

August 15, 2024

The Honorable Cathy McMorris Rodgers Chairwoman House Committee on Energy and Commerce 2125 Rayburn House Office Building Washington, DC 20515

The Honorable Jeff Duncan Chairman Subcommittee on Energy, Climate, and Grid Security House Committee on Energy and Commerce 2125 Rayburn House Office Building Washington, DC 20515

Dear Chairwoman McMorris Rodgers and Chairman Duncan:

Thank you for holding the timely "Powering AI: Examining America's Energy and Technology Future" hearing; it was a privilege to testify before the House Energy and Commerce Committee.

Enclosed are my responses to the questions for the record.

Sincerely,

T. Hourfind Z

Tom Hassenboehler Chair, Advisory Council Electricity Customer Alliance



#### Questions for the Record Responses of Tom Hassenboehler Chair, Advisory Council, Electricity Customer Alliance

#### House Committee on Energy and Commerce, Subcommittee on Energy, Climate, and Grid Security

#### "Powering AI: Examining America's Energy and Technology Future"

August 15, 2024

#### The Honorable Jeff Duncan

#### 1. With grid authorities warning that reliability risks to American families are real and growing, I'm concerned about what happens as growing industries compete for the power that is already in short supply. How do regulators, utilities, policy makers assure that residential customers are not stuck with large costs, and more unreliable power?

Demand growth is resulting from a variety of factors, including the expansion of data centers, reshoring and resurgence of manufacturing, semiconductor fabrication, and transportation and building electrification. This growth should be viewed positively as it is a strong indicator of economic vitality and technological progress.

This growth is underpinned and dependent upon electric infrastructure. One does not exist or grow without the other. Building new industrial facilities and data centers often requires corresponding upgrades to electric infrastructure. The costs of these upgrades are allocated to customers based on cost-causation principles, ensuring that each customer pays for the upgrades that benefit them, along with a share of those that benefit all customers. Additionally, large load customers planning to build or expand in a utility service area are increasingly collaborating with utilities and grid operators early in the site selection process. This proactive engagement allows all parties to identify and address potential challenges and opportunities from the outset.

Federal, state, and local governments as well as utility partners, play a key role in promoting a vibrant, modern, competitive market for power generation and advanced energy services. Unlike when electric load was flat or declining, we need national urgency to modernize and responsibly build the electric infrastructure that can power this growth, spur economic development, and enhance national security.

2. After more than a decade of flat electricity demand, the United States is beginning to experience a significant increase in demand growth, especially as AI continues to develop. Even when demand was flat, federal permitting and related litigation took years, including for clean energy projects. The final NEPA permitting rule issued by CEQ defaults to the status quo that is making permitting worse and introduces more uncertainty for project developers. Judicial review remains the biggest wildcard in project development timelines yet this rule invites more



#### litigation to oppose project permits. What are the two most important judicial review reforms Congress needs to take to introduce more predictably to the process?

The U.S. faces a significant challenge with its strained electricity grid infrastructure and the slow pace of building new transmission and generation. This delay threatens to undermine our ability to drive an American economic renaissance. Additionally, electric power regulations, including the National Environmental Policy Act (NEPA), have become obstacles rather than enablers of efficient and reliable grid operation and modernization. We need a faster, more coherent approach to permitting and multi-state infrastructure development to fuel economic growth and compete effectively with rivals like China.

There is broad, bipartisan agreement that unrestricted judicial review delays the permitting and construction of energy projects and related infrastructure. As Congress considers additional permitting reform, it's crucial to include measures that provide more certainty for all types of energy projects without bypassing important protections for our environment and impacted communities.

- Congress should reduce the statute of limitations. Specifically, a claim arising under federal law seeking judicial review of a permit, license, or approval issued by a federal agency for an energy facility or energy storage device shall be barred unless the claim is filed within 180 days after publication of final agency actions. Earlier this year, the Supreme Court, see Corner Post v. Federal Reserve, ruled that plaintiffs can sue within six years of a regulation causing harm to them, not just within six years of the regulation's issuance. The practical effect of this ruling is that longstanding rules can now be challenged at any time. Congress, by reducing the statute of limitations, can provide increased certainty for projects thereby expediting the responsible development of electric infrastructure-infrastructure that is needed to power America's digital infrastructure-and reducing project costs associated with delays.
- Congress could also consider the following options:
  - Reduce standing, specifically limiting eligibility to those who raised concerns during the public comment period in the administrative process.
  - Eliminate judicial review for categorical exclusions designations.
  - Elevate litigation filed after final agency actions directly to the U.S. Court of Appeals.
  - Establish a technical court with jurisdiction over federal permitting decisions.
  - Setting deadlines on agency remand. For example, requiring courts to set deadlines for agency action when the judges send the decision back to the agency for further consideration.
  - Direct the Council on Environmental Quality or the Permitting Council to develop a public database of NEPA lawsuits. To promote increased transparency, the database could include information about timelines for both filing of initial claims and total length of the judicial review process.



