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Improving the Federal Environmental Review and Permitting Processes

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Good morning, Chairman Capito, Ranking Member Whitehouse, and members of the committee. Thank you for the opportunity to testify and for holding this important hearing.

My name is Jeremy Harrell. I am the Chief Executive Officer of ClearPath, a 501(c)(3) organization that works to accelerate American innovation to reduce global energy emissions. Industry-informed but philanthropically funded, ClearPath runs like a business — we seek out the top private sector innovators, determine the barriers to their success, and help cultivate the environment that allows them to scale up.

The United States faces intense global competition, especially in the energy sector. Adversaries like China and Russia are deploying hundreds of billions of dollars around the world to advance their geostrategic interests, with the goal of controlling the sector and connected supply chains. There is real uncertainty as to whether the U.S. will be able to effectively counter these efforts, and our current permitting regime is often cited as a major factor. Regulatory unpredictability is the single largest barrier to meeting energy, climate and economic development goals at the federal, state, and local levels.

Unmovable bureaucratic obstacles cause delays at every stage of project development. Whether it is federal permitting, lawsuits, or local opposition, there are numerous challenges to moving projects forward. These challenges are present in every infrastructure sector of the economy, from energy to housing to transportation projects.

This challenge must be overcome for the U.S. to meet its domestic energy needs and beat the competition for resources and technology. America is at the dawn of a new age of unprecedented energy demand fueled by robust economic growth, a revival of American manufacturing, strong advances in artificial intelligence (AI), and quantum computing. These developments have presented new challenges for the future yet offer immense opportunities for America to build big things as we once did.

For example, over $200 billion has been invested in clean manufacturing since 2022, creating over 200,000 jobs, primarily in Republican districts.[1] Meanwhile, the Chips and Science Act combined with regulatory reforms have supported an expected tripling of semiconductor manufacturing by 2032.[2] Recent projects show the AI race may more than triple data center

[1] https://cleaneconomytracker.org/
[2]https://www.semiconductors.org/wp-content/uploads/2024/05/Report_Emerging-Resilience-in-the-Semiconductor-Supply-Chain.pdf

capacity this decade.[3] Major technology companies have redoubled their efforts to deploy clean 24/7 energy to meet their needs, with the likes of Alphabet, Amazon, and Microsoft all announcing orders for advanced nuclear reactors. Large energy users from a wide variety of sectors have similarly made commitments to support innovative energy resources. These also include large manufacturing companies like Cummings, Dow and Nucor, which have each committed to develop first-of-a-kind projects for emerging technologies – like advanced nuclear, next-generation geothermal, clean hydrogen, and long-duration energy storage (LDES).[4] These types of corporate commitments are essential to "build the order book" to commercialize new technologies. Realizing these tremendous opportunities for economic growth, decarbonization, and strategic geopolitical advantage all hinge on America's ability to build infrastructure at a rate that is significantly faster than today.

The need for new sources of reliable and affordable energy is urgent. The technologies are ready, but they will not be built if they cannot secure permits on a predictable, expeditious timeline.

In the final days of the 118th Congress, members of this Committee worked closely with members in the House and Senate in an effort to find a compromise on the Energy Permitting Reform Act (EPRA) led by former Senator Joe Manchin (I-WV) and Senator John Barrasso (R-WY). While that bill did not make it across the finish line, I remain hopeful that this Committee will be able to build on those recent bipartisan discussions in the months ahead. Today's hearing sends a strong signal that permit reform remains a bipartisan priority, and it is my hope that this hearing is the first step to passing bipartisan legislation this Congress.

My testimony will address several of the underlying issues that necessitate "step-change" reforms to America's permitting system.

The nation's permitting system should demand accountability and promote good outcomes – balancing speed and safety by:

- leveraging innovative American technology,
- expediting reviews, and
- streamlining litigation over approved projects.

