

February 20, 2026

*Via Electronic Mail & Hand Delivery*

Mr. Brian Johnson  
North Dakota Public Service Commission  
600 E. Boulevard, Dept. 408  
Bismarck, ND 58505-0480  
[ndpsc@nd.gov](mailto:ndpsc@nd.gov)

In re: Otter Tail Power Company & Montana-Dakota Utilities Co.  
345kV JETx Transmission Line  
Siting Application - Stutsman, LaMoure, and Dickey Counties  
Case No. PU-25-236  
OAH File No. 20250300  
Our File No. 072879-000001

Dear Mr. Johnson:

Enclosed for filing in the above-referenced matter, please find eight copies of Late-Filed Exhibit 24, Winter Construction Plan, Revision 1.

Please feel free to contact me if you have any questions. Thank you.

Sincerely,



Casey A. Furey

CAF/lh

Enc.

cc:	ALJ Hope Hogan	(via email)	Otter Tail Power Co. Regulatory	(via email)
	Zachary Pelham	(via email)	Allison Waldon	(via email)
	Victor Schock	(via email)	Travis R. Jacobson	(via email)
	Robert M. Endris	(via email)	Erik Edison	(via email)



Jamestown – Ellendale 345kV Transmission Line  
Winter Construction Plan  
Revision 1  
Case No. PU-25-236

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## TABLE OF CONTENTS

1.0 INTRODUCTION.....	3
2.0 BACKGROUND.....	4
2.1 ELECTRIC TRANSMISSION LINES VS. PIPELINES.....	4
3.0 SOIL SEGREGATION .....	5
3.1 SOIL SEGREGATION DURING WINTER CONDITIONS.....	7
4.0 DRILLED PIER CONCRETE FOUNDATIONS.....	7
4.1 DRILLED PIER CONCRETE FOUNDATIONS DURING WINTER CONDITIONS.....	7
5.0 ACCESS PLANS .....	7
5.1 ACCESS PLANS DURING WINTER CONDITIONS .....	8
6.0 MATTING.....	8
6.1 MATTING DURING WINTER CONDITIONS.....	8
7.0 CONCLUSION .....	9

## 1.0 INTRODUCTION

Otter Tail Power Company (OTP) and Montana-Dakota Utilities Co. (Montana-Dakota) (jointly, the Applicants) are proposing to jointly construct, own, and operate approximately 92 miles of new, double circuit capable, 345-kilovolt (kV) transmission line within a 150-foot-wide Corridor from OTP's existing Jamestown 345-kV Substation in Stutsman County to Montana-Dakota's existing Ellendale 345-kV Substation in Dickey County (Project). The transmission line is planned to initially be constructed with one circuit, one optical ground wire, and one overhead ground wire. A second, 345-kV circuit will be installed in four discrete locations along the Project during initial construction, and the remainder of the second circuit will be installed in the future, when the need arises. In addition to the new high-voltage transmission line, the Project includes a substation expansion at the Jamestown 345-kV Substation, and modifications within the Ellendale 345-kV Substation. The Project was identified and approved by the Midcontinent Independent System Operator, Inc. (MISO) as part of its Long-Range Transmission Planning Tranche 1 Portfolio through the 2021 MISO Transmission Expansion Plan. The Project schedule anticipates beginning construction in Q3 of 2026 and energizing the line in Q4 of 2028. The Project schedule will take place over two seasons of winter construction.



Figure 1 – Structure Erection During Winter Conditions

## 2.0 BACKGROUND

Once all the applicable permits are acquired, the Applicants will start construction, which is planned to be continuous until complete. This schedule will provide an opportunity for the Applicants to take advantage of areas where winter construction can minimize potential impacts and result in lower construction costs. The Applicants have developed this document to outline best practices that will be employed during construction of the Project in the winter season to minimize potential impacts based on data and references gathered from Best Management Practices from past transmission line projects and applicable practices that the Applicants identified from two reference documents provided by Public Service Commission (PSC) staff.<sup>1,2</sup>

There will be activities within the Project's Corridor that will require access multiple times in preparation for, and over the course of, construction. These activities range from soil exploration, clearing and grubbing vegetation, temporary access road development, foundation installation, structure erection, conductor stringing, and restoration.

