UNITED STATES OF AMERICA BEFORE THE DEPARTMENT OF ENERGY OFFICE OF ELECTRICITY

APPLICATION OF NORTH STAR ELECTRIC COOPERATIVE FOR PRESIDENTIAL PERMIT

Docket No. PP-____

June 15, 2020

Daniel E. Frank Eversheds Sutherland (US) LLP 700 Sixth St., N.W., Suite 700 Washington, DC 20001-3980

Attorneys for North Star Electric Cooperative

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- Environmental Analysis (waiver requested) Exhibit E
- Verification Exhibit F

UNITED STATES OF AMERICA BEFORE THE DEPARTMENT OF ENERGY OFFICE OF ELECTRICITY DELIVERY AND ENERGY RELIABILITY

North Star Electric Cooperative

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Docket No. PP-____

APPLICATION OF NORTH STAR ELECTRIC COOPERATIVE FOR PRESIDENTIAL PERMIT

Pursuant to Section 202(e) of the Federal Power Act, 16 U.S.C. § 824a(e), Executive Order No. 10,485 as amended by Executive Order No. 12,038, and 10 C.F.R. §§ 205.320, *et seq.* (2019), North Star Electric Cooperative ("North Star") hereby applies for a Presidential Permit authorizing the continued connection, operation, and maintenance of facilities for the transmission of electric energy at the international border between the United States and Canada (the "Facilities"). In support of this Application, North Star states as follows:

I. INTRODUCTION

A. North Star Electric Cooperative

North Star is a rural electric cooperative that was formed in 1940 to provide electricity to the rural areas of north central Minnesota (in Lake of the Woods, Koochiching, St. Louis, and Roseau Counties). Today North Star serves approximately 6,400 customer accounts over 1,400 miles of distribution line. Because North Star is a cooperative, North Star's customers are its member-owners. North Star is a distribution cooperative member-owner of Minnkota Power Cooperative ("Minnkota"), a generation and transmission ("G&T") cooperative that provides wholesale power requirements to North Star and its other member-owner cooperatives. North Star is governed by its seven-member board of directors, who are elected by the member-owners of North Star.

North Star currently serves 26 residential customers in Canada. The Facilities deliver power into Canada to serve those consumers.¹ Two of the customers are served from one radial feed, and the remaining 24 are served from a second radial feed. The Facilities comprise low-voltage (7,200 and 14,400 volts) lines running from Minnkota's International Falls substation in northern Minnesota approximately 10.35 miles to the border (i.e., 10.35 miles from the substation to the border).²

Other than meters, the customers in Canadian waters own the facilities in Canada that serve them. In addition to the regular electric rate and a slightly reduced basic service fee,³ they pay for cable replacement, safety upgrades, and outage restoration (if the problem is north of the border).

North Star does not intend that its distribution facilities serving its customers in Canadian waters to be used by any other parties. Because they are distribution lines, they are generally exempt from "open access" requirements. North Star does not own any of its own power generation facilities itself, but instead purchases all of its power supply requirements (to serve its retail customers) from Minnkota. Because North Star serves customers in Canada and delivers power to

¹ The nearest utility in Canada, HydroOne, has expressed an unwillingness to extend its facilities to serve these customers and supports North Star serving these customers.

 $^{^2}$ The 10.35 miles is the distance from the substation to the border in a straight line, i.e., "as the crow flies." The actual length of the line from the substation to the border is approximately 14.16 miles. From the border, there are approximately 14.8 miles of line in Canadian waters that feed 26 meters (customer-members). The substation and the facilities extending from the substation to the border were originally built before 1970 to serve North Star's customers in northern Minnesota. Pieces of these facilities have been replaced over time for reliability purposes. Less than 4 miles of the distribution lines between the substation and the border are underwater (between islands). The last North Star customer served in the U.S. is approximately three hundred yards from the U.S.-Canada border; the farthest North Star customer served in Canada is just under three miles from the border.

