

**STATE OF NEBRASKA
NEBRASKA POWER REVIEW BOARD**

IN THE MATTER OF THE APPLICATION)	PRB-3979
OF THE NEBRASKA PUBLIC POWER DISTRICT,)	
HEADQUARTERED IN COLUMBUS, NEBRASKA,)	
REQUESTING AUTHORIZATION TO CONSTRUCT)	ORDER
APPROXIMATELY 9 MILES OF 115 KILOVOLT)	
TRANSMISSION LINE IN BUFFALO COUNTY,)	
NEBRASKA)	

On the 27th day of January, 2023, the above-captioned matter came on for consideration before the Nebraska Power Review Board (the Board). The Board, being fully advised in the premises, and upon reviewing said application and the evidence presented to the Board at said hearing, HEREBY FINDS AS FOLLOWS (references to testimony are designated by a “T” followed by the transcript page, then the lines upon which the testimony appears, while references to exhibits are designated by “Exh.”):

FINDINGS OF FACT

1. That on November 22, 2022, the Nebraska Public Power District (NPPD), headquartered in Columbus, Nebraska, filed an application with the Board requesting authorization to construct approximately nine (9) miles of 115 kilovolt (kV) transmission line in Buffalo County, Nebraska. The application was designated “PRB-3979.”
2. The proposed 115 kV line would run from NPPD’s existing Kearney TechOne 115 kV substation to NPPD’s existing Kearney Tower 115 kV substation. (Exh. 1, pages 1 and 4-5; Exh. 7; T16:6-10). The corridor in which the line would be

located is in the northern part of the City of Kearney and in the area just north of the City. The corridor outer boundaries are just south of 56th Street to just north of 78th Street, and just west of 30th Avenue to just east of Antelope Avenue. (Exh. 1, pages 4-5, (Exhibit A to Exhibit 1); Exh. 7). If approved, construction would commence on or about November 1, 2024, with an expected completion date of May 30, 2025. (Exhibit 1, page 3; T16:12-13).

3. That those power suppliers and entities, other than the applicant, that the Board deemed to be potentially affected by or interested in PRB-3979 were the Dawson Public Power District and the City of Kearney. Written notice of the filing of the application and the hearing date was provided to these potentially interested parties and NPPD via certified U.S. mail. (Exh. 2).

4. Notice of the filing and the opportunity to file a Petition for Intervention to participate in the proceeding was provided to the general public by publication of a notice in the *Kearney Hub* newspaper on Wednesday, December 14, 2022. (Exhs. 3 and 4). The publication is a legal newspaper with circulation in the general area where the proposed transmission line would be located.

5. That no Petitions to Intervene or Protests were filed with the Board concerning this application. Dawson Public Power District filed a consent and waiver form with the Board consenting to approval of the application and waiving a hearing in the matter. (Exh. 6; T44:14-16).

6. That pursuant to the requirement set out in Neb. Rev. Stat. § 37-807(3), the Board consulted with the Nebraska Game and Parks Commission (the

Commission) to ensure that the Board utilizes its authority in furtherance of the purposes of the Nebraska Nongame and Endangered Species Act, and to ensure that approval of the proposed transmission line would not jeopardize the continued existence of any endangered or threatened species or result in the destruction or modification of habitat of such species which is determined by the Commission to be critical. The Commission provided a letter to the Board dated November 21, 2022, stating that the proposed project corridor is within the range of the state-listed endangered Interior least tern (*Sternula antillarum athalassos*), and the state and federally listed threatened Northern long-eared bat (*Myotis septentrionalis*) and Piping plover (*Charadrius melodus*), and the state and federally listed endangered Whooping crane (*Grus americana*). (Exh. 5, page 2).

7. The Commission determined that the project area is unlikely to contain suitable habitat for Interior least terns and Piping plovers. Due to the project's proximity to the Platte River, it is likely to have suitable habitat for Whooping cranes. Also, the project is likely to involve removal of trees which are considered suitable roosting areas for Northern long-eared bats. The Commission informed the Board that Commission staff met with representatives of HDR, Inc., the entity responsible for construction of the project for NPPD. NPPD, through HDR, committed to certain conservation and mitigation measures in order to avoid adverse impacts to endangered or threatened species. (Exh. 5, page 2).

