Testimony Before the United States Senate Committee on Environment and Public Works

Improving the Federal Review and Permitting Processes

Testimony of Nicole Pavia, Director of Clean Energy Infrastructure Deployment

Clean Air Task Force

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CLEAN AIR TASK FORCE

Madam Chair, Ranking Member, and Distinguished Members of the Committee:

My name is Nicole Pavia, and I am the Program Director for Clean Energy Infrastructure Deployment at Clean Air Task Force (CATF). In my role, I lead CATF's work to identify and address barriers – regulatory, permitting, financing, and social – holding back deployment of clean energy technologies at the necessary pace and scale to decarbonize our economy. Thank you for the opportunity to testify.

Clean Air Task Force is a nonprofit organization dedicated to advancing the policy and technology changes necessary to achieve a zero-emissions, high-energy economy at an affordable cost. We work to advance a full suite of low-carbon energy and other climate- and public health-protecting technologies, including nuclear energy, carbon capture and storage, and next-generation geothermal. CATF is a pragmatic, non-ideological advocacy group with a broad range of scientific, technical, legal, and policy expertise, nearly 30 years of experience on climate and energy policy, and a commitment to exploring all potential solutions.

Testimony Summary

The United States urgently needs to build more long-distance interstate transmission to maintain grid reliability, to improve energy affordability and security, to deploy clean energy technologies, and to enable growth of new economic sectors. Simultaneously, investment and deployment have fallen short, and action is needed to speed deployment while safeguarding community and environmental protections. Through our research, CATF and our partners have compiled an evidence-based record around key transmission lines and uncovered several high-priority problem areas and clear opportunities for process improvement. We synthesized this information into a report published last year, which will be detailed later in this testimony.[1]

There are certainly more efficiencies to be found in how environmental reviews are done under the National Environmental Policy Act (NEPA) process itself – further consideration of regulatory categorical exclusions, "tiering" reviews, and expanded use of programmatic environmental impact statements (PEISs) would reduce redundancies. And duplicative environmental reviews, particularly in National Interest Electric Transmission Corridors (NIETCs), must be eliminated to facilitate the timely development of nationally important transmission lines. Fundamentally, though, our work found that the provisions of NEPA are not to blame for the most significant delays and inefficiencies in transmission deployment. NEPA also provides important opportunities for public and stakeholder engagement and transparency in the environmental review process.

Slowdowns most cited by interviewees and in conversations throughout the course of this work were largely process- and resource-oriented, stemming from leadership gaps, lack of steady

[1] Clean Air Task Force & Niskanen Center, Evidence-Based Recommendations for Overcoming Barriers to Federal Transmission Permitting (Apr. 2024), https://www.catf.us/wp-content/uploads/2024/04/evidence-based-recommendations-overcoming-barriers-federal-transmission-permitting.pdf.

funding, a dearth of permitting expertise at agencies both in Washington, D.C., and at field offices, insufficient federal coordination and tools to enable such coordination, and local opposition to and lack of state support for nationally-beneficial projects. These are not all permitting-specific blockers but often flare up throughout the course of the permitting process.

Regulatory differences between jurisdictions also add time and cost to environmental review, permitting, and project timelines. Developers building long-distance lines crossing state or Tribal borders are subject not only to the permitting requirements of the federal government, but also the requirements of all state and Tribal governments traversed by the lines. Federal and state requirements, including the requirements of bordering states, can be uncoordinated or duplicative. Staff shortages are not only evident at the federal level – state and Tribal staffing and resource constraints also contribute to lengthier timelines. And consultations with Tribal Nations and communities have historically not been prioritized. Though not all these findings fall specifically under the jurisdiction of the federal government, federally-supported technical assistance, conversations between states and regions, and local community and Tribal Nation engagement can pay dividends.

Overall, prioritization of a modernized, secure, well-connected, resilient transmission network as a worthwhile national goal will require a departure from the status quo. Siting and permitting authorities for projects in the national interest should be consolidated under FERC, accompanied by constructive dialogue with all stakeholders, including states, local communities, and private entities on project details and throughout project lifecycles.