Equipment required to support construction activities may include track mounted lo-drills to excavate the foundations, skid steers to install matting and material management, front end loaders for excavated spoils, trucks to haul away the excavated material and to deliver rebar and anchor bolts, concrete trucks to haul concrete to the site, cranes to erect structures and place rebar cages, dozers and trailers containing equipment materials to install the conductor, and pickup trucks for transporting craft workers and inspectors.

## 2.1 ELECTRIC TRANSMISSION LINES VS. PIPELINES

The two reference documents provided by PSC staff were primarily established for pipeline construction. Electric transmission lines and pipelines differ in many ways, not only in what they transport but also in their construction methods. Pipelines are contiguous with almost all of the infrastructure placed underground. This requires excavators and other earth moving equipment to excavate a trench, install the pipe, and backfill the trench all along the route. See Figure 1 below for an illustration of typical winter pipeline installation. Transmission lines are also contiguous, but almost all the infrastructure is located and constructed above ground. The only components of a transmission line that are permanently placed underground are the drilled pier foundations which consist of concrete to which the steel poles will be attached.

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<sup>1</sup> *Planning Guidelines of Pipeline Construction During Frozen Conditions*, Interstate Natural Gas Association of America (INGAA), December 2013, available at <https://ingaa.org/wp-content/uploads/2013/12/21144.pdf>

<sup>2</sup> *Successful Reclamation of Lands Disturbed by Oil and Gas Development and Infrastructure Construction*, North Dakota State University Extension Service in coordination with United States Department of Agriculture (USDA), October 2014.

Earth and environmental disturbance with a pipeline project is much different to that of a transmission line project. For example, a 92-mile pipeline utilizing a 6-foot-wide trench would disturb approximately 67 acres during the installation process of the pipeline. In comparison, a 92-mile transmission line consisting of around 500 structures with an average foundation diameter of 10-feet would disturb less than 1 acre.



*Figure 2 - Typical Winter Pipeline Installation<sup>3</sup>*



*Figure 3 - Typical Winter Drilled Pier Foundation Installation*

### 3.0 SOIL SEGREGATION

Appropriate procedures will be implemented during all construction seasons to effectively separate topsoil from subsoil. During construction, an approximate 150 ft x 200 ft temporary work area will be created at each structure location. This temporary work area will include interlocking composite mats where topsoil will be stockpiled to keep it separate from subsoils. (See Figure 4 below).

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<sup>3</sup> From INGAA Planning Guidelines for Pipeline Construction During Frozen Conditions.

The depth of the topsoil at each structure location will be known from the results of the geotechnical soil investigation that will have been conducted prior to the start of construction. A Project representative will be present to oversee segregation of the topsoil and make a visual determination of the topsoil depth where geotechnical soil information is not available. The drilling rig for digging the foundations will utilize specific auger sizes to drill each foundation to the designed diameter and depth. To effectively segregate the topsoil, the auger used to drill the foundation will dig to a specified depth to excavate the topsoil and then keep that topsoil on the auger until it is unloaded onto the composite mat. In addition to the auger moving topsoil onto the composite mats, a skid steer or front-end loader will also be used to stockpile the topsoil in such a manner that it is all contained upon the composite mats at each structure location. After stockpiling the topsoil on the composite mats, the auger will continue to dig subsoil to the designed depth at each structure location. The subsoil will be hauled off-site in accordance with landowner requests while complying with any applicable requirements. Once the foundation is installed, the topsoil will be utilized to backfill around the foundation as part of the restoration process with the use of a skid steer.



*Figure 2 - Installation of Temporary Work Area with Composite Mats*

In the event that other ground disturbance is required during construction, such as grading to create a level area for trucks and construction equipment to work safely, soil segregation practices will be utilized to keep topsoil separate from subsoils, including stockpiling topsoil on composite mats. The depth of the topsoil in these excavated areas would be determined through visual inspection from an on-site project representative. In areas where grading is necessary to create a level working area, equipment such as dozers, front end loaders, and skid steers will be utilized. Once construction in these excavated areas is complete, the topsoil will be respread as part of the restoration process mostly likely with the use of a skid steer.

