

Committee on Energy and Commerce
Tuesday, January 23, 2023, hearing entitled “American Energy Expansion: Strengthening Economic, Environmental, and National Security”

Additional Questions for the Record for Robert McNally
Submitted March 7, 2023

The Honorable Richard Hudson

How can the grid’s reliability and security be improved in the short-term and long-term?

I suggest three broad policy strategies to enhance grid security and reliability.

1. Enact permitting reform to enable timely and substantial investments in generation, transmission, and efficiency improvements. Permitting reform is required for all forms of energy resource development, including hydrocarbon, geothermal, and renewable sources. While energy investment decisions are based on various market and industrial factors outside the direct control of Congress, removing unnecessary and debilitating permitting delays is necessary. Permitting reform is especially important for transmission capacity projects due to their long lead times compared to generation projects.
 - NEPA review process alone takes an average of 4.5 years to complete and adds an estimated \$4.2 million to project costs.¹ One astute analysis noted “[t]he NEPA process is tailor-made for NIMBYism.”²
 - A recent Brookings study of renewable permitting delays aptly described the unacceptable situation the US currently faces for both renewable and thermal energy projects: “All told, the dizzying array of permits and other regulatory obstacles to renewable energy projects can create extremely long delays. Reports of 10-year or longer timelines for transmission lines are not uncommon.”³
 - Reform should include imposing legally enforceable deadlines on federal infrastructure reviews, amending NEPA to disallow steps taken by [President Biden’s January 2023 CEQ Notice of Interim Guidance](#), such as including indirect emissions, imposing a social cost of carbon, and omission of cost-benefit analyses. Congress should also reduce litigation risk for project developers, create a unified, centralized permitting process, reduce the scope for state and

¹ <https://www.c3solutions.org/policy-paper/nepa-modernization-101/>

² https://cei.org/wp-content/uploads/2022/09/Mario_Loyola_-_Unleashing_America_s_Energy_Abundance.pdf

³ <https://www.brookings.edu/research/how-does-permitting-for-clean-energy-infrastructure-work/>

local regulatory delay and obstruction, and establish programmatic and general permits for major categories of infrastructure projects.⁴

2. Avoid unnecessarily burdensome, excessive, and duplicative regulations and policies that delay or prevent investment in new, efficient generation and transmission capacity.
 - Avoiding mistakes requires the Energy Information Administration to provide Congress with timely and unbiased analyses of the cost-benefit impacts of mandating extreme energy outcomes. For example, the EIA still needs to provide Congress with an analysis of the energy security and economic implications of recent presidential executive orders and legislative climate proposals, including
 - President Biden’s executive order calling for the federal government to reduce its emissions by 65% by 2030 and reach net-zero emissions by 2050, and
 - A bill (CLEAN Future Act) introduced by Democrats, mirroring the President’s campaign proposal, to ban the use of fossil fuels—which currently account for 60% of U.S. electricity generation—in U.S. power plants by 2035.
 - Transmission capacity expansion is essential for grid reliability. A recent draft DOE analysis concluded that the US likely needs 47,300 GW-miles of new transmission by 2035, a 57% increase compared to today. Significant new transmission capacity is required by 2030 in the Plains, Midwest, and Texas regions. By 2040, sizeable new capacity will be needed for the Mountain West, Mid-Atlantic, and Southeast.⁵
 - Meanwhile, as a February 2023 report, “[Energy Transition in PJM: Resource Retirements, Replacements & Risks](#),” noted, four trends create increasing reliability risks.
 - Strong electricity demand growth;
 - Thermal (gas, coal primarily) generation retirements due to government and private sector policies, as well as economic factors;
 - Insufficient new generation resources to replace retirements due to industry forces, including siting and supply chain challenges; and

⁴ https://cei.org/wp-content/uploads/2022/09/Mario_Loyola_-_Unleashing_America_s_Energy_Abundance.pdf

⁵ Howland, Ethan. (2023, March 6). DOE finds ‘pressing’ transmission needs, with inter-regional links offering the biggest benefits. *Industry Drive, reported in Bloomberg News*.

- The preponderance of yet still insufficient amount of intermittent (wind, solar) and limited-duration resources at the expense of always-on, long-duration thermal resources.
 - To address these risks, Congress should scrap the current climate strategy and embark on a new one that would depoliticize science, consider the cost-benefit analyses of all strategies, and result in legislative changes at home and leadership abroad. For more background, please see this April 2022 report from the Forum for American Leadership entitled "[Blueprint for a Sound and Serious Climate Policy.](#)"
3. Deter cyber attacks on critical energy infrastructure. Amid reports that our electricity and oil systems are absorbing growing numbers of attacks, Congress must deter cyber attackers. The following May 2021 Forum for American Leadership report entitled "[Eight Necessary Steps to Defend U.S. Critical Energy Infrastructure from Cyber Attacks](#)" provides more detail.

The Honorable Russ Fulcher

While geothermal covers a small part of our population today, it offers baseload reliability at utility-level scale according to the Energy Information Administration (the EIA). For example, Idaho's Raft River facility can sell up to 10 MW of this clean, reliable energy source. Yet, permitting for new geothermal projects can take 7-10 years.

1. My bill, the Enhancing Geothermal Production on Federal Lands Act, would allow for geothermal development where there are already existing oil and gas leases. Can you speak to how changes like this that remove duplicative red tape can help America return to energy dominance?

Energy investment decisions are based on many market and industrial factors out of Congress's control. But permitting reform is a necessary, but not sufficient, condition for the timely expansion of transmission capacity, which is essential for Idaho's geothermal development and other forms of energy production.

2. I understand that transmission development is one of the key factors that could limit the deployment of geothermal technologies across areas of the West, like Idaho. This is largely due to geothermal being located far from load/population centers and the sheer amount of federal land the transmission lines would have to cross in order to meet demand. What barriers exist to developing transmission to help clean, baseload technologies like geothermal to provide reliable power to the grid?

While I am not an expert in Idaho's geothermal and hydroelectric electricity sectors, unnecessary regulatory delays in transmission siting, permitting, and construction impede connecting electric power generation with demand centers. Therefore, permitting reform is essential, as noted above and in my testimony.

Hydroelectric constitutes roughly half of my state's total in-state generation. And, it speaks to the importance of Idaho's dams.

1. Can you discuss any transmission challenges that may occur with getting this highly reliable and clean energy to population centers, given these dams are often nested between large sections of federal land?

While siting electricity lines is inherently uncertain and involves complex economic, social, and land-use factors, the federal government can contribute to more successful outcomes by limiting its interventions to large, high-powered interstate transmission lines and repealing, reducing, and avoiding intrusions into the process.