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August 7, 2012

VIA ELECTRONIC
AND U.S. MAIL

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

Re: **XCEL ENERGY UNDERGROUND CABLE OUTAGE REPORT**
CASE NOS. PU-10-657, PU-11-55

Dear Mr. Nitschke:

Pursuant to the terms of the approved Settlement Agreement in our last electric rate proceeding (Case Nos. PU-10-657 and PU-11-55), I submit here our summary of underground residential distribution ("URD") cable failures through the second quarter, 2012.

As you will note on page 1, there were 24 URD cable failures in our North Dakota system during the second quarter (April through June). Five of those qualified for replacement under our cable replacement guidelines and engineering review. I have attached these guidelines to the report for your reference, on page 3.

I have also included as page 4 of this submittal a summary of the feeder level outages that have occurred in the first and second quarter this year. As stipulated in our Settlement Agreement, we have been notifying the Commission Staff of these outages as they occurred over the 3 month period; we have simply summarized them again here for your convenience.

Please feel free to contact me with any questions or comments you have about the information provided. Thank you.

Sincerely,

A handwritten signature in blue ink that reads 'David H. Sederquist'.

DAVID SEDERQUIST
SR. REGULATORY CONSULTANT

cc: Jerry Lein

Xcel Energy - North Dakota Electric
2012 URD Cable Outage, Review, and Replacement Summary
(Compliance Report - Case Nos. PU-10-657, PU-11-55)

#	Date of Cable Failure	Outage Duration	Service Area	Customers Impacted	Date of Engineering Review ¹	Meets Criteria to Replace? ²	Footage To Replace	Scope of Replacement ³	Date of Work Order	Date Project Started	Date Project Completed	Note
1	Jan-09 7:40 PM	5:23	Grand Forks	120	Jan-13	No	-	-	-	-	-	
2	Jan-13 11:58 AM	2:44	Minot	13	Jan-20	No	-	-	-	-	-	
3	Jan-31 7:16 PM	4:30	Fargo	148	Feb-03	No	-	-	-	-	-	
4	Feb-20 9:55 AM	1:36	Fargo	2	Feb-24	No	-	-	-	-	-	
5	Feb-23 4:14 PM	2:51	Fargo	8	Mar-02	No	-	-	-	-	-	
6	Mar-12 5:06 PM	2:20	Fargo	82	Mar-17	No	-	-	-	-	-	
7	Mar-20 3:10 AM	4:49	Minot	91	Mar-26	No	-	-	-	-	-	
8	Mar-24 11:21 AM	1:10	Fargo	2	Apr-02	No	-	-	-	-	-	
9	Apr-12 10:40 PM	1:32	Grand Forks	1,438	Apr-16	Yes	7,203	Segment	May-31	Jul-16	In Process	a
10	Apr-21 12:58 AM	2:48	Fargo	145	Apr-30	Yes	176	Segment	May-09	Jul-09	Jul-10	
11	Apr-21 2:26 AM	2:58	Fargo	54	Apr-30	No	-	-	-	-	-	
12	Apr-26 4:40 PM	2:40	Minot	48	Apr-30	No	-	-	-	-	-	
13	Apr-27 1:28 PM	2:37	Fargo	1	Apr-30	No	-	-	-	-	-	
14	May-03 5:27 AM	2:18	Fargo	83	May-07	No	-	-	-	-	-	
15	May-04 1:13 PM	1:32	Minot	24	May-07	No	-	-	-	-	-	
16	May-05 5:47 AM	13:22	Fargo	2	May-14	Yes	2,300	Radial	May-09	Aug-20	Aug-31	
17	May-17 7:53 AM	2:25	Fargo	166	May-21	No	-	-	-	-	-	
18	May-18 12:39 AM	2:21	Minot	8	May-21	No	-	-	-	-	-	
19	May-20 11:39 PM	2:09	Fargo	3,463	May-28	No	-	-	-	-	-	
20	May-25 10:00 PM	1:15	Grand Forks	1,441	May-28	Yes	7,203	Segment	May-31	Jul-16	In Process	b
21	Jun-04 4:14 PM	1:16	Minot	54	Jun-11	No	-	-	-	-	-	
22	Jun-12 4:53 AM	1:45	Minot	1	Jun-18	No	-	-	-	-	-	
23	Jun-12 3:53 PM	3:14	Minot	38	Jun-18	No	-	-	-	-	-	
24	Jun-12 3:53 PM	2:58	Minot	39	Jun-18	No	-	-	-	-	-	
25	Jun-14 7:10 AM	1:46	Fargo	8	Jun-18	No	-	-	-	-	-	
26	Jun-19 2:52 AM	2:18	Fargo	186	Jun-25	No	-	-	-	-	-	
27	Jun-19 4:26 AM	1:52	Fargo	51	Jun-25	No	-	-	-	-	-	
28	Jun-20 1:44 PM	1:40	Minot	1	Jun-25	Yes	519	Radial	Jul-03	-	-	
29	Jun-21 7:47 AM	3:20	Fargo	268	Jun-25	No	-	-	-	-	-	
30	Jun-26 11:11 AM	0:19	Minot	85	Jul-02	Yes	178	Segment	Jul-03	-	-	
31	Jun-26 11:12 PM	5:48	Fargo	18	Jul-02	No	-	-	-	-	-	
32	Jun-27 9:44 PM	6:41	Grand Forks	106	Jul-02	No	-	-	-	-	-	

