation features an appropriately broad statement of purpose and need that accommodates a meaningful range of reasonable action alternatives.

To avoid an “unreasonably narrow” NEPA analysis, DOE must take care not to “adopt[] private interests to draft a narrow purpose and need statement that excludes alternatives that fail to meet specific private objectives.”¹³⁶ While DOE may acknowledge and consider private goals, the best guidance for determining the purpose and need of agency action is “the views of Congress, expressed, to the extent that the agency can determine them, in the agency’s statutory authorization to act, as well as in other congressional directives.”¹³⁷ Hence, DOE should ensure that its

¹³³ *Id.*

¹³⁴ *Id.*

¹³⁵ See 16 U.S.C. § 824p(b) (emphasis added).

¹³⁶ *NPCA v. BLM*, 606 F.3d at 1072.

¹³⁷ *Id.* at 1070 (noting that “the views of Congress” are “more important[]” than “the need to take private interests into account”)

determination of the purpose and need of any NIETC designation is well-grounded in the factors established in the FPA, which plainly establish that the purpose of NIETC designations is broad.

Importantly, the factors that the FPA defines as the basis for NIETC designations all focus on the public interest, rather than on the private interest of any developer in a particular transmission project. For example, the statute allows DOE to consider whether designating a NIETC would promote “energy security of the United States” or “national energy policy,” would reduce consumers’ energy costs, or would facilitate the connection of new generation.¹³⁸ In contrast, a developer’s interest in building a particular transmission facility in a particular location is not listed even implicitly in the factors that Congress authorizes DOE to consider. The statute’s broad focus on factors that assess the public interest indicates that the purpose and need of a NIETC designation must be broader than any private interest of developers in particular transmission lines or particular sites.

Because the purpose and need of NIETC designations must be framed broadly, DOE’s analysis of alternatives must be similarly broad. In particular, DOE must ensure that when responding to a proposal for a NIETC designation, the agency considers a range of alternatives that is broader than any single developer’s private interest in a particular transmission project or preferred route. Instead, DOE should consider a reasonable range of action alternatives, including: (1) at least one action alternative that prioritizes the statutory factors of “maximiz[ing] existing rights-of-way” and “avoid[ing] and minimize[ing], to the maximum extent practicable, and offset[ing] to the extent appropriate and practicable, sensitive environmental areas and cultural heritage sites”¹³⁹; at least one action alternative that maximizes the production of renewable

¹³⁸ *See id.*

¹³⁹ 16 U.S.C. § 824p(a)(4)(G) (Assessing such an alternative is consistent with the common agency practice of identifying an environmentally preferable alternative).

energy¹⁴⁰; and at least one action alternative that would promote the “economic vitality and development of the corridor” by maximizing the benefits to communities that would host a NIETC.¹⁴¹ Similarly, DOE should consider alternatives that include different corridor widths, in order to assess what geographic scale of the corridor may best preserve the discretion of siting authorities during subsequent permitting processes for projects within NIETCs.

a. Please comment on the role of FERC in the corridor designation process. How can DOE and FERC coordinate to avoid redundancy and promote efficiency in environmental reviews regarding the DOE corridor designation and any potential FERC permit applications? Please be as specific as possible, including but not limited to how the timing of the corridor designations and permit applications restricts or facilitates coordination, and practicable approaches to implementation.

FERC’s chief role under FPA section 216 is siting and permitting transmission projects within NIETCs.¹⁴² Logically, that role does not begin until DOE has designated a NIETC. As such, FERC does not have any statutory role in DOE’s NIETC designation process. However, the FPA requires DOE to “consult regularly” with FERC when “exercising [its] responsibilities” under section 216.¹⁴³ To do so, DOE should consult FERC regarding NIETC designations, including soliciting FERC’s views on DOE’s upcoming guidance for NIETC proposals and its views on specific NIETC designations. DOE should particularly solicit FERC’s views on how best to preserve FERC’s authority and discretion over siting decisions and how to ensure that DOE’s NIETC designation process does not predetermine the outcome of FERC’s subsequent siting processes or foreclose FERC’s ability to consider siting alternatives or require changes to a project.