The Infrastructure Challenge has Arrived

Building enough energy infrastructure has become more urgent in the face of skyrocketing demand growth. The North American Reliability Corporation (NERC) finds that annual demand growth rates are nearly double[5] those of the last decade, when roughly three projects[6] were added to the grid per day. Meeting this demand growth may necessitate building approximately six projects per day or 16,000 facilities by 2035. This could equate to doubling the grid's current capacity by adding as much as 1,300 gigawatts of new energy by 2035. The U.S. will need an

[3]https://www.mckinsey.com/industries/technology-media-and-telecommunications/our-insights/ai-power-expanding-data-center-capacity-to-meet-growing-demand

[4] https://nucor.com/newsroom/google-microsoft-and-nucor-announce-initiative

[5]https://www.nerc.com/pa/RAPA/ra/Reliability%20Assessments%20DL/NERC_Long%20Term%20Reliability%20Assessment_2024.pdf

[6] https://www.eia.gov/electricity/data/eia860m/

"all-of-the-above" push to meet that need with new nuclear, lower-emission natural gas and coal, geothermal, wind, solar, and hydropower generation and new grid infrastructure.[7]

The geographic spread of new manufacturing, data centers, and other electric-intensive industries may be concentrated in a few regions.[8] However, reliably serving these customers and maintaining grid reliability at the lowest cost may require broader network upgrades and deployments. And while past periods of projected demand growth from data centers did not materialize due to efficiency gains, America's national security and economic competitiveness cannot afford to have a permitting regime that flouts the significant project demand growth, especially from efficient AI.[9]

Absent a thorough overhaul of the current permitting system, meeting the expected pace of demand growth will be practically impossible. Connecting new generation assets to the grid will also require significant expansions of electric transmission, natural gas, and carbon dioxide pipeline infrastructure, which will face regulatory, permitting, and litigation challenges.

A looming transmission shortage poses a direct threat to America's energy security. Many areas of the country are already experiencing insufficient transmission capacity. This shortage has immediate ramifications, meaning that manufacturing, data centers, and the power sources they need are stuck waiting before they can begin operating. Innovative grid technologies, like advanced conductors, can unlock more capacity on existing lines, and thus, permitting new lines will be absolutely necessary. American workers, businesses, and clean energy innovators cannot delay investments to accommodate a NEPA process that takes 4.3 years on average from the Notice of Intent to a Record of Decision for an Environmental Impact Statement[10] for electrical transmission projects and litigation that is resolved in the projects favor in 88% of cases .[11]

Permitting delays are already presenting a growing reliability crisis for the power sector. The importance of natural gas infrastructure to grid reliability and affordability cannot be overstated. Natural gas provides 44% of U.S. electricity needs[12] and has simultaneously delivered significant U.S. emissions reductions since 2005.[13] Yet, opposition of some states to the development of pipelines has contributed to blackouts during winter storms in recent years and has led to states in the Northeast relying on the highest emitting sources of energy, like fuel oil, to keep the lights on when natural gas supplies are artificially constrained. A December 2022 cold-snap caused the region to "burn more oil for electricity on a single day during…than they have in four years."[14]

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[7] https://rhg.com/research/taking-stock-2024/

[8]https://www.woodmac.com/horizons/gridlock-demand-dilemma-facing-us-power-industry/?__FormGuid=81d8a1b9-fba3-4634-bdc1-67c626a6af21&__FormLanguage=en&__FormSubmissionId=9a384c54-20db-4ae9-a372-bc1a74955e82

[9]https://eta-publications.lbl.gov/sites/default/files/2024-12/lbnl-2024-united-states-data-center-energy-usage-report.pdf

[10] https://www.catf.us/resource/contextualizing-electric-transmission-permitting/

[11]https://www.niskanencenter.org/evidence-based-recommendations-for-overcoming-barriers-to-federal-transmission-permitting/

[12] https://www.eia.gov/electricity/monthly/

[13]https://clearpath.org/our-take/the-u-s-needs-natural-gas-heres-a-playbook-to-reduce-emissions/#:~:text=Natural%20gas%20has%20already%20played,reductions%20between%202005%20and%202019.

[14] https://www.eenews.net/articles/new-england-clean-energy-goals-slam-into-oil-reality/

The reliance on fuel oil remains a policy choice due to natural gas supply constraints ingrained in the current permitting system.

