# STATE OF NEBRASKA NEBRASKA POWER REVIEW BOARD

IN THE MATTER OF THE APPLICATION	)	PRB-3726
OF THE NEBRASKA PUBLIC POWER DISTRICT,	)	
HEADQUARTERED IN COLUMBUS, NEBRASKA,	)	
REQUESTING AUTHORIZATION TO CONSTRUCT	·)	
FORTY MILES OF 345 KILOVOLT TRANSMISSION	)	
LINE, EIGHTEEN MILES OF 115 KILOVOLT	)	ORDER
TRANSMISSION LINES, AND A 345 KILOVOLT	)	
SUBSTATION IN STANTON, WAYNE, MADISON,	)	
PIERCE AND ANTELOPE COUNTIES, NEBRASKA.	)	

On the 14<sup>th</sup> day of June, 2013, 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 May 20, 2013, the Nebraska Public Power District ("NPPD") filed an application with the Board requesting authorization to construct approximately forty (40) miles of 345 kilovolt (kV) transmission line, approximately eighteen (18) miles of 115 kV transmission lines, and a new 345 kV substation. (Exh. 1). The application was designated "PRB-3726."

- 2. The proposed 345 kV line would run from NPPD's existing Hoskins substation located southwest of the Village of Hoskins to the proposed new Antelope substation northeast of the City of Neligh, Nebraska. The 115 kV lines will run from the new Antelope substation and connect the proposed facilities to NPPD's existing 115 kV transmission grid system in the Neligh area. The facilities will be located in Stanton, Wayne, Madison, Pierce and Antelope counties in Nebraska. (T14:18 to16:13; Exh. 1).
- 3. That those power suppliers and entities, other than the applicant, that the Board deemed to be potentially affected by or interested in PRB-3726 were the North Central Public Power District, the Elkhorn Rural Public Power District, the Northeast Nebraska Public Power District, the Village of Hadar, the Village of Hoskins, the City of Neligh, the City of Norfolk, the Village of Oakdale, the City of Pierce, and the City of Tilden. 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 request to participate in the proceedings was provided to the general public by publication of a notice in the Neligh News and Leader, the Norfolk Daily News, and the Tilden Citizen on Wednesday, May 29, 2013. (Exhs. 3, 4 and 6). Notice was also published in the Pierce County Leader on Thursday, May 30, 2013. (Exh. 5). All the publications are legal newspapers with circulation in the general area where the proposed transmission lines and substation would be located.

- 5. That no Petitions to Intervene or Protests were filed with the Board concerning this application.
- 6. That Consent and Waiver forms were offered and accepted into evidence at the hearing before the Board, as provided by law and the Board's Rules of Practice and Procedure, whereby the Elkhorn Rural Public Power District, the North Central Public Power District and the Northeast Nebraska Public Power District consented to the approval of PRB-3726 and waived a hearing and further notice in the matter. (Exhs. 8, 9 and 10).
- 7. 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 lines and substation 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 dated June 12, 2013, stating that the proposed project corridor, including the preferred and alternative routes for the proposed lines, are within the range of the following three threatened or endangered species: a) the Whooping Crane (*Grus americana*); b) Western Prairie Fringed Orchid (*Platanthera praeclara*); and c) Small White Lady's Slipper (*Cypripedium candidum*). (Exh. 11, page 2).

- 8. The Commission determined that suitable habitat for all three species exists within the project corridor and that there are records of all three species within or near the project area. (Exh. 11, page 2). The Commission informed the Board that NPPD committed to conduct surveys for all three species in order to avoid adversely impacting them. (Exh. 11, page 2).
- 9. The Commission informed the Board that NPPD has agreed to conduct a daily survey for whooping cranes if construction occurs during the cranes' spring or fall migration periods (March 23 to May 10 and September 16 to November 16, respectively). (Exh. 11, page 2). If whooping cranes are detected in the construction area, NPPD will contact the Commission and the U.S. Fish and Wildlife Service, and construction activities will not begin or will be halted until the birds are at least one-half mile from the construction activities. NPPD has also agreed to install bird flight diverters on the transmission lines in the areas in or near whooping crane habitat. (T20:12 to 21:4; Exh. 11, page 2). If construction activities will occur during blooming season for the western prairie fringed orchid and small white lady's slipper, NPPD will conduct surveys in areas identified as suitable habitat in order to determine if the plants are present in the construction zone along the final route. NPPD will coordinate with the Commission if the plants are found to be present. (Exh. 11, pages 2-3).
- 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. 11, page 3).