DOE should also request that FERC serve as a cooperating agency during any NEPA process for NIETC designations. FERC’s permitting role for projects within NIETCs means that

¹⁴⁰ See 16 U.S.C. § 824p(a)(4)(F).

¹⁴¹ *Id.* § 824p(a)(4)(B)(i).

¹⁴² See 16 U.S.C. § 824p(b).

¹⁴³ *Id.* § 824p(h)(9).

it “[i]s involved in a group of actions directly related to each other because of their functional interdependence,” which makes FERC an appropriate cooperating agency.¹⁴⁴ As a cooperating agency, FERC would participate in DOE’s NEPA process, including scoping, and contribute information and capacity especially on issues with which it has “special expertise.”¹⁴⁵

Including FERC as a cooperating agency in the NEPA process for NIETC designations would promote efficiency and reduce redundancy. Coordination would assist both DOE and FERC in determining what issues are ripe for analysis during the NIETC designation process and what issues may be best reserved for the siting and permitting process. Coordination may also facilitate FERC’s use of tiering or incorporation by reference in subsequent NEPA processes, which can help “eliminate repetitive discussions” and “focus on the actual issues ripe for decision.”¹⁴⁶

Regularly consulting FERC, including consulting FERC as a cooperating agency, may also allow both agencies to agree on what information they will need to solicit from developers, which would reduce burdens on developers by allowing them to gather information only once.

DOE may also promote efficiency and reduce redundancy by tiering to, or incorporating by reference, the NEPA analysis underlying designations of West-Wide Energy Corridors, as supplemented by a subsequent Corridor Study. In that process, DOE collaborated with other federal agencies to prepare a PEIS and, after settling litigation over the adequacy of that analysis, recently issued a subsequent Corridor Study.¹⁴⁷ Although DOE will need to assess whether the information and analysis in the PEIS and Corridor Study remains valid,¹⁴⁸ utilizing this analysis

¹⁴⁴ 40 CFR § 1501.7(a)(2).

¹⁴⁵ *Id.* § 1501.8(b).

¹⁴⁶ *See id.* § 1501.11.

¹⁴⁷ *See U.S. Dep’t of Energy et al., Energy Policy Act of 2005 Section 368 Energy Corridor Review FINAL REPORT: REGIONS 1-6 (2022)*, available at <https://www.corridoreis.anl.gov/>.

¹⁴⁸ *See, e.g., N. Plains Res. Council. v. Surface Transp. Bd.*, 668 F.3d 1067, 1085–87 (9th Cir. 2011) (holding that “faulty reliance” on outdated and “stale” information “does not constitute the ‘hard look’ required under NEPA”).

through the existing NEPA mechanisms of tiering and incorporation by reference may allow DOE to efficiently consider the co-location of NIETCs along West-Wide Energy Corridors.

b. Is there additional information that DOE should request in its NIETC application beyond the information listed in Section II.A.iii? Is additional information beyond the information listed in Section II.A.iii, necessary to develop a record consistent with that which FERC would require to meet its responsibilities under section 216(b) and NEPA?

DOE should request, or independently obtain, information sufficient to assess the reasonably foreseeable indirect and cumulative impacts of NIETC designations, including climate impacts.¹⁴⁹ NIETC designations will likely have a net positive climate impact by facilitating construction of new transmission that will allow clean energy to connect to the grid and old, inefficient, dirty generation to retire.

As the Council on Environmental Quality (“CEQ”) explained, “[c]limate change is a fundamental environmental issue, and its effects on the human environment fall squarely within NEPA’s purview.”¹⁵⁰ Federal actions that facilitate approval and construction of major transmission lines “may result in substantial [greenhouse gas] emissions or emissions reductions, so Federal leadership that is informed by sound analysis is crucial to addressing the climate crisis.”¹⁵¹ Assessing climate change impacts in the NEPA context requires not only consideration of direct emissions of greenhouse gases (“GHGs”) from the construction of a facility, but also net reasonably foreseeable emissions—or emissions reductions—“over the projected lifetime of the action.”¹⁵² Where a project “involves use or conveyance of a commodity or resource,” such as

¹⁴⁹ See generally CEQ, National Environmental Policy Act Guidance on Consideration of Greenhouse Gas Emissions and Climate Change, 88 Fed. Reg. 1196 (Jan. 9, 2023).

