

Testimony of Mike Casper
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“Farm Bill 2023: Rural Development and Energy”
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Introduction

Chairwoman Stabenow, Ranking Member Boozman, and members of the Committee, thank you for the opportunity to testify today. On behalf of Jo-Carroll Energy’s consumer-members, we are grateful for the opportunity to share our story and we thank the Committee for their interest in the issues facing rural communities.

My name is Mike Casper and I am the President and Chief Executive Officer of Jo-Carroll Energy (JCE) headquartered in Elizabeth, Illinois. JCE is a not-for-profit distribution electric cooperative. We serve approximately 26,500 electric and natural gas accounts in Jo Daviess, Carroll, Whiteside and Henry counties. In addition, our Sand Prairie high-performance fiber internet service includes over 3,000 subscribers. As a cooperative, we are proud to be member-owned and controlled, returning any profits back to our member-owners. Around the country, rural electric cooperatives serve 92% of America’s persistent poverty counties.

JCE’s story is similar to many other electric cooperatives across the country. As urban areas were electrifying during the early 1900s, rural American communities were being left behind. Rural pioneers all across the country began to organize as not-for-profits to bring electricity and a more prosperous way of life to their communities. Organized in 1939, Jo-Carroll Energy’s first 20 miles of electric lines were energized on May 3, 1940, bringing service to 60 members.

Today, cooperatives like JCE are still the primary providers of electricity in rural Illinois areas. Located in rural northwestern Illinois, we serve small businesses and industries, farms, residences, places of worship, cabins, and recreational homes. JCE is dedicated to providing our members with safe, reliable electric service and in more recent years fiber internet service at the lowest practical price.

Around the country, electric cooperatives deliver power to 1 in 8 Americans in 48 states covering 56 percent of the nation’s landmass. The rural communities we are owned by and serve are the same rural communities that benefit from a strong Farm Bill. The Farm Bill is the single consistent, comprehensive bill Congress passes every five years to update federal government policy for rural America. Electric cooperatives thank this Committee for the work you all have done over the years to better develop the federal tools rural stakeholders use to work towards our shared goal of a more prosperous rural America.

As the Committee considers the upcoming Farm Bill, there are three key challenges for electric cooperatives I respectfully request you consider as you work to reauthorize USDA programs:

- Electric cooperatives are responding to consumer-member feedback for an evolving generation mix.
- Co-ops' ability to maintain reliable, dispatchable baseload power capacity is a critical part of a lower carbon future.
- USDA is a necessary partner in our mission to build and provide benefits to our rural communities beyond electrification.

Responding to Consumer-Member Feedback

Electric cooperatives rely on a diverse energy mix to ensure a reliable, affordable, and responsible electricity supply that meets the demands of our consumer-members. Unlike the rest of the electric sector, electric co-ops sell the majority of their power to households rather than businesses. Keeping rates down for rural families at the end of the line is especially important for JCE.

Renewable Energy

As a distribution cooperative, Jo-Carroll Energy ensures delivery of electricity to our consumer-members and manages the infrastructure needed to safely do so. JCE is a member-owner of Dairyland Power Cooperative (Dairyland) and Prairie Power, Inc., two forward-thinking generation and transmission cooperatives (G&Ts) that are responsible for power generation or acquisition for JCE families and businesses. Dairyland recently completed a large wind power purchase agreement to power 16,000 homes in addition to their current renewable portfolio that makes up over 20% of their generation mix. Prairie Power is similarly investing in renewable energy through solar farm ownership and power purchase agreements for solar and wind energy.

To supplement power purchased from our G&Ts, we have developed three separate community solar arrays to generate power. Development of community solar arrays came as a result of feedback we received from our consumer-members in member surveys. All of our community solar arrays operate on a subscription model as a voluntary option for those looking for environmentally sustainable options.

Our South View Solar Farm community solar array was made possible by a \$89,125 grant through the Rural Energy for America Program (REAP). Through USDA, REAP provides loans and grants to develop renewable energy systems and implement energy efficiency measures to benefit rural economies. REAP is helping us increase renewable energy generation to supplement power we buy from our G&Ts and respond to feedback we have received from our consumer-members down the line.

Our investments in renewable energy must be accompanied by timely siting and permitting for additional transmission lines in order to deliver power we promised to our consumer-members. Unfortunately, our ability to expand renewable energy generation is threatened by impediments and delays to the development of the transmission infrastructure necessary to connect generation assets to our distribution cooperatives. For example, the Cardinal-Hickory Creek Transmission Line Project, co-owned by Dairyland, American Transmission Co. and ITC Midwest, is an essential 345-kV interconnection to our region's renewable energy developments. The new

transmission line will reduce energy costs, improve the reliability and flexibility of the region's transmission system, and support the interconnection of renewable generation in the Upper Midwest but has encountered costly delays and permitting challenges associated with approximately 1% of the 102-mile route.

