

Direct Testimony and Schedules
Tony Wendland

Before the Minnesota Public Utilities Commission
State of Minnesota

In the Matter of the Application for a Route Permit for the Mankato – Mississippi
River 345 kV Transmission Line Project in Southeast Minnesota

Docket No. E002/TL-23-157
OAH Docket No. 65-2500-40099

**Direct Testimony of Tony Wendland
on behalf of Northern States Power Company,
doing business as Xcel Energy**

March 28, 2025

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Schedules

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I. INTRODUCTION AND QUALIFICATIONS

3 Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.

4 A. My name is Tony Wendland, and my business address is 414 Nicollet Mall,
5 Minneapolis, Minnesota 55401.

7 Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?

8 A. I am employed as a Project Director by Xcel Energy Services Inc. (XES), the
9 service company provider for Northern States Power Company, doing
10 business as Xcel Energy (Xcel Energy or Applicant). As a Project Director, I
11 oversee the project managers that are responsible for the scope, cost, schedule,
12 and construction of the Mankato – Mississippi River 345 kV Transmission
13 Project (Project).

15 Q. PLEASE DESCRIBE YOUR QUALIFICATIONS AND EXPERIENCE.

16 A. I obtained a Bachelor of Science in Construction Management from the
17 University of Minnesota – Mankato in 2007. I have held a Project
18 Management Professional Certification since 2013 and a Scheduling
19 Profession Certification since 2012, both from the Project Management
20 Institute. I joined Xcel Energy as a Senior Project Controls Specialist in
21 November 2010. I have held multiple positions within Xcel Energy over the
22 past fourteen years. In those positions, I managed business plans and
23 performance tracking for construction and operation of electric and natural
24 gas transmission projects. I also managed construction and scheduling of
25 transmission lines and substations, and supervised employees constructing
26 transmission projects. In July 2024, I was promoted to the role of Project
27 Director. As part of my job responsibilities, I provide strategic leadership

1 while directing management for projects that require greater oversight due to
2 large scopes and complexity. My resume is attached as **Schedule 1**.

3

4 Q. FOR WHOM ARE YOU TESTIFYING?

5 A. I am testifying on behalf of the Applicant in this proceeding, Xcel Energy.

6

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

8 A. The purpose of my testimony is to provide information regarding cost and
9 schedule for the Project. I am providing information regarding costs of route
10 alternatives that have been put forth by the public and other stakeholders for
11 analysis in the Environmental Impact Statement (EIS).

12

13 Q. PLEASE PROVIDE A BRIEF OVERVIEW OF THE PROJECT.

14 A. The Project consists of a new, approximately 130-mile 345 kV transmission
15 line between the Wilmarth Substation in Mankato, Minnesota and the
16 Mississippi River near Kellogg, Minnesota. The project also consists of a new,
17 approximately 20-mile 161 kV transmission line between the North Rochester
18 Substation near Pine Island, Minnesota and an existing transmission line
19 northeast of Rochester, Minnesota. The Project also includes upgrades at the
20 existing Wilmarth and North Rochester substations, and possible
21 modifications to the existing Eastwood Substation if the south route
22 alternative (Option 1 South) is selected.

23

II. PROJECT SCHEDULE

3 Q. WHAT IS XCEL ENERGY'S ANTICIPATED CONSTRUCTION SCHEDULE FOR THE
4 PROJECT?

5 A. As shown in Table 1, Xcel Energy intends to begin construction of the Project
6 in the fourth quarter of 2026 or the first quarter of 2027 and place the Project
7 in service in the first quarter of 2030.

Table 1. Anticipated Project Schedule

Activity	Estimated Dates
Minnesota Certificate of Need and Route Permit for Issued	Fourth Quarter 2025
Land Acquisition Begins	Fourth Quarter 2025
Survey and Transmission Line Design Begins	Third Quarter 2024
Other Federal, State, and Local Permits Issue	Third/Fourth Quarter 2025
Start Right-of-Way Clearing	Third Quarter 2026
Start Project Construction	Fourth Quarter 2026 or First Quarter 2027
Project In-Service	First Quarter 2030

III. PROJECT COSTS

Q. WHAT IS THE ESTIMATED COST FOR THE PROJECT?

13 A. In the Application, Xcel Energy provided the total estimated cost of the
14 Project based on the routes it proposed in the Application. These costs include
15 all transmission line costs (including materials, associated construction,
16 permitting and design costs, and risk reserves), substation modification costs
17 (including materials, construction, permitting and design costs, and risk
18 reserve), Allowance for Funds Used During Construction (AFUDC), and
19 right-of-way costs. The total Project capital expenditures range from \$524.7
20 million on the low end to \$577.2 million on the high end. These costs were

1 escalated to nominal dollars to reflect the expected final cost at completion
2 for each component of the Project.