8. NPPD agreed that construction activities will not occur during the Whooping crane spring and fall migration periods (March 6 to April 29 and

October 9 to November 15, respectively). Should construction activities be required to occur in rural areas during the migration periods, NPPD will conduct a site survey each day prior to commencement of construction activities. If one or more Whooping cranes are found to be present in the project area (or if a Whooping crane were to land in the project area during construction), NPPD's contractor will stop work within one-half mile of the Whooping crane's location and follow an agreed-upon protocol to determine when work can commence or resume. NPPD agreed removal of woody vegetation and trees will not occur during the Northern long-eared bat maternity roosting period (June 1 to July 31). (Exh. 5, page 2).

9. Following the close of the hearing, the Commission sent a letter dated March 9, 2023, to the Board re-evaluating the consultation for the project. The letter explained that the federal and state listing of the Northern long-eared bats was changing from threatened to endangered, effective March 31, 2023. Due to this, if NPPD or its contractor remove any woody vegetation or trees it must be done between November 1 to March 31. The findings in the November 21, 2022, letter regarding the other species was not changed. The March 9 letter explained that NPPD has agreed to abide by the updated conservation measures determined necessary by the Commission. (Exh. 12). In order to place the March 9, 2023, letter into evidence in the hearing record, the hearing officer consulted with NPPD and proposed to reopen the record for the purpose of admitting the letter as Exhibit

12. NPPD's counsel notified the hearing officer that NPPD does not object to that procedure.

10. Based on NPPD's commitments, the Commission determined that the proposed project "May Affect but is Not Likely to Adversely Affect" state-listed threatened or endangered species and did not object to the approval of the project. (Exh. 5, page 2; Exh. 12, page 2).

11. The project area in which the proposed facilities will be located is shown on Exhibit 1, pages 4 and 5, and on Exhibit 7. On both exhibits the project area is outlined by a dark red line designated as the "routing corridor" in both of the maps' legends. Although NPPD has designated a preferred and alternate routes for the line, a final decision on the route that will be followed has not yet been determined. (T16:23 to 17:5; Exh. 7). NPPD could chose a final location for the line anywhere within the project corridor identified by the dark red line on Exhibits 1, pages 4-5 and on Exhibit 7. (T42:14 to 43:8).

12. When selecting a route for a transmission line such as the one in PRB-3979, NPPD follows a public involvement process. After NPPD selects several alternative routes it holds an open house where affected landowners, public officials and members of the general public are invited to provide input. NPPD mails a notice of the open house to all registered owners of land adjoining the proposed routes of the line. In this case, the first open house was held in September 2022. NPPD narrows the alternative routes for the line based on the public input. NPPD then selects a preferred and various alternate routes and holds a second open house to invite landowners, public officials and the

general public to provide additional input. The second open house on the line involved in PRB-3979 was held in November 2022. (T33:10-24; T37:4 to 38:8; 40:3 to 41:20).

NPPD also holds meetings with public officials, government agencies and other electric utilities regarding the line. NPPD met with officials from the City of Kearney and the Buffalo County Commissioners, the U.S. Fish and Wildlife Service, the Nebraska Game and Parks Commission, and the Nebraska State Historical Society (T38:9 to 40:2).

NPPD will then select a final route and hold a public hearing on the line in March 2023. After a 30-day period to receive comments, NPPD will designate the final route for the line. (T41:23 to 42:12). The Board does not approve the exact siting or pathway for the line. Instead, NPPD must demonstrate that the line meets the Board's statutory approval criteria for a final route located anywhere inside the project corridor.

