The Nebraska Public Power District (District) appreciates the opportunity to provide input and comment on the Nebraska Public Service Commission’s (Commission) LB 388 Order Opening Docket, Application Number C-5272. While the District does not seek to be an Internet Service Provider, we understand the absolute necessity of reliable, affordable, high-speed Internet access in rural Nebraska. We also believe public/private partnerships can make a substantial contribution to closing the urban/rural digital divide. The docket and questions posed demonstrate the Commission’s commitment to addressing issues and challenges associated with rural broadband funding efforts. The challenge is significant, but we also believe this is an opportunity to ensure that available funding is prioritized and provided in an effective, fair, and equitable way. Our specific comments are provided below, arranged in the same order as the docket text:

**Project Areas**

**Geographic Area Identification** – The District strongly supports the use of polygon and point shapefiles to identify both the broadband deployment area boundary and all serviceable locations within that area. In addition, in keeping with the District’s philosophy that Nebraska needs broadband “over every acre”, applicants should be required to attest that they are committed to serving all locations within the applications polygon shapefile. Failing to do so will deny Nebraska’s growing precision agriculture industry the connectivity it needs to flourish.

**Speed Data** – The District supports requiring applicants to provide results from actual speed tests throughout a proposed project’s deployment area that have been conducted by an independent third party. The number of tests conducted and their distribution throughout the proposed deployment area should be such that they can be considered a “statistically significant” sample. Actual recent tests are preferred over reliance on compiled FCC maps or Form 477 submittals, as we believe they provide neither an accurate nor comprehensive view of the actual service being delivered to consumers.

**Non-Contiguous Geographical Areas** – The District believes that allowing applicants to file grant applications for project areas that are not contiguous is not compatible with the goal of providing rural Nebraska with broadband “over every acre” and should not be allowed. An application should contain a single contiguous geographic area, and the Commission may want to consider setting minimum sizes for these areas. County and township boundaries as well as local telephone exchange and rural public power district-chartered territories are some of the options that could be considered.

**Unserved and Underserved Areas** – The District recommends the Commission accept single applications that contain a mixture of both unserved and underserved areas. The opportunity to accomplish both goals of improved service to underserved areas and the deployment of service to unserved areas with a single project should be not ignored. In addition, we see no reason why these types of applications should be relegated to the lower priority tier. If the Commission is concerned about grant funds not being used to deploy service to unserved areas, determining the ratio of
underserved to unserved customers in a project area may allow the Commission to dictate how funds are to be targeted in project areas.

**Digital Inclusion Plan** – The District strongly supports the disqualification of any digital inclusion plans where the carrier would impose data caps on consumer usage.

**Matching Funds**

The District believes Universal Service Funds or other grants should not be allowed as matching funds. Matching funds should demonstrate an applicant’s real commitment to building infrastructure required to serve an area. We believe there have been instances where grant funds have been used in a “defensive strategy” to buyout or otherwise prevent other providers from serving customers in a footprint, resulting in continued underservice or complete lack of service. This should not be allowed in the future.

The District supports the idea of a scoring advantage for projects that can exceed 50% match. Applicants that have as much “skin in the game” as possible should be encouraged and supported. The weighting table proposed seems reasonable.

The District also believes that in-kind contributions as a match should be allowed, but only to the extent the Commission can readily verify the fair market value of those contributions. While the value of existing rights-of-way certainly impacts the cost of a project, we believe placing a fair market value on those rights that all stakeholders could agree on would be an exercise in futility. Existing inventory should be valued at the amount an applicant has it on their books, subject to market verification if the Commission deems necessary.

**Eligibility and Priority Determination**

With all due respect to the FCC and the Form 477 process, the District continues to believe the representations of actual service derived from this effort are deeply flawed and should not be relied upon in determining consumers’ actual end-use experience. We believe the Commission should require a recent (within 6 months) survey using actual testing done over a proposed project’s entire deployment area. The number of tests (sample size) and their distribution over the proposed deployment area should produce a “statistically significant” analysis that can be used to help determine priority areas. Testing should also include an indication of what speed the consumer has subscribed to. For those tests where the consumer is subscribing to at least 100/20 Mbps up/down, 100% of the tests should reflect that speed for the area to be considered served.

One test methodology the District is currently employing has been developed by the University of Nebraska – Kearney (UNK) and is entitled *Rural Measures*. We believe using an independent third party such as UNK will produce more accurate and reliable results that all stakeholders can rely upon to make grant funding and deployment decisions. For more information on *Rural Measures*, please see their web site – [https://ruralmeasures.com](https://ruralmeasures.com).

**Scoring and Criteria**

The District agrees with the Commission’s intent to use a weighted scoring system to award available funds. However, because we believe in the benefit of public/private partnerships and the cost advantage of jointly designing and building smart grid and broadband networks simultaneously, we
believe the PSC should score such partnerships higher than private only projects. We’d also request you address the following concerns in your final order:

- How “scalability” is determined and who will make that determination.
- Process and details around an applicant being “released” from their commitment.

The District supports an objective, transparent weighting process for selecting grant recipients. We support attachment B overall, but would encourage the Commission to consider the advantages of public/private partnerships, especially the advantage associated with public entities being able to leverage “patient” capital (lower cost with longer time horizons) for the long-lived infrastructure (fiber, wireless antenna support poles etc.). Perhaps this could be included in the financial capability assessment.