4 Since the filing of the Application, Xcel Energy has updated this range of
5 Project costs to reflect the specific costs for each route alternatives included
6 in the EIS. These updated costs are provided in Table 2 below.

7 **Table 2. Total Project Costs**

Project Components	Low Capital Expenditures (\$Millions)	High Capital Expenditures (\$Millions)
Mankato – Mississippi River 345 kV Transmission Line	\$376.6	\$484.8
Wilmarth Substation Modifications	\$8.6	\$9.1
North Rochester Substation	\$10.5	\$11.5
North Rochester to Chester 161 kV Transmission Line	\$41.1	\$69.7
Eastwood Substation Modifications	\$0	\$8.7
Total	\$436.8	\$583.8

8 Q. PLEASE EXPLAIN THE CHANGES TO THE PROJECT COSTS SHOWN IN TABLE 2
9 TO WHAT WAS PROVIDED IN THE APPLICATION.

10 A. Table 2 reflects changes to the cost estimates for both the 345 kV and the 161
11 kV portions of the Project. The cost estimates for the substations portions of
12 the Project are unchanged from the costs provided in the Application. The
13 primary change to the transmission line cost estimates is that, for purposes of
14 providing cost estimates for the Application, Xcel Energy did not use route-
15 specific cost estimates. Rather, the Company developed the range of cost
16 estimates using a single potential route and different risk reserve amounts. The
17

1 costs reflected in Table 2 are based on specific routes for both the 345 kV and
2 161 kV transmission lines. This was done to allow the ability to compare costs
3 of different route alternatives. The low end of the 345 kV transmission line
4 costs in Table 2 are based on a combination of the lowest cost route
5 alternatives for each of the different segments of the 345 kV transmission line.
6 The high end of the 345 kV transmission line costs in Table 2 are based on a
7 combination of the highest cost route alternatives for each of the different
8 segments of the 345 kV transmission line.

9
10 For the 161 kV transmission line portion, the high end of the cost range is for
11 Route Segment Alternative 13. This is an alternative that was put forth during
12 the scoping process and involves double-circuiting the new 161 line with the
13 existing North Rochester – Northern Hills 161 kV line for approximately 11
14 miles starting at the North Rochester Substation to where it will connect with
15 Route Option 4 West. The cost estimates in the Application were based on a
16 single-circuit 161 kV design. In contrast, Route Segment 13 involves
17 constructing 11 miles of double-circuited 161/161 kV transmission line,
18 which is more expensive than single-circuit construction due to the larger
19 structures and additional conductor.

20
21 The low end of the cost range for the 161 kV transmission line, is for Route
22 Segment 12. This alternative was put forth in the scoping process and involves
23 constructing the new 161 kV line parallel to the existing CapX2020 North
24 Rochester – Mississippi River double-circuit 345/345 kV transmission line.
25 Route Segment 12 is estimated to be less expensive than the two routes
26 included in the Application (Route Option 4 East and Route Option 4 West)
27 because it is approximately six miles shorter in length than these routes. A

1 shorter route means less structures, less conductor, and less right-of-way
2 which results in lower overall costs.

3

4 Q. HAS XCEL ENERGY PREPARED A COST ESTIMATE FOR ITS PREFERRED ROUTE
5 FOR THE PROJECT?

6 A. Yes. Xcel Energy's preferred route is discussed in greater detail in the Direct
7 Testimony of Company witness Ellen Heine. The estimated cost for Xcel
8 Energy's preferred route is \$465.4 million as shown in Table 3 below.

9 **Table 3. Total Costs for Xcel Energy's Preferred Route**

Project Components	Capital Expenditures (\$Millions)
Mankato – Mississippi River 345 kV Transmission Line	\$376.6
Wilmarth Substation Modifications	\$8.6
North Rochester Substation	\$10.5
North Rochester to Chester 161 kV Transmission Line	\$69.7
Eastwood Substation Modifications	\$0
Total	\$465.4

10

11 Q. HAS XCEL ENERGY DEVELOPED COST ESTIMATES FOR THE ROUTE AND
12 ALIGNMENT ALTERNATIVES THAT ARE BEING ANALYZED IN THE EIS?

