U.S. Senate Committee on Energy and Natural Resources
May 8, 2025 Hearing: The Doffermyre, Jereza, and Haustveit Nominations
Questions for the Record Submitted to Ms. Catherine Jereza

Questions for the Record from Ranking Member Martin Heinrich

Question 1: The concept of baseload is evolving as more storage and demand response technologies come online. Grid-scale storage technologies can keep the lights on during power outages, prevent waste when there's too much electricity, ease traffic on crowded power lines, and help keep the grid running smoothly and safely by providing frequency and voltage support.

The Office of Electricity plays a key role in advancing U.S. expertise in grid-scale storage technologies, such as long-duration storage. As Assistant Secretary, how would you ensure this critical work continues to support grid reliability?

Response: Innovation in grid-scale storage is essential to ensuring a reliable, flexible and modern electricity grid – especially as we integrate more variable resources. If confirmed, I will work closely with National Laboratories, industry leaders and states to ensure advanced energy storage solutions are deployed where they provide the greatest value for reliability, resilience and cost-effectiveness.

Question 2: Currently, the Office of Electricity does not have primary jurisdiction over federal permitting authorities, which is held today by the Grid Deployment Office (GDO) and FERC, however, if GDO were folded into Office of Electricity, the Assistant Secretary would likely inherit permitting-related responsibilities.

How would you approach managing those responsibilities, and what role should DOE play in helping streamline the permitting process for high-priority transmission projects?

Response: While the permitting process today is led by other entities, I recognize how critical it is to the timely buildout of transmission infrastructure. If confirmed, I will work to ensure the Office of Electricity helps identify and address grid needs, reduce bottlenecks and coordinate with permitting agencies to support timely, high-impact transmission development.

Question 3: The Office of Electricity's research and development mission to improve grid reliability, resilience, security, and affordability is dependent on public-private partnership research collaborations. I have a two-part question:

- Given your experience at the Edison Electric Institute, which has collaborated with the Office of Electricity, can you discuss the importance of public-private sector collaborations?
- And do you think the private sector's willingness to work the federal government may be affected by this administration's pull back of previously obligated funds?

Response: Public-private collaboration is vital to advancing the Office of Electricity's mission. The private sector brings operational insight and deployment experience, while DOE contributes research expertise and long-term planning. Partnerships between the public and private sector can accelerate innovation and improve outcomes for grid reliability and security. If confirmed, I

will work to ensure that the Office engages with partners and administers its programs responsibility in accordance with the law.

Question 4: The Office of Electricity has worked with industry to address the distribution transformer supply chain shortage, as well as address shortages with large power transformers and other grid components.

These supply chain issues highlight that regardless of source, if we don't have a modernized grid, we will be unable to get power from point A to point B. And the market is now in particular disarray due to the threat of tariffs.

In light of these tariffs, what is your strategy for shoring up our grid technology energy supply chains, and what specific actions will you take if confirmed for the position?

Response: A secure and modern electric grid depends on a reliable supply of key components like transformers and advanced conductors. If confirmed, I will prioritize efforts to strengthen domestic supply chains by supporting research into alternative materials, expanding manufacturing capacity, and working closely with industry to identify vulnerabilities. The Office of Electricity can also play a role in sharing data and technical standards that help guide private-sector investment. Ensuring we can move power reliably across the country is fundamental to grid resiliency and national security.

Question 5: We all know that energy demand is increasing, and with that our generation and transmission capacity have to continue to increase.

One promising technology that I am excited about is reconductoring, since we can add extra capacity to our existing power lines without having to build out new transmission.

Can you discuss how you see reconductoring playing a role in grid modernization and the energy transition? And how do you see the Office of Electricity moving this technology forward?

Response: Reconductoring can be a practical, cost-effective way to boost transmission capacity using existing infrastructure – a smart solution as energy demand grows. If confirmed, I will support work with industry and national labs to develop advanced conductors, assess where they can provide the greatest grid benefits, and help utilities deploy these technologies safely and efficiently as part of broader grid modernization efforts.

Questions for the Record from Senator Steve Daines

Question 1: Ms. Jereza, if confirmed to be the Assistant Secretary of Energy for the Office of Electricity, how will you work with Congress to advance and expand our energy production to strengthen the grid with reliable, affordable and resilient baseload power?

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Response: Expanding the production of reliable, affordable, and resilient power and securing its delivery is essential to meeting the needs of our growing economy and national security risks. Baseload power plays an important role in ensuring grid reliability. If confirmed, I will work closely with Congress to ensure the Office of Electricity supports technologies and infrastructure that strengthen the grid and maintain consistent baseload power.

Questions for the Record from Senator Maria Cantwell

Question 1: Pacific Northwest National Laboratory
Our National Laboratories play an indispensable role in America's innovation-driven economy. Pacific Northwest National Laboratory (PNNL) is a national leader in grid modernization, chemistry, and materials science and it plays a critical role in energy and national security.

The Grid Storage Launch Pad (GSL) at PNNL is specifically designed to engage industry to help verify and validate the new storage technologies which will be key contributors to the operational flexibility and reliability of the grid.

