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State of Nebraska
Power Review Board
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By: [Signature]
Title: Executive Director

NEBRASKA POWER REVIEW BOARD

IN THE MATTER OF THE APPLICATION OF)

Nebraska Public Power District)

PO Box 499)

Columbus, NE 68602-0499)

Amended Application for
authority to construct
microwave facilities
or extensions of existing
facilities.

Application No. PRB-4063-M
Application File No.

Comes now the Nebraska Public Power District (NPPD) whose principal place of business is Columbus, Nebraska, and hereby applies to the Nebraska Power Review Board for an order authorizing it to construct microwave facilities or extensions of existing facilities in Holt County, Nebraska as hereinafter set forth.

(1) Purpose of proposed construction and description of related facilities:

Installation of microwave equipment to provide communications for the operation and control of NPPD's electric system. This construction shall provide supervisory control, protective relaying, data, 2-way radio, and voice communications for the operation of NPPD facilities to NPPD's O'Neill office. NPPD will install and maintain the microwave equipment required at the WAPA Orchard tower site and the NPPD O'Neill tower.

(2) Description of proposed microwave facilities:

- a. Microwave path miles 18.4
- b. Number of microwave sections One
- c. Frequency band 11 Ghz
- d. Initial channel loading
 - 1. Four high security, high reliability (99.999%), high speed (low latency) point-to-point, mirrored bit relaying circuits (backup).
 - 2. Five RTU SCADA circuits.
 - 3. One low substation operational network backhaul connection. One statewide 2-way radio system tower network connection.
 - 4. One NPPD Office WAN connection / Network connections for microwave radios, DC power, and other telecommunications equipment.
- e. Five-year projected channel loading Two new expanded NPPD Networks, relaying circuits, and RTU SCADA circuits are expected in five years.

(3) Attached hereto and herewith made a part of this application and designated as Exhibit "A" is a map showing the location and/or route of the proposed microwave system and related facilities, and any other information deemed necessary or useful in the consideration of this application.

(4) Construction of the proposed microwave system or extension thereof, and/or related facilities is currently estimated to start on or about Fall 2025, and to be completed on or about Winter 2025/2026.

(5) The estimated cost of construction and five years of service by NPPD is \$ 95,715.14. Cost of construction and ten years of service is \$101,715.14.

(6) The known owners of the communication facilities and any other persons or organizations whom the applicant believes to be interested in the application are:

Northeast Nebraska Telephone Company (NNTC) – NNTC provided two options and quotes. Each of the options has the same endpoints but a different five-year cost of construction/providing ongoing service and different buildout distance/signal attenuation. The difference in the two NNTC proposals is based on the amount of new construction NNTC would be required to build out and the difference in monthly service costs. Option one, with a construction cost and cost of five years of service being \$126,200.00 requires less new construction, but the overall path for NPPD is at, or approaching, the 80km distance limitation at which service quality is diminished. Option two, with a construction cost and cost of five years of service being \$363,200.00, has a higher initial expense as NNTC would be required to install a longer run of new fiber optic cable. This new path is estimated to be 40km in length but has the same endpoints (O'Neill Tower and Orchard Tower). An additional internal cost to NPPD of \$6,625.52 would be added to the quotes for NPPD support during construction, thus resulting in proposed costs of \$132,825.52 (option one) and \$369,825.52 (option two). Each NNTC option has a higher combined construction cost plus five years of service expense than if NPPD were to construct the microwave facilities and own them for five years.

3 Rivers Communications - does not service this area

Cogent Communications - does not service this area

Great Plains Communications (GPC) – GPC provided a quote for a five-year cost of construction/providing ongoing service for a total of \$141,000. An additional internal cost to NPPD of \$6,625.52 would also be added to the quote for NPPD support during construction. Total five-year estimated cost of \$147,625.52, which exceeds the amount that NPPD estimates.

K&M Telephone Company – no response.

Centurylink/Lumen – no response.

Verizon/Frontier/Citizens – does not service this area.

Three River Telephone Company – declined to provide a proposal.