13 A. Yes. The Department of Commerce, Energy Environmental Review and
14 Analysis (DOC-EERA) is currently preparing an EIS that will help inform the
15 Commission's decision regarding the route for the Project. In the EIS, the
16 DOC-EERA will evaluate the routes proposed in the Application as well as
17 ten route segment alternatives and five alignment alternatives proposed during
18 the scoping process. Xcel Energy's cost estimates for these route and

1 alignment alternatives are provided as **Schedule 2** to my Direct Testimony
2 with the exception of Route Segment 12 (161 kV parallel to CapX2020
3 345/345 kV) and Route Segment 17 (Highway 14 alternative), which are
4 provided below.

5

6 Q. HOW DID XCEL ENERGY DEVELOP COST ESTIMATES FOR THESE ROUTE AND
7 ALIGNMENT ALTERNATIVES?

8 A. To prepare cost estimates for the route and alignment alternatives, Xcel
9 Energy first calculated the length of the route or alignment alternative. The
10 Project team assembled inputs from all the necessary functional area subject
11 matter experts on the Project team regarding design and route specific
12 constraints that could impact costs. For instance, the Project team considered
13 whether a particular segment was single-circuit or double-circuit design. The
14 inputs from the subject matter experts were incorporated into Xcel Energy's
15 cost estimating tool. The outputs from the cost estimating tool were then
16 reviewed for accuracy and vetted against historical benchmark data for similar
17 projects and revised as needed. These cost estimates were then used to
18 develop a per-mile cost estimate for a similar segment of the route. Xcel
19 Energy then applied the per-mile cost estimate to the length of the route or
20 alignment alternative. Xcel Energy then compared the cost for the route or
21 alignment alternative to the same portion of the route proposed in the
22 Application to determine the cost difference. For certain route and alignment
23 alternatives that had similar mileage and design as the routes proposed in the
24 Application, Xcel Energy noted that the cost difference was "negligible" on
25 **Schedule 2**.

1
2 Q. PLEASE DESCRIBE ROUTE SEGMENT 12 AND PROVIDE XCEL ENERGY'S COST
3 ESTIMATE FOR THIS ROUTE ALTERNATIVE.

4 A. Route Segment 12 is an alternative route for Segment 4 of the Project. Route
5 Segment 12 involves constructing the 161 kV line parallel to the existing
6 CapX2020 North Rochester – Mississippi River 345/345 kV line in Segment
7 3 of the Project from the North Rochester Substation to point described as
8 Chester Junction. Route Segment 12 would deviate from the 345/345 kV line
9 in three locations to avoid a constraint or pinch-point along the existing
10 345/345 kV line. Table 4 below provides Xcel Energy's cost estimate for
11 Route Segment 12 as compared to Xcel Energy's Preferred Route for Segment
12 4. The cost estimate for Route Segment 12 was developed using the same
13 method described above that was used for all of the other route and alignment
14 alternatives.

15 **Table 4. Cost Estimate for Route Segment 12**

Alternative	Capital Expenditures (\$Millions)
Xcel Energy's Preferred Route for Segment 4 (Route Segment 13)	\$69.7
Route Segment 12	\$41.1

16
17 Q. PLEASE DESCRIBE ROUTE SEGMENT 17 AND PROVIDE XCEL ENERGY'S COST
18 ESTIMATE FOR THIS ROUTE ALTERNATIVE.

19 A. Route Segment 17 is a route alternative for Segments 1 and 2 of the Project.
20 Route Segment 17 involves constructing the new 345 kV transmission line
21 along U.S. Highway 14 (Highway 14). It begins at a point on Segment 1 South
22 near the intersection of County Road 12 and Highway 14 and continues east,

1 primarily located within or adjacent to the Highway 14 right-of-way, to Byron,
2 Minnesota. At Byron, Route Segment 17 travels north to the North Rochester
3 Substation and would be double-circuited with the existing Pleasant Valley to
4 North Rochester 345 kV transmission line. Table 5 below provides Xcel
5 Energy's cost estimate for Route Segment 17 as compared to Xcel Energy's
6 Preferred Route for Segments 1 and 2. The cost estimate for Route Segment
7 12 was developed using the same method described above that was used for
8 all of the other route and alignment alternatives.

9 **Table 5. Cost Estimate for Route Segment 17**

Alternative	Capital Expenditures (\$Millions)
Xcel Energy's Preferred Route for Segment 1 and 2	\$339.9
Route Segment 17	\$397.1

10

11 **IV. CONCLUSION**

12

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

14 A. Yes.

Tony Wendland, PMP,PMI-SP

Experience Summary

20 years of experience in the fields of high voltage electric transmission project management, distribution substation project management, natural gas project management, utility construction operations management and strategic planning, project scheduling, electric transmission foundation construction, commercial construction, construction inspections, general construction and maintenance, utility field work, supervisory roles, and project coordination.