³ The Canadian customers receive a \$2/month credit off the \$42 basic service fee to recognize their ownership of their transformers. The rest of the basic service fee covers costs like all other member-customers of North Star.

them, North Star expects to submit an application for export authorization in connection with the use of the Facilities.

B. The Application

In July 2018, North Star discovered that it did not have the necessary Presidential Permit for the Facilities. At that time, North Star had been approached by three prospective customers about extending retail service to new customers in Canadian waters. North Star contacted its power supplier, Minnkota, for advice on how to proceed. Minnkota determined that a Presidential Permit was required, and that North Star did not have one. North Star was not previously aware of the Presidential Permit requirement. As soon as it became aware of the requirement, North Star contacted counsel to determine appropriate remedial actions, including filing the necessary application and obtaining the required permit(s).

North Star regrets that it had not previously obtained the required authorization. With this Application, North Star seeks to come into compliance with the Presidential Permit requirements. North Star is requesting authorization to maintain its current cross-border connections and continued authorization to operate and maintain the Facilities. Although North Star has recently completed upgrades to the U.S. side of the Facilities, North Star requests that the Presidential Permit issued in response to this request include permission to make appropriate upgrades to the Facilities to enable North Star to continue to reliably serve the customers in Canadian waters.⁴

⁴ In 2018 North Star completed system improvements on the Island View line on the U.S. side that feeds the line that serves the customers in Canadian waters. North Star is in the process of developing its next four-year construction work plan, which may include upgrading some of the Facilities. North Star does not expect to construct any additional cross-border facilities (i.e., new crossing points).

II. INFORMATION REGARDING THE APPLICANT

A. Legal Name of the Applicant [10 C.F.R. § 205.322(a)(1)]

The legal name of the Applicant is North Star Electric Cooperative, Incorporated. The

principal place of business of the Applicant is 441 State Hwy 172 NW, Baudette, MN 56623.

B. Legal Name of All Partners [10 C.F.R. § 205.322(a)(2)]

North Star Electric Cooperative is the sole applicant. North Star Electric Cooperative is a

cooperative corporation organized under Minnesota state law, and does not have any partners.

C. Communications and Correspondence [10 C.F.R. § 205.322(a)(3)]

All communications and correspondence related to this Application should be addressed

to:

Daniel E. Frank Eversheds Sutherland (US) LLP 700 Sixth St., N.W., Suite 700 Washington, DC 20001-3980 Tel.: (202) 383-0838 Fax: (202) 637-3593 Email: DanielFrank@eversheds-sutherland.com

D. Foreign Ownership and Affiliations [10 C.F.R. § 205.322(a)(4)]

Neither North Star nor any of the Facilities is owned wholly or in part by a foreign government or directly or indirectly assisted by a foreign government or instrumentality thereof. North Star does not have any agreement pertaining to such ownership by or assistance from any foreign government or instrumentality thereof.

E. Existing Foreign Contracts [10 C.F.R. § 205.322(a)(5)]

Except as stated in the next sentence, North Star does not have any existing contracts with any foreign government, or any foreign private concerns, relating to any purchase, sale or delivery of electric energy. North Star serves the retail electricity requirements of 26 residential customers in Canada; this service is provided pursuant to standard service agreements and tariffs.

F. Opinion of Counsel [10 C.F.R. § 205.322(a)(6)]

A signed opinion of counsel that the continued connection, operation, and maintenance of the Facilities are within North Star's corporate powers and that North Star will comply with all pertinent federal and state laws is provided as <u>Exhibit A</u>.

