

Written Testimony of Nelson Peeler

Duke Energy Corporation

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Chairman Latta, Ranking Member Castor, Chairman Guthrie, Ranking Member Pallone, and members of the Subcommittee, thank you for the opportunity to testify before you today.

I serve as Senior Vice President for Grid Strategy, Planning and Integration at Duke Energy –one of the largest investor-owned electric utilities in the United States, serving more than 8 million electric customers across the Midwest and Southeast. Duke Energy shares this Subcommittee’s focus on reliable, affordable energy to support economic growth and power America’s leadership in AI.

Duke Energy serves customers under a vertically integrated utility model in all of our states, except Ohio. This benefits our customers by allowing us to plan, build, and operate generation, transmission, and distribution resources in a coordinated and accountable manner under federal and state regulatory oversight. As a result, rates in all of our vertically-integrated states are below the national average. Alignment of long-term resource planning and strong state regulatory oversight ensure that infrastructure investments are prudent and deliver measurable customer value.

As this Committee recognizes, power demand is growing. I appreciate the opportunity to share how we’re serving that growth while remaining steadfast in our commitment to providing our customers and communities with reliable power at the lowest possible cost. Being a regulated utility comes with the privilege and responsibility to serve all customers—regardless of background or circumstance—and to do so in a way that is affordable, reliable, and rooted in the communities where we live and work.

Protecting Customers:

To do that, Duke Energy has a culture of continuous improvement, and we work to find better ways to do things every day for the benefit of our customers. We are enabled by our size and scale to deliver services to customers in a cost-effective manner, including through strong cost control and operational performance. Our commitment to maintaining a strong balance sheet, utilization of relevant tax incentives, financing cost recovery during construction of large generation projects, securitization of storm recovery expenditures and constructive and stable regulatory environments all lower costs to customers over time.

We are also proud to be leading in our contract provisions designed to protect existing customers. Under the oversight of our regulatory commissions we are implementing well-designed arrangements that avoid cost shifting to existing customers by ensuring new large-load customers:

- Pay their own full cost of delivering service to them
- Commit to long-term service arrangements that reduce stranded-asset risk; and
- Provide financial security mechanisms that protect existing customers.

These are a few examples of how we're meeting our foundational commitment to our customers and communities amid this load growth.

Respecting regional judgment is also critical as new large-load customers come online because the costs and benefits of growth should be managed locally. We're proud to energize a \$10 billion AWS data center campus under construction in Richmond County, North Carolina. These large new electricity customers, if integrated into the grid responsibly, present local economic development opportunities and can limit rate growth by spreading the fixed costs of the grid across a larger base of customers.

Meeting Demand:

To meet this growing demand we're seeing across our service territory, we are also investing over \$100 billion over the next five years to add 14 gigawatts of new capacity and associated network transmission to our system - enough energy to power 10.5 million homes. This includes:

- Building new generation resources, including natural gas, solar, and storage, with nearly 5 GW already under construction.
- Efficiency improvements to get another 1000 megawatts out of existing nuclear, natural gas and hydro assets; and
- Grid-enhancing technologies that improve efficiency, performance and resilience

We are also expanding and modernizing our transmission system through a combination of new lines, strategic upgrades, and deployment of grid-enhancing technologies such as advanced conductors. We coordinate closely with regional grid operators and state regulators to ensure projects are properly scoped, cost-effective, and aligned with system needs.

Let me be clear - transmission does not exist to meet abstract policy goals. It exists to transfer scale and distribute generation to serve all customers—reliably and affordably. In regulatory proceedings before state commissions—including the North Carolina Utilities Commission—I have consistently testified that integrated planning produces lower long-term system costs and produces stronger reliability outcomes than fragmented or siloed approaches. Federal policy should therefore avoid substituting national prescriptions for regional judgment. I’d also like to note that the National Association of Regulatory Utility Commissioners recently released a letter asking the Senate to reject any effort to circumvent the local decision-making process as it pertains to transmission siting. We fully support NARUC’s assessment.

Key Enablers:

There are a few key enablers I’d like to mention as you contemplate meeting demand while protecting ratepayers. Even with the right planning frameworks and customer protections in place, infrastructure cannot move forward efficiently if national environmental permitting processes are unpredictable or protracted. Duke Energy supports targeted, practical reforms that improve efficiency without weakening environmental protections, including clear timelines and efficient judicial review under NEPA, the Clean Water Act, and the Endangered Species Act.

Duke Energy was a leader in reforming and reducing backlogs in our generation interconnection queues, and we support practical interconnection queue reforms that prioritize financially committed, shovel ready generation projects.

Closing

Duke Energy is delivering the outcomes this Subcommittee is focused on — disciplined investing, prudent planning, and reliable operations to achieve speed-to-power. We look forward to continue working with Congress to advance policies that reinforce reliability, affordability, state-led solutions, and policies that reduce customer costs.

Thank you for the opportunity to testify and review the legislation before us today. I look forward to your questions.



Duke Energy is Unlocking More Grid Capacity with GETs

Leveraging GETs to accelerate integration of large loads and generation additions on the grid

Duke Energy is deploying Grid Enhancing Technologies (GETs) to maximize today’s transmission system with proven, near-term solutions. We already extensively use advanced conductors across Duke Energy Progress, Duke Energy Carolinas, and Duke Energy Florida, and our Standards and Engineering group has determined that this technology is reliable for use on our systems.

Enterprise-wide GETs evaluation—led by our Emerging Technology Office

Consistent with FERC requirements, Duke Energy Florida is already evaluating GETs in generator interconnection studies as potential alternatives to traditional network upgrades—and reporting the results. In May, Duke Energy Carolinas will begin the same evaluation. For each technology, we will document feasibility and quantified cost and schedule benefits.

Testing Emerging DLR Technologies: ~\$3M North Carolina Pilot

To maximize the capacity of the existing grid, we filed a request with the North Carolina Utilities Commission on March 16, 2026, to deploy four Dynamic Line Rating (DLR) technologies. We hope to receive Commission approval by mid-year. If approved, Duke Energy Carolinas and Duke Energy Progress would test four DLR technologies (including software-based and sonar-based approaches) across all four seasons on a range of transmission lines statewide.

More than doubling line capacity—reducing outages for 14,000+ customers within existing right-of-way

Duke Energy’s 40-mile Lee–Milburnie transmission line rebuild in North Carolina will more than double capacity (541 MVA to 1,195 MVA) and reduce outage frequency and interruptions for more than 14,000 customers—while staying within existing right-of-way. The project will save two years of right-of-way acquisition and ~\$25M in costs. The project uses advanced conductors, replacing 1979-era wooden H-frame structures with modern steel monopoles and high-temperature, low-sag (HTLS) conductors to reduce outages and customer interruptions across Eastern North Carolina. We are currently negotiating with the U.S. Department of Energy (DOE) for a \$57 million grant. With this award granted in August 2024, the DOE funding will reduce project costs by ~30% versus a comparable greenfield line and enable double-circuit capability to future-proof the system.

Near-term bridge for faster connection

GETs can serve as a near-term bridge until long-lead equipment—such as high-voltage power transformers—can be placed in service. For example, we have scoped and received cost estimates for an advanced power flow control device that could defer the need for a large transformer, creating time to engineer, procure, and construct the permanent solution. We have also implemented, and continue to identify, switchable reactors and remedial action schemes to manage constraints and avoid certain line rebuilds.