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December 1, 2011

Darrell Nitschke, Executive Secretary
North Dakota Public Service Commission
Department 408
600 East Boulevard Avenue
Bismarck, ND 58505-0480

VIA ELECTRONIC AND FEDERAL EXPRESS

Re: NOVEMBER 14 FARGO AREA POWER OUTAGE

Dear Mr. Nitschke:

Enclosed is our report of the findings of the investigation Northern States Power Company ("Xcel Energy" or "the Company") conducted in response to the transmission level outage our customers in the Fargo/West Fargo area experienced on November 14. As I conveyed in the letter submitted to the Commission on November 16, I sincerely regret that this outage occurred, and I want to ensure you this incident, the investigation, and follow-up actions continue to have the full attention of our senior management team.

It is my understanding the Commission may wish to discuss this outage further as a part of our pending electric rate case (Consolidated Case Nos. PU-10-657, PU-11-55 and PU-11-557). I also understand the Commission may wish to enter into evidence correspondence from the Company regarding the event, including this submittal. North Dakota Century Code Chapter 28-32-25 allows evidence to be considered that was not provided at the October 18, 2011 formal hearing. The Company does not object to the Commission considering further evidence regarding the November 14 outage as a part of its consideration of our pending electric rate case. The Company respectfully reserves its right, consistent with NDCC Chapter 28-32-25, to examine such evidence and present additional evidence or discussion to further clarify the record as necessary.

Please feel free to contact me or Dave Sederquist at (701) 241-8632 if you have any questions.

Sincerely,

Laura Mc Carten

LAURA MCCARTEN

Enclosures

Report to North Dakota Public Service Commission
Regarding November 14, 2011 Transmission Outage in Fargo, ND

Overview

On November 14 Xcel Energy was performing transmission line work requiring two of the three 115 kV transmission lines serving our customers in the Fargo/West Fargo area to be de-energized. As is our normal practice with this type of system configuration, our preparations included a detailed plan to minimize outage risk and a contingency plan to quickly restore power if, despite our planning, an outage did occur. Unfortunately, during the course of the November 14 work the remaining in-service transmission line tripped when a contract field technician disregarded operating procedures and performed testing on equipment he erroneously believed to be de-energized. When this occurred, our prior contingency planning allowed us to safely and promptly move through the steps required to switch one of the two de-energized transmission lines back into service and eventually restore power to all customers within 35 minutes. We have since taken steps to address the situation with the contract field technician and, as described in more detail below, have taken other corrective steps to minimize the possibility of further service interruptions as we complete the planned transmission projects.

Event Description

On the morning of November 14th, two of the three 115 kV transmission lines serving the Fargo/West Fargo area were taken out of service prior to the start of foundation work associated with a project requested by the City of Fargo to replace these adjacent transmission lines with a double circuit configuration. The requested project will reduce the easement width needed and allow more space for commercial development in the immediate area. In order to perform the project, we had to de-energize both transmission lines to allow workers to safely maneuver heavy equipment and materials and physically allow enough room to drill the hole for the large concrete foundation needed for a new steel pole structure in the southwest corner of 32nd Avenue South and 42nd Street. The two lines that were de-energized are referred to as the Sheyenne-Moderow line section and the Sheyenne-Cass County #2 line. Attachment A contains a picture of these lines and the foundation work being performed. The third transmission line source to the area, the Maple River-Red River line, remained in-service and was more than adequate to carry the forecasted load during this phase of the project. Attachment B shows the location of these three 115 kV lines.

A second project to upgrade relaying and control equipment for the Sheyenne-Cass County #2 transmission line was also scheduled to occur while the Sheyenne-Moderow and Sheyenne-Cass County #2 lines were out of service. This project was part of a series of upgrade projects planned for this fall and into next spring to improve system reliability in the Fargo/West Fargo area. Relay upgrade work of this nature is performed whenever possible on de-energized lines, which minimizes both the number of outages required to do the work and the potential for the work to impact the line's overall reliability.

At 12:15 p.m., the Maple River-Red River line tripped and reclosed. This caused a momentary outage to the Cass County, Moderow, and Red River substations. At 12:19 p.m., the Maple River-Red River line tripped again and remained out of service. Both trips were caused by a contract field technician testing error at the Red River Substation.

At 12:23 p.m., after determining that it was safe to proceed, the NSP Transmission Control Center attempted to remotely close the circuit breaker at the Red River Substation and re-energize the Maple River-Red River line. This attempt was unsuccessful due to a design weakness in the circuit breaker's closing control circuit.

The decision was made at this point to initiate the pre-planned contingency sequence to restore one of the two 115kV lines out of the Sheyenne Substation that had been de-energized that morning. At 12:49 p.m., after implementing standard operating procedures to prepare the lines for re-energizing, the necessary switching was performed and the Sheyenne - Moderow line section was energized, thus restoring service to most of the Fargo/West Fargo area. Additional switching at the Red River Substation allowed power restoration to three feeders remaining out at 12:54 p.m.