Transmission is beneficial and needed, but not enough is being built

One area that is indicative of the need for improving the federal review and permitting process is transmission. The United States electrical grid infrastructure is at a critical moment. There are a myriad of reasons to build out and invest in a high-capacity, modernized transmission system. Transmission is an enabling technology for all generation resources, carrying reliable and affordable power to homes and businesses as well as to data and industrial centers. Approximately 2,600 gigawatts of generation and storage capacity – of which 95 percent are zero-carbon, low or zero air polluting resources – are waiting to connect to the grid today.[2] A revitalized and connected transmission grid will boost resilience to extreme weather events, security threats, and other challenges. Transmission system expansion will alleviate constraints on the grid, which could benefit consumers by allowing lower-priced energy to flow to congested areas with high electricity prices. And considering projections for increasing electricity demand, even more wires may be required to connect generation resources to pockets of greater demand.

[2] Lawrence Berkeley National Laboratory, Queued Up: Characteristics of Power Plants Seeking Transmission Interconnection (April 2024), https://emp.lbl.gov/queues.

Despite the clear benefits of transmission deployment for security, resiliency, economic development, affordability, and decarbonization, the United States has not kept up with the infrastructure investments required to capitalize on these benefits. Multiple studies estimate that a three- to four-fold increase of transmission capacity will be required to meet burgeoning demand within the next 30 years.[3] Some estimates indicate that transmission investment requirements will reach more than $40 billion annually by 2031.[4] However, between 2010 and 2020, the U.S. saw overall *decreases* in annual transmission investment for large powerlines.[5]

So why are we not building more transmission, especially the long-distance lines that bring power from where it is most efficiently and affordably generated to where it is needed most? There are several overlapping challenges – to name a few, we are seeing uncoordinated planning across regions, cost allocation debates, financial incentives of the utility business model to build shorter, incremental lines over larger projects, and the need for permits from several different jurisdictions with varied regulatory environments.

Over the past several years, a growing consensus has emerged that federal permitting and environmental review processes must be improved. However, to date, very limited research, evidence, and data have been available to pinpoint the most impactful drivers of delay in these processes. Understanding common pain points and high leverage opportunities for time savings are critical to crafting the most effective and targeted transmission permitting reform proposals. Many of these conversations involve NEPA, a tool to enable transparency and informed decision-making and ensure that all federal agencies consider reasonably foreseeable environmental impacts of proposed federal actions before making final decisions, including whether to fund, permit, or authorize a project.

CATF and Niskanen Center aimed to fill research gaps on drivers of transmission delays

CATF partnered with the Niskanen Center and engaged with ClearPath and other collaborators to build an evidentiary record of the drivers of delays in the federal environmental review process for transmission lines. We aimed to better understand what prevents transmission buildout, including the approvals required from multiple jurisdictions (federal, Tribal, state, local) and social factors (such as developer-community relations). We theorized that many elements of the current process present hurdles to transmission permitting. And we found that

[3] Niskanen Center & Clean Air Task Force, How are we going to build all that clean energy infrastructure? (August 2021), https://www.niskanencenter.org/wp-content/uploads/2021/08/CATF_Niskanen_CleanEnergyInfrastructure_Report.pdf.
[4] Jürgen Weiss, et al., The Coming Electrification of the North American Economy: Why We Need a Robust Transmission Grid, BRATTLE GRP. (March 2019), https://wiresgroup.com/wp-content/uploads/2020/05/2019-03-06-Brattle-Group-The-ComingElectrification-of-the-NA-Economy.pdf.
[5] Department of Energy, National Transmission Needs Study (October 2023), https://www.energy.gov/sites/default/files/2023-12/National%20Transmission%20Needs%20Study%20-%20Final_2023.12.1.pdf.

there are concrete opportunities to streamline transmission permitting efforts, while focusing attention on permitting for major federal projects.

