

APPENDIX Q: LIST OF ACRONYMS, TERMS, AND DESCRIPTIONS

Acronym/Term	Definition
2021 IRP	Minnesota Power's 2021 Integrated Resource Plan
2025 Plan	Minnesota Power's Preferred Resource Plan
2025 IRP	2025-2039 Integrated Resource Plan
AC	Alternate Current
A-CAES	Advanced Compressed Air Energy Storage
AD/CVD	Anti-dumping and countervailing duties
AEIC	Association of Edison Illuminating Companies
AFR	Annual Electric Utility Forecast Report
AFR 2024	2024 Annual Electric Utility Forecast Report
AI	Artificial Intelligence
AICHO	American Indian Community Housing Organization
ATTAIN	Advanced Transportation Technologies and Innovation
Base Plan	The proposed plan to meet the Base Case
Basin	Basin Electric Cooperative
BEC	Boswell Energy Center
BEC3	Boswell Energy Center Unit 3
BEC4	Boswell Energy Center Unit 4
BESS	Battery Energy Storage System
BIL	Bipartisan Infrastructure Law
Bison	Bison Wind Energy Center
Bison 1	Bison 1 Wind Facility
Bison 2	Bison 2 Wind Facility
Bison 3	Bison 3 Wind Facility
Bison 4	Bison 4 Wind Facility
Brayton Cycle	Gas Turbine Cycle
BTU	British Thermal Units
C&I or C/I	Commercial and Industrial customer classes
CAA	Clean Air Act
CAC	Central Air Conditioning/Central Air Conditioner
CAGR	Compound Annual Growth Rate
C-BED	Community-Based Energy Development
CCGT	Combined Cycle Gas Turbine
CCR	Coal Combustion Residuals
CCS	Carbon Capture and Sequestration
CDS	Circulating Dry Scrubber
CEE	Center for Energy and Environment
CFS	Carbon-Free Electricity Standard
CIP	Conservation Improvement Program

Acronym/Term	Definition
CN	Certificate of Need
CO	Carbon Monoxide
CO ₂	Carbon Dioxide
COD	Commercial Operation Date
Commission	Minnesota Public Utilities Commission
Company	Minnesota Power
CP	Coincident Peak
CPA	Conservation Program Adjustment
CREA	Capacity Revenue and Expense Adjustment
CSG	Community Solar Garden
CT	Combustion Turbine
DC	Direct Current
DCFC	Direct Current Fast Chargers
DE&I	Diversity, Equity, and Inclusion
Department/DOC	Department of Commerce – Division of Energy Resources
DER	Distributed Energy Resource
DG	Distributed Generation
DG solar	Distributed Solar Generation
DLOL	Direct Loss of Load
DOE	U.S. Department of Energy
DR	Demand Response
DSA	Demand Side Analytics
DSES	Distributed Solar Energy Standard
DSM	Demand Side Management
ECO	Energy Conservation and Optimization
ECO Act	Energy Conservation and Optimization Act of 2021
EE	Energy Efficiency
EEl	Edison Electric Institute
EGS	Enhanced Geothermal Systems
EIA	Energy Information Administration
EnCompass	EnCompass Power Planning Software
EPA	Environmental Protection Agency
EPRI	Electric Power Research Institute
EQB	Environmental Quality Board
ESP	Electrostatic Precipitator
EV	Electric Vehicle
FERC	Federal Energy Regulatory Commission
FLA	Final License Application
FPE	Fuel and Purchased Energy
FPL	Florida Power and Light
GDP	Gross Domestic Product

Acronym/Term	Definition
GEIS	General Environmental Impact Statement on Timber Harvesting and Forest Management in