

Direct Testimony and Schedules
Gerald Chezik

STATE OF MINNESOTA
OFFICE OF ADMINISTRATIVE HEARINGS
FOR THE PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE APPLICATION
FOR A ROUTE PERMIT FOR THE
MONTICELLO TO ST. CLOUD 345 KV
TRANSMISSION LINE PROJECT

PUC DOCKET No. ET2/TL-09-246
OAH DOCKET No. 15-2500-20665-2

TESTIMONY OF

Gerald Chezik

On Behalf of

APPLICANTS

NORTHERN STATES POWER COMPANY, A MINNESOTA CORPORATION
and GREAT RIVER ENERGY, A MINNESOTA COOPERATIVE
CORPORATION

February 1, 2010

Exhibit _____

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1 **I. INTRODUCTION AND QUALIFICATIONS**

2 **Q. PLEASE STATE YOUR NAME AND YOUR BUSINESS ADDRESS.**

3 A. My name is Gerald Chezik and my business address is 414 Nicollet Mall, MP-8A,
4 Minneapolis, Minnesota 55401.

5 **Q. BY WHOM ARE YOU EMPLOYED AND WHAT IS YOUR POSITION?**

6 A. I am employed as a Senior Project Manager at Xcel Energy Services Inc., the
7 service company provider for Northern States Power Company, a Minnesota
8 corporation (“Xcel Energy”). As part of my responsibilities in this position, I am
9 the project manager for the Monticello to St. Cloud 345 kV Transmission Line
10 Project (“Monticello-St. Cloud Project” or “Project”) and am primarily
11 responsible for permitting, design and construction of the Project.

12 **Q. PLEASE SUMMARIZE YOUR EDUCATIONAL BACKGROUND AND PROFESSIONAL**
13 **EXPERIENCE.**

14 A. I graduated from the University of Minnesota, Institute of Technology with a
15 Bachelor in Civil Engineering in 1973. I am currently a registered Professional
16 Engineer in the states of Minnesota and Wisconsin. I am also certified as a
17 Project Management Professional.

18 My employment at Xcel Energy began in 1976, as a Civil Engineer in Minnesota
19 assigned to design transmission line projects in Minnesota and Wisconsin. I was
20 assigned as a Transmission Engineer and eventually Project Engineer of the 500
21 kV Twin Cities to Winnipeg Transmission Project.

22 After spending seven years in plant engineering I returned to Substation and
23 Transmission Engineering in 1989 as a Senior Transmission Engineer until I was

1 promoted to Supervisor of the Substation Engineering group in 1989. I
2 remained in that position until 1996 where I managed the implementation of
3 Xcel Energy's portfolio of Minnesota and Wisconsin transmission projects.

4 In 1997 I was promoted to Project Development Manager where I was
5 responsible for budgeting and implementing projects across what is now the
6 Xcel Energy Inc.-wide portfolio of transmission work which includes Xcel
7 Energy, Northern States Power Wisconsin, Public Service Colorado and
8 Southwestern Public Service Corporation in Texas.

9 I was promoted to Senior Project Manager in 2001. In this position I provide
10 specific project management of large transmission projects in Minnesota and
11 Wisconsin. My recent projects include the King to Eau Claire to Arpin 345 kV
12 Rebuild Project, which was completed in 2008.

13 **Q. FOR WHOM ARE YOU TESTIFYING?**

14 A. I am testifying on behalf of Xcel Energy, a Minnesota corporation, and Great
15 River Energy, a Minnesota Cooperative corporation, the joint Applicants for a
16 Route Permit in this proceeding.

17 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS PROCEEDING?**

18 A. The purpose of my testimony is to provide information regarding the Project,
19 including engineering design, costs, and schedule.

20 **Q. WERE YOU INVOLVED IN THE PREPARATION OF THE ROUTE PERMIT
21 APPLICATION IN THIS PROCEEDING?**

22 A. Yes. I contributed to the preparation of Chapter 2 and portions of Chapter 3 of
23 the Route Permit Application.

1 **Q. ARE YOU AVAILABLE TO PROVIDE TESTIMONY IN SUPPORT OF PARTICULAR**
2 **SECTIONS OF THE ROUTE PERMIT APPLICATION?**

3 A. Yes. I am testifying in support of Chapter 2 (Project Information) and
4 supporting those portions of Chapter 3 (Section 3.1 Transmission Line
5 Engineering, Substation Engineering and Operational Design, Section 3.3.2
6 Construction Procedures; Section 3.3.3 Restoration Procedures, Section 3.3.4
7 Maintenance Procedures, and Section 3.5 Transmission Line Reliability) relating
8 to project design, construction, and maintenance.

9 **II. PROJECT OVERVIEW**

10 **Q. PLEASE PROVIDE A GENERAL DESCRIPTION OF THE MONTICELLO TO ST.**
11 **CLOUD 345 kV PROJECT.**

12 A. The Project consists of 345 kV transmission line facilities and substation
13 connections between the existing Monticello Substation in Monticello,
14 Minnesota, and the proposed Quarry Substation west of St. Cloud, Minnesota.

15 As currently proposed, the Project will be constructed as a single circuit on
16 double circuit capable poles.

17 Once property is acquired for the Quarry Substation, a tap of the existing 115 kV
18 transmission line would be constructed and two 115 kV transmission lines, an in
19 and an out, would connect the transmission line to the substation for Quarry
20 Substation Sites 1, 2 or 4.