Our research effort consisted of three main parts:

1) The research team compiled a database of 37 new high-capacity transmission lines that required federal permits and conducted a quantitative analysis on permitting timelines. These lines met the following criteria:
    a) The line was a new build (not a rebuild or upgrade);
    b) The project had an environmental impact statement (EIS) in progress or completed between 2010 and 2020 (the project published a Notice of Intent [NOI], Final EIS [FEIS], Record of Decision [ROD], or was in the process of having an EIS prepared at some point in the time period);
    c) The line voltage was at least 115 kilovolts (kV);
    d) The line was at least 5 miles in length; and
    e) The line had at least one domestic endpoint.
2) The research team conducted in-depth case studies on each of the lines identified, gathering information from public dockets and news articles on the lines.
3) The research team conducted background interviews with transmission developers, federal stakeholders, and Tribal representatives to understand transmission development challenges from their informed perspectives.

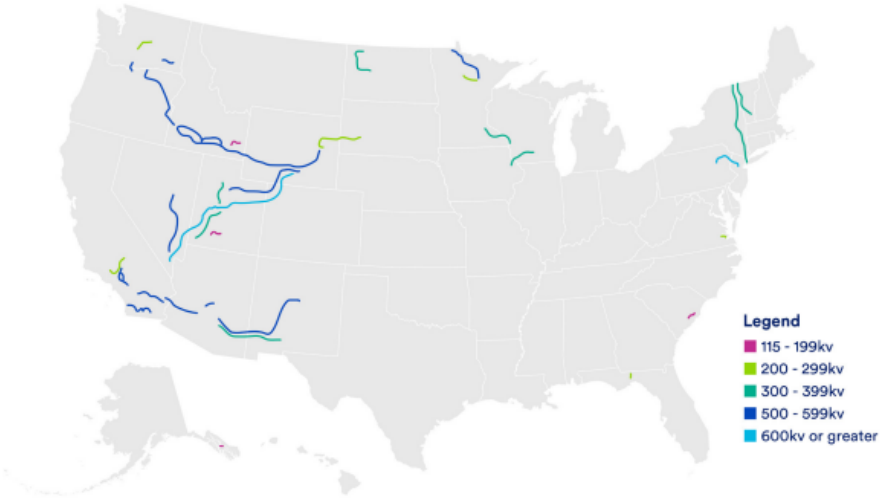
Key findings from quantitative research

Several key findings emerged from our quantitative analysis on the 37 transmission lines meeting the above criteria. Of the 37 lines, 4 were canceled, so analysis was conducted on the remaining 33 lines.

- Lines requiring an EIS between 2010 and 2020 made up only a small fraction (3.5 percent) of newly built transmission lines but comprised a proportionally large share (26 percent) of new line miles. Projects requiring federal permitting were more than 7 times longer in length than the average transmission project.
- The two most common major federal actions triggering a NEPA review were projects crossing federal land or projects that had federal involvement in project funding.
- 64 percent of the projects analyzed were built within the California Independent System Operator (CAISO) region or in the non-RTO West (see Figure 1).
- EIS review length (calculated from the date of NOI through the issuance of an ROD) across all the electric transmission projects we catalogued was on average 4.3 years, with a median of 3.7 years and a range of 1 to 11 years.
- For the largest lines in our dataset (longer than 100 miles and above 345 kV), the average timeline is slightly longer – 4.7 years – but about in line with White House Council on Environmental Quality (CEQ) findings for all federal environmental reviews (4.5 years)

from 2010 to 2018.[6] The median timeline in our data set was 3.5 years, which was also similar to the median of 3.8 years for federal environmental reviews from the same time period in CEQ's most recent analysis.[7]

Figure 1. Map of the 33 Completed Lines in the EIS Lines Dataset, by Voltage Class



As more of the long-distance transmission we need is planned, a greater proportion of projects could be subject to the federal permitting process. This further underscores the need for more comprehensive review and a better understanding of permitting processes today to enable more deployment.

Key drivers of slow transmission permitting today

Through our qualitative and quantitative research, interviews with transmission and community stakeholders, and case studies on specific transmission lines, we gathered insights into the most pressing drivers of delay in the transmission permitting process. These drivers can be grouped into three buckets – (1) insufficient leadership, coordination, and capacity at the federal level, (2) misalignment in requirements between different jurisdictions with permitting authority, and (3) inefficiencies in the overall permitting process.