Currently, approximately 115 renewable generation projects totaling nearly 17 gigawatts are depending upon the construction of the Cardinal-Hickory Creek transmission line. These projects will generate enough electricity to power millions of homes with clean energy.

Energy Efficiency

One of Jo-Carroll Energy's core values is environmental stewardship. JCE feels strongly that energy conservation starts with improving the efficiency of homes and businesses. The best kWh is the one not used. Through our Energy Detective program, we offer free energy assessments and low price energy audits that are reimbursed if energy efficiency recommendations are implemented. This program was initiated and expanded by two different grants through REAP. This helps lower energy bills for our members while reducing energy use. Using another grant from REAP, JCE installed a ground source heat pump system along with other energy efficiency measures at co-op headquarters. This project saves an estimated \$18,000 in energy costs and 174,000 kWh per year.

In addition to REAP, the Rural Energy Savings Program (RESP) is another Farm Bill program for rural energy providers to finance energy efficiency upgrades in rural homes using zero-interest loans from USDA. This program was created by the 2014 Farm Bill and is a mutually beneficial program used to lower energy bills for rural Americans, reduce energy use, and smartly leverage USDA resources. As a zero-interest loan program, this program yields strong return on federal investment as each dollar of appropriations for RESP facilitates about \$20 worth of zero-interest loans for energy efficiency projects. Participation in RESP can be a large administrative undertaking for a cooperative. As the Committee considers reauthorization of this program, consideration of a grant component like similar programs at USDA, would help ease the burden on electric cooperatives.

Tools for a Lower Carbon Future

A resilient and reliable electric grid that affordably keeps the lights on is critical to rural economies in the United States. Diversity of electric generation is essential to our commitment to a lower carbon future. As cooperatives look to the future, we are exploring all options, technologies, and ideas to work to meet the evolving energy needs of the local communities we serve.

As rural America electric load has grown, electric co-ops substantially lowered their carbon emissions by 17% between 2005 and 2021, the equivalent of taking nearly 7 million cars off the road. Included in the Inflation Reduction Act (IRA) is a new USDA program to assist electric cooperatives to further reduce emissions. Under the program, USDA is authorized to disburse grants, loans, loan guarantees, or other financial assistance to cooperatives to purchase or build new clean energy systems. Importantly, this program includes eligibility for renewable energy,

storage, carbon capture, nuclear, and generation and transmission system efficiency improvements. Additionally, the IRA established a forgivable loan program open to all clean energy developers, including electric cooperatives. These programs will help co-ops meet the future energy needs of the communities they serve while providing important flexibilities to maintain reliable, affordable power in rural America.

Maintaining Reliability in a Lower Carbon Future

As urban areas began to electrify in the early 1900s, rural areas were being left behind. Rural community members recognized that the economics of the electricity business simply did not work in their favor. Taking matters into their own hands and with help from the federal government, communities formed electric cooperatives, like JCE, and obtained low-cost loans from the Rural Electrification Administration (REA). What was then the REA is now the Rural Utilities Service (RUS) and it's as relevant now as it was back then.

Mission to Provide Affordable, Reliable Power to Rural America

Today, many electric cooperatives rely on RUS Electric Program loans for basic investments like poles and wires, and to invest in co-op infrastructure to make systems smarter and more efficient. The RUS Electric Program provides certainty that the federal government remains committed to the basic electricity needs in rural America. While JCE mostly relies on non-government lenders, knowing RUS exists as a trusted lender for all generation options, including baseload capacity and renewable energy sources, is critically important. Dairyland, JCE's primary wholesale power provider, continues to rely on funding through the RUS Electric Program to provide us stable rates that we pass onto our consumer-members.

As we look to the future, intermittent resources such as wind and solar must continue to be complemented and supported by always-available baseload resources. This is not about prioritizing one energy source over another. Our focus is on building out and retaining the diverse tools needed to keep the lights on for rural American families and businesses. System reliability depends on the ability to use intermittent sources like wind and solar with firm, flexible, and dispatchable electric capacity.

Opportunities to Improve the Electric Loan Program

Through the RUS Electric Program, electric cooperatives across the country obtain financing for important electrical infrastructure projects of all sizes. Unfortunately, RUS loan approvals for projects are in some instances needlessly lengthened by environmental reviews and decision delays. Uncertain environmental review timelines and challenging construction timeframes due to weather and other factors can lead to cost increases and significant project delays for RUS borrowers. To meet our nation's growing electricity needs, electric cooperatives would benefit greatly from reforms to the federal permitting process that maintain robust environmental protections while ensuring determinations are made in a timely manner.