III. INFORMATION REGARDING THE FACILITIES

A. Overview

The Facilities involve the following cross-border facilities; the Facilities described here are the electric lines and associated equipment that run from the last substation in the U.S. to the border-crossing points of the lines that serve the customers in Canada. Starting at the International Falls Substation owned by Minnkota in the U.S. and proceeding in a northeasterly direction, there are (all distances are approximate) 4.1 miles of 14,400 volt three-phase underground line, then 2.5 miles of 14,400 volt three-phase overhead line, then 1.0 miles of 7,200 volt three-phase overhead line, then 4.0 miles of 7,200 volt three-phase underwater line to an oil circuit recloser ("OCR") breaker on the U.S. mainland. From that point, one single-circuit line continues north within the U.S. to serve additional customers located in the U.S. and the majority of the customers located in Canada, and a tap on that line heads east for about 1.2 miles toward the U.S./Canada border to serve the remaining two customers in Canadian waters. Specifically, from the OCR breaker, there is a 0.15 mile stretch of 7,200 volt three-phase overhead line, then 0.14 miles of 7,200 volt singlephase overhead, and then 2.27 miles of 7,200 volt single-phase underwater line to the U.S./Canada border, which is just beyond Curtis Island.⁵ The total distance of these lines is approximately 14.16 miles from the International Falls Substation to the border.

⁵ The North Star cabinet on Curtis Island is located at coordinates 48° 37' 36.142" N. Latitude and 93° 11' 14.796" W. Longitude.

The location of the Facilities is indicated on the overall system map provided in Exhibit B and the detailed map provided as Exhibit C. The Facilities are not connected with the interconnected electric grid in Canada.

B. Technical Description [10 C.F.R. § 205.322(b)(1)(i)]

1. <u>Number of Circuits (¶ A)</u>

North Star seeks authorization for the continued connection, operation, and maintenance of the Facilities, as described above. Of the Facilities, there are two single-circuit lines that cross the border. The first heads north from Curtis Island, which is located just inside the U.S., and feeds the majority of the customer accounts in Canadian waters. The second line heads east of Curtis Island and feeds the remaining two customer accounts in Canadian waters. The Facilities cross the border between the U.S. and Canada approximately at coordinates 48° 37' 42.88" N. Latitude and 93° 11' 4.64" W. Longitude and coordinates 48° 37' 28.95" N. Latitude and 93° 10' 46.68" W. Longitude.⁶ As described above, on the U.S. side, approximately 4 miles of the lines that run from the substation to the border are underwater; the remaining facilities are overhead and underground facilities.

2. <u>Operating Voltage and Frequency (¶ B)</u>

The Facilities are operated at 7,200 and 14,400 volts (nominal), as described above, and at a frequency of 60 Hertz.

3. <u>Conductors (¶ C)</u>

The Facilities are 1/0 260 mill jacketed 7,200 and 14,400 volt cable, with one conductor per phase.

⁶ The coordinates are approximate because the conductor is underwater at the border crossing.

C. Additional Overhead Line Information [10 C.F.R. § 205.322(b)(1)(ii)]

1. Wind and Ice Loading Design Parameters (¶ A)

The Facilities have been designed and constructed in accordance with the National Electric Safety Code ("NESC") for heavy loading conditions for ice. The NESC requirements provide the minimum criteria, and additional requirements will be evaluated during North Star's regular construction work plan cycle.

2. <u>Description and Drawing of a Typical Supporting Structure (¶ B)</u>

A typical supporting structure is a single wood pole for overhead conductor. Underground and underwater conductor is three-phase 4/0 jacketed underground cable, with taps consisting of 1/0 260 mill jacketed cable.

3. <u>Structure Spacing with Typical Ruling and Maximum Spans (¶ C)</u>

Supporting structures are installed along the center of the right of way. The typical ruling span is 250 feet. The maximum span is approximately 280 feet.

4. <u>Conductor (Phase) Spacing (¶ D)</u>

The typical spacing is 4 feet from neutral / ground conductor to the nearest phase conductor, and 4 feet from phase conductor to phase conductor.

5. <u>Line-to-Ground Design and Conductor-Side Clearances (¶ E)</u>

The minimum vertical design clearances are as provided in the NESC. Design clearances are based on a nominal 7,200 volt line voltage and the NESC specified maximum final conductor sag loaded. Typical line to ground clearance is 21 feet over roads, consistent with the NESC requirements and Minnesota law.