Insufficient leadership, coordination, and capacity at the federal level

The transmission environmental permitting process can involve a wide range of stakeholders, including multiple federal agencies, Tribal nations, state agencies, communities, and regional grid operators. The NEPA process offers avenues for interagency coordination and collaboration,

[6] White House Council on Environmental Quality, *Environmental Impact Statement Timelines (2010-2018)* (June 12, 2020), https://ceq.doe.gov/docs/nepa-practice/CEQ_EIS_Timeline_Report_2020-6-12.pdf.
[7] White House Council on Environmental Quality, *Environmental Impact Statement Timelines (2010-2024)* (Jan. 13, 2024), https://ceq.doe.gov/docs/nepa-practice/CEQ_EIS_Timeline_Report_2025-1-13.pdf.

but there are few models for how exactly agencies should coordinate. In short, there has been a failure to create and support an iterative, agile review process with continuous and consistent communication among agencies, stakeholders, and developers to identify and address concerns early and often. Lack of communication and accountability by all agencies at the start of the permitting process can lead to relevant agencies engaging relatively late in the game or slow-to-resolve conflicts between agencies, adding months if not years to permitting timelines.

Communication and coordination challenges within and among agencies, and between agencies and developers, are further complicated by a lack of centralized information on transmission projects undergoing environmental review. Through the process of conducting this research, the project team also came face-to-face with lack of data availability and compilation. Project EIS information is strewn across several agency websites, and data is not presented or catalogued in a standardized format. The project team also pored over federal and state dockets to uncover more details on project decisions and timelines – an extremely time-intensive task. We also procured data from a private consultant to gather additional information on the lines we identified, including on leading drivers for the construction of each line (for example, to improve reliability, to manage load growth, to interconnect new generation, for storm or fire hardening). Transmission project stakeholders and researchers alike would benefit from greater data availability and standardization.

The Permitting Dashboard,[8] managed by the interagency Federal Permitting Improvement Steering Council (Permitting Council) established under FAST-41, is an existing database not fully utilized today to widely track the permitting process for transmission lines. Though the Dashboard was established to track FAST-41 "covered" projects meeting specific criteria, the Executive Director of the Permitting Council has authority to post projects other than FAST-41 covered projects to the Dashboard in the interest of transparency.[9] Smaller transmission projects that do not meet the $200 million threshold may therefore be listed on the Dashboard at the discretion of the Permitting Council. If leveraged to a fuller extent, the Dashboard could be used to track all nationally and regionally significant transmission projects undergoing an EIS.

Supporting a more agile process, improving coordination and communication between agencies, and managing useful databases also requires skilled and specialized agency staff time. But another key barrier that developers and federal stakeholders identified through our research is very limited existing agency capacity for permitting processes. Legislation like the Inflation Reduction Act provided more than $1 billion to support the environmental review process and hire and train personnel,[10] but inconsistent annual funding levels make it difficult for agencies to

[8] Permitting Dashboard, Federal Infrastructure Projects, https://www.permits.performance.gov/projects.
[9] A covered project is one that: (1) is subject to NEPA; (2) is likely to require a total investment of more than $200,000,000; and (3) does not qualify for abbreviated authorization or environmental review processes under any applicable law. *See* 42 U.S.C. § 4370m(6); https://www.energy.gov/oe/fast-41.
[10] White House, Building a Clean Energy Economy: A Guidebook to the Inflation Reduction Act's Investments in Clean Energy and Climate Action (January 2023), https://www.whitehouse.gov/wp-content/uploads/2022/12/Inflation-Reduction-Act-Guidebook.pdf.

recruit and retain qualified permitting staff over time. Several important senior-level managerial positions with long-term, national-level views of transmission projects, such as National Project Managers at the Department of the Interior's Bureau of Land Management, have been phased out as knowledgeable staff retired, leaving gaps in subject matter expertise and connective tissue between and within agencies. And recent and ongoing agency staff capacity reductions in Washington and at field offices will worsen the capacity challenges that developers and other stakeholders specifically identified more than a year ago in our research.