- 11. The project area in which the proposed facilities will be located is indicated in white on Exhibit A-1 attached to the original application. All the proposed transmission lines, substation and related facilities will be located within the project area. (T17:11-17; Exh. 1, page 5).
- transmission organization. The SPP conducts transmission planning studies to determine the need for transmission facilities in its operating area. Prior to becoming a member of the SPP, member utilities such as NPPD conducted their own internal transmission planning studies. (T33:19 to 34:9). The SPP engaged in an integrated transmission planning process that involves SPP and member utilities studying what transmission projects are believed to be needed in the entire SPP region based on projections for the next twenty years. The SPP then prepares a more detailed integrated transmission plan that determines what transmission facilities need to be built based on a ten year horizon. (T34:10 to 35:1). The study indicated that the facilities in PRB-3726 are needed. (T35:1-17; Exh. 15, pages 101-103 and 128-129). The SPP issued NPPD a Notice to Construct the proposed project. (T36:7 to 38:9; Exh. 1, page 3).
- 13. Although the SPP Notice to Construct set an in-service due date of March 1, 2019, NPPD plans to have the facilities in service by the summer of 2016 due to a

great need for the transmission services the project will provide. (T38:10-19; Exh. 1, page 3).

- 14. The overall purpose of the project is to enhance the reliability of the transmission system and reduce transmission system congestion in the area including and surrounding the City of Neligh and in north central Nebraska in general. (T30:1-6; Exh. 1, page 2-3). The line could also potentially provide transmission services for future wind-powered generation projects in the project area. (Exh. 1, page 2-3).
- 15. Currently the area in north central Nebraska that would be served by the proposed facilities are served by a loop of 115 kV transmission lines. The existing 115 kV transmission facilities were built decades ago in the 1950's and early 1960's. North central Nebraska has experienced very large load growth in recent years. The current 115 kV facilities are not always able to provide adequate service to the area, making it necessary to add a high voltage transmission source. The new facilities would supply electricity to the 115 kV loop in the area. (T31:6-19).
- 16. There is an existing 345 kV substation near the Village of Hoskins. The substation is connected to a 345 kV transmission line that interconnects the substation with facilities in western Iowa. Another 345 kV transmission line connects the Hoskins substation to facilities further south near the cities of Columbus and then on to Lincoln, Nebraska. The substation is also connected to a 230 kV transmission line that connects to facilities further to the east near South Sioux City, Nebraska, and then into eastern Iowa. Finally, the substation connects to several 115 kV transmission lines. Only one of the

115 kV transmission lines serves facilities to the west of the substation. (T31:20-25; T32:9-25; Exh. 14).

- 17. One 230 kV transmission line intersects the proposed project area. It begins generally southeast of the project area and proceeds to the northwest to Fort Randall, South Dakota, where it interconnects with Western Area Power Administration facilities. (T32:1-8; Exh. 14). This line is not capable of moving electric power from the Hoskins area to the Neligh area.
- The existing 115 kV transmission lines cannot provide the capacity needed 18. to adequately serve the area in north central Nebraska with its electrical needs. In 2012 NPPD experienced unprecedented electric loading in the area that would be served by the proposed facilities. The load increases were driven largely by irrigation needs. Due to the severe drought in north central Nebraska, NPPD's load growth has been much higher than other areas of the state where load is not as heavily driven by agricultural needs. NPPD set a new peak load in 2012 of 3,062 megawatts, surpassing its previous record peak load of 2,600 megawatts by more than 450 megawatts. Although NPPD's generation resources were adequate to serve the loads, it was difficult for NPPD to provide sufficient electric power to the north central Nebraska area using the existing 115 kV transmission loop. In one instance NPPD had to shed load from the system. (T38:14 to 40:20; T48:8-14). To help alleviate the constraints in the transmission system this summer, NPPD plans to install mobile diesel generators in order to provide localized generation. NPPD has already spent approximately \$4 million to secure these temporary generators and install necessary interconnection equipment at the existing substations. If

these mobile generation resources are used, there will be additional costs for fuel and operating personnel. (T39:9-12; T42:1-15; T59:5-21). The proposed 345 kV transmission line would create a high-voltage interconnection between the Hoskins substation facilities in east to the area near the City of Neligh further west. (T32:12-15; T33:6-11).

- 19. The other electric utilities in the project area are retail electric distribution power suppliers. All three of the rural public power districts which hold the service area rights to the applicable area are NPPD's wholesale customers. These utilities operate subtransmission and distribution voltage lines up to 34.5 kV and 69 kV, which are not capable of providing the amount of needed power to the area. The retail distribution utilities do not operate 345 kV facilities and are not capable of building a project as large as the one proposed in PRB-3726. (T21:5 to 22:1; T43:4-11; Exh. 1, page 5; Exh. 14).
- Although NPPD will initially pay for the entire capital construction costs for the project, it will recover ninety-three (93) percent of the costs over time from the SPP. According to the SPP rate structure, the costs of this project will be shared by all SPP member utilities according to a ratio determined by each utility's proportionate share of the load in the SPP region. Since NPPD constitutes approximately seven percent of the load in the SPP region, NPPD will pay for seven percent of the cost of the project. (T43:12-23; T52:18 to 53:19). If the costs of the project would for some reason increase beyond what is in the Notice to Construct by a significant amount, it is possible that the SPP could determine that the cost overruns are unreasonable and would have to be paid by the

transmission owner, which in this case is NPPD. (T51:23 to 52:17). Even if the costs of the project in PRB-3726 were not socialized using the SPP rate formula, NPPD would still need to build this project due to reliability needs and to serve its customers in the area. (T48:8-14; T55:14 to 56:1).

- 21. It is not possible to supply the amount of transmission capacity needed with one, two or even three 115 kV lines instead of one 345 kV line. Although a 345 kV line costs considerably more than a 115 kV line, it would take ten 115 kV lines to equal the capacity of one 345 kV line. (T44:10 to 45:6).
- 22. There are currently no 345 kV transmission lines that can move electricity east and west in the project area between Hoskins and Neligh. The only lines in the area that connect facilities on the east and west sides of the project area are 115 kV. The 230 kV line that intersects the project area is oriented to move power north and south. It cannot be used to move power east and west across the project area. (T46:3 to 47:5; Exh. 14).

### **CONCLUSIONS OF LAW**

23. 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-3726.

- 24. 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 insure that approval of the proposed transmission lines and related facilities 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 surveys for certain species and other mitigation actions, the Commission has 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 work with the Commission to take measures to mitigate any potential impact on threatened or endangered species, including conducting site surveys and installation of bird flight diverters as determined to be necessary, approval of the proposed transmission lines and substation 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.
- 25. The Board finds that the evidence shows the proposed project will serve the public convenience and necessity.
- 26. The Board finds that the evidence demonstrates that NPPD can most economically and feasibly supply the electric service resulting from the proposed project.

- 27. The Board finds that the evidence demonstrates the proposed project will not unnecessarily duplicate other facilities or operations.
- 28. That based on the foregoing findings, NPPD is entitled to an Order approving the construction of the transmission lines and substation described in PRB-3726.

#### ORDER

That during that part of its public meeting on June 14, 2013, held subsequent to the hearing on the merits pertaining to application PRB-3726, 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-3726. The Board notes that Chairman Siedschlag recused himself from participating in the hearing, discussion or vote pertaining to this proceeding.

IT IS THEREFORE ORDERED by the Nebraska Power Review Board that, pursuant to the Board's action taken during its public meeting held June 14, 2013, application PRB-3726 for authorization to construct approximately forty (40) miles of 345 kilovolt transmission line, eighteen (18) miles of 115 kilovolt transmission lines, and a 345 kilovolt substation in Stanton, Wayne, Madison, Pierce and Antelope Counties, Nebraska be, and hereby is APPROVED.

Dated this \_\_\_\_\_ day of August, 2013.

Stephen M. Lichter

Vice-Chairman

# **CERTIFICATE OF SERVICE**

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