#### The Honorable Rick W. Allen

# 1. I have bitcoin mining sites in my district who work with the local power providers to offer a large flexible load that can integrate with current energy systems. Can you explain why this model works for them and not all data center's AI uses?

Data centers power the products that industrial, commercial, and residential customers rely on to grow the economy.

These data centers are crucial to our daily lives, supporting vital public services such as emergency response systems, government operations, hospitals, and education platforms, so they must remain reliable and responsive twenty-four hours a day, seven days a week. Data centers are more than just technical facilities; they are essential to maintaining our digital economy and societal well-being, making them indispensable to the everyday lives of Americans.

Different types of data centers have varying energy needs. For instance, those supporting financial services, security operations, health care systems, and general business processes require consistent power. These operations are often time-sensitive, so any disruption or reduction in energy supply could cause significant delays, data loss, or even system failures.

Cryptocurrency mining, however, is the process by which networks of computers generate and release new currencies and verify new transactions and their load is deferrable and price sensitive. While some cryptocurrency mining sites can operate flexibly, that is not true for data centers.



#### The Honorable Kim Schrier

1. You mention in your testimony that the energy sector should be more transparent and collaborative moving forward. On the subject of this month's hearing, accurately forecasting load growth from data centers can be tricky. Data center operators often don't want to share data about their energy usage. And beyond that, it's a fast-growing industry. The often abrupt load demand from a data center connecting to the grid isn't as gradual and predictable as the trend of electrification.

a. In light of this uncertainty, how do we ensure power planners have the right tools to predict load growth and the nature of the load growth? For instance, understanding how easily data centers can ramp down demand when there is peak need elsewhere.

Electricity customers want to work with policymakers to develop solutions that better align economic and electric infrastructure development. For example, large load customers would like to collaborate with states, public utility commissions, and utilities to modernize and align economic readiness with utility load demand growth projections.

Similarly, large load customers want to work with Congress to advance a customer-centric reliability agenda, including conducting oversight, prioritizing permitting reforms, bolstering transmission system efficiencies and technologies, removing barriers to self-supply and flexible demand, and supporting regional grid resilience efforts.

b. Load growth from data centers could raise resource adequacy concerns in some areas of the grid where data centers dominate the share of a service territory's generation capacity. This is a concern for the public utility districts in Washington State where low power rates and land costs are attracting data center expansion. How do we protect ratepayer costs and ensure the grid remains reliable as we bring more data centers online?

Digital infrastructure is underpinned by electric infrastructure. One does not exist or grow without the other. Building new industrial facilities and data centers often requires corresponding upgrades to electric infrastructure. The costs of these upgrades are allocated to customers based on cost-causation principles, ensuring that each customer pays for the upgrades that benefit them, along with a share of those that benefit all customers. Additionally, large load customers planning to build or expand in a utility service area are increasingly collaborating with utilities and grid operators early in the site selection process. This proactive engagement allows all parties to identify and address potential challenges and opportunities from the outset.

Federal, state, and local governments as well as utility partners, play a key role in promoting a vibrant, modern, competitive market for power generation and advanced energy services.



Unlike when electric load was flat or declining, we need national urgency to modernize and responsibly build the electric infrastructure to spur economic development and enhance national security.

#### c. Forecasting for the future is tricky business-that was learned the hard way when Northwest power planners overestimated load growth in the 1980s, which resulted in the largest municipal bond default in US history. How can we avoid similar mistakes in the future and adequately match generation supply with load growth?

To better align generation supply with load growth, several strategies can be employed, including promoting regional integration and more interconnected grids.

- <u>Improved Forecasting Techniques</u>: As the capabilities of AI applications are rapidly progressing, there is an opportunity for <u>AI to make meaningful contributions to the energy sector</u>. For example, advances in data analytics, machine learning, and AI can significantly enhance the accuracy of load forecasting. These technologies enable more granular, real-time analysis of energy usage patterns, helping to better predict future demand. Additionally, incorporating diverse scenarios in planning, including the impacts of electrification, can help planners anticipate a range of possible futures rather than relying on a single forecast.
- <u>Regional Integration and More Interconnected Grids</u>: One of the most effective ways to match generation supply with load growth is through the promotion of regional integration and more interconnected grids, including the expansion of regional electricity markets. These markets allow for the sharing of resources across a broader geographic area, enhancing grid stability and reducing the need for redundant capacity. In regions with interconnected grids, energy can be transferred to where it's needed most, balancing supply and demand more efficiently.
- <u>Enhanced Transmission Planning</u>: Regional markets also benefit from improved transmission planning, which is essential for delivering power where it is needed most. By coordinating across states and regions, transmission upgrades can be optimized to support both current and future load growth, reducing the likelihood of bottlenecks that could constrain supply or lead to overbuilding in less-needed areas.
- <u>Stakeholder Collaboration</u>: Ongoing collaboration among utilities, regulators, and customers is key. This includes transparent processes that allow for public input and feedback, ensuring that all stakeholders are aligned on expectations for future load growth and infrastructure development.