Although the past several presidential administrations, Republican and Democratic alike,[11] have identified the urgent need to deploy interstate and interregional transmission, there remains a fundamental lack of federal prioritization of transmission buildout that trickles down from agency leadership through to frontline managers and permitting officials. Prioritizing interstate transmission buildout and providing adequate staffing and funding for coordination efforts could ameliorate all the identified challenges at the federal level. This leadership is also vital in addressing regional and interregional issues that require regular coordination between federal agencies, Tribal Nations, state and local governments, and regional grid operators.

The barriers we have identified are important to consider when weighing effective permitting reform strategies. New deadlines for permitting and environmental review decisions can help – the Fiscal Responsibility Act of 2023 imposes a two-year deadline to complete EISs,[12] and the Department of Energy's (DOE) Coordinated Interagency Transmission Authorizations and Permits Program (CITAP) is a valuable step forward in agency coordination and action that also sets a two-year deadline to issue permits and authorizations for eligible projects.[13] But more will be needed to address agency coordination and staffing to get the permitting outcomes that the country needs.

Misalignment in requirements between different jurisdictions with permitting authority

Federal agencies are not the only entities engaged in permitting – these processes also require coordination with and among state and Tribal governments and even local communities. We observed key barriers where these jurisdictions and relationships overlapped and connected.

The benefits from interstate transmission lines may vary for each state or Tribe they traverse, and the federal government has not sufficiently led in communicating or demonstrating the importance of developing transmission to support national and regional policy goals. Local opposition can overlook or underestimate the collective value of transmission. And state

[11] National Electricity Policy: Federal Government Perspectives: Hearing Before the Subcommittee on Energy and Air Quality of the Comm. on Energy and Com. H.R., 107th Cong. 34-35 (2001) (statement of Francis Blake, Deputy Sec. of Energy).
[12] See 42 U.S.C. § 4336a(g).
[13] Department of Energy, Coordinated Interagency Transmission Authorizations and Permits Program, https://www.energy.gov/gdo/coordinated-interagency-transmission-authorizations-and-permits-program.

opposition to nationally important interstate transmission lines can create major barriers that are separate and apart from the permitting process.

Today, developers building long-distance lines crossing state or Tribal borders are subject not only to the permitting requirements of the federal government, but also the requirements of all state and Tribal governments traversed by the lines. Federal and state requirements can be out of sync or duplicative, as can requirements between neighboring states, adding time and costs for developers. State and Tribal staffing and resource constraints can also contribute to lengthier timelines. And consultations with Tribal Nations have historically not been prioritized, contributing to delays throughout the transmission line permitting and development processes.

Inefficiencies in the permitting process

Our research uncovered inefficiencies in the extensive "pre-filing" process for transmission projects where agencies and applicants have detailed interactions to understand application requirements and allow vetting of projects to jointly identify potential problems with the project. Historically, these processes have been one-off, uncoordinated, or unclear, with agencies having their own methods for engaging with developers pre-filing. DOE recently standardized its pre-filing process via the CITAP program[14] for projects where DOE is the lead agency, but other agencies have not yet formalized these processes.

While the NEPA process supports informed decision-making and the surfacing of important environmental information about projects, there is also the potential for duplicative NEPA analyses and permitting review processes in National Interest Electric Transmission Corridors (NIETC). NIETCs are corridors established by DOE pursuant to Section 216(a) of the Federal Power Act (FPA) as amended by the Infrastructure Investment and Jobs Act to support the development of nationally-beneficial transmission lines. The corridors, informed by the findings of the triennial DOE National Transmission Needs Study, should be located where consumers are harmed by transmission gaps and where new transmission would provide additional benefits like improved reliability and affordability.[15] A NIETC designation also unlocks key financing mechanisms available under the Transmission Facility Program (TFP) and the Transmission Facility Financing (TFF) loan programs.