¹⁵⁰ 88 Fed. Reg. at 1197.

¹⁵¹ *Id.*

¹⁵² *Id.* at 1201.

electricity, “changes relating to the production or consumption of that resource” constitute indirect impacts that require consideration.¹⁵³

DOE’s RFI does not appear to solicit information about how proposed NIETC designations may affect the climate by facilitating changes in the resource mix. To do so, DOE should solicit from applicants, or independently obtain, all available information about how a proposed NIETC will facilitate development or interconnection of new clean energy resources and thus alter the emissions of GHGs from electricity generation. If a NIETC designation would foster development of new GHG-emitting power plants, DOE should solicit and consider that information as well.

Transmission projects have reasonably foreseeable climate benefits because they facilitate the development and interconnection of renewable energy resources that do not emit GHGs. Indeed, bringing new renewable energy online is often prominent among the needs that federal agencies or developers identify when considering new transmission.¹⁵⁴ Where renewable energy development is a predictable impact of a transmission project—and especially when such development is an explicit goal—this development is “reasonably foreseeable” because it is “sufficiently likely to occur such that a person of ordinary prudence would take it into account in

¹⁵³ *Id.* at 1204. Indirect effects are those “which are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable.” 40 CFR § 1508.1(g)(2). Indirect effects include “growth inducing effects and other effects related to induced changes in the pattern of land use.” *Id.* Cumulative effects “are effects on the environment that result from the incremental effects of the action when added to the effects of other past, present, and reasonably foreseeable actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions.” *Id.* § 1508.1(g)(3).

¹⁵⁴ *See, e.g.*, Dep’t of Energy Draft Needs Study, *supra* note 21, at iii (noting a “pressing need to expand electric transmission—driven by the need to improve grid reliability, resilience, and resource adequacy, *enhance renewable integration and access to clean energy*, decrease energy burden, support electrification efforts, and reduce congestion and curtailment” (emphasis added)); *see also* Electric Transmission Texas, *Texas CREZ Projects*, available at <https://www.ettexas.com/Projects/TexasCrez> (last accessed May 15, 2023) (describing how Texas “develop[ed] a plan to construct the transmission capacity necessary to deliver th[e] electric output from renewable energy technologies in [Competitive Renewable Energy Zones] to electric customers.”); MISO, *MTEP21*, at 4 (2022), available at <https://www.misoenergy.org/planning/planning/previous-mtep-reports/#t=10&p=0&s=FileName&sd=desc> (noting that transmission lines known as “Multi-Value Projects” were intended “to integrate a significant amount of wind resources to meet state policy goals.”).

reaching a decision.”¹⁵⁵ Hence, the reduced GHG emissions from new renewable energy development changing the energy mix are a reasonably foreseeable impact of new transmission. Equally, transmission lines that facilitate development of fossil fuel resources could foreseeably increase GHG emissions and thus harm the climate. In either case, the climate impacts are reasonably foreseeable indirect and cumulative impacts.

To provide the meaningful analysis of climate impacts that NEPA requires, DOE should require applicants to provide, or independently obtain, information about how a proposed NIETC designation is likely to serve or induce changes in the generation mix in the region the NIETC will serve. DOE must also assess how changes in the generation mix will alter GHG emissions from electricity generation. As such, DOE must assess whether a proposed NIETC will connect renewable-rich areas such as windy plains or sunny deserts with load centers, facilitate the development of significant renewable energy generation, or enable interconnection of renewable energy projects stuck in interconnection queues. DOE must use this information to assess how a proposed transmission project will reduce overall GHG emissions and thus benefit the climate.

PIOs recognize that predicting NIETCs’ climate impacts may be difficult or even impossible to quantify precisely. Nevertheless, DOE must make a good faith effort to assess these impacts.¹⁵⁶ Fortunately, “[q]uantification and assessment tools are widely available and are already in broad use in the Federal Government and private sector, by state and local governments, and globally.”¹⁵⁷ To assist agencies, “CEQ maintains a GHG Accounting Tools website listing many

¹⁵⁵ 40 CFR § 1508.1(aa); *see also Oregon-California Trails Ass’n*, 467 F. Supp. 3d at 1051 (finding that wind power development was a foreseeable indirect effect of permitting a transmission project because it was one of the project’s explicit purposes).

