BASIN ELECTRIC POWER COOPERATIVE
A Touchstone Energy® Cooperative

Testimony of Mr. Todd Brickhouse
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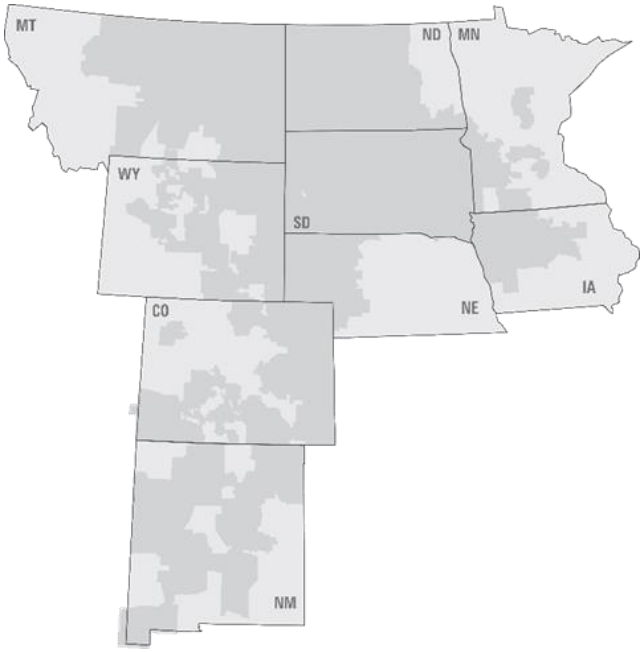
To the United States House of Representatives
Committee on Energy and Commerce
Subcommittee on Energy

"Scaling for Growth: Meeting the Demand for Reliable, Affordable Electricity"
Wednesday, March 5, 2025

Chairman Latta, Ranking Member Castor, and Members of the Committee, thank you for the opportunity to testify today. My name is Todd Brickhouse, and I serve as Chief Executive Officer and General Manager of Basin Electric Power Cooperative (Basin Electric). I am testifying today to provide my own insights as a co-op leader and to also represent the National Rural Electric Cooperative Association (NRECA).

Basin Electric is a not-for-profit generation and transmission (G&T) cooperative owned by 139 member cooperative systems across nine states serving 3 million member-owners. Its geographical footprint covers nearly 500,000 square miles – approximately 12% of the United States. It was founded by rural Americans with the objective of bringing reliable, affordable, and responsible energy to the people of the Great Plains. For more than 60 years, generation and transmission assets have been the engines of commerce for a service territory that feeds and fuels the world. Basin Electric owns and maintains over 2,600 miles of high-voltage transmission lines, 119 substations, and 224 telecommunication sites that deliver electricity to an integrated system. Basin Electric is the largest G&T in the United States for total sales (38.2 million megawatt-hour (MWh)), member sales (32.1 million MWh), and second largest in total assets ($8.2 billion).



NRECA is the national trade association representing nearly 900 rural electric cooperatives across the country including 64 G&T cooperatives and 832 distribution cooperatives. These not-for-profit entities are independently owned and governed by the people they serve. Electric co-ops provide power to 42 million Americans across 48 states, keeping the lights on across 56% of the American landscape – areas that are primarily residential and sparsely populated. These characteristics make it comparatively more expensive for electric co-ops to operate than the rest of the electric sector. This means that co-ops are constantly asked to do more with less, and they deliver.

American families and businesses expect the lights to stay on at a cost they can afford. Our nation's energy policies must meet this fundamental expectation. Basin Electric, NRECA, and America's electric cooperatives stand ready to work with Congress and the Trump Administration on smart energy policies that advance safe, reliable and affordable power by:

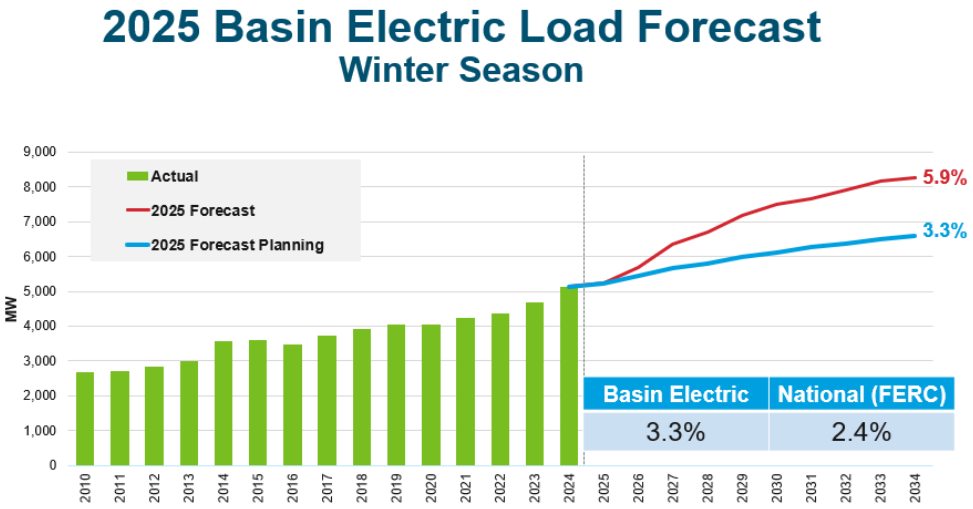
- Supporting a diverse supply of energy resources to meet skyrocketing electricity demands for American energy production and manufacturing – particularly in rural communities;
- Improving permitting processes and cutting costly and burdensome regulations to accelerate deployment and maintenance of electric infrastructure; and
- Ensuring federal programs and resources that support electric cooperative energy projects are used efficiently and effectively as we invest to meet the needs of our communities.

Basin Electric's Reliability Story

Reliable electricity is more than a convenience - it's essential for survival, especially in the harsh weather conditions of the Upper Great Plains. Basin Electric's members endure extreme weather conditions for more than half the year with temperatures reaching as low as -51º F and as high as 112º F.

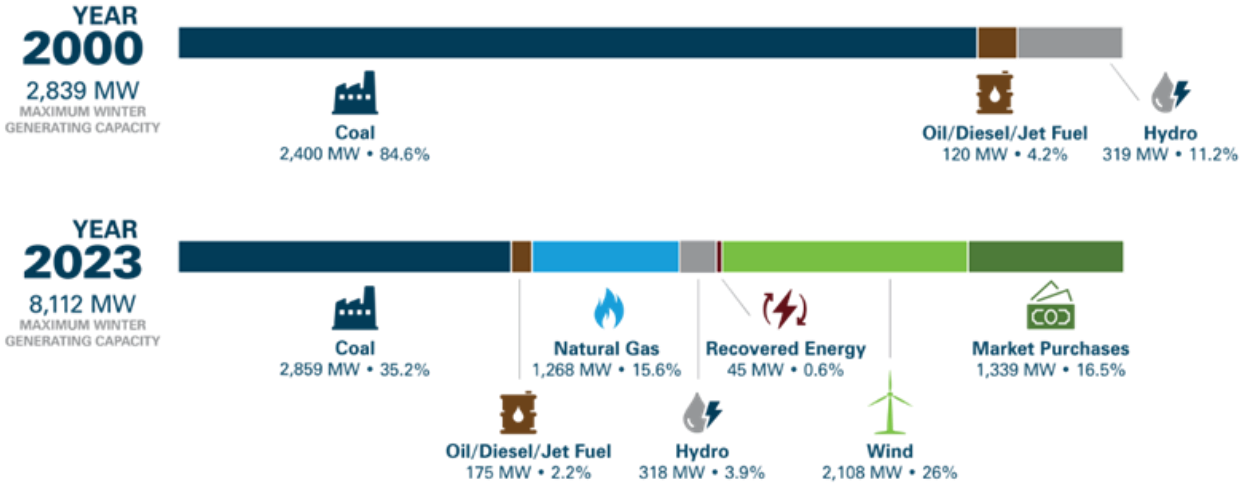
Rural areas across the Upper Great Plains attract industries, companies, and people due to the availability of land and resources, along with reliable and affordable electricity. As a result, growth within Basin Electric's service area is expanding across residential and commercial sectors. Key developments include increased demand from cryptocurrency and data center operations, the anticipated rise of ethanol-related carbon capture and sequestration projects, and ongoing economic development in western North Dakota.