Additionally, projects in these corridors may also be eligible for federal siting by the Federal Energy Regulatory Commission (FERC) when the following criteria are met:[16]

[14] Department of Energy, Coordinated Interagency Transmission Authorizations and Permits Program, https://www.energy.gov/gdo/coordinated-interagency-transmission-authorizations-and-permits-program.
[15] Department of Energy, Grid Deployment Office Guidance on Implementing Section 216(a) of the Federal Power Act to Designate National Interest Electric Transmission Corridors (Dec. 19, 2023), https://www.energy.gov/sites/default/files/2023-12/2023-12-15%20GDO%20NIETC%20Final%20Guidance%20Document.pdf.
[16] Federal Energy Regulatory Commission, Electric Transmission Facilities Permit Process, https://www.ferc.gov/electric-transmission-facilities-permit-process.

- A state does not have the authority to approve the siting of facilities or to consider interstate or interregional benefits of the facilities;
- An electric transmitting utility does not qualify for siting approval in a state;
- A state has not made a determination on an application within one year;
- A state has conditioned its approval such that the project will not significantly reduce transmission capacity constraints or congestion, or is not economically feasible; or
- A state denies an application.

The NIETC identification and selection process is currently underway at DOE. Therefore, no federal environmental review processes are yet active in proposed corridors, and project applicants cannot yet appeal to FERC for use of its limited siting authorities as mentioned above. However, the potential for duplicative reviews in the process of finalizing and building in these corridors has been identified. Once corridors are selected, DOE must conduct a NEPA analysis for each corridor. Siting by FERC could then trigger another round of environmental review. FERC noted in Order 1977 that it will coordinate with DOE "to the maximum extent practicable to minimize redundancy and promote efficiency in the Federal environmental review process," but also that "the framework for the [FERC's] coordination with DOE in exercising DOE's separate authority to designate National Corridors under section 216(a) of the FPA is beyond the scope of this final rule."[17]

Several proposals have been put forward to proactively reduce the potential for duplicative environmental review for interstate transmission lines and better structure the relevant responsibilities of FERC and DOE. The Energy Permitting Reform Act of 2024 proposed to eliminate DOE's requirement to designate NIETCs and instead establish new criteria for projects "in the national interest" qualifying for federal siting under FERC and designate FERC as the lead agency on NEPA analysis for the projects it sites.[18,19] The Streamlining Interstate Transmission of Electricity Act (SITE Act) proposed giving FERC exclusive siting authority for transmission lines at least 1000 megawatts in capacity crossing two or more states,[20] and the Clean Electricity and Transmission Acceleration Act (CETA) used the same definition for covered lines while also directing FERC to incorporate DOE's environmental review findings into its own environmental review process.[21] To date, this issue remains unresolved for transmission.

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[17] See Order No. 1977, Applications for Permits to Site Interstate Electric Transmission Facilities, 187 FERC ¶ 61,069, P 291 (2024), https://www.ferc.gov/media/e-2-rm22-7-000.
[18] Energy Permitting Reform Act of 2024, S.4753, 118th Cong. (2nd Sess. 2024), https://www.congress.gov/bill/118th-congress/senate-bill/4753.
[19] Grid Strategies, "Energy Permitting Reform Act of 2024 – How the Transmission Process Would Work", https://gridstrategiesllc.com/wp-content/uploads/EPRA-Transmission-Explainer-Grid-Strategies.pdf.
[20] Streamlining Interstate Transmission of Electricity or "SITE Act", S. 946, 118th Cong. (1st Sess. 2023), https://www.congress.gov/ bill/118th-congress/senate-bill/946..
[21] Clean Electricity and Transmission Acceleration Act of 2023, H.R.6747, 118th Cong. (1st Sess. 2023), https://www.congress.gov/ bill/118th-congress/house-bill/6747.

However, FERC already has authority over other kinds of interstate linear infrastructure that streamlines the environmental review and permitting processes. For example, the Natural Gas Act gives FERC siting authority over interstate gas pipelines and designates FERC as the lead agency on NEPA and for coordinating all applicable federal authorizations.[22] The Natural Gas Act gives FERC much more robust authority over interstate natural gas pipelines today than the FPA gives any specific agency over interstate transmission.