Today, the U.S. has more than 5,300 miles of carbon pipelines across the nation. This is a small fraction of the Department of Energy's recent estimates that the U.S. will need 30,000 – 96,000 miles of these pipelines by 2050.[15] While that number may seem daunting, this is just a fraction of the existing 3 million miles of oil and gas pipeline infrastructure that go unnoticed every day.[16]

The U.S., along with 30 other countries and 14 major financial institutions[17], has committed to tripling global nuclear capacity. This could amount to as many as 200 additional GW in the U.S. grid by 2050 in addition to keeping our current fleet operational. This equates to upward of 1,000 new reactors, depending on size. In order to meet this scale of deployment, the pathway between the order announcements of today and power on the grid tomorrow hinges on Congressional action. In the near term, it is essential that the Nuclear Regulatory Commission (NRC) implements the act in an effective, efficient manner and updates the way that it does project reviews to ensure that the U.S. adds more nuclear energy to the grid in a timely manner.

Never has the phrase "time is money" been more appropriate. Regulatory delays, in some cases, that can last nearly a decade are making projects more expensive, and impeding our ability to deploy billions of dollars of capital that would create American jobs, enhance U.S. energy security, keep consumer costs affordable, and reduce emissions.

In the final week of the Biden Administration, the Council on Environmental Quality (CEQ) published data showing that the median EIS completion time, under the National Environmental Policy Act (NEPA), between 2021 and 2024 was 2.4 years, compared to 3.1 years from 2017 to 2020[18]. When comparing 10-year averages from 2025-2015 and 2020-2010, permitting timelines remain unchanged, underscoring the insufficiency of incremental reforms.

However, 34% of projects undergoing an EIS took more than five years to reach a Record of Decision, highlighting the continued unpredictability of this process. Many of the projects facing the longest review timelines have the greatest potential benefits to the United States in reduced energy costs, enhanced energy independence, increased economic opportunity, and lower global emissions.

The combination of permitting delays and politically charged decisions has disrupted our ability to build. As a result, it can now take more than three years to permit carbon dioxide storage wells from industrial sites in Illinois to California, 13 years to permit a critical minerals project in Minnesota, and up to 15 years for a new transmission line from Wyoming to Utah. Beyond those specific examples, the U.S. needs a system that ensures timely approvals of new LNG terminals

[15] https://liftoff.energy.gov/wp-content/uploads/2024/02/20230424-Liftoff-Carbon-Management-vPUB_update4.pdf

[16] https://www.phmsa.dot.gov/data-and-statistics/pipeline/pipeline-mileage-and-facilities

[17] https://world-nuclear.org/news-and-media/press-statements/14-major-global-banks-and-financial-institutions-express-support-to-triple-nuclear-energy-by-2050-23-september-2024

[18] https://ceq.doe.gov/nepa-practice/eis-timelines.html

as well as any necessary interstate natural gas pipelines to supply these new terminals. These are just a few of the hundreds of projects held up by the status quo of the current system.

Clarifying the Role of the National Environmental Policy Act

NEPA is often misunderstood as an environmental protection law with regulatory standards. In reality, NEPA does not impose substantive environmental requirements such as emissions limits or technology mandates. Instead, it is a procedural law that requires federal agencies to evaluate and disclose potential environmental impacts of their actions before making a decision to proceed.

NEPA mandates that agencies provide the public with a "detailed statement" outlining the environmental consequences of proposed federal actions, which may include issuing permits, distributing grants, or approving infrastructure projects.[19] NEPA is about process – not results – meaning that compliance with NEPA does not ensure specific environmental outcomes or project approval.

However, NEPA compliance is just the first step in a broader permitting process. Permitting refers to the legal approvals required for a project to proceed under multiple federal statutes – each of which addresses a specific environmental or cultural consideration. In concert with agencies completing a NEPA review, project developers must often obtain multiple permits under the:

- Endangered Species Act (ESA): Requires permits if the project may impact threatened or endangered species or their habitat.
- Clean Air Act (CAA): Mandates permits to ensure that emissions from the project do not violate air quality standards.
- Clean Water Act (CWA): Section 404 requires permits for discharging dredged or fill material into waterways, including wetlands.
- Migratory Bird Treaty Act (MBTA): May require permits if the project impacts migratory bird populations.
- Resource Conservation and Recovery Act (RCRA): Governs the management and disposal of hazardous waste produced by the project.
- National Forest Management Act (NFMA): Applies if the project is on national forest lands, requiring consistency in forest management practices.
- Solid Waste Disposal Act (SWDA): Regulates the disposal of non-hazardous solid waste.
- National Historic Preservation Act (NHPA): Requires consideration of effects of historic properties and may necessitate permits or agreements to mitigate impact.