### 3.1 SOIL SEGREGATION DURING WINTER CONDITIONS

During winter conditions, soil segregation procedures will be similar to non-winter conditions outlined above with a few minor differences. First, the stockpiled topsoil will be replaced as soon as the foundation is constructed to ensure the topsoil doesn't freeze. In addition, insulated blankets may be used to prevent the topsoil from freezing before it is backfilled around the foundation. Lastly, excavated subsoil will be loaded in trucks immediately after excavation and hauled offsite in accordance with landowner requests while complying with any applicable requirements before the soil freezes.

### 4.0 DRILLED PIER CONCRETE FOUNDATIONS

Once the foundation is drilled, a form will be placed over the excavated hole to hold the rebar and anchor bolts in place while concrete is poured into the foundation. Once the concrete has reached its desired strength during the curing process (determined through testing), the structures will be placed on the foundation by using a crane.

### 4.1 DRILLED PIER CONCRETE FOUNDATIONS DURING WINTER CONDITIONS

During winter conditions, the concrete mix for the drilled pier foundations may use heated aggregate and water to allow foundations to continue being installed through the winter season. Once the foundations are completed, insulated blankets will be placed over the concrete to prevent freezing during the curing process.



*Figure 5 – Pouring Concrete*

### 5.0 ACCESS PLANS

The Applicants will create an Access Plan that will detail how, and ideally when, areas of the Corridor will be accessed. Maps will be available to personnel working on the Project by utilizing portable electronic devices. The Access Plan will take into consideration soil conditions, environmentally sensitive areas (ESA), permit requirements, landowner requests, time of year, terrain, and other factors.

The Access Plan will identify the proposed route to be taken to each structure and work area locations, identify areas where matting is recommended, time of year when construction activities should occur, estimated amount of matting required, and the recommended type of matting (composite or wood) that should be used. The Access Plan will need to be flexible in order to accommodate unforeseen conditions during construction such as excessive precipitation, extreme temperature fluctuations, concrete availability, and other factors.

County and Township roads that the Applicants will be utilizing for accessing the Corridor may also be susceptible to damage, especially in late winter and spring during the freeze/thaw cycles. These roads will be identified, evaluated, and assessed prior to beginning construction and will continue to be monitored throughout construction in coordination with local road officials and following all applicable North Dakota Load Restrictions. Through this coordination, the Applicants will make the necessary improvements prior to, during, and after construction of the Project to keep these roads in good condition.

As with all plans implemented, communication among Project representatives, contractors, agencies, landowners and stakeholders will be maintained to promote a safe and successful Project. Once construction begins, the Applicants will hold Plan of the Day (POD) meetings each day prior to beginning daily tasks. Attendees will include representatives of the different active work groups. These daily POD meetings will support clear and concise communication with all Project personnel on what is planned throughout the day and week ahead.

## 5.1 ACCESS PLANS DURING WINTER CONDITIONS

To utilize the access plan during winter conditions, the route will be cleared of snow as needed to avoid unsafe work conditions. In most cases, the snow will be moved to the edge of the workspace (within the corridor) where it will not interfere with the work areas. Clearing snow also allows the ground to freeze and stabilize, enabling heavy equipment to move across these areas with less impacts.

## 6.0 MATTING

Matting will be used as needed to prevent rutting and soil mixing and to provide additional equipment support to minimize impacts.

### 6.1 MATTING DURING WINTER CONDITIONS

The characteristics of the winter season will dictate matting for the Project. The temperatures and the amount of snow will be determining factors on the amount of matting that will be required. For example, if the winter season consists of lower temperatures and minimal snowfall, the Applicants will be able to utilize less matting because of the additional depth of the frost during these types of winter conditions.



*Figure 3 - Matted Access*

## 7.0 CONCLUSION

The winter season offers unique opportunities during the construction of a transmission line project. Understanding and identifying the potential challenges, planning for them, and coordinating with landowners, construction contractors, agencies, and other stakeholders can minimize potential impacts and reduce the extent of restoration after winter construction. Sites that require restoration that were disturbed during winter construction will be restored as soon as weather and conditions permit. These sites will be monitored throughout the construction of the Project to ensure the restoration process is successful. The sites will be inspected at the end of the Project to verify that all conditions have been met and that the sites have been satisfactorily restored prior to the Project being closed out.