¹⁵⁶ *See Sierra Club v. FERC*, 867 F.3d at 1374 (rejecting the Commission’s argument “that it is impossible to know exactly what quantity of greenhouse gases will be emitted as a result of [a] project being approved” and holding that the Commission must either quantify greenhouse gas emissions or explain more rigorously why it could not).

¹⁵⁷ 88 Fed. Reg at 1,201.

such tools.”¹⁵⁸ DOE should use these tools to assess how transmission projects can serve a key role in mitigating and adapting to climate change. Additionally, if assessing climate impacts may require unavailable information, CEQ’s regulations describe how to assess reasonably foreseeable impacts based on incomplete or unavailable information.¹⁵⁹ DOE should use this NEPA mechanism when assessing climate impacts. By providing tools to quantify GHG emissions, estimate climate impacts, and assess impacts based on incomplete or unavailable information, CEQ has provided the tools DOE needs to engage in “reasonable forecasting” and make “educated assumptions about an uncertain future.”¹⁶⁰ Such educated assumptions may be expressed as ranges and include some uncertainties; here, NEPA requires only educated predictions, not perfection.¹⁶¹

11. Are there other forms of outreach and/or consultation that should be included in this process to ensure adequate participation of and notice to Tribal authorities, State, local, the public, and appropriate regional authorities? For example, should regional planning entities or grid operators be included in outreach or consultation?

Consultation with Tribes

DOE should follow processes for meaningful outreach and consultation with tribes and Indigenous peoples that appropriately respect tribal sovereignty, and should clarify the agency’s consultation policy in this context and more broadly. DOE should also ensure that tribes and Indigenous peoples can participate meaningfully in consultations and other DOE processes by providing these groups with adequate resources and actually incorporating their input.

DOE’s NEPA regulations define American Indian tribes as “any Indian tribe, band, nation, pueblo, or other organized group or community, including any Alaska native entity, which is

¹⁵⁸ *Id.*

¹⁵⁹ See 40 CFR § 1502.21.

¹⁶⁰ *Sierra Club v. FERC*, 867 F.3d at 1374 (“NEPA analysis necessarily involves some ‘reasonable forecasting’ and . . . agencies may sometimes need to make educated assumptions about an uncertain future”).

¹⁶¹ See *WildEarth Guardians v. Zinke*, 368 F. Supp. 3d 41, 70 (D.D.C. 2019) (noting that an agency “could have explained the uncertainties underlying the [emissions] forecasts, and it could have explained the uncertainties underlying the forecasts, but it was not entitled to simply throw up its hands and ascribe any effort at quantification to a ‘crystal ball inquiry’”).

recognized as eligible for the special programs or services provided by the United States because of their status as Indians.”¹⁶² These special programs and services are often part of the federal trust responsibility, under which DOE has obligations to tribes.¹⁶³

Although the precise details vary by tribe, one fundamental element is proper formal consultation. PIOs note that we do not write from the perspective of tribes or Indigenous peoples, and urge DOE to seek out input from tribes and Indigenous peoples. Nevertheless, we outline several suggestions to improve DOE’s tribal consultation process to ensure more effective collaboration in planning, siting, and building transmission, including: (1) committing to obtaining free, prior, and informed consent from affected tribes; (2) deepening its work to comply with relevant executive orders; and (3) ensuring that tribes have adequate resources to participate.

First, tribal consultation must require free, prior, and informed consent. The United Nations Declaration on the Rights of Indigenous Peoples, endorsed by the United States in 2010, mandates that nation states consult with Tribal Nations—here known as American Indian tribes—“in order to obtain their free and informed consent prior to the approval of any project affecting their lands or territories and other resources, particularly in connection with the development, utilization or exploitation of mineral, water or other resources.”¹⁶⁴ The obligation of governments to obtain free, prior, and informed consent allows Indigenous peoples to give or withhold consent to a project that *may* affect them or their territories. While consent must first be ascertained *prior* to an action, consent can also be withdrawn at any stage of a process. Moreover, the requirement for the federal

¹⁶² 10 CFR 1021.104.