Stealth Broadband – Stealth Broadband provided a quote for a five-year cost of construction/providing ongoing service for a total of \$82,380. An additional internal cost to NPPD of \$6,625.52 would be added to the quote for NPPD support during construction. Total estimated five-year cost of \$89,005.52. However, Stealth Broadband's ten-year service cost is \$122,760, plus

NPPD internal cost for a total of \$129,385.52 compared to \$101,715.14 for NPPD. To be precise, after year six the NPPD owned system would then be the lower cost solution going forward.

OPTK (formerly NebraskaLink) – no response.

Nextlink – no response.

Rise Broadband/JAB Wireless, Inc. – no response.

Verizon Wireless – Cellular based connectivity is not sufficient for relaying services.

AT&T – Cellular based connectivity is not sufficient for relaying services.

Viaero Wireless – Cellular based connectivity is not sufficient for relaying services.

T-Mobile – Cellular based connectivity is not sufficient for relaying services.

(7) Safety Standards: The design of the microwave towers and related facilities as set out in the foregoing conforms with the standards set forth for safety by the FCC and the FAA.

(8) Remarks: The installation of this new microwave will provide the system needed to meet NPPD operational needs. This system will also serve as a backup path for critical substation relaying systems that require high speed circuits to ensure breakers protect the lines during a fault condition.

(9) (a) Applicant is not receiving the required quality of service and will not within a reasonable time receive the required quality of service from the regulated carrier or carriers involved, or (b) the regulated carriers will not provide the required quality of service by the same or alternate methods at the same or lower cost to the Applicant, and (c) such construction is in the public interest.

Dated October 24, 2025.

NEBRASKA PUBLIC POWER DISTRICT
PO Box 499, Columbus, NE 68602-0499

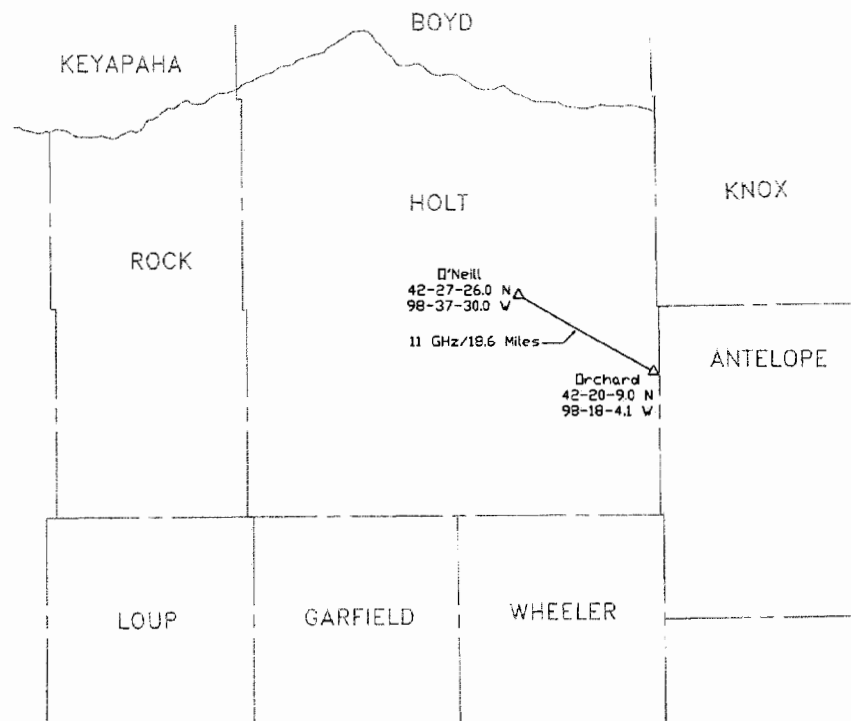


Signature of Authorized Agent

By: Chris B. Elliott

Print name of Authorized Agent

Title: Assistant General Counsel



Amended PRB-4063-M

PROPOSED ORCHARD/O'NEILL 11 GHZ
MICROWAVE POWER REVIEW BOARD
SUBMITTAL



Nebraska Public Power District

EXHIBIT "A"