21 **Q. WHAT DOES IT MEAN FOR POLES TO BE “DOUBLE CIRCUIT CAPABLE?”**

22 A. It means that the poles are manufactured to support two circuits. For this
23 particular project, the davit arms for both circuits will be built during initial

1 construction, but only one circuit will be installed. The conductors for the
2 second circuit could be added at a future time when conditions warrant.

3 **Q. WHAT STRUCTURES DO APPLICANTS PROPOSE TO USE FOR THE PROJECT?**

4 A. The Applicants propose to use single pole, galvanized or self-weathering steel
5 double circuit structures for the majority of the Project. Single steel pole
6 structures are typically placed on a concrete pier foundation. Specialty structures,
7 including H-frame structures, may be required in certain limited circumstances.
8 For example, H-frame structures are sometimes required near environmentally
9 sensitive areas when longer spans are required. H-frame structures consist of
10 two wooden or steel poles with cross bracing. If soil conditions are poor, a
11 deeper foundation or piling may be required. Deadend structures with one to
12 three legs may be used depending on site conditions.

13 For the 115 kV transmission extension into the proposed Quarry Substation
14 Applicants propose to use single pole steel 115 kV poles.

15 **Q. WHAT CONDUCTORS ARE APPLICANTS PROPOSING TO USE FOR THE**
16 **PROJECT?**

17 A. Each phase of the 345 kV transmission line will consist of bundled conductors
18 composed of two 954 kcmil 54/7 Cardinal Aluminum Conductor Steel
19 Supported (“ACSS”) cables or conductors of comparable capacity.

20 For the 115 kV transmission line connection, 795 ACSS is proposed.

1 **Q. WILL FIBER OPTIC CABLES ALSO BE INSTALLED?**

2 A. Yes. The shield wires on the 345 kV and 115 kV transmission line facilities will
3 include fiber optic cable that allows a path for substation protection equipment
4 to communicate with equipment at other terminals on the transmission line.

5 **Q. DESCRIBE THE RIGHT-OF-WAY THAT WILL BE REQUIRED FOR THE PROJECT.**

6 A. Generally, a right-of-way cleared of obstructions is required for the safe
7 operation of the facilities. A 150-foot wide right-of-way will be needed for the
8 majority of the 345 kV transmission line. In some limited instances, where
9 specialty structures are required for long spans or in environmentally sensitive
10 areas, a larger, 180-foot wide, right-of-way may be required.

11 For the possible transmission line extension of the existing St. Cloud to Sauk
12 River 115 kV transmission line to the new Quarry Substation, 75 feet of right-of-
13 way will be needed.

14 **Q. WHAT ARE THE ANTICIPATED SPAN LENGTHS FOR THE PROJECT?**

15 A. Spans of 750 to 1,100 feet between structures are expected for the majority of
16 the 345 kV line Project. For the 115 kV transmission line, spans of 600 to 800
17 feet are anticipated.

18 **Q. WHAT IS THE TIME SCHEDULE FOR COMPLETING THE PROJECT?**

19 A. An overview of the expected permitting and construction schedule for the
20 Preferred Route (Route A) was included in the Application in Section 2.5 and is
21 provided below. Additionally, Project completion is desired at the beginning of
22 Q2 2012 in order to accommodate summer load in the St. Cloud area.

MONTICELLO – ST CLOUD 345 kV PROJECT SCHEDULE	
ACTIVITY	TIMEFRAME
Minnesota Route Permit Granted	Second Quarter 2010
Construction Underway	Fourth Quarter 2010
Project Completed	Second Quarter 2012

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2 **Q. WOULD THE SCHEDULE BE THE SAME FOR ALL ROUTES NOW UNDER**
3 **CONSIDERATION?**

4 A. No. If Route B or Route C were selected, the same schedule would apply.
5 However, if Route D were selected, the in-service date could be significantly
6 delayed. As Darrin Lahr noted in his direct testimony, the permitting process for
7 approvals to cross the Mississippi River required for Route D may take
8 approximately six additional months. In my estimation, selection of Route D
9 could cause up to a one-year delay in the 2Q 2012 in-service date of the
10 Monticello -- St. Cloud 345 kV Project due to the uncertainty around the length
11 of time required to acquire the permits. Under the current anticipated schedule
12 for the Preferred Route, permits would be obtained by 3Q 2010 which allows for
13 construction to commence in 4Q 2010. The Project would seek to do significant
14 work during the winter construction season due to the enhanced ability to
15 operate in frozen conditions. Any delay in acquisition of the required permits
16 may result in a delay in construction activities due to working conditions, and
17 potentially hinder the desired in service date.

1 **Q. WHAT IS THE PROJECTED CAPITAL COST OF THE PROJECT?**

2 A. The total cost of the Project, which includes the survey, engineering, materials,
3 construction, right-of-way, and project management associated with the
4 transmission line and substations, is dependent, in significant part, on the design
5 of the transmission line facilities. The total cost is estimated to be between \$76.2
6 million and \$93.5 million in 2008 dollars depending on the route selected.
7 Applicants are in the process of reviewing cost estimates for Routes A-D and
8 will provide additional cost information in supplemental testimony.

9 **III. CONCLUSION**

10 **Q. DOES THIS CONCLUDE YOUR PRE-FILED DIRECT TESTIMONY?**

11 A. Yes.

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