¹⁶³ See, e.g., *United States v. Mitchell*, 463 U.S. 206, 225 (1983) (noting the “undisputed existence of a general trust relationship between the United States and the Indian people,”; *Seminole Nation v. United States*, 316 U.S. 286, 296-97 (1942) (describing the trust duty as one of “obligations of the highest responsibility and trust”).

¹⁶⁴ United Nations, General Assembly, United Nations Declaration on the Rights of Indigenous Peoples A/RES/61/295 at 5, 11 (Oct. 2, 2007), available at https://www.un.org/development/desa/Indigenouspeoples/wp-content/uploads/sites/19/2018/11/UNDRIP_E_web.pdf.

government to attain free, prior, and informed consent enables Indigenous peoples to negotiate the conditions under which the project will be designed, implemented, monitored, and evaluated.

To implement the obligation to require free, prior, and informed consent in the consultation process, DOE should adopt language from the Washington State Attorney General’s Centennial Accord Plan. That policy requires the Attorney General’s Office to obtain free, prior and informed consent before initiating a program or project that affects tribes, tribal rights, tribal lands, or sacred sites.¹⁶⁵ Notably, the policy states what actions are subject to consent, how to request consent, defines consent, outlines how to emphasize that the office is always open to consultation at the request of tribes, and states how the office will provide notice to tribes.¹⁶⁶ This approach would ensure that DOE upholds its trust responsibility and respects tribes’ rights to self-determination.

Second, DOE must continue to implement the requirements of the Biden Memorandum on Uniform Consultation Standards.¹⁶⁷ The Uniform Consultation Standards address several important requirements, including: agency staff training requirements; notice contents and timing minimums; and recordkeeping mandates, including a requirement for the agency to explain how consultation affected the ultimate decision.¹⁶⁸ DOE has already issued an action plan and progress updates in response to the Uniform Consultation Standards,¹⁶⁹ and should continue to solicit tribal input as it solicits and considers NIETC proposals and designates NIETCs.

¹⁶⁵ See *Tribal Consent & Consultation Policy* found in the *Centennial Accord Plan*, Washington State Office of the Attorney General (May 10, 2019), available at <https://www.atg.wa.gov/tribal-consent-consultation-policy>.

¹⁶⁶ See *id.* at § IV(A)–(C), VI–VII.

¹⁶⁷ See Memorandum on Uniform Standards for Tribal Consultation (“Uniform Consultation Standards”) (Nov. 30, 2022), available at <https://www.whitehouse.gov/briefing-room/presidential-actions/2022/11/30/memorandum-on-uniform-standards-for-tribal-consultation>.

¹⁶⁸ See *id.* at §§ 5, 7, 8.

¹⁶⁹ See Dep’t of Energy, Tribal Consultation Plan of Actions- Progress Report (2022). available at <https://www.energy.gov/sites/default/files/2022-11/DOE%20Tribal%20Consultation%20Plan%20of%20Actions%20%E2%80%93%20Progress%20Report%202022.pdf>.

Finally, to promote effective consultation and coordination with tribes, DOE should consider tribal perspectives and needs during NEPA review. Procedurally, DOE should provide tribes and other interested parties with a clear explanation of all environmental review timelines, including how DOE's processes line up with any other agencies' review efforts of the same project. DOE should also ensure that tribes understand the consequences of participating (or not) at each stage in the environmental review process. Tribes may also wish to maintain privacy around cultural resources, and DOE should explain whether the NEPA process may render such information publicly available, or whether DOE will maintain confidentiality over such information. Additionally, tribes need adequate resources to participate in any NEPA review.

Substantively, DOE should value and incorporate Indigenous Knowledge in environmental review and decision-making. CEQ and the Office of Science and Technology Policy formally recognize Indigenous Traditional Ecological Knowledges as an important body of knowledge that contributes to the scientific, technical, social, and economic advancements of the United States and our collective understanding of the natural world.¹⁷⁰ As a 2021 memorandum instructed other agency department heads, traditional Indigenous Knowledge “can and should inform Federal decision making along with scientific inquiry.”¹⁷¹

Consultation with Regional Planning Entities and Grid Operators

PIOs support DOE's suggestion to include regional planning entities and grid operators in outreach and consultation. Soliciting these entities' expertise is good policy. It is also consistent

¹⁷⁰ See Office of Science and Tech. Policy, Memorandum on Indigenous Traditional Ecological Knowledge and Federal Decision Making (Nov. 30, 2022), *available at* <https://www.whitehouse.gov/wp-content/uploads/2022/12/OSTP-CEQ-IK-Guidance.pdf>.