- If confirmed, how do you plan for the Department to maximize the value of national laboratory facilities in order to ensure reliability and security of the grid?
- How will you ensure that GSL is utilized to its full potential?

Response: I fully agree that the national labs, including PNNL, are essential to advancing innovation and ensuring grid reliability and security. If confirmed, I will work to ensure that DOE maximizes the impact of lab facilities by aligning research with real-world grid needs and strengthening collaboration with industry. The Grid Storage Launch Pad represents an important capacity for advancing energy storage technologies from materials to systems solutions, and I recognize its potential to contribute to grid modernization efforts and America's competitiveness.

Achieving energy security and affordability at a time of unprecedented electricity demand growth will require solutions that are developed at the regional scale. Platforms such as those housed at PNNL's Electricity Infrastructure Operations Center (EIOC) are specifically designed to leverage secure data and best-in-class tools to take on emerging challenges in grid reliability at the regional scale.

- If confirmed, how do you plan to support these efforts, and to foster solutions at the regional scale?

Response: Regional solutions are essential to addressing the evolving challenges of grid reliability and demand growth. If confirmed, I will support efforts to collaborate with labs, states, and utilities to ensure regional needs are reflected in DOE's grid strategies and that we continue to strengthen our technical capabilities at the regional level.

Supplying the large new electrical loads the grid is seeing will require new generation coupled with an increase in transmission capacity in already constrained corridors. There is work going on at National Laboratories on new materials that can improve the conductivity of metals for key

grid components that can expand capacity on existing transmission infrastructure. It's also very important that we secure key parts of this supply chain here in the U.S.

- If confirmed, how do you view the Office of Electricity's role in helping fill some of these key gaps in the supply chain, and supporting new manufacturing methods for key grid components?

Response: The Office of Electricity has an important role to play in advancing material research and helping translate those innovations into real-world manufacturing solutions. Supporting new methods to improve conductivity and expand grid capacity – especially using existing infrastructure – is a smart, strategic approach. If confirmed, I will work to ensure the Office continues to partner with the national labs and industry to identify supply chain gaps and strengthen domestic manufacturing of critical grid components.

Question 2: Smart Grid Grants
Recognizing the need to make long overdue investments in our nation's electricity grid, this Committee authored provisions in the 2021 Bipartisan Infrastructure Law to make the U.S. power grid more resilient, adaptive, and efficient. All with the intent of preventing blackouts, lowering prices, and allowing more needed generation to be built.

So far, DOE has invested more than $14 billion of the dollars Congress provided to boost the U.S. power grid. Funding that has been matched many times over by the private sector in all 50 states. Many states have received support through important programs like the Grid Resilience and Innovation Partnerships (or GRIP program) that I originally authored back in 2007.

These investments will have tangible benefits and cost savings of nearly $100 million for electricity ratepayers in my State.

- If confirmed, will you commit to seeing these important investments through to completion?
- And ensure that all remaining funding in these important grid-enhancing programs from the Bipartisan Infrastructure Law are deployed by the Department of Energy?

Response: The investments made through programs like GRIP are intended to improve the reliability, adaptability and efficiency of our grid. They reflect a strong partnership between the DOE, states and the private sector. If confirmed, I will support the continued role in administering these programs effectively, with the focus on transparency, performance and delivering lasting value to ratepayers and the grid.

Question 3: Transmission
Congress created DOE's Transmission Facilitation Program (TFP) in the Bipartisan Infrastructure Law to help build-out new interregional transmission lines across the country. The TFP is a revolving fund program to provide Federal support to overcome the financial hurdles in the development of large-scale new transmission lines and upgrading existing transmission.

- Do you think the bipartisan Transmission Facilitation Program has been a success?
- Will you commit to supporting it as a tool to facilitate investment in new transmission lines across the U.S. at no additional cost to taxpayers?

Response: I am aware that the Grid Deployment Office administers the TFP. I am not familiar with the status of specific programs at GDO in this issue area, but if confirmed, I will request a briefing so I can evaluate current and future investment opportunities and how best to work with you and the Committee on shared goals to overcome the financial hurdles in the development of large-scale new transmission lines and upgrading existing transmission.

Questions for the Record from Senator Catherine Cortez Masto

Question 1: Do you believe in an all-of-the-above resource approach to tackle growing energy demand? Why or why not?

Response: I believe the best way to meet growing energy demand is by supporting an affordable, reliable, secure mix of energy resources. Every region has different operating environments, and our grid must be flexible enough to integrate a range of technologies that address the specific needs of the region. The goal is a system that delivers consistent service while adapting to evolving needs and keeping costs manageable for consumers.

Question 2: If confirmed – how would you work to convene and coordinate with energy utilities on today's grid challenges, such as growing energy demand, cybersecurity, and supply chain or transmission needs?

Response: The Office of Electricity serves as a convening force – sharing data, supporting technical collaboration and aligning federal tools with utility needs. Whether it's addressing demand growth, enhancing cybersecurity, or resolving supply chain bottlenecks, strong public-private coordination is essential to ensuring a resilient and responsive grid.

Question 3: Would you be willing to provide technical support to help state, local, and Tribal governments analyze the potential impacts of growing energy demand and the potential impacts it poses on people and communities?