Basin Electric's load growth over the next 10 years is projected to be 3.3%, excluding potential large loads including cryptocurrency and data centers, compared to the national average of roughly 2.4% , according to the Federal Energy Regulatory Commission. However, this percentage could nearly double (5.9%) if probable large load projects come to fruition, and even higher for loads that are in the early stages of discussion. The largest growth in Basin Electric's service territory is in the Bakken region—one of the largest oil and gas fields in the nation. Upper Missouri Power Cooperative, one of Basin Electric's largest members, serves this area and has witnessed record growth of over 800% in total megawatt hours and over seven-fold peak increases in the last 15 years (2009 to 2023). By serving demand in this area, Basin Electric is fostering energy independence for our nation.



Technology-based loads, such as cryptocurrency and data centers, can become operational in as little as three years - far faster than the seven years required to build the dispatchable generation infrastructure needed to support them. This is due to regulatory approvals, grid interconnection delays, and supply chain constraints.

Basin Electric takes a responsible approach through a diverse energy supply portfolio to meet member needs while adapting to the challenges of a rapidly changing energy landscape. Basin Electric's power supply resources include owned generation, long-term power purchase contracts, short-term agreements, and spot market energy purchases. Its generating resources are fueled by a diverse blend of natural gas, coal, wind, hydro, solar, recovered energy, and fuel oil. This balanced approach ensures reliable, affordable, and environmentally responsible energy for its members.



Basin Electric is a leader among G&Ts in building dispatchable generation for reliability and plans to invest $12 billion in capital expenditures - more than doubling its balance sheet of assets - over the next decade. Planned projects include:

Pioneer Generation Station Phase IV: Approximately 580 MW in new natural gas-fired generation from six reciprocating engines and two simple-cycle combustion turbines. Constructed at an existing generation site near Williston, North Dakota, it is strategically located near a reliable fuel supply and helps reduce flared natural gas in the Bakken. With a budget of approximately $800 million, all units are scheduled to begin commercial operation in 2025.

Bison Generation Station: Approximately 1,470 MW in new natural gas-fired generation planned from two combined-cycle power plants (roughly 700 MW each) in Williams County, North Dakota. One of the largest electric generation projects in the cooperative's history, this project has a budget of $4 billion and is projected to be completed in 2030.

Prairie Winds ND & Prairie Winds SD Repower Projects: Repowering planned for the existing 80 wind turbines at Prairie Winds ND & 108 wind turbines at Prairie Winds SD. The turbine blades and mechanical components will be replaced with more efficient components, with a budget of approximately $450 million. The business decision to repower these turbines was based largely on Congress' continued support of Production Tax Credits and, with continued PTCs, this project has an expected completion date of 2027.

Leland Olds Station-To-Tande Transmission (345-kV line): This transmission project, stretching roughly 160 miles and with a budget of approximately $400 million, was deemed necessary for system reliability by the Southwest Power Pool (SPP). Projected to be complete in 2026, this project will provide more reliable service to electric consumers.

Wheelock & Tande-To-Saskatchewan Transmission (230-kV line): This transmission project will stretch roughly 110 miles from existing Basin Electric substations to the Canadian border. With a budget of approximately $180 million, it is expected to be complete in 2027. This line was also deemed necessary to resolve SPP transmission capability deficiencies.

Basin Electric is one of the few utilities that supply electricity on both sides of the national East-West electric system separation. It is also a member of two independent regional transmission organizations (RTO): SPP and Midcontinent Independent System Operator. These RTOs provide flexibility and allow Basin Electric to access additional power resources across multi-state areas. For example, the SPP market provides access, control, and coordination for a mix of more than 800 generators, ensuring a diverse and cost-effective energy supply under varying conditions. Basin Electric supports efforts to ensure RTOs adequately compensate baseload power plants, helping cover the costs of maintaining these essential resources so they remain available when needed.

Cutting Regulatory Red Tape

As Basin Electric continues to meet the needs of its member-owners, particularly as energy demand grows, federal permitting and regulatory policies must be addressed to allow the cooperative to build and maintain the infrastructure critical to this mission.

NEPA Reform: Federal permits and other authorizations from various agencies are often necessary to construct and maintain electric generation and transmission infrastructure, especially when utilizing federal loans or financial assistance. For example, Basin Electric's Roundup-to-Kummer Ridge transmission project required two separate Environmental Assessments - one from the Bureau of Land Management and another from the Bureau of Indian Affairs. While both agencies report to the Secretary of the Interior, their National Environmental Policy Act (NEPA) processes do not align, and complying with both resulted in added time, expense, and red tape to a critical transmission project. In 2023, Congress made important updates to NEPA to require firm time limits for reviews, greater applicant involvement, and more efficient reviews for minimal-impact projects. It is critical that all federal agencies fully and faithfully implement these improvements. Congress should also curb lengthy, costly litigation that can cause unnecessary and often indefinite delays that hold up projects that communities badly need.