Education and Professional Certifications

Bachelor of Science Construction Management, Minnesota State University, Mankato
Project Management Professional, Project Management Institute
Scheduling Professional, Project Management Institute

Professional Experience

July 2024 – Present Xcel Energy Minneapolis, MN

Project Director Capital Project Development (Transmission and Distribution)

- Provide strategic leadership to project teams developing the scope schedule and cost for a portfolio of large and complex transmission line and substation projects
- Provide direction and leadership to diverse teams through project planning, development and state/local permit processes
- Manage relationships and communicate with internal and external stakeholders

June 2023 – July 2024 Xcel Energy Minneapolis, MN

Project Manager III Capital Project Development (Transmission and Distribution)

- Responsible for developing the scope, schedule and cost of large complex transmission line and substation projects
- Lead a diverse team through project planning, development and state/local permit processes
- Manage relationships and communicate with internal and external stakeholders

May 2021 to June 2023 – Xcel Energy Minneapolis, MN

Senior Project Manager (Transmission)

- Management and leadership for a portfolio of transmission line and substation projects
- Lead a diverse project team to achieve approved project scope using strategic sequencing, detailed schedules, cost tracking, forecasting and reconciliation

March 2019 to May 2021 – HireGenics / Xcel Energy Minneapolis, MN

Project Controls Specialist

- Maintain a schedule portfolio of transmission and substation projects using Primavera scheduling software
- Perform detailed schedule creation and periodic updates on my portfolio of projects

September 2018 to March 2019 - Xcel Energy Maple Grove, MN

Senior Operations Manager, Construction Management Office

- Developed strategic direction for a new organization within Xcel Energy to improve construction efficiency
- Implemented new material coordination team
- Implemented unit bid pricing with our major contractors
- Oversight and governance of all major contract work within the Transmission Construction department

August 2016 to September 2018 - Xcel Energy Maple Grove, MN

Experience**Senior Project Manager, Strategic Planning and Operational Performance**

- Provide overall business planning and performance tracking for the Transmission construction and Line Operations department.
- Developed and help implement major organization adjustments
- Implementing the use of unit pricing contracts and compliance processes for those contracts
- Developed audit compliance responses and implemented the process changes including a new vendor observation program

January 2014 to August 2016 - Xcel Energy St. Paul, MN

Senior Project Manager High Pressure Natural Gas

- Responsible for managing the scope, schedule, cost and risks of multi-million dollar high pressure natural gas projects
- Manage and oversee construction and inspection of high-pressure natural gas pipeline projects
- Liaison between Xcel, community and the public during the planning, design and construction phases of the project

June 2012 to January 2014 - Xcel Energy Maple Grove, MN

Field Operations Supervisor II

- Responsible for supervising 80 employees working on installing foundations for electric transmission structures and substation equipment
- Supervised crews working on parts of the CAPX 2020 project, installing large drilled-pier foundations for transmission lines

November 2010 to June 2012 – Xcel Energy Minneapolis, MN

Project Controls Specialist

- Maintained a schedule portfolio of 100 to 200 transmission and substation projects using Primavera scheduling software
- Perform detailed schedule creation and periodic updates on my portfolio of projects

Nov 2008 to Nov 2010 Hardrives Inc. Rogers, MN

Project coordinator

- Scheduled heavy highway paving crews and equipment
- Daily estimating of asphalt and other material needed for projects

May 2007 to June 2008 Sand Companies, Inc. Waite Park, MN

Assistant Project Manager

- Assisted project managers to complete commercial construction projects on time and under budget
- Management of sub-contractors, inspecting contractors work, estimating, scheduling, negotiation of contracts, plan reading, and plan interpretation

May 2004 to June 2006 Midwest Utility Service Inc. Mankato, MN

Foreman/Operator

- Managed crews and equipment installing to home, fiber optic systems in the Midwest using horizontal drilling, cable plowing and trenching construction methods