13. Although the preferred route is not the most direct, the preferred route avoids placing the line near where more homes and schools are located. (T17:20 to 18:9). Following the most direct route in this instance would require passing through part of the City of Kearney, which would not only place it closer to homes, schools and businesses, but would require moving existing facilities. Those issues can be minimized by locating the line outside Kearney, even though that adds some additional distance to the length of the line. (T18:10 to 19:10). Locating the majority of the line north of the City of Kearney also reduces the number of property owners that are affected by the line. (T19:19 to 21:7).

14. NPPD has a series of 345 kV, 230 kV and 115 kV transmission lines in the Kearney area. The Kearney substation is south of Kearney, while the Tower and

TechOne substations are in the northern part of Kearney. North of Kearney is the Riverdale substation. (T50:6 to 54:15; Exh . 8). There is no direct east-west connection between the Tower and TechOne substations. (Exh. 7; Exh. 8). Under peak load conditions NPPD cannot serve all the aggregate load in the Kearney area under what is called N-1 contingency conditions. One of the problems is that over 300 megawatts of load has been added in the area between the Tower and TechOne substations. (T56:20 to 57:25).

15. The purpose of the proposed line would address both redundancy issues and possible thermal overloading issues in the area in and around the City of Kearney in the event an existing line in the area were to be taken out of service and the electricity would have to be rerouted to the other lines in the area. (T58:20 to 60:3). Currently NPPD has 115 kV lines that essentially a ring or oval around the City of Kearney. The proposed line would provide a mechanism to cut the ring or oval in half, thereby adding redundancy by facilitating serving loads in the area from multiple sources in the event of a transmission outage. (Exh. 8; T66:20 to 67:5).

16. The proposed line will also provide service to current electric loads and be used for future loads in the area. (T16:14-19). Avoiding reliability issues in the event one part of the grid system were to fail or be taken out of service is a requirement imposed on electric utilities by the North American Electric Reliability Corporation (NERC). (T59:19 to 60:3).

17. NPPD is a member of the Southwest Power Pool (SPP), a regional transmission organization. The SPP functions as NPPD's transmission planning

and reliability coordinator. It conducts transmission planning studies to determine the need for transmission facilities in its operating area. The SPP conducted a Delivery Point Network Study of the Kearney area, and on June 18, 2021 issued a report with its findings. (Exhibit 9; T60:6-15). The SPP study provides a list of the thermal overloads and voltage violations that the SPP models indicated could occur under various conditions. While some overloads were only .1% over the rated capacity of an existing line, others were up to 31.9% over the rated capacity. (Exh. 9, page 8; T61:7-20). If a thermal limit on a transmission line is exceeded, the line will “trip” or automatically shut down. If that happens the electricity from that line will flow to the other lines in the area and can quickly overload those lines, causing a cascading failure effect and violation of NERC standards. One purpose of the proposed line is to prevent such a situation in the Kearney area. (T89:9 to 90:6). SPP believes the proposed connecting line was the lowest cost alternative to address the overloads indicated in the study. (T62:14-20). The conclusion of the study was that SPP recommended construction of a 115 kV line connecting the Kearney Tower to the Kearney TechOne substations. (Exh. 9, pages 12-13).

18. The SPP board of directors approved the project that is now designated PRB-3979 and on November 4, 2021, SPP issued NPPD a Notice to Construct the proposed project. (Exh. 10; T31:8-15; T64:10 to 65:1). The designated reason supporting the need for the line was to enhance regional grid reliability. (Exh. 10, page 2). NPPD’s board of directors approved the

commitment to construct the project at its January 2022 meeting, and NPPD formally accepted the Notice to Construct in a letter dated January 25, 2022. (Exh. 11; T65:2-6; T66:9-17).

19. NPPD did examine whether alternatives were available instead of building the line proposed in PRB-3979. NPPD looked at expanding its 345 kV line from the Axtell substation, adding a 230 kV line west of Kearney, or rebuilding some of the 115 kV lines in the Kearney area. The project in PRB-3979 was determined to be the lowest cost alternative to meet the needs in the area. (T83:5-19).