Each statute requires its own permitting process, which can include detailed environmental assessments, public consultations, and coordination across multiple agencies. The complexity and duration of obtaining these permits can significantly extend project timelines, adding years to the approval process.

NEPA does not grant or deny these permits, it only ensures agencies evaluate and consider environmental impacts.

[19] 42 U.S. Code § 4332

Obtaining a permit is one thing, but project developers must still comply with all underlying laws and regulations. Understanding these as two distinct tools – with one focused on process and one focused on real outcomes – is necessary to properly evaluate the options ahead for permitting reform.

Bipartisan Opportunities for Congress

The following are some ways Congress could improve the permitting system that range in complexity and impact. These include setting clear deadlines and expanding categorical exclusions to certain well-understood resources, to a paradigm shift that significantly changes the system by establishing a permit-by-rule approach.

Require accountability, provide transparency, and encourage the use of modern technology, like artificial intelligence. Establishing timelines for agency action is critical to deploying energy projects at scale. Process reforms without timelines can lead to a lack of consistency when administrations change. One mechanism could be achieved through legislation that compels agencies to meet deadlines and deem projects approved if the agency falls short. The federal government should also track the number of permits in the federal agency queues at any one time in a consistent and timely manner.

There is a clear need for more reliable information from federal agencies to better understand the number of permits under review and how long they have stuck in permitting limbo. Transparent data will help Congress better address agency funding needs in these areas to approve permits and provide the public with information about how the federal permitting system works at large. Yes, Congress created the Federal Permitting Improvement Steering Council, better known as the Permitting Council, which, unfortunately, lacks the legal ability to compel timely agency action and resolve interagency disputes.

Congress could also consider the role of artificial intelligence (AI), machine learning, and other automation technologies that can help reduce the human capital burden of project reviews. While the federal government should explore how to best leverage technology in the future, a recent congressionally mandated report from CEQ to Congress illustrated that even requiring the use of spreadsheets or tracking systems would be a helpful first step in better understanding how our permitting system works today.[20] Technology reforms are perhaps the lowest-hanging fruit for bipartisan action to streamline reviews.

Expedite Approvals. Expediting the approval process for projects that bring net benefits and comply with existing environmental laws could be an effective first step toward meeting the nation's energy needs.

Congress could expand categorical exclusions to permit projects in a timely manner. Categorical exclusions are a one-time determination under NEPA that certain activities do not warrant the need for the substantial data collection and review that comes with site-specific environmental assessments (EA) or environmental impact statements (EIS). A categorical exclusion requires the agency to determine whether an activity does not individually or cumulatively negatively impact the environment. However, categorical exclusions still require agency decisions specific to each

[20] *https://ceq.doe.gov/docs/ceq-reports/CEQ-E-NEPA-Report-to-Congress_Final-(508).pdf*

site. Expanding categorical exclusions could be a useful next step to accelerate low-impact energy projects like geothermal exploration by eliminating redundant reviews.

Permit-by-Rule: Another approach to streamlining permits is for Congress to create a permit-by-rule system for obtaining federal permits. Permit-by-rule expedites reviews by the agency by Congress and/or the agency establishing predetermined criteria for a defined permit to be issued for a project at the planning and design phase. Instead of undergoing a case-by-case review, applicants would assess the criteria, take the necessary steps to comply, and submit a notice of compliance to the permitting agency – along with necessary proofs and certifications – to receive a permit. Once submitted and reviewed, that permit is automatically issued, allowing construction to begin.

This approach eliminates case-by-case government reviews and analysis. It also shifts the federal government's role from gatekeeping to compliance enforcement, ensuring substantive standards are promulgated to protect public health, safety, and the environment.