EPA's Power Plant Rule: The Environmental Protection Agency's (EPA) final Power Plant Rule, issued in May 2024, poses significant and immediate threats to Basin Electric and, more importantly, threatens the economic stability and quality of life of the millions of consumers across nine states who depend on us. This regulation could force the premature closure of always available power plants Basin Electric relies upon to maintain reliability and require us to make legally binding commitments to close power plants while the rule is still being litigated, resulting in irreversible economic harm.

It would also impede the ability to build new natural gas plants at a time of increasing electricity demand. For example, new gas-fired plants have to meet stringent emissions limits - effectively requiring 90% carbon capture, a technology that has not yet been commercially demonstrated - or limit their output of electricity. For example, a 100 MW plant may only be permitted to generate 40 MW of electricity if used as baseload or may run at 100 MW for only 40% of the calendar year. As Basin Electric is in the process of permitting a

new 1,470 MW combined cycle plant, the requirements and near-term uncertainties of this rule will impact whether it can operate a brand-new plant at full capacity when it is constructed and makes future planning very difficult.

Basin Electric has estimated that regulatory compliance with this rule may necessitate nearly $10 billion in incremental capital expenditures, in addition to approximately $12 billion needed to meet new load growth by 2035. These compliance costs would lead to an estimated 60% rate increase for Basin Electric members by 2035. Congress should support EPA as they immediately repeal the Power Plant Rule and provide compliance relief to electric cooperatives. Additionally, Congress should address EPA's New Source Review permitting requirements, which can be a significant obstacle for power plant operators proactively exploring projects to improve efficiency or reduce pollution at existing power plants.

Natural Gas Infrastructure: New natural gas capacity will be essential for meeting the nation's power supply needs and serving as a reliable backstop for intermittent generation sources. Basin Electric's natural gas needs are expected to triple from 2024 to 2030 (40mm MMBtus annually in 2024 and 120mm MMBtus annually in 2030). Basin Electric continues to use local natural resources to generate electricity for its members, leveraging abundant natural gas from the Bakken oil fields as a reliable fuel source.

Generation projects are strategically located near high-load growth areas to support system reliability, minimize transmission strain, and minimize capital investment required for new transmission infrastructure. By constructing generation closer to demand, Basin Electric also helps mitigate energy pricing spikes when transmission lines are out of service or at capacity. However, new natural gas pipelines are needed to transport the growing supply of fuel beyond the local region to areas where it can be effectively utilized. Strong coordination between the electric and gas sectors will also be critical as their interdependence grows to avoid significant and unacceptable service curtailments to consumers, particularly during winter months and extreme weather.

Effectively Using Infrastructure Tools

Electric cooperatives work together with federal agencies, particularly the Department of Energy (DOE), to access critical programs and tools to improve electric system resilience and reliability and keep electric rates affordable for member-owners. This includes numerous programs that support critical grid components, improve efficiencies, defend against cyber threats, provide hydropower, and advance carbon capture.

Transformers: Increasing energy demand and generation needs have created a bottleneck in procurement of critical grid components such as electric transformers, delaying much needed projects. Lead times for high-voltage transformers have increased from 18 months to 3-5 years and for high-voltage breakers from 6 months to 4-5 years. Some providers have stopped taking new orders completely, costs have increased significantly, and backlogs for American-produced transformers have made meeting Buy American requirements challenging. To help address these challenges, Congress should provide targeted federal financial support for critical grid component manufacturing here in America to expand production and reduce lead times. Basin Electric is grateful to many on this Committee who weighed in with DOE last year to ensure their updated distribution transformer energy conservation standards did not exacerbate this problem and instead allow use of the existing core material - grain oriented electrical steel - while supporting development of amorphous core transformers.