Recommendations to overcome barriers to federal transmission permitting and improve permitting timelines

CATF's position is that any federal permitting and environmental review reforms must be conscientiously designed to safeguard and empower impacted communities, particularly communities historically disadvantaged or disproportionately impacted by existing energy infrastructure.

Based on the evidentiary record we reviewed and our research findings, we compiled some recommendations for actions. These would holistically address major pain points in the permitting process, and reduce permitting timelines, while remaining true to the core tenets of community and environmental protection.

Our recommendations are grouped into three buckets that mirror the three kinds of challenges – (1) improving federal agency coordination, cooperation, and capacity, (2) streamlining interactions among sovereign authorities, and (3) improving the environmental review and permitting process.

Improving federal agency coordination

- ***Congress and agencies should enhance transparency in project review and project timelines.*** All actors should work toward an iterative process with consistent and transparent communication and timelines. This should include interagency coordination in the pre-application part of the permitting process.
- ***Congress should invest in interagency coordination, interagency cooperation, and agency capacity.*** More permitting staff trained on the nuances of transmission infrastructure are required to shorten permitting timelines. Staff should also be available for joint agency cooperation. Congress should provide regular appropriations for transmission permitting staff at agencies. Congress and agencies should also continue to work on modernizing permitting review processes and invest in relevant digital tools.
- ***DOE, the Permitting Council, or other agencies should require transparency and accountability through use of the Permitting Dashboard.*** DOE can recommend nationally and regionally significant projects undergoing EIS review be added to the

[22] *See* 42 U.S.C. § 717f.

Permitting Dashboard. Ideally, projects would be added before the NOI to prepare an EIS.

- ***The executive branch should continuously recognize transmission infrastructure permitting as a national priority.*** Setting the transmission prioritization agenda and promoting a whole-of-government approach starts with the Executive Office of the President. This prioritization should be enforced by regular cabinet-level alignment and coordination, full leverage of Permitting Council authority, and appointment of a transmission director. Senior-level personnel reporting directly to agency decision-makers should be assigned to each major project under environmental review. Adequate staff should be available to support each step of agency-specific and coordinated, multi-agency permitting processes.

Streamlining interactions among sovereign authorities

- ***Federal agencies, with congressional support, should support enhanced state and Tribal capacity to conduct and participate in permitting processes.*** Federal agencies can dedicate grant programs, provide technical support (such as through DOE Grid Deployment Office's Offshore Wind Transmission Technical Assistance program[23]), and share best practices. Agencies should proactively engage with Tribes, on par with federal engagement with developers and states.
- ***Congress should consolidate permitting and siting authority for multi-state transmission projects that are in the national public interest.*** Congress should grant FERC comprehensive and plenary permitting and siting powers for key transmission projects (see the proposed SITE and CETA Acts).[24,25]
- ***States should harmonize their permitting processes to create regulatory efficiency and allow concurrent processes.*** Though our research was federal in nature, many stakeholders emphasized optimization of project timelines through more aligned state permitting processes and more aligned federal-state processes. Joint state and federal environmental reviews, incorporation by reference of state or federal environmental reviews by other jurisdictions, and project-specific memoranda of understanding provide opportunities for better alignment.
- ***The Permitting Council should instruct Chief Environmental Review and Permitting Officers (CERPOs) to advance projects and coordinate with and support local agencies.*** Under FAST-41, each agency is required to designate CERPOs, who report to the agency deputy secretary on environmental review processes and authorizations.

[23] National Renewable Energy Laboratory, Tribal Nation Offshore Wind Transmission Technical Assistance Program: Introduction to Technology and Tribal Nation Support Technical Assistance Program Webinar (April 10, 2024), https://www.nrel.gov/docs/fy24osti/89524.pdf.
[24] Streamlining Interstate Transmission of Electricity or "SITE Act", S. 946, 118th Cong. (1st Sess. 2023), https://www.congress.gov/ bill/118th-congress/senate-bill/946.
[25] Clean Electricity and Transmission Acceleration Act of 2023, H.R.6747, 118th Cong. (1st Sess. 2023), https://www.congress.gov/ bill/118th-congress/house-bill/6747.