¹⁷¹ Office of Science and Tech. Policy, Memorandum on Indigenous Traditional Ecological Knowledge and Federal Decision Making (Nov. 15, 2021), *available at* <https://www.whitehouse.gov/wp-content/uploads/2021/11/111521-OSTP-CEQ-ITEK-Memo.pdf>.

both with section 216's emphasis on a collaborative process¹⁷² and with DOE's past practice.¹⁷³

While the appropriate outreach and consultation may depend on context, these entities may provide valuable input to DOE's NIETC designations in several ways. First, because DOE's shift to an applicant-driven process heightens the need for DOE to conduct a robust and independent review, the perspectives of regional planning entities and grid operators may especially be valuable because they are independent from the applicant and likely to have robust information.

Second, as discussed above, RTO/ISO's transmission planning processes can inform how DOE should (or should not) evaluate and weigh the benefits of proposed NIETCs. *See* Question 4 (highlighting MISO's LRTP process). In formulating its application guidance, DOE should solicit input from these entities regarding their respective regional approaches.

Finally, DOE should retain a proactive role in designating NIETCs, whether through inviting proposals aimed at specific transmission needs or independently designating NIETCs.¹⁷⁴ In either case, DOE should consult relevant regional planning entities and grid operators before requesting NIETC proposals or proposing its own NIETCs. Further, as discussed above in Questions 1 and 6, DOE should allow these entities (and others) to propose NIETCs on their own.

12. Are there post-designation procedures not discussed in this request that should be included?

DOE should explain how the public may seek judicial review of NIETC designations. Notably, in DOE's first round of NIETC designations, the agency explained in its Federal Register

¹⁷² *See* 16 U.S.C. § 216(a)(1) (requiring consultation on the Needs Study with affected States and Indian Tribes), (a)(3) (requiring consultation on the Needs Study and NIETC designations with regional reliability organizations), (h)(9) (requiring DOE to "consult regularly" with FERC, reliability organizations, and FERC-approved Transmission Organizations).

¹⁷³ *See* Draft Needs Study at 108–09 (noting DOE's consultation with states, Tribes, and regional entities, including comments from regional reliability entities, ISO/RTOs, and regional transmission planning entities); 72 Fed. Reg. at 56,996 & nn.18–19 (describing DOE's consultation with States and regional reliability entities on draft NIETC designations).

¹⁷⁴ *See* 88 Fed. Reg. at 30,957 n.1.

notices that its designations were “governed by section 313 of the FPA,” which requires direct review in the Court of Appeals.¹⁷⁵ In subsequent litigation, courts agreed with DOE’s position.¹⁷⁶

Review under FPA section 313 has important consequences that may not be apparent to members of the public. First, although most federal agency decisions are subject to review in district courts within six years, the FPA’s judicial review provision is significantly different: challenges to covered decision-making must first be brought to the agency and then litigated in a court of appeals, under much shorter timelines.¹⁷⁷ Second, the FPA imposes more demanding exhaustion requirements, allowing courts to consider only claims that the petitioner specifically raised in a rehearing application.¹⁷⁸ Finally, challenges to other agency actions related to a NIETC designation could be swept into the FPA’s judicial review provision.¹⁷⁹

DOE should help the public understand the FPA’s judicial review scheme and structure their participation accordingly. DOE should clearly explain—both in its guidelines and in publishing individual applications for comment—that the FPA’s judicial review provisions require intervention before DOE, raising any substantive concerns during the DOE process even if those concerns are not issues with which DOE has expertise, seeking rehearing within thirty days, and

¹⁷⁵ 72 Fed. Reg. at 25,841 (citing 16 U.S.C. § 825I(b)); see also 72 Fed. Reg. at 57,026.