¹ The Company's Reliability Management System ("REMS") compiles and processes outage-related information and will flag an engineering review if one of the protective devices (i.e., fuse, breaker, recloser) designed to isolate the fault and protect the system operates *twice within a two year period*. The review will determine if a failed cable qualifies for replacement. A designation of "na" in this column indicates that REMS did not flag such a review for this event.

² See URD Cable Replacement Guidelines summary, attached. Cable may also qualify for replacement under the current 500 MCM replacement program funded under Case. No. PU-10-657.

³ Based on our replacement guidelines, primary cable replacements can involve 1) a single cable segment, 2) multiple cable segments, 3) all common vintaged cable on a radial, or 4) all common vintaged cable on a half-loop.

Notes

- a. NOR035 feeder cable failure did not qualify for replacement under Cable Replacement Guidelines, but does under the current 500 MCM cable replacement program.
- b. Second failure of NOR035 feeder cable qualifies it for replacement under Cable Replacement Guidelines; however, replacement work has already begun (see note a.)

Key:



- 1st Qtr
- 2nd Qtr
- 3rd Qtr
- 4th Qtr

Xcel Energy

Underground Residential Distribution Cable Replacement Guidelines

Effective Jan. 1, 2009

Radial Feeds:

- After two cable failures occur anywhere on a given radial within a two year period, any cable segments (on the radial) that have failed within the last two years are replaceable.
- If two thirds (2/3) of the cable segments on the radial qualify for replacement, all segments (on the radial) that are of the *same vintage*, regardless of their failure history are replaceable.

Loop Feeds:

- After two failures occur on any single cable segment within a two year period, the cable segment is replaceable.
- After two failures occur anywhere on the same half of the loop within a two year period, any cable segments that have failed (on the half-loop) within the last two years are replaceable.
- If two thirds (2/3) of the cable segments on the same half of the loop qualify for replacement, all segments (on the half-loop) that are of the *same vintage* are replaceable.

Any Feeder Configuration:

- If a cable replacement project can be shown to reduce the customer minutes out (“CMO”) at a cost of \$0.13 or less per reduced CMO, the cable may be replaced.
- If a repaired cable segment fails again within one week after being placed back into service, the cable is replaceable.

Note: Final decisions regarding the replacement (and/or related scheduling) of failed underground cable is subject to the consideration of circumstances not contemplated in the guidelines shown here.

Xcel Energy - North Dakota Electric 2012 Feeder Level Outages Summary

2nd Quarter Summary

#	Date of Outage	Outage Duration	Service Area	Customers Impacted	Cause
1	Jan-31 9:00 AM	1:29	Berthold	262	Burned jumper wire on Verendrye Elec Co-op side of feeder
2	Mar-08 9:25 AM	1:11	Mayville	628	Loose connection created high heat, burned jumper
3	Apr-12 10:40 AM	1:32	G Forks	1,445	Underground cable fault
4	Apr-14 7:37 AM	2:32	G Forks	1,926	Broken, downed wire
5	Apr-15 2:27 PM	2:39	Minot	1,384	Pole fire
6	May-16 6:31 PM	1:57	G Forks	364	Switching equipment failure
7	May-20 11:39 PM	2:09	Fargo	3,513	Underground cable fault
8	May-22 10:45 PM	1:23	Thompson	472	Tree branch on line
9	May-25 10:00 PM	1:15	G Forks	1,448	Underground cable fault
10	Jun-13 3:00 AM	2:51	Mayville	556	Intentional; install mobile sub
11	Jun-13 5:18 AM	0:33	Mayville	230	Intentional; install mobile sub
12	Jun-13 5:18 AM	0:33	Mayville	449	Intentional; install mobile sub
13	Jun-13 5:18 AM	0:33	Mayville	192	Intentional; install mobile sub