CERPOs can liaise with the Permitting Council and provide agency-specific updates on key projects. CERPOs can also execute a core NEPA function of providing information to states, Tribes, and other decisionmakers and support local authorities in making timely permitting decisions.

Improving the environmental review and permitting process for transmission

- ***Agencies and developers should conduct early, sustained, and meaningful stakeholder outreach.*** A common thread running through all stakeholder interviews for this project was the importance of early, timely, and meaningful stakeholder outreach to positive project outcomes. Government-to-government consultations with Tribes also is critical for respecting sovereign authority and pre-empting issues that can cause project delays.
- ***Agencies should implement robust pre-filing processes.*** Agency-specific pre-filing processes should be implemented, and agencies should encourage applicants to opt in to pre-filing.
- ***Developers and agencies should engage in early and collaborative identification of alternatives to be analyzed in an EIS.*** Project alternatives should be identified early on, in a collaborative process that involves relevant agencies, the developer, state and local officials, Tribes, communities, and other stakeholders. Identification of project alternatives is core to the NEPA process and can improve project outcomes by finding better routes, minimizing conflicts, and consequently reducing timelines.
- ***Agencies should carefully expand categorical exclusions for transmission development.*** A categorical exclusion is a class of actions determined by an agency that do not individually or cumulatively have a significant effect on the human environment. Strategic and appropriate use of categorical exclusions, with adequate environmental and community safeguards, can help agencies accelerate the deployment of transmission infrastructure. Available categorical exclusions should be expanded for more categories of projects within existing project rights-of-way. Agencies should look to their existing categorical exclusions and, based on their expertise, consider how these categorical exclusions can be thoughtfully expanded to responsibly increase environmental review efficiency.
- ***Agencies should expand the use of programmatic EIS (PEIS) reviews for transmission infrastructure projects, and Congress should ensure that agencies have sufficient capacity to do so.*** PEIS reviews consider the impacts of programmatic federal actions (such as actions occurring in the same geography or actions with relevant similarities). "Tiering" reviews, or relying on earlier NEPA review documents to expedite project-specific environmental review, can also increase efficiency of environmental review.
- ***DOE and FERC should minimize environmental review redundancy for the NIETC process.*** DOE, FERC, and relevant environmental agencies must collaborate closely to streamline NIETC environmental review processes and remove duplicative review requirements. However, it would take congressional action to move to a single

environmental review process. CATF supported language in the Energy Permitting Reform Act of 2024 to address this issue, and we have encouraged DOE and FERC to align what information they gather and evaluate under their regulations at each step of the process.

Conclusion

More long-distance, interstate transmission is needed in the United States for grid reliability, affordability, security, and resiliency, as well as to support the development of new economic sectors. However, transmission investment has not sufficiently kept up to unlock these benefits. There is broad consensus that transmission permitting and environmental review processes must be improved, but there has been little evidence provided for when, where, and how slowdowns in these processes occur. CATF and our project partners ventured to uncover problem areas and opportunities through comprehensive analysis of transmission projects subject to federal environmental review.

The most significant delays and inefficiencies uncovered in our research were not tied directly to the provisions of NEPA, but rather related to gaps in process and in resources. Interagency coordination issues, limited staff with permitting expertise at agencies, underutilized tools and databases, and misaligned permitting and regulatory requirements between federal, state, and Tribal jurisdictions all added significant time to transmission development timelines.

Prioritizing interstate transmission buildout at the highest levels of government and ensuring adequate staffing and funding for coordination efforts between federal agencies and between federal, state, and Tribal entities could ameliorate all identified challenges. Consolidating siting and permitting authorities and eliminating duplicative environmental reviews for high-priority, nationally-beneficial transmission lines, while providing for constructive dialogue with stakeholders, would also speed time to deployment. Reductions of agency capacity in Washington D.C. and at field offices, failure to set up the staff and management infrastructure at agencies to support interagency coordination, and underinvestment in permitting dashboards and other data management tools will increase the time it takes to get projects requiring federal permits and environmental reviews built.