Response: I would support the Office of Electricity's continued role in providing technical assistance to state, local and tribal governments who have an important stake in the planning and implementation of energy solutions. The Department can offer data, modeling and expertise to help these stakeholders make informed decisions that protect residents and support sustainable growth.

Question 4: From your perspective, are there ways that the Department of Energy (DOE) and the Office of Electricity (OE) can better leverage existing assets, such as its 17 national labs and partnerships with external organizations, to tackle today's grid challenges?

Response: Yes, I believe there are continued opportunities to better leverage the expertise of the national labs and external partners. The labs offer cutting-edge capabilities in grid modeling, energy storage, cybersecurity and advanced materials. If confirmed, I will support efforts to

strengthen coordination between the Office of Electricity, the labs and external stakeholders so that we are delivering solutions that improve grid reliability and resilience.

Question 5: From your perspective, are there ways that the U.S. can better incorporate inter-regional planning and power transfer capabilities – in order to prevent against threats to the grid – such as cyber attacks and extreme weather?

Response: Better coordination across regions can help prevent cascading outages and ensure flexible responses to disruptions. If confirmed, I will support efforts to enhance regional modeling, improve situational awareness, and advance technologies to increase the grid's ability to adapt and recover quickly from both physical and cyber threats.

Questions for the Record from Senator John Hickenlooper

Question 1: As Assistant Secretary, what actions would you take to accelerate the buildout of new transmission, especially interstate and interregional transmission? How will you utilize the tools DOE already has via the Grid Deployment Office, Transmission Facilitation Program, and Loan Program Office to accelerate transmission growth?

Response: If confirmed, I would focus on using the Office of Electricity's core strengths in grid analysis, technical support and stakeholder engagement to inform transmission planning and deployment. While other DOE offices administer specific transmission programs, I believe there is value in close coordination to help ensure that investments are guided by sound data, regional needs and long-term grid reliability goals.

Question 2: The Bipartisan Infrastructure Law allocated $22B in funding to the Grid Deployment Office at DOE. Much of this funding is already allocated to modernize our grid through eight grant and loan programs, including $7B in Grid Resilience and Innovation Partnerships funding for projects in all 50 states.

As Assistant Secretary, will you ensure commitments of congressionally appropriated funds through grants and loans intended to advance grid reliability are administered and delivered to their intended recipients?

Response: If confirmed, I will ensure that all activities within the Office of Electricity are carried out in full compliance with law.

Questions for the Record from Senator Alex Padilla

Question 1: Extreme weather events have increased in both frequency and intensity, making power outages more and more common. Whether it be extreme heat in the summer or freezing temperatures in the winter, our nation's electric grid is frequently tested, and in many cases, it has not been able to weather the storm. Building a resilient and reliable grid is a bipartisan issue

that I have worked on with Senator Cornyn, but there is much work that needs to be done to keep the lights on for all Americans. Will you commit to prioritizing grid hardening and continuing the funding for grid hardening through the Grid Deployment Office?

Response: Grid resilience is essential to protecting communities from the impacts of extreme weather. If confirmed, I will prioritize efforts within the Office of Electricity that support grid reliability and hardening through data, technical assistance and coordination with other DOE offices. I am committed to ensuring that all actions are focused on strengthening the grid to meet today's challenges.

Question 2: How do you plan to use your position to support programs that will help harden the grid, like the Grid Resilience and Innovation Partnerships (GRIP) Program?

Response: If confirmed, I will use the Office of Electricity's expertise in grid modeling, reliability analysis and stakeholder engagement to support programs that strengthen grid resilience. While other DOE offices administer programs like GRIP, I see a key role for the Office in providing the data and technical insight needed to help inform and guide those efforts.

Question 3: Do you commit to working with Congress to ensure that Americans can keep their lights on in light of ongoing weather events that are getting harsher, more frequent, and more devastating?

Response: I commit to working with Congress to help ensure Americans have access to affordable, reliable and secure energy. If confirmed, I will focus using the Office of Electricity's capabilities to strengthen grid reliability and support efforts that protect communities from power disruptions.

Question 4: One of the issues all of us agree on is that our nation is going to need significantly more electricity in the coming years, and we are going to need more transmission capacity to transport those electrons to where we need them. To meet the projected demand, our grid will need solutions that can be implemented quickly, like reconductoring. Rewiring our existing transmission lines with state-of-the-art carbon fiber or aluminum alloy materials has the potential to deliver twice the amount of energy as conventional steel and aluminum transmission cables. And that's all without having to build brand new lines. How will you work to ensure DOE uses every tool in its tool box, including grid-enhancing technologies like reconductoring, to meet growing demand, and if confirmed will you commit to working with me on this issue?

Response: Technologies like reconductoring can be smart, efficient ways to increase grid capacity without the challenge of building new transmission lines. If confirmed, I will ensure the Office of Electricity continues to support the analysis, research and coordination needed to help utilities assess and deploy grid-enhancing solutions for maximum benefit. I welcome the opportunity to work with you on this issue and I share your goal of making the grid stronger and response to rising demand.