Benefits Beyond Electrification

Rural electric cooperatives were built by and belong to the communities they serve. For JCE and our 100 plus employees, who understand the needs of our local communities, we aim to be more than the electric utility in northwestern Illinois. Through our own cooperative network, JCE has developed a scholarship program, organized blood drives, and distributed assistance to local food pantries. With USDA as a key partner, JCE can access federal tools that allow electric cooperatives to address unmet community needs, like ensuring access to highspeed internet for our rural families and businesses that allow them to be at a fair advantage with their urban counterparts.

Electric Cooperatives Expanding Rural Broadband

Sand Prairie, the broadband business division of JCE, was created in 2008 to enable communications with its supervisory control and data acquisition (SCADA) system and its advanced metering infrastructure (AMI), which operates in parallel with JCE's gas and electric divisions. In addition to allowing for communication with these advanced monitoring and control systems, the broadband backbone deployed by Sand Prairie also allows JCE to offer high-speed internet access to rural customers, largely in unserved and underserved areas of western Illinois. Deploying this fiber communications infrastructure network has allowed JCE to expand cooperative-to-member communications well beyond metering information, and now encompasses smart grid, smart home, distributed energy resources, and other technology-based solutions, along with fiber-to-the-home broadband access, that have lasting benefits to the cooperative and surrounding communities.

USDA tools, such as the Electric Loan Program as well as ReConnect and Community Connect, have allowed JCE and Sand Prairie to accelerate the expansion of our fiber footprint and improve the quality of life in our corner of rural America. However, as we look to continue leveraging USDA resources to meet the needs of our communities and co-op members, it's important to keep in mind that we are not building a network for one purpose anymore. By keeping broadband and electric programs siloed, we face time-consuming challenges and cumbersome burdens that hinder our ability to build robust rural networks, especially as we expand applications for smart grid, distributed energy resources, and other dual-purpose applications.

Dairyland also identified a growing and critical need for reliable, affordable, high-speed broadband internet service in rural areas of its four-state service territory (WI, MN, IA, and IL). To support its growing operational needs and provide fiber capacity for middle mile infrastructure, Dairyland established a Core Fiber Network Plan in 2019, which will install approximately 1,200 miles of optical ground wire (OPGW) fiber connectivity to Dairyland's generation facilities, transmission substations, and service centers. Approximately \$20 million has been invested to date in the buildout and retrofitting of 458 miles of OPGW. For last mile providers and those that may access the middle mile network in the future, it provides the opportunity to reach additional unserved and underserved areas and create redundancy, reliability, and affordability for their systems.

Access to new regional middle mile infrastructure will allow JCE to greatly improve overall reliability to its last mile network by interconnecting to larger, geographically diverse fiber rings. This will allow JCE's last mile network to provide the level of service required to attract and support all types of last mile connections, especially businesses and those with critical uptime requirements.

Access to new regional middle mile infrastructure will also allow JCE to have access to high-capacity circuits needed to interconnect a growing bandwidth demand, specifically the mobile cellular sector. JCE believes that a robust rural communications service area should include both future-proof Fiber-to-the-Premise and access to reliable mobile cellular coverage. Major cell carriers are now requesting up to 10 Gbps lit ethernet circuits at each tower that are only possible with interconnections to major data centers. Middle mile projects in Dairyland's Fiber Network Plan will help make this possible for rural providers like JCE.

Rural Economic Development Loans and Grants

Through USDA's Rural Economic Development Loan and Grant Program (REDL&G), JCE works with local community groups to create jobs in rural areas. The program allows for rural electric cooperatives to identify needs in their communities and work effectively as the lender with USDA capital. For instance, JCE worked with a local small business, Neumiller Farms, to make needed updates to and expand a potato handling facility creating 47 rural jobs. Partnering with USDA, JCE loaned Neumiller Farms capital for a larger, improved facility allowing for a more streamlined handling process.

Conclusion

In closing, I would like to thank the Chair and Ranking Member for allowing me to testify to the Committee today. I hope it was helpful to hear JCE's perspective. 80 years ago, our community banded together to bring electric service to our homes and 80 years later we're laying fiber to bring highspeed internet. While we do not know what the next 80 years will hold, we know our mission will not change. At JCE, we are a member-owned cooperative that strives to deliver utility solutions to our members and communities – safely, efficiently and responsibly. As the Committee considers the upcoming Farm Bill, JCE and rest of our nation's electric cooperatives look forward to working together in our shared goal of powering and improving the lives of rural Americans. I'm happy to answer any questions you may have.