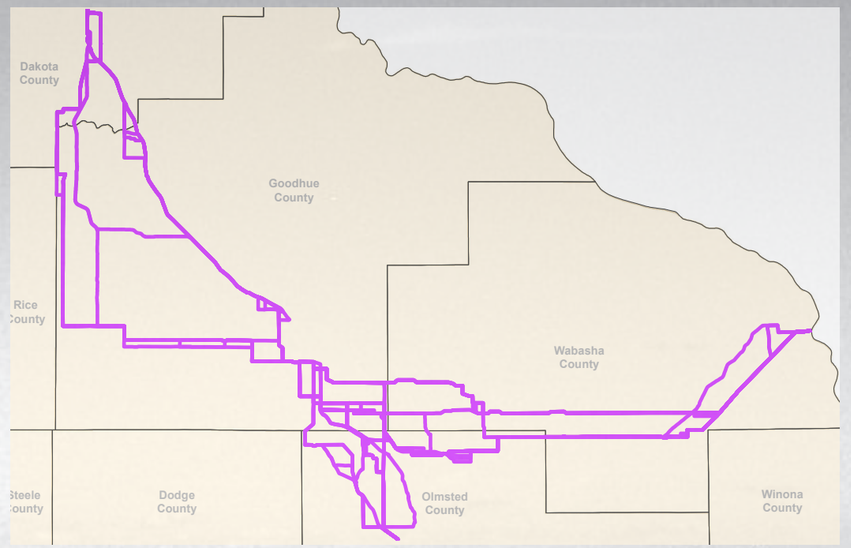
CapX Hampton-Rochester-La Crosse 345kV and 161kV Transmission Lines Project

Final Environmental Impact Statement



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Responsible Governmental Unit

Minnesota Department of Commerce
85 7th Place East, Suite 500
St. Paul, MN 55101-2198

MN DOC Representative

Matthew Langan
State Permit Manager

Energy Facility Permitting
(651) 296-2096

Project Applicant

Xcel Energy Company
414 Nicollet Mall
Minneapolis, MN 55401

Project Representative

Thomas G. Hillstrom
Supervisor
Siting and Permitting, Xcel Energy
1-800-238-7968

Abstract

The Public Utilities Commission (Commission) is considering the project proposed by Xcel Energy – on behalf of its CapX2020 co-owners Dairyland Power, Rochester Public Utilities, WPPI Energy and Southern Minnesota Municipal Power Agency – to construct and operate a 345 kilovolt and a 161 kilovolt transmission line between Hampton, Minnesota, Rochester, Minnesota, and La Crosse, Wisconsin. The portion of the project within the state of Minnesota would traverse parts of Dakota, Goodhue, Olmsted and Wabasha counties, with one potential route alternative that runs along the Rice-Goodhue county border. The project also includes the construction and operation of a new substation in an area between Zumbrota and Pine Island, Minnesota.

This environmental impact statement (EIS) evaluates the portion of the line in the state of Minnesota only, and was produced to satisfy the state of Minnesota environmental review requirements for the project.

Additional information on the project is available in the project application listed in the references chapter of this EIS. Other material related to this docket is available online at: http://energyfacilities.puc.state.mn.us/Docket.html?Id=25731, or on the eDockets website at https://www.edockets.state.mn.us/EFiling/search.jsp (enter the docket year "09" and number "1448").

This EIS was released on August 31, 2011. The document includes responses to comments received on the draft EIS (see Appendix O).

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List of Preparers

Contributors to this document included:

Matthew Langan, State Permit Manager
Office of Energy Security, Minnesota Department of Commerce

Barr Engineering Company (Barr)

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8.4.1-05 Detailed River Crossing Map - Option D