At the federal level, the Environmental Protection Agency (EPA) has already implemented permit-by-rule systems for certain activities, including ocean disposal, injection wells, and treatment works facilities.[21] The EPA's model simplifies the permitting process, providing a potential framework for other federally regulated industries, such as the energy sector, to adopt.

Permit-by-rule is not limited to federal regulations. Many states have also embraced this approach. At least 26 states have implemented permit-by-rule systems, including Alaska, Arizona, Arkansas, Nebraska, North Dakota, Ohio, South Carolina, and Utah. These state permit-by-rule systems cover a wide range of activities, from hazardous waste management to pharmaceutical take-back programs. Each state has its own criteria tailored to fit its specific needs and risk assessments, demonstrating the flexibility and effectiveness of this permitting approach.

Permit-by-rule can offer significant benefits with a balance between streamlining procedures and safeguarding public health, safety, and the environment. To do this, the criteria must be well-defined, periodically reviewed, and aligned with the overall regulatory framework.

Place-Based Streamlining: Similarly, encouraging development in certain prequalified geographic areas could go a long way toward accelerating projects with the lowest impact. Such areas could include previously disturbed lands or well-categorized sites, such as brownfield sites that present opportunities to use existing electrical or mechanical infrastructure. The environmental impacts to these locations related to energy deployment are minimal, and in many cases, these locations are in or near communities that need the redevelopment most urgently. Congress could also consider regulatory incentives to direct investment toward areas where impacts are already well understood.

Litigation Reforms: To make any of the suggested improvements in permitting more effective, Congress could seek to narrow the scope of legal challenges against approved projects and streamline judicial review of agency actions. The current system is overwhelmingly tilted in favor of those seeking to delay or block projects. Nearly every major energy and infrastructure project faces litigation that often drags on for years over minor procedural details buried within

[21] https://www.epa.gov/permits/epa-permit-programs-and-corresponding-environmental-statutes

agency reviews. This results in years of additional analysis that often changes little to nothing about the project. Meanwhile, injunctions halt progress, paralyzing the project and jeopardizing investments. Litigants exploit these delays, knowing that time is money. By repeatedly filing lawsuits, they aim to stretch the process until developers run out of funding and abandon their projects. This uncertainty affects all energy and infrastructure projects from pipelines and transmission lines to manufacturing facilities, where delays drive up development costs, and discourage investment. Congress could limit legal challenges to clear and material errors under natural resources laws, narrow the scope of review, and enforce statutory timelines for resolving disputes. Without these changes, billions in investment and years of progress will continue to be wasted, undermining the nation's ability to build the infrastructure needed for energy and economic security.

Last Congress, H.R.1, the Lower Energy Costs Act included provisions requiring legal disputes be resolved in less than one year – a critical step in the right direction. Other major House and Senate permitting proposals include injunctive relief, standing clarifications, and deadlines on the statute of limitations. However, judicial unpredictability is among the biggest wildcards in the current permitting system. Last Congress saw a variety of proposals seeking to do the same, the RESTART Act, introduced by Sen. Capito (R-WV), the REPAIR Act, introduced by Sen. Cassidy (R-LA), and the PEER Act of 2023 introduced by former Sen. Carper (D-DE) and Sen. Schatz (D-HI), all proposed reforms to reduce the years-long uncertainty tied to legal challenges.

Recent bipartisan proposals can provide a roadmap to restore balance to the system. The Fix Our Forests Act offers a strong starting point to balance the needs of local communities with a more predictable process. A more predictable process benefits all parties involved, allowing claims to move forward when real harms occur while limiting litigation that merely seeks to delay or cancel projects.

The pace and scale necessary to build energy infrastructure projects to reliably meet America's energy demand and reduce emissions is not something the authors of the 1970s environmental laws could have imagined. Merely throwing more federal money at the projects or the agencies reviewing them is not going to substantially change that problem. Further, the erosion of regulatory and legal predictability makes attracting project financing more difficult and expensive. At a time when the U.S. economy is poised for significant growth and innovation, we encourage policymakers to ensure the federal permitting process can help deliver on these opportunities, not stand in the face of them.

ClearPath looks forward to working with this Committee to advance permitting reform, and I look forward to today's discussion.