WRITTEN TESTIMONY OF
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BEFORE THE UNITED STATES SENATE AGRICULTURE COMMITTEE
RURAL DEVELOPMENT AND ENERGY SUBCOMMITTEE
HEARING ON: RENEWABLE ENERGY – GROWTH AND OPPORTUNITIES FOR OUR RURAL ECONOMIES

JUNE 22, 2021

Chairwoman Smith, Ranking Member Ernst, and distinguished Members of the Senate Agriculture Committee, on behalf of Central Iowa Power Cooperative (CIPCO), thank you for the opportunity to testify on renewable energy efforts in Iowa and the important role they play in delivering diverse, reliable power.

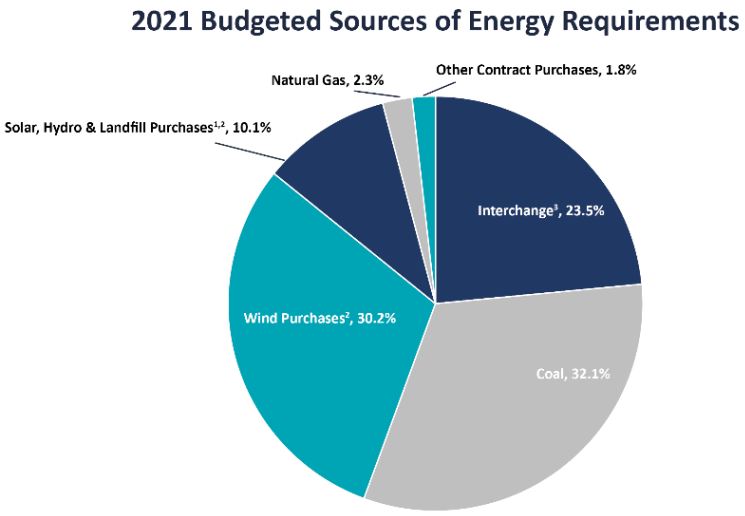
CIPCO is a generation and transmission (G&T) electric cooperative in its 75th year of operation, providing electricity to member cooperative systems across the state. As a not-for-profit energy provider, CIPCO is committed to judiciously maintaining and growing an electrical system that supplies safe, reliable, and affordable energy on a 24/7 basis in an ever-changing electric industry. CIPCO is dedicated to efficient, cost-effective operations and has proudly returned over $112,000,000 in patronage to our member distribution systems since its inception. This commitment to cost-effective measures has created system energy rates that are steady, and even declining, over the last 10 years in an industry often fraught with rising and unstable costs.

CIPCO is an all power requirements supplier for its 13 member cooperative distribution systems, which includes an association of 15 municipal systems across the state. Together, the CIPCO system serves a population of nearly 300,000 rural and urban residents and more than 13,000 small and large commercial and industrial accounts. CIPCO's territory stretches 300 miles diagonally across Iowa, adjoining 12 of Iowa's 17 cities with populations greater than 25,000 and serving 58 Iowa counties on 1,925 miles of transmission lines delivering power to over 300 member system substation delivery points through owned and contracted facilities. When looking at this data, it's important to remember that Iowans receive electric service from three types of utilities: investor-owned, municipals, and cooperatives. While the costs of poles and wires remains the same, those costs are spread amongst an average of 56 customers per mile for municipals, 28 customers for investor-owned utilities, and only 3.5 customers per mile for cooperatives. As such, CIPCO's mission of providing safe, reliable, and affordable power while maintaining stable rates is a testament to the strength of the electric cooperative system.

As the G&T, CIPCO provides generated power to member distribution systems through owned assets and long-term Power Purchase Agreements (PPAs) – contracts with third party companies who own and operate the generation. CIPCO's current diverse portfolio consists of wind, solar, hydro, landfill gas, natural gas, coal, and purchases on the market. CIPCO previously provided

nuclear baseload power from the Duane Arnold Energy Center, however that source of power ended when the facility ceased operations in 2020.

CIPCO's sources of energy have undergone significant change in the last decade and will continue doing so for years to come. In 2010, CIPCO served the power needs of its members primarily through owned assets of coal at 58.4% and nuclear at 32.1%. Wind[1] was just entering the mix as a PPA at 4.1%. As CIPCO continues diversifying generation assets, coal usage significantly dropped in 2020 to 20.6%, while wind[1] grew to 31.7% and solar[1,2] appeared at less than one percent. During its final year, nuclear represented 19.5% of the mix, a smaller number than originally projected as the plant came offline early due to damage from the August derecho storm. While CIPCO typically buys a small portion of power from the energy market to augment owned and contracted resources, the early decommissioning of the nuclear plant in 2020 led to market purchases[3] of nearly 23%.



CIPCO's portfolio continues to evolve in 2021. Annual projections for the portfolio include wind[1] at over 30% and the combination of solar[1,2], hydro and landfill gas increases to greater than 10%. System reliability depends upon the ability to back up intermittent wind and solar with firm, flexible, and dispatchable capacity, like coal and natural gas. This is particularly critical when the wind is not blowing, and the sun is not shining.

Looking forward, CIPCO projects a generation portfolio in 2030 that is over 60% wind and solar[1,2], as these resources continue to provide the lowest cost energy for CIPCO in the foreseeable future. This includes the 100 MW Wapello Solar LLC PPA that became operational in early 2021, the 100 MW Coggon Solar LLC PPA scheduled for completion in 2022, the 54 MW Independence Wind PPA scheduled for operation late this year and additional generation resources in the planning stage. However, as noted above, intermittent resources like wind and solar cannot support the system's power needs alone. A diverse portfolio that ensures baseload generation is necessary to meet the 24/7 power demands of Iowans and businesses in CIPCO's service territory, and for consumers across the country. For this reason, CIPCO recently invested $85 million in our existing Summit Lake generation plant, adding efficient reciprocating-natural gas engines that serve peak loads. The repowering of Summit Lake complements the addition of intermittent wind and solar resources in the CIPCO system while maintaining reliability across the system. This balance of intermittent resources and firm, flexible and dispatchable capacity is critical for reliability and grid stability.