8.4.1-06 Detailed River Crossing Map - Option E

Substations

8.5-01 Hampton Substation Area

8.5-02 North Rochester Substation Area

8.5-03 Northern Hills Substation Area

List of Acronyms

ACGIH	American Conference of Governmental Industrial Hygienists
ACSS	Aluminum Conductor Steel Supported (cables)
AIMP	Agricultural Impact Mitigation Plan
ALJ	Administrative Law Judge
AM	Amplitude Modulated
AMA	Aquatic Management Area
APE	Area of Potential Effect
ATF	Advisory Task Force
AWOS	Automated Weather Observation Stations
BFD	Bird Flight Diverters
BMP	Best Management Practice
BWSR	Minnesota Board of Water and Soil Resources
CCD	Colony Collapse Disorder
Commission	Public Utilities Commission
CON	Certificate of Need
CR	County Road
CREP	Conservation Reserve Enhancement Program
CRP	Conservation Reserve Program
CSAH	County State Aid Highway
CWA	Federal Clean Water Act
CWCS	Comprehensive Wildlife Conservation Strategy
CWD	Chronic Wasting Disease
dB	Decibels
dBA	"A-weighted" sound scale (human hearing) recorded in units of decibels
DME	Distance Measuring Equipment
DNR	Minnesota Department of Natural Resources
DOT	Minnesota Department of Transportation
ECS	Ecological Classification System
EFP	OES Energy Facilities Permitting
EIS	Environmental Impact Statement
ELF	Extremely Low Frequency
EMF	Electromagnetic Field
EMI	Electromagnetic Interference
EPRI	Electric Power Research Institute
EQB	Environmental Quality Board
EU	European Union
FAA	Federal Aviation Administration
FAR	Federal Aviation Regulations
FEMA	Federal Emergency Management Agency
FM	Frequency Modulated
FMA	Fish Management Area
FNAP	Farmland Natural Areas Program, Dakota County, MN
G	Gauss (mG = milligauss)
GAP	Gap Analysis Program
GBCA	Grassland Bird Conservation Areas
GIS	Geographic Information System
GPS	Global Positioning System
GSM	Global System for Mobile Communications
HPFF	High-Pressure Fluid-Filled Pipe
HU	Hydrologic Unit
HUD	Housing and Urban Development
HVTL	High Voltage Transmission Line
Hwy	Highway
Hz	Hertz
IBA	Important Bird Area
ICD	Implantable Cardioverter Defibrillators
ICNIRP	International Commission on Non-Ionizing Radiation Protection
IEEE	Institute of Electrical and Electronics Engineers
kV	Kilovolt
LGU	Local Government Unit
LULC	Land Use/Land Cover
LUST	Leaky Underground Storage Tank
mA	Milliamps
MCBS	Minnesota County Biological Survey
MDA	Minnesota Department of Agriculture
MES	Master Entity System
MHz	Megahertz
MLCCS	Minnesota Land Cover Classification System
MN	Minnesota
Mn Hwy	Minnesota State Highway
MSIWG	Minnesota State Interagency Working Group
MVA	Megavolt-ampere
MW	Megawatt
MWh	Megawatt hour

NAAQS	National Ambient Air Quality Standards
NAC	Noise Area Classifications
NEPA	National Environmental Policy Act
NERC	North American Electric Reliability Corporation
NESC	National Electrical Safety Code
NHIS	Natural Heritage Information System
NHPA	National Historic Preservation Act
NIEHS	National Institute of Environmental Health Sciences
NOP	USDA National Organic Program
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NRPB	National Radiological Protection Board
NWI	National Wetlands Inventory
NWR	National Wildlife Refuge
OES	Office of Energy Security (Department of Commerce)
PCA	Minnesota Pollution Control Agency
PPB	Parts Per Billion
PPSA	Power Plant Siting Act
PSCW	Public Service Commission of Wisconsin
PUC	Public Utilities Commission
PWI	Public Waters Inventory
RIM	Reinvest in Minnesota, MN DNR critical habitat program
RJD Forest	Richard J. Dorer Memorial Hardwood Forest
ROW	Right-of-Way
RPA	Route Permit Application
RUS	U.S. Department of Agriculture Rural Utilities Service
SCGN	Species in Greatest Conservation Need
SHPO	State Historic Preservation Office
SIP	State Implementation Plan
SNA	Scientific and Natural Area
SPCC	Spill Prevention, Control, and Countermeasure Plan
SWG	State Wildlife Grants
SWPPP	Stormwater Pollution Prevention Plan
TCP	Traditional Cultural Property
TSR	Township, Section, and Range
US Hwy	U.S. Highway
USACE	U.S. Army Corps of Engineers
USDA	U.S. Department of Agriculture
USDOE	U.S. Department of Energy
USEPA	U.S. Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VOR	Very High Frequency Omni-directional Radio Range
WCA	Wetland Conservation Act
WHO	World Health Organization
WMA	Wildlife Management Area
WPA	Waterfowl Production Area
WRP	Wetland Reserve Program
XLPE	Extruded dielectric cable system

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