20. No other utility has been identified that could or would be willing to provide the necessary upgrades. (T85:8-12). The other utilities in the area near Kearney operate primarily subtransmission and distribution facilities. The issues facing the Kearney area require a high-voltage transmission solution. Upgrading subtransmission and distribution facilities will not help alleviate the transmission thermal and reliability problems in the Kearny area. (T83:20 to 85:25). No other Nebraska utility has stepped forward indicating it would be capable of or willing to construct the needed transmission facilities.

21. The estimated total cost of the project is \$12,019,122. (Exh. 1, page 3). Although NPPD will initially pay for the capital construction costs for the project, it will recover some of its costs over time using the SPP's "Highway/Byway" cost sharing methodology. For projects involving facilities rated between 100 kV and 300 kV, SPP's cost methodology requires the utilities in the local zone where the new facilities will be

located to pay approximately two-thirds of the project cost, while one-third of the cost is paid by the other members of the SPP, based on the load ratio of the SPP member utilities. NPPD is the utility with facilities in the local zone in this instance. Thus, NPPD will recover about one-third of the costs for the project. (T35:21 to 36:9; T63:6 to 64:6).

CONCLUSIONS OF LAW

22. Pursuant to Neb. Rev. Stat. §§ 70-1012, 70-1013, and 70-1014, the Board has jurisdiction to conduct a hearing and either approve or deny an application for authority to construct a transmission line and related facilities located in the State of Nebraska, but outside a power supplier's service area. Such approval is required prior to commencement of construction of facilities such as those described in application PRB-3979.

23. The Board has complied with the requirements under Neb. Rev. Stat. § 37-807(3) to consult with and request the assistance of the Nebraska Game and Parks Commission in order to utilize the Board's authority in furtherance of the purposes of the Nebraska Nongame and Endangered Species Act, and to ensure that approval of the proposed transmission line would not jeopardize the continued existence of any endangered or threatened species or result in the destruction or modification of habitat of such species which is determined by the Commission to be critical. Based on NPPD's commitments to conduct mitigation measures, such as site surveys for the presence of certain species, and refrain from removal of woody vegetation during the Northern long-eared bat activity period, the Commission determined that the proposed project "May Affect but is Not Likely to Adversely Affect" any endangered or threatened species or

habitat critical to those species. The Board believes it is reasonable to defer to the expertise of the Commission. The Board therefore concludes that, due to NPPD's agreement to perform certain measures to address potential impacts on endangered or threatened species, approval of the proposed transmission line would not jeopardize the continued existence of any endangered or threatened species or result in the destruction or modification of the critical habitat of such species.

24. Pursuant to Neb. Rev Stat. § 70-1014(2), if an application filed with the Board involves a transmission project for which a regional transmission organization such as the SPP has issued a Notice to Construct, the Board is to consider information from the regional transmission organization's planning process. The Board may also take into account benefits the project provides to the region, including Nebraska, that the project provides when determining whether to approve or deny the application. In this instance the Board does take into account the SPP's planning process and recommendation. The benefits of the proposed project are primarily to the local area in and around the City of Kearney, Nebraska.

25. Although there was some testimony regarding the high load factor incurred due to server farms and crypto mining operations that have located recently in the Kearney area, the evidence also showed that the purpose of the proposed project is for reliability purposes in the local area, and not primarily due to the server farms and crypto mining operations in the area. Also, those entities are required to provide NPPD a security deposit. (T75:1-21). Although the new loads in the area have accelerated the need for the proposed project, the fact remains due to the increase in electric load in the

area, additional transmission is required to ensure reliability in an outage situation, and the other load growth in the area would require the project in the next few years even without the addition of the server farms and crypto mining operations. (T78:16 to 79:14). The Board also points out that NPPD has an obligation to provide service to all applicants for electric service within its retail service area.

26. The Board finds that the evidence shows the proposed project will serve the public convenience and necessity.

27. The Board finds that the evidence demonstrates that NPPD can most economically and feasibly supply the electric service resulting from the proposed project.