Event Analysis

Our investigation of this event revealed that the two Maple River-Red River line trips were caused by contract field technician testing errors. Two contract technicians went to our Red River Substation that morning to do preparatory work for a relaying upgrade project on the Maple River-Red River line, which was scheduled to begin on December 2nd. Believing he was working on de-energized circuits and there would be little or no risk to system reliability, one of the technicians connected test equipment to energized line relaying components. Because the relaying components were actually energized, connecting the test equipment caused the protective line relaying equipment to operate resulting in two trips of the Maple River – Red River line and eventually the outage to our Fargo/West Fargo customers. This technician was experienced with the Company's operating procedures and testing practices, was fully aware of the system configuration in place that day, but acted contrary to his training and approved work plan.

In summary, Xcel Energy's investigation revealed that both contract field technicians disregarded operating procedures and established work practices, including not communicating work their location and intentions to our Control Center. The specific actions that caused the outage were beyond the scope of their work plan for that day and were not appropriate for the system configuration in place.

Project Planning

The work we began on November 14 to reconfigure two separate transmission lines to a double-circuit structure required de-energizing both lines in order to perform the work safely and efficiently. In cases like this where the work requires eliminating planned system redundancy, we carefully plan and schedule the work so as to minimize the risk of service interruption.

We scheduled this work and various substation maintenance activities to occur at a time of low system demand, when customer needs can be met even with certain system components out of service. We conducted thorough and extensive planning well ahead of the actual field activities. This activity included development of both an overall project plan to mitigate the outage risks and a contingency action plan in case unexpected project issues or an outage did occur. The planning was a collaborative effort involving the internal work groups involved in the projects as well as local work groups involved in day-to-day system work in the Fargo area, including Transmission Operations, Distribution Operations, Substation Construction and Testing, Transmission Line Construction and various Engineering organizations.

Once the project plan was established, material deliveries were arranged, and crew schedules were in place, multiple pre-construction activities were initiated to further mitigate the potential for customer outage. For example, transmission line patrols and substation infrared scans were performed on all critical facilities to identify and correct any issues. In addition, extensive communications regarding the reduced redundancy of the system configuration and outage mitigation measures were conducted with field crews involved with both projects. Finally, detailed and comprehensive restoration plans were developed in the event an unanticipated outage occurred. These plans included scheduling transmission linemen to remain in the area for the duration of the foundation work, to be available to promptly re-energize the lines if needed.

This type of planning is an established practice at Xcel Energy for all construction projects. Planning of project scopes, schedules, outage requirements, and contingency plans occur regularly through the Company's constructability and outage coordination meetings involving engineering, operations, transmission, substation, and distribution personnel. Because of the sensitivity around reliability issues in North Dakota resulting from recent high-profile outages in Fargo, we conducted the project planning and execution with a heightened sense of caution. Thus, we undertook additional planning above and beyond what we would normally do given the complexity, sensitivity, magnitude, number of workgroups, and duration of the project.

Action Plan

In response to this event we have taken the following actions:

- *Investigate the cause(s) and file the appropriate reports.*
- *Address the outage cause.* We have removed the contract field technicians, who disregarded protocols, from the Fargo area project, and have informed the contract company we will not use their services on any remaining Xcel Energy projects. Steps to develop alternate technician staffing plans are underway.
- *Replace equipment that extended the outage restoration time.* We have replaced components and improved the closing control circuitry of the Maple River-Red River breaker that did not operate properly after the line tripped. Additional testing has also been performed on this breaker.

