

## Acronyms and Abbreviations

AADT	Annual Average Daily Traffic
AC	alternating current
ACSR	aluminum conductor steel-reinforced
AIMP	Agricultural Impact Mitigation Plan
AM	Amplitude Modulation
AMA	Aquatic Management Area
APLIC	Avian Power Line Interaction Committee
Applicant	Northern States Power Company, doing business as Xcel Energy
Application	The Site Permit and two Route Permit Applications provided herein.
AQI	Air Quality Index
ARMER	Allied Radio Matrix for Emergency Response
ASIS	Aggregate Source Information System
BCC	Birds of Conservation Concern
BCR	Bird Conservation Region
BIPOC	black, indigenous and people of color
BMPs	best management practices
BNSF Railroad	Burlington Northern-Santa Fe Railroad
BWSR	Board of Water and Soil Resources
CAA	Clean Air Act
CFR	Code of Federal Regulations
CO	carbon monoxide
Commission	Minnesota Public Utilities Commission
CN	Certificate of Need
CSAH	County State Aid Highway
CWI	County Well Index
dB	decibels
dBA	A-weighted decibels
DC	direct current
East Application Alignment	The likely alignment within the proposed East Route that minimizes the overall potential impacts based on the routing factors identified in Minn. Stat. § 216E.03, subd. 7(b), and Minn. R. Ch. 7850.4100.
East Collector Substation	A 34.5 to 345 kilovolt step-up substation that will collect power from the East Block of the Solar Project.
East HVTL Project	The proposed 1.7-mile 345 kilovolt transmission line that runs from the proposed East Collector Substation to the existing Sherburne County Substation.

East Route	The proposed route width of 860 feet between the East Collector Substation and existing fenceline of the Sherco Generating Plant. Inside this fenceline, the route width varies between 950 - 1,800 feet.
ECS	Ecological Classification System
EMF	electric and magnetic field
EPA	U.S. Environmental Protection Agency
ESA	Endangered Species Act
FAA	Federal Aviation Administration
FCC	Federal Communications Commission
FEMA	Federal Emergency Management Agency
FM	Frequency Modulation
FPPA	Farmland Protection Policy Act
GHS	Green House Gas
GIS	Geographic Information System
GPS	Global Positioning System
HVTL	high-voltage transmission line
IAA	impact assessment area
IARC	International Agency for Research on Cancer
IBA	Important Bird Area
ICNIRP	International Commission on Non-Ionizing Radiation Protection
IPaC	Information for Planning and Conservation
ISD	Independent School District
kV	kilovolt
kV/m	kilovolts per meter
L10	ten percent of any hour
L50	fifty percent of any hour
MBTA	Migratory Bird Treaty Act
MBS	Minnesota Biological Survey
MDH	Minnesota Department of Health
mG	milliGauss
MGS	Minnesota Geological Survey
MHz	megahertz
MISO	Midcontinent Independent System Operator
MNBBA	Minnesota Breeding Bird Atlas
MNDNR	Minnesota Department of Natural Resources
MNDOT	Minnesota Department of Transportation
MPCA	Minnesota Pollution Control Agency

MPUC	Minnesota Public Utilities Commission
MVA	megavolt amperes
MW	megawatt
NAAQS	National Ambient Air Quality Standards
NESC	National Electric Safety Code
NG Renewables	National Grid Renewables Development, LLC
NHIS	Natural Heritage Information System
NIEHS	National Institute of Environmental Health Sciences
NLCD	National Land Cover Database
NLEB	northern long-eared bat
NO <sub>2</sub>	nitrogen dioxide
NPCs	native plant communities
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NWI	National Wetlands Inventory
NWR	National Wildlife Refuge
O <sub>3</sub>	ozone
O&M	operations and maintenance
OSA	Office of the State Archaeologist
Pb	lead
PM	particulate matter
PPSA	Minnesota Power Plant Siting Act
Project	As described in this Application, an up to 460-megawatt solar project (Solar Project) and two 345 kilovolt transmission lines (the West and East HVTL Projects) to interconnect the Solar Project to the grid.
Project Footprint	Approximate 3,024-acre area where Xcel Energy proposes to build the Solar Project facilities.
PSA	Purchase and Sale Agreement
PV	photovoltaic
PWI	Public Waters Inventory
RFP	request for proposals
SCADA	Supervisory Control and Data Acquisition
scorecard	Board of Water and Soil Resources Habitat Friendly Solar Site Assessment Form
SDWA	Safe Drinking Water Act
SGCN	Species of Greatest Conservation Need
Sherco Generating Plant	The existing coal-powered Xcel Energy Sherburne County Generating Facility.

SHPO	State Historic Preservation Office
SNA	Scientific and Natural Area
SO <sub>2</sub>	sulfur dioxide
SOBS	Sites of Biodiversity Significance
Solar Guidance	Minnesota Department of Natural Resources Commercial Solar Siting Guidance, May 2016
Solar Project	Sherco Solar Project
Solar Project Area	Approximately 3,480-acre area of privately-owned land for which Sherco Solar, LLC and Xcel Energy has leases and purchase options to allow siting and construction of the Solar Project.
SPCC	Spill Prevention, Control, and Countermeasures Plan
SSA	sole source aquifer
SSI	Swedish Radiation Protection Authority
SSM	Swedish Radiation Safety Authority
SSURGO	Soil Survey Geographic Database
SWAP	Minnesota's State Wildlife Action Plan
SWPPP	Stormwater Pollution Prevention Plan
Tetra Tech	Tetra Tech, Inc.
THPO	Tribal Historic Preservation Officer
USACE	U.S. Army Corps of Engineers
USC	U.S. Code
USDA	U.S. Department of Agriculture
USDOT	U.S. Department of Transportation
USFWS	U.S. Fish and Wildlife Service
USG	unhealthy for sensitive groups
USGS	U.S. Geological Survey
VMP	Vegetation Management Plan
WEG	Wind Erodibility Group
West Application Alignment	The likely alignment within the proposed West Route that minimizes the overall potential impacts based on the routing factors identified in Minn. Stat. § 216E.03, subd. 7(b), and Minn. R. Ch. 7850.4100.
West Collector Substation	A 34.5 to 345 kilovolt step-up substation which will collect power from the West Block of the Solar Project.
West HVTL Project	The proposed 3.2-mile 345 kilovolt transmission line that runs from the proposed West Collector Substation to the existing Sherburne County Substation.
West Route	The proposed route width of 600 feet between the West Collector Substation and existing fenceline of the Sherco Generating Plant. Inside this fenceline, the route width varies between 700 -1,800 feet.
Westwood	Westwood Professional Services

WHO	World Health Organization
WHPA	Wellhead Protection Area
WMA	Wildlife Management Area
WNS	white-nose syndrome
Xcel Energy	Northern States Power Company, doing business as Xcel Energy