As electric cooperatives across the nation work to meet the energy needs of their local communities, the ongoing flexibility of our systems to calibrate power supply with unique local factors is critical to our business. It is important for policymakers to understand that one size does not fit all. Diversity of power-generating sources helps electric cooperatives maintain affordable rates and reliable supply in the face of a rapidly changing energy market. As the policy discussion continues about the adoption of renewable energy resources and growth opportunities for rural economies, these conversations must recognize the need for a transition to be accomplished over a realistic time period while accounting for regional differences in energy resource availability.

Within the context of renewable energy and growth opportunities for rural economies, it's important for policymakers to note that the current federal tax-credit structure prevents not-for-profit electric cooperatives like CIPCO from taking advantage of the tax benefit to directly build and own wind and solar generation assets. This requires cooperatives to work with third-party providers on long-term contracts to bring this energy onto the system to benefit our member systems and those they serve at the end of the line. This unworkable incentive structure impedes the ability of cooperatives to adopt new technologies in a cost-effective way. Congress should recognize this and make the existing tax credits direct-pay eligible for electric cooperatives. With this legislative change, G&Ts like CIPCO would be better positioned to reduce the cost of wind and solar resources by building and owning them directly for the benefit of our member systems. Direct-pay incentives would level the playing field between investor-owned utilities and cooperatives, ensuring that all consumers have access to a diverse power supply mix.

Most relevant to this committee, is our interest in providing the Rural Utility Service (RUS) with the ability to allow electric cooperatives across the country to refinance the interest on existing RUS loans. While CIPCO's excellent credit rating provides access to a number of financing resources, the RUS remains a key partner for long-term success. CIPCO has partnered with RUS on project financing from the beginning with an RUS loan of $3 million in 1947. Over the last 30 years, RUS has supported CIPCO with more than $500 million in secured, long-term financing, particularly for transmission projects. Recently, low interest rates have allowed utilities with commercial loans to refinance to lower interest rates, providing needed savings, particularly during the pandemic. Unfortunately, this is not a current option with RUS loans. However, passage of the Flexible Financing for Rural America Act would allow electric cooperatives across the country to refinance the interest on existing RUS loans. According to CIPCO's national trade association, the National Rural Electric Cooperative Association (NRECA), electric cooperatives would save over $10 billion in interest across the life of the loans[4]. For CIPCO, that number is more than $21 million in savings. As a not-for-profit electric utility, the interest savings would assist with rate stability, support additional infrastructure improvements and growth, and ultimately could be returned to members as additional patronage. CIPCO values the ongoing relationship with RUS, and an efficient system that understands and values the changing utility industry is important for continued success. Investments we make today will continue grid viability and system success into the future.

Additionally, relevant to the jurisdiction of this Committee, USDA's rural development and broadband programs are essential to the communities we serve. CIPCO takes pride in the assistance offered to our communities supporting growth and economic success. The Rural Economic Development Loan and Grant (REDL&G) program is a key asset for growth in rural Iowa. In 2020, CIPCO secured 10 loans and grants to support business growth and expansion throughout the service territory, amounting to $8.7 million in investment. CIPCO is honored to have had these projects selected for the program. Additionally, the grant and loan programs provided to enhance broadband capabilities across rural areas are greatly appreciated. Nearly 200 fellow electric cooperatives in 39 states are engaged in providing broadband to their consumers where it makes sense. Affordable, reliable high-speed internet is critical for education, rural business support, economic development and growth in rural area. However, fiber optic capabilities are also necessary to support enhancements and reliability of a 21st century electrical grid. The Committee's continued support of programs for both of these purposes is essential.

A number of issues impact the electric industry today and the Committee's commitment to ensuring programs are available to support the safety, reliability and cost-effectiveness of the system is greatly appreciated. Thank you, again, for conducting this hearing to discuss the diversity necessary for today's and tomorrow's electric generation resources.

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[1] CIPCO invests in the development of renewable energy projects in several ways. We operate six small-scale solar arrays near communities we serve and retain the renewable energy credits associated with each. We also contract with energy producers for the electricity output from wind, hydro, and methane gas from a landfill (converted into electricity). CIPCO cannot claim these resources as renewable within our supply portfolio as we have either sold to third parties or do not receive the renewable attributes associated with the electricity produced from these renewable power sources. By selling these attributes (RECs), we not only support other organizations in meeting their renewable energy goals, we also generate revenue to help us lower our wholesale power rate to our 12 Member-owner distribution cooperatives and 15 municipalities.

[2] CIPCO's purchase power agreement for Wapello Solar LLC locks in stable, long-term pricing and avoids the risks associated with rising fuel costs. Renewable energy credits (RECs) are not included in this agreement.

[3] A percentage of market purchases exist within the portfolio to meet additional supply needs not covered by existing contracts or CIPCO-produced generation. Weather volatility and unplanned operational events at power plants may also impact market purchases.

[4] Author Erin Kelly, Author Media Relations, Author Victoria A. Rocha, Author Cathy Cash, Author NRECA, Author Derrill Holly, Author Michael W. Kahn, & Author Steven Johnson. (2019, December 17). *Tax and Financing*. America's Electric Cooperatives. https://www.electric.coop/issues-and-policy/tax-and-financing.