Advanced Conductoring: Advanced electrical conductors have higher strength and thermal capacity than traditional conductors which can reduce the size and quantity of grid structures required, in turn reducing cost to members and lessening impacts to landowners. Basin Electric has implemented carbon fiber

composite core – one type of advanced conductoring - on three recently energized transmission projects: the 230-kV, 26-mile Neset-North Shore line and the 345-kV, 15-mile PGS-Judson and 33-mile Roundup-Kummer Ridge lines. We also plan to evaluate the use of advanced conductors for future transmission projects. DOE has been a key partner for many electric cooperatives across the country in pursuing similar projects, particularly through the Grid Resilience and Innovation Partnerships program.

Cybersecurity: The electric sector faces a rapidly evolving threat landscape with cyber adversaries targeting our systems and infrastructure. Securing the grid against these threats is a top priority for Basin Electric and electric co-ops across the country. Basin Electric and other co-ops leverage DOE programs, like the Energy Threat Analysis Center, OT Defender, and Rural and Municipal Utility Cybersecurity Program, to strengthen our cybersecurity posture, improve information sharing and threat situational awareness, and build our cyber workforce.

Hydropower: The Federal Power Marketing Administrations (PMAs) within DOE, including the Western Area Power Administration (WAPA) who we partner with in Basin Electric's service area, protect reliability by managing federal power and transmission systems that provide affordable hydropower. The PMAs are funded through rates paid by utility customers like Basin Electric's member-owners - not U.S. taxpayers - which ensures local accountability and directs benefits to regional communities. It is critical for WAPA and other PMAs to retain the authority and staffing required to deliver always-available hydropower across their regions. Importantly, Congress should support rescinding the 2023 Memorandum of Understanding on the Lower Snake River Dams, which could devalue hydropower and set an unacceptable precedent of dam breaching for PMA hydropower nationwide.

Carbon Capture: For several years, Basin Electric has hosted the discovery of new technologies to capture and store carbon off its 405 MW Dry Fork Station coal plant near Gillette, Wyoming through the University of Wyoming School of Energy Resources-managed Wyoming Integrated Test Center (ITC) in partnership with NRECA and Tri-State Generation and Transmission Cooperative. DOE recently awarded the Wyoming ITC $17 million for test site improvements. Basin Electric has partnered with the University of Wyoming-led and DOE-funded CarbonSAFE project in Wyoming which will develop a 50-million-ton carbon dioxide (CO_2) storage hub. Dakota Gasification Company, a subsidiary of Basin Electric, is also home to the largest carbon sequestration project in the world - The Great Plains CO_2 Sequestration Project. The project went into service mid-February 2024 and by the end of the year a total of 1.38 million metric tons of CO_2 had been captured and sequestered. Basin Electric continues to monitor carbon capture technology readiness and costs, as well as regulatory developments, as we evaluate next steps on carbon capture projects.

In order to maintain affordability for our member-owners as we deploy needed infrastructure projects, electric co-ops also rely on a variety of federal financing mechanisms. Basin Electric supports full and proper funding for the U.S. Department of Agriculture (USDA) Rural Utilities Service, which provides financing to electric co-ops and benefits the federal government because co-ops consistently repay their loans with interest, generating a positive return.

Further, federal tax policy has played a critical role in Basin Electric's ability to provide affordable electricity to consumers. We are grateful to those members here who have supported energy tax credits – including the Investment and Production Tax Credits and the 45Q program – and urge Congress to continue support for these important incentives. Since 2022, co-ops have also gained access to an "elective pay" (or direct pay) option so rural Americans can take advantage of energy incentives available to other utilities. Congress should protect access to elective pay energy tax credits that will be critical to co-op infrastructure projects.

Co-ops across the country, including Basin Electric, also participate in USDA's New Empowering Rural America (New ERA) program, a voluntary grant and loan program designed specifically for electric co-ops as they deploy new nuclear, carbon capture, batteries, renewables, and other technologies that make sense for local communities. In addition to our planned baseload and peaking generation, Basin Electric's New ERA awards include funding for both new and repowered wind, solar, and hydropower generation as well as battery storage. We are in an era of energy expansion, not just a transition, and every available electron will be needed to meet growing demands of our membership and power rural America. Congress should support USDA and co-ops as they deploy these projects and oppose any cuts to the New ERA program.

Conclusion

Our nation is at an energy crossroads. Your leadership in shaping our nation's energy policy is more critical than ever. Basin Electric stands ready to support the efforts by Congress, the Administration, the new National Energy Dominance Council, and all federal agencies with jurisdiction over energy in their efforts to enhance affordability and reliability for American consumers.