28. The Board finds that the evidence demonstrates the proposed project will not unnecessarily duplicate other facilities or operations.

29. That based on the foregoing findings, NPPD is entitled to an Order approving the construction of the proposed transmission line and any related facilities described in PRB-3979.

ORDER

That during that part of its public meeting on January 27, 2023, held subsequent to the hearing pertaining to application PRB-3979, a majority of the members of the Power Review Board, by a vote of 4 to 0, voted in favor of a motion to approve application PRB-3979.

IT IS THEREFORE ORDERED by the Nebraska Power Review Board that, pursuant to the Board's action taken during its public meeting held January 27, 2023,

application PRB-3979 for authorization to construct approximately nine (9) miles of 115 kilovolt transmission line in Buffalo County, Nebraska, be and hereby is, APPROVED.

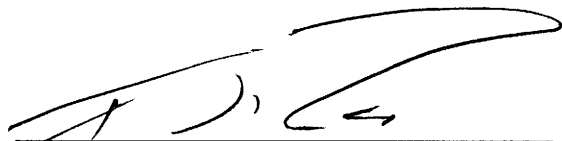
It is furthered ordered by the Board that NPPD, to the best of its ability, abide by the mitigation measures it committed to follow to the Nebraska Game and Parks Commission to avoid, to the extent possible, harm to Whooping cranes and Northern long-eared bats, as described in paragraphs 7, 8 and 9 of this Order.

Reida (Chair), Hutchison (Vice Chair), Moen and Peck, participating.

Board member Grennan, not participating. Mr. Grennan recused himself due to his employer's involvement in engineering work on the proposed project. Mr. Grennan's term of office ended and he was replaced on the Board by Kristen Gottschalk shortly after the hearing in PRB-3979.

Board member Gottschalk, not participating. Board member Gottschalk had not yet received legislative confirmation as a Board member at the time of the hearing.

Dated this 17th day of March, 2023.



Frank Reida
Chairman

Vice Chair Hutchison, concurring in part and dissenting in part.

I join in the Board's Order and the decision to approve PRB-3979, but I dissent from the conclusions in paragraph 25 because I am not convinced all the findings in that paragraph can be affirmatively made.

Although I voted to approve the proposed transmission line in PRB-3979, I submit this concurring opinion to express my concerns over the lack of evidence in this proceeding regarding whether there may be economic alternatives that could avoid the need to build the proposed line, or put off the need for a number of years, and whether such an economic alternative may be the most economical and feasible option.

I understand it is incumbent on NPPD to provide firm electric service to its customers to the extent possible. The immediate need for this transmission line is the 90 megawatts of round-the-clock load from a single customer, Compute North Data Center. (T78:12 to 79:14). The SPP Delivery Point Network Study determined this upgrade was necessary in June 2022. (Exh. 9, page 12, Table 3-3). Because the transmission line was not installed before June 2022, NPPD was required to submit mitigations to SPP. NPPD's mitigation is load control at Compute North Data Center. Under critical conditions, Compute North Data Center would quickly reduce its load. Compute North Data Center also participates in the SPP market as a demand resource. (T71:14 to 72:9).

I would prefer to see an economic analysis comparing the cost of incentivizing the necessary loads to curtail versus the cost of building the transmission line. Such a comparison would be very useful to the Board when making its decision on projects such as the one in PRB-3979.

If the above information is not addressed in future applications (where the information is applicable), I may request to continue the hearing so the necessary information can be acquired and presented to the Board when the hearing reconvenes.

CERTIFICATE OF SERVICE

I, Timothy J. Texel, Executive Director and General Counsel for the Nebraska Power Review Board, hereby certify that a copy of the foregoing **Order** in PRB-3979 has been served upon the following parties by mailing a copy of the same to the following persons at the addresses listed below, via certified United States mail, first class postage prepaid, on this 17th day of March, 2023.

Christopher Elliott
Senior Staff Attorney
Nebraska Public Power District
P.O. Box 499
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Timothy J. Texel