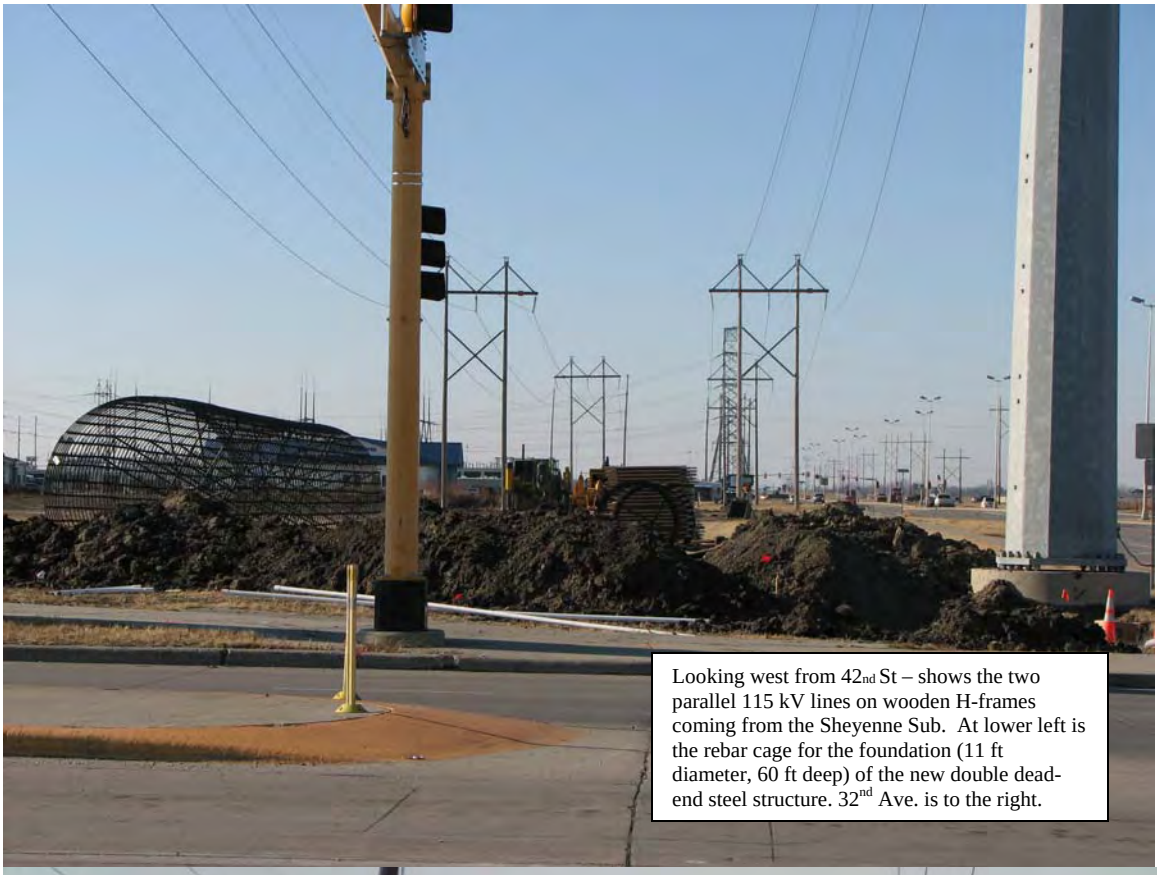
- *Revise the project schedule.* Because work was impacted by the outage and subsequent investigation, we have revised the project schedule. Foundation work has since resumed and the two lines coming out of Sheyenne Substation were de-energized on November 30 to complete the large foundation at the corner of 32nd Ave and 42nd St. Line relaying upgrades will continue through 2011 and additional line relaying upgrades will begin again in spring 2012, after the winter cold and weather season.
- *Mitigate outage risk during the remainder of these projects.* In addition to the actions taken above, we will take steps to prevent unrelated activity occurring at the substations in the Fargo area during future planned outages.
- *Review contractor management processes.* In spite of the fact that the outage resulted from the inappropriate actions of a contract field technician, we also intend to review our current contractor management processes to identify any areas that may need improvement.

Conclusion

Xcel Energy designs and operates its transmission system to the exact set of mandatory reliability standards required by the North American Electric Reliability Corporation ("NERC") and the Federal Energy Regulatory Commission. These standards provide a consistent base of rules that are in force for the entire country. These standards are becoming stricter and continue to evolve, and with that we will continue to make the prudent investments necessary to keep our system compliant.

Xcel Energy's goal is - and always has been - to provide safe and reliable energy to our North Dakota customers. We value our North Dakota customers and are committed to making necessary and prudent investments in our North Dakota electric system to accomplish that goal. Xcel Energy has completed almost all of the planned substation maintenance projects and activities discussed in our March 2011 presentation to the Commission in Bismarck. Between 2011 and 2015, the Company's investment plan for our North Dakota system calls for nearly $30 million in substation and transmission projects. We understand that a sound electric infrastructure is critical to the economic vibrancy and quality of life in the cities we serve.

12/1/2011



Looking west from 42nd St – shows the two parallel 115 kV lines on wooden H-frames coming from the Sheyenne Sub. At lower left is the rebar cage for the foundation (11 ft diameter, 60 ft deep) of the new double dead-end steel structure. 32nd Ave. is to the right.

This picture shows the height of the drill boom, foundation rebar cage, and other equipment requiring both transmission lines to be de-energized to safely construct the large foundation at the corner of 32nd Ave. and 42nd

S MAPLE RIVER

S NORTH BROADWAY

S RED RIVER

S CASS COUNTY

S MODEROW (MPC)

S BARNES

S SHEYENNE

Line #0910

Line #0911

Line #0913

Line #0866

Main Ave

32nd Ave S

42nd St S

Minnkota 230kv
Interconnect fo Frontier

Ottertail Power Interconnect
to USBR Substation

Ottertail Power Interconnect
to Audubon Substation

Note: Current Project
to Dbl Crt. this section
to corner - will require
double outages

Foreign Operating Company

FARGO

MOORHEAD

RED RIVER

29 94 10 75

N W E S

Scale: 1" equals 3809'

Legend

0839 (SHY-MDW INC.-CAS-RED-MPR)

- SHY-MDW
- MPR-RED
- RED-CAS-MDW

0866 (USBR INC.-SHY-CAS)

- SHY-CAS

Other Transmission Line

Ad Hoc Map

THIS MAP/DOCUMENT IS A TOOL TO ASSIST EMPLOYEES IN THE PERFORMANCE OF THEIR JOBS. YOUR PERSONAL SAFETY IS PROVIDED FOR BY USING SAFETY PRACTICES, PROCEDURES AND EQUIPMENT AS DESCRIBED IN THE SAFETY TRAINING PROGRAMS, MANUALS AND SPARS.

By: 200511

Date: 11/21/2011

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