**Financial Capability** – The District categorizes broadband network elements into two distinct classes based on longevity. Long-lived assets include fiberoptic cable, poles, etc. that have expected lifespans of 30+ years. Electronics used to light fiberoptic cable or power a fix-wireless network are considered to have considerably shorter lifespans (3-5 years). One public/private business model the District is evaluating places the investment responsibility for the long-lived assets with the public entity, with the private partner taking the responsibility shorter-lived assets as well as the responsibility for delivering the actual broadband service.

The District certainly agrees that recipients should be held accountable for appropriate use of the funds received. Audits and reviews may be the only way to ensure accountability. However, we’d encourage the process to be as simple and non-burdensome to the recipients as possible. Recipients need to utilize their human resources to build and operate networks, not to monitor and comply with copious amounts of documentation and reports.

**Technical Capability** – The District supports the Commission’s proposal to require information from each applicant detailing prior experience in providing broadband services. We would advise caution in regard to the granularity of additional required information. While we feel it is completely reasonable to ask an applicant about the materials to be used in the project such as the type of fiber, electronics, a description of installation methods, etc., requiring an applicant to provide this information on a section-by-section or lateral-by-lateral basis would be onerous.

**Eligible Telecom Carrier Status** – The District does not necessarily oppose giving more weight to a provider who was an ETC prior to the application deadline. However, we recommend consideration be given to other ways new ETC applicants or providers have delivered reliable network services in non-broadband applications like control networks, Internet of Things etc.

**Rates** – While the District supports providing consumers with rates and tiers (we recommend 3) that are competitive with those paid in urban areas, we would caution against being overly prescriptive in what is required. For comparison purposes, we would recommend utilizing the applicant’s rate for 100/100 Mbps up/down tier of service, as we believe that will be the predominate choice for most consumers. Contracts should not be required, and usage caps should be prohibited. Again, one of the focus areas of UNK’s *Rural Measures* program has been the difference between rural and urban rates, and the Commission may want to consider their research in addressing this issue.
**Minimum Broadband Speeds** - The District strongly supports a 100 Mbps symmetrical speed threshold for fiberoptic cable installations. However, the District also recommends the Commission set a separate speed threshold of 50 Mbps symmetrical for fixed wireless (FWA) installations. The broadband feasibility studies the District has completed so-far indicate that 100% fiber to the home (FTTH) networks are not going to be financially feasible without large subsidies. While many of today’s FWA installations fall far short of delivering even 50 Mbps down, the District believes properly designed FWA networks based on comprehensive propagation studies and purpose-built towers serviced by fiberoptic cable will be able to reliably deliver 50 Mbps symmetrical speeds until such time as demand supports extension of FTTH. Asymmetrical service speeds do not recognize or support precision agriculture, telemedicine, or the need for content contribution in education and other virtual business applications. Proposed projects that can deliver our cited thresholds from day one should be scored higher than those that are “scalable”. While it appears the predominate technologies for supplying broadband “over every acre” appear to be fiberoptic cable, terrestrial fixed wireless and low Earth orbiting satellite (perhaps), the District would recommend the Commission not weight one technology differently than another. We believe requiring and enforcing post-deployment testing to be a better guarantor of performance as opposed to complicated and subjective assessments of various technical solutions. Applicants will pay closer attention to ensuring what they build can pass the tests.

**Project Match** – Regarding the additional scoring for the number of households served, we are concerned about how this metric supports the broadband “over every acre” concept we have embraced. Closing the rural digital divide is supposed to be the goal, but if projects that serve more customers due to higher customer density are favored, then providers are going to continue to focus on towns - not farms, ranches and fields. Broadband “over every acre” would fail. Focusing exclusively on the number of households also fails to capture the evolving broadband needs of “Internet of Things” devices and LoRaWan networks. The rural broadband network of the future will be much more than service simply to farmsteads, and we need to be building that network today.

**Challenge Process**

While the District understands the Commission’s desire to avoid unnecessary overbuild, we recommend the Commission work to ensure good faith proposals are not derailed by threatened 3rd party incumbents or competitors. Funds should not be able to be used for defensive strategies that end up protecting incumbents or potential future competitors. The District concurs that challengers should be required to submit test data, not just claims, and that all testing be done by an independent third party.

**Distribution of Support**

The District supports the phased distribution of funds, and tying distribution to project milestone completion makes sense, but we caution that the desire for a speedy deployment does not compromise sound engineering and construction techniques. We support the idea that in some cases, extensions might be warranted.

**Post-Award Testing**

The District believes post-award testing should be required and should be carried out by an independent third party and be on an unannounced basis to avoid provider pre-conditioning. Testing should include
an initial customer survey to determine what speeds they are subscribing to such as is done in the UNK Rural Measures process.

Post-Award Repayment

While the District supports the concept of requiring grant repayment for failed efforts, we would rather see a thorough pre-grant qualification process that minimizes the potential for failure and the expensive litigation that usually accompanies it.

The District appreciates the opportunity to provide these comments and looks forward to working with the Commission to further the goal of broadband “over every acre”.

Respectfully submitted on behalf of Nebraska Public Power District by:

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