Route Alternative Name	Segment of the Project	Proposer	Description of Route Alternative	Estimated Cost Difference Between Original Route Segment and Route Alternatives
Route Segment 1	Segment 1 South	Public	Route Segment 1 starts north of the Eastwood Substation in Blue Earth County. It traverses south from Highway 14 and then east along Madison Avenue until 594th Avenue where it turns north until it joins Segment 1 South at N. Victory Dr. This route segment would avoid potential impacts to commercial property.	\$3.0 million more
Alignment Alternative 2	Segment 1 North	Applicant	Alignment Alternative 2 shifts the alignment of Segment 1 North to the east side of 589th Avenue. This alignment alternative would avoid a new development that has broken ground in the same location as the property alignment for Segment 1 North. The parcel is not wide enough to accommodate the transmission line and commercial development.	Negligible; 0.01 mile difference between original and alternative alignment.
Route Segment 5	Segment 1 South	Applicant	Route Segment 5 is located in the city of Madison Lake near Walnut Avenue and East Street. Route Segment 5 extends from Segment 1 South at the northeast side of the city along the south side of an existing railroad to the west side of 626th Avenue and then south to rejoin Segment 1 South.	Negligible; 0.36 mile difference between original and alternative route.
Route Segment 6	Segment 1 South	Public	Route Segment 6 would follow the Sakatah Singing Hills State Trail. Route Segment 6 would start at the intersection of 516th St. and the Sakatah Singing Hills State Trail and continue 3.6 miles east and rejoin Segment 1 South near Highway 60. This route segment is intended to utilize the existing Sakatah Singing Hills State Trail corridor to reduce additional land use conversion, and to move the line away from multiple residences along Highway 60.	\$2.6 million more
Route Segment 7	Segment 1 South	Applicant	Route Segment 7 is located south of the city of Morristown along 260th Street West. Route Segment 7 would avoid construction of a new residence along 260th Street West.	Negligible; 0.01 mile difference between original and alternative route.
Alignment Alternative 8	Segment 1 North	Public	This Alignment Alternative 8 starts east of Echo Avenue and would traverse 0.2 miles northeast where it would reconnect with Segment 1 North. The Alignment Alternative would avoid tree removal near a steep hill along Segment 1 North.	Negligible; no difference in mileage between original and alternative alignment.
Route Segment 9	Segment 1 North	Public	Route Segment 9 is located southwest of the city of Faribault and east of Cannon Lake. The route segment would shift the route approximately 600 feet to the east of where it is proposed and span 0.9 miles northeast where it would reconnect with Segment 1 North. Route Segment 9 would minimize tree clearing.	Negligible; no difference in mileage between original and alternative route.
Route Segment 10	Segment 1 South	Public	Route Segment 10 starts at Appleton Ave. north of 250th St. West and traverses east to Interstate 35 and then north along the east side of the interstate where it would connect with Segment 2 South.	\$6.9 million less assuming connects to Segment 2 South. \$4.3 million more assuming connects to Segment 2 North.

Route Alternative Name	Segment of the Project	Proposer	Description of Route Alternative	Estimated Cost Difference Between Original Route Segment and Route Alternatives
Route Segment 11	Segment 1 South	Public	Route Segment 11 starts on 250 th St just west of Appleton Ave and traverses east to the west side of Interstate 35 then north along the west side of the interstate until intersecting with Route Segment 10, described above, continuing north along the east side of the interstate where it would connect with Segment 2 South.	<p>\$6.2 million less assuming connects to Segment 2 South.</p> <p>\$5.3 million more assuming connects to Segment 2 North.</p>
Route Segment 13	Segment 4	Applicant	Route Segment 13 involves double circuiting the new 161 kV with the existing North Rochester to Northern Hills 161 kV line. Route Segment 13 starts at the North Rochester Substation and would double circuit the existing transmission line for 11.3 miles south where it would connect to Route Option 4 West.	Route Segment 13 was included as part of Xcel Energy's Preferred Route for Segment 4. See Table 4 in Tony Wendland's Direct Testimony for costs for the Preferred Route for Segment 4.
Alignment Alternative 15	Segment 4	Public	Alignment Alternative 15 is an alternative to the alignment of Route Segment 12, described above, at the Zumbro River crossing. This alternative would cross the Zumbro River on the south side of the County Road 12 and on the south side of the existing 345 kV transmission line.	Negligible; 0.03 mile difference between original and alternative route.
Alignment Alternative 16	Segment 4 East	Public	Alignment Alternative 16 is alternative to a portion of Segment 4 East. It would shift the corresponding portion of the 161 kV line to the south side of 75th Street NW for approximately 950 feet.	Negligible; no difference in mileage between original and alternative route.
Route Segment 18	Segment 1	Minnesota Public Utilities Commission	Route Segment 18 departs Segment 1 North and travels east along an existing property line before intersecting 230th Street West, just south of Highway 60 in Rice County. From its intersection within 230th Street West, the route segment would extend northeast until it intersects with Route Segment 9 which is described above. This route segment would move the proposed 345 kV line further from Cannon Lake.	Negligible; 0.01 mile difference between original and alternative route.