¹⁷⁶ See *Ctr. for Biological Diversity v. DOE*, No. CV 08-168AHM(MANX), 2008 WL 4602721, at *4-6 (C.D. Cal. Oct. 16, 2008) (granting DOE’s motion to dismiss for lack of subject matter jurisdiction); *Pa. Pub. Util. Comm’n v. Bodman*, No. CV-07-2002, 2008 WL 3925840, at *3-7 (M.D. Pa. Aug. 21, 2008) (same). Although the Ninth Circuit did not expressly discuss its jurisdiction, it implicitly agreed with DOE’s jurisdictional statement by reaching the merits. See Answering Br. of Resp. Dep’t of Energy at 1, *Cal. Wilderness Coal. v. DOE*, 631 F.3d 1072 (9th Cir. 2011) (No. 08-71074), 2009 WL 2898548.

¹⁷⁷ See 16 U.S.C. § 825I(a), (b).

¹⁷⁸ *Id.* § 825I(b).

¹⁷⁹ See *City of Tacoma v. Taxpayers of Tacoma*, 357 U.S. 320, 336 (1958) (finding that the FPA “necessarily precluded de novo litigation between the parties of all issues inhering in the controversy [before FERC], and all other modes of judicial review”). However, inconsistent judicial rulings make this issue difficult to predict. See *PennEast Pipeline Co., LLC, v. New Jersey*, 141 S.Ct. 2244, 2254 (2021) (discussing *City of Tacoma* but finding that a challenge to a FERC-authorized use of eminent domain was not a collateral attack on the FERC order at issue). Circuit court rulings are similarly mixed. Compare *Adorers of the Blood of Christ U.S. Province v. Transcon. Pipeline Co., LLC*, 53 F.4th 56, 62–65 (3d Cir. 2022) (reviewing various circuits’ precedents and concluding that Religious Freedom Restoration Act claim should have been brought before FERC even though FERC has no expertise regarding the issues) with *Save the Colorado v. Spellmon*, 50 F.4th 954, 960–66 (10th Cir. 2022) (reviewing a similar body of case law but reaching a different conclusion).

seeking judicial review in a court of appeals within sixty days of a rehearing decision.¹⁸⁰ DOE should also follow its prior practice of granting party status to any party that submits a timely comment on a NIETC application.¹⁸¹ Last, consistent with important principles of early and meaningful stakeholder outreach, DOE should encourage applicants to provide this information in both pre- and post-application outreach, and establish model language for doing so.

Conclusion

PIOs appreciate the opportunity to provide input on DOE's RFI, which is an important step toward developing transmission projects that are essential to mitigate climate change, meet the nation's climate and clean energy goals, reduce congestion, increase reliability and resilience, and protect consumers, communities, and the environment.

Respectfully submitted,

/s/ Cullen Howe

Cullen Howe
Senior Attorney
Natural Resources Defense Council
40 West 20th Street
Eighth Floor
New York, NY 10011
chowe@nrdc.org

/s/ Nick Lawton

Nick Lawton
Senior Attorney
Earthjustice
1001 G Street, NW Suite 1000
Washington, DC 20001
nlawton@earthjustice.org

/s/ John Moore

John Moore
Director
Sustainable FERC Project
1125 15th Street NW
Suite 300
Washington DC 20005
Moore.fercproject@gmail.com

/s/ Nicholas J. Guidi

Nicholas J. Guidi
Federal Energy Regulatory Attorney
Southern Environmental Law Center
122 C St. NW, Suite 325
Washington, DC 20001
nguidi@selcdc.org

¹⁸⁰ See 16 U.S.C. § 825*l*.

¹⁸¹ See 72 Fed. Reg. at 57,025.

/s/ Alexander Tom

Alexander Tom
Associate Attorney
Earthjustice
50 California Street, Suite 500
San Francisco, CA 94111
atom@earthjustice.org

/s/ Justin Vickers

Senior Attorney
Sierra Club
Chicago, IL
Justin.vickers@sierraclub.org

/s/ Ted Kelly

Ted Kelly
Senior Attorney, Federal Energy
Environmental Defense Fund
1875 Connecticut Ave NW #600
Washington, DC 20009
tekelly@edf.org

/s/ Adam Kurland

Adam Kurland
Fellow, Federal Energy
Environmental Defense Fund
1875 Connecticut Ave NW # 600
Washington, DC 20009
akurland@edf.org