

Statement of Ms. Courtney A. Dentlinger

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Subcommittee Hearing on Crypto-Asset Environmental Transparency

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Good afternoon, Chairman Markey, Ranking Member Ricketts and members of the Subcommittee. Thank you for allowing me the opportunity to testify today.

My name is Courtney Dentlinger. I am the Vice President of Customer Service and External Affairs & Chief Customer Officer for Nebraska Public Power District (NPPD). Prior to joining NPPD five years ago, I had the privilege to serve as Director of Economic Development for the State of Nebraska, in then-Governor Ricketts' cabinet.

I would like to share a little bit about NPPD and the territory we serve to set the stage for my remarks regarding our experience with cryptocurrency mining.

Nebraska's electric utility industry is unique and a legacy of Senator George Norris. We are the only 100% public power state in the nation. All retail electric service in Nebraska is provided by municipal electric systems, public power districts and electric cooperatives. Public power districts like NPPD are public corporations and political subdivisions of the State of Nebraska. We are not-for-profit. Our rates are set to deliver reliable, affordable, sustainable energy and related services to our customers. We do not have shareholders; rather, our customers are in essence our owners. Approximately 2,000 employees operate NPPD's integrated electric utility system including generation, transmission, and distribution facilities.

Control of NPPD and its operation is vested in an 11-member Board of Directors, popularly elected from within NPPD's chartered territory which encompasses all or parts of 84 of the state's 93 counties, spanning 500 miles from east to west.

The majority of NPPD's retail and wholesale service territory is rural. The largest city we serve has fewer than 35,000 people and much of the area receiving our power

supply is farm and ranch land where crops and livestock are grown to help feed America and the world, along with significant ag-processing and other manufacturing.

Nebraska Public Power District's 3,200 megawatts of diverse generation, located across the state, includes nuclear, coal, gas, wind, hydro and solar. This diverse generation mix helps NPPD meet customer expectations to be reliable, affordable, sustainable, and resilient. NPPD and our fellow Nebraska utilities are proud to offer some of the lowest rates and highest reliability among the 50 states. According to the Energy Information Administration's preliminary 2021 data, Nebraska's average revenue per kilowatt hour was ranked 9th lowest in the Nation. NPPD serves its Nebraska customers with a resource mix that is 62% carbon free. In 2021, our Board has set a goal of achieving net zero carbon emissions by 2050, while emphasizing the need to maintain reliability and affordability. In fact, we're actively pursuing multiple technologies as we look to the future of carbon-free energy. NPPD is leading Nebraska's efforts, along with partners in Iowa and Missouri, to pursue a federal hydrogen hub designation. We're currently conducting a feasibility study to determine potential locations for advanced nuclear reactors as those technologies become commercially viable and affordable in the future. And we're working with the U.S. Department of Energy and several different companies on carbon capture and sequestration opportunities.

In Nebraska, like in most other states, electric utilities regardless of whether they are public power, cooperatives or investor owned have an exclusive retail service area which includes an obligation to serve all customers under just, fair, and reasonable rates. We cannot refuse customers based on the business they may operate. We generally must serve all electrical loads agreeing to meet applicable terms of service. And just as every generation source has its benefits and challenges, so does each type of customer load. All electric utility customers have unique characteristics as to how they impact the various aspects of electric infrastructure. Historically, steady electric demand from a customer resulted in the most efficient use of electric infrastructure and the lowest cost per unit of electricity for those customers. Today, the variability of generation from an increasing amount of renewables, as well as other considerations, is allowing opportunities for new tools to be implemented to manage generation and loads, including innovative rate designs and demand response.

I will now turn to NPPD's experience with crypto-mining loads.

In Nebraska over 55 percent of the state's population of approximately 2 million residents is concentrated in just three counties in eastern Nebraska. In our predominately non-metro and rural service areas, diversification of businesses and economic growth is critical as these areas continue to see population declines. In fact, local leaders have been receptive to the crypto mining facilities as they have seen the potential for significant economic benefits for their communities. For instance, an economic impact study performed for a crypto-mining project in Nebraska showed over a \$65 million economic

impact on Nebraska's economy; 193 jobs generated and supported; and \$5.5 million in state and local taxes and transfer payments generated. State sales tax, gross revenue tax, and related transfer payments made to the community generated significant revenues for local and state government. In rural areas, these economic benefits can be significant.

The Nebraska projects we have seen have an average wage of \$60,000 per job. The types of jobs include site managers/administrators, data center technicians, and security personnel (compared to NPPD's service territory 2020 median household income of \$55,000). In addition, there is an increased demand for specialized hardware and software, which can help create more jobs in the tech sector.

Unlike traditional hyperscale data centers, which often need to locate in metro areas due to workforce availability and the availability of redundant fiber, these types of operations are more suited for rural areas because of smaller workforce requirements and less-stringent redundant fiber requirements. Although the number of jobs is smaller, these good-paying opportunities can have a significant impact in a rural area.

The tax revenues for the state and local political subdivisions can also be significant. One crypto mining facility in Nebraska paid \$1.6 million in state sales tax in a 12-month timeframe on the energy it consumed. The local government received \$3.8 million in that same time period.

In Kearney, Nebraska, the community has been able to make significant enhancements to its municipal airport to attract commercial air service to the community due to increased tax revenues, which is important not only from a quality-of-life perspective, but also for recruiting additional economic development prospects.

In our experience, projects have not demanded incentives to come into our communities. In addition, because these types of projects can be more flexible with respect to siting requirements, the developers are often seeking locations where there is existing excess or unused transmission capacity.

These loads have very high-capacity factors, running nearly 24 hours a day, 7 days a week, which is a benefit for load-serving entities. Moreover, while crypto mining requires a lot of electricity, the load can be very flexible. They often seek interruptible rates and can quickly drop loads, which has proven to be helpful during local storm damage related events, and even larger-scale grid events, where either transmission or generation is insufficient to serve load across a regional transmission organization's footprint. NPPD has developed new interruptible rate structures that allow for this demand response that benefits the customer, the utility, and the regional transmission organization.

Again, I appreciate the opportunity to share our experience with you today, and I look forward to any questions you may have.