D. Additional Underwater Line Information [10 C.F.R. § 205.322(b)(1)(iii)]

As noted above, approximately 4 miles of the Facilities (on the U.S. side of the border) are underwater. To the extent necessary, Applicant requests waiver of the requirement to provide

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technical diagrams of the underwater facilities; it is unlikely such diagrams would provide helpful clarification of the information provided below.

1. Burial Depth (\P A)

The depth of the water in which the lines are located ranges from 0 feet at the shoreline down to approximately 40 feet.

2. Type of Cable and Description of Supporting Equipment (¶ B)

The Facilities use 1/0 260 mill jacketed 7,200 volt cable.

3. <u>Cathodic Protection Scheme (¶ C)</u>

There is no cathodic protection scheme as it is unnecessary under these conditions.

E. General Area Map [10 C.F.R. § 205.322(b)(2)]

A general area map showing the overall system is attached at <u>Exhibit B</u>. As noted above, a map showing the physical location, longitude and latitude of the Facilities at the international border is attached at <u>Exhibit C</u>.

F. Bulk Power System Information [10 C.F.R. § 205.322(b)(3)]

This section of the Department's regulations requests information for bulk power supply facilities that are to be operated at 138 kV or higher. The Facilities here are retail distribution facilities operated at 7,200 volts. Accordingly, this section does not apply to this Application.

Nonetheless, the Applicant notes that it does not readily have information on the maximum power transfer capability of the Facilities, but the Applicant has made all system improvements identified by system studies as necessary to provide reliable retail electricity service to the customers in Canadian waters. The Applicant also notes that approximately 40,000 kWh are expected to be delivered annually across the Facilities. (This figure is derived from an average of 130 kWh electricity usage per month per customer-member.)

As an all-requirements distribution cooperative member of a G&T, North Star receives all of its power supply requirements from Minnkota. Therefore, North Star is providing information here on Minnkota's load requirements and reserve margins; this information indicates that North Star's continued connection, operation, and maintenance of its cross-border facilities will not jeopardize the reliability of the U.S. electric grid. Minnkota's peak load in 2019 was 594 MW and its three-year average peak load is 598 MW. As required by applicable standards, Minnkota maintains a capacity reserve of at least 8.9%, or 53 MW, consisting of owned and purchased electric generating capacity. Therefore, North Star's continued service to its Canadian residential customers will have no impact on the reliability of the U.S. bulk power system.

IV. INFORMATION REGARDING POTENTIAL ENVIRONMENTAL IMPACTS

A. Introduction

Because the Facilities are already constructed and in operation (and have been since before the 1970s), to the extent necessary the Applicant requests a waiver of the requirement to provide a formal assessment of the environmental impacts of the Facilities. To the extent there are environmental impacts, they are known, and it would be impractical and of little benefit to undertake additional environmental impact assessments at this time.

B. Water Resources [10 C.F.R. § 205.322(c)(1)]

As noted, the Applicant requests a waiver of the requirement to provide a list of each flood plain, wetland, critical wildlife habitat, navigable waterway crossing, Indian land, or historic site that may be impacted by the Facilities.

C. Cultural Resources [10 C.F.R. § 205.322(c)(2)]

There are no known historic places that may be affected by the Facilities.

D. Minimum Right-of-Way Width [10 C.F.R. § 205.322(c)(3)]

The right-of-way width for the Facilities is a minimum of 10 feet for underground lines. Side clearances for conductor wind-blowout and right-of-way clearances are a maximum of 20 feet from the center of the conductor.

E. Biological Resources [10 C.F.R. § 205.322(c)(4)]

There is no designated or proposed critical wildlife habitat within the area served by the Facilities, and no identified vegetation issues or endangered, threatened, or candidate species.

F. Practical Alternatives to the Proposed Facilities [10 C.F.R. § 205.322(d)]

At this time, there are no practical alternatives to the Facilities. A determination of "no action" on the Application would result in cutting off electric service to the customers currently served in Canada.

V. VERIFICATION

In accordance with 18 C.F.R. § 205.322(e), this Application has been verified under oath by an officer of the Applicant having knowledge of the matters set forth above. The signed and notarized verification is included as <u>Exhibit F</u>.

VI. SUMMARY OF EXHIBITS

The following exhibits are included with this Application:

- Exhibit A Opinion of Counsel
- Exhibit B Overall System Map
- Exhibit C International Border Crossing Map
- Exhibit D Technical Drawings (waiver requested)
- Exhibit E Environmental Analysis (waiver requested)
- Exhibit F Verification

VII. CONCLUSION

North Star Electric Cooperative respectfully requests that the Department grant the Presidential Permit requested herein as soon as practical. We appreciate the Department's assistance with this matter.

Respectfully submitted,

/s/ Daniel E. Frank

Daniel E. Frank Eversheds Sutherland (US) LLP 700 Sixth St., N.W., Suite 700 Washington, DC 20001-3980

Attorneys for North Star Electric Cooperative

June 15, 2020

<u>Exhibit A</u>

Opinion of Counsel



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Phone 701.795.4000 www.minnkota.com

June 12, 2020

United States Department of Energy Office of Electricity Washington, DC

> Re: Application of North Star Electric Cooperative for Presidential Permit (Docket No. PP-___)

Ladies and Gentlemen:

I am counsel to North Star Electric Cooperative, a Minnesota cooperative corporation ("North Star"), and have represented North Star in connection with the Application of North Star Electric Cooperative for Presidential Permit (the "Application"). I am an attorney-at-law, authorized to practice law in the State of Minnesota. I have examined such corporate records, certificates and other documents, and such questions of law, as I have considered necessary or appropriate for the purposes of this opinion. Upon the basis of such examination and as of the date hereof, it is my opinion that:

- (1) North Star is a cooperative corporation validly existing and in good standing under the laws of the State of Minnesota.
- (2) North Star has the corporate power and authority to engage in the continued connection, operation, and maintenance of the Facilities as set forth in the Application.
- (3) Based upon my knowledge of the facts and the law, including as a result of my consultation with outside counsel, following the issuance of the authorization sought in the Application, North Star will comply with all federal and state laws applicable to the continued connection, operation, and maintenance of the Facilities as set forth in the Application.

The foregoing opinion is limited to the federal laws of the United States and the laws of the State of Minnesota as of the date hereof, and I am expressing no opinion as to the effect of the laws of any other jurisdiction.

In rendering this opinion, I have relied as to certain matters on information obtained from public officials, officers of North Star and other sources believed by me to be responsible, and I have assumed that the signatures on all documents examined by me are genuine, assumptions which I have not independently verified. United States Department of Energy Office of Electricity June 12, 2020 Page 2

I am furnishing this opinion solely for your benefit in connection with the Application. This opinion may not be relied upon by you for any other purpose or relied upon by or furnished to any other person without my express written consent.

Very truly yours,

forle Andrew C. Sorbo

Counsel to North Star Electric Cooperative

Dated: June 12, 2020

<u>Exhibit B</u>

Overall System Map



<u>Exhibit C</u>

International Border Crossing Map



<u>Exhibit D</u>

Technical Drawings

(To the extent necessary, the Applicant requests a waiver of the requirement to submit Technical Drawings.)

<u>Exhibit E</u>

Environmental Analysis

(To the extent necessary, the Applicant requests a waiver of the requirement to submit an Environmental Analysis.)

<u>Exhibit F</u>

Verification

VERIFICATION

THE STATE OF MINNESOTA)LAKE OF THE WOODS COUNTY)

Ann Ellis, being first duly sworn, hereby certifies under oath:

That she is General Manager of North Star Electric Cooperative (the Applicant), that she has read the foregoing Application for Presidential Permit and knows its content, and that the same are true and correct to the best of her knowledge and belief.

Ann Ellis General Manager North Star Electric Cooperative

Subscribed and sworn before me this 12 day of June, 2020.

Notary Public Geol

My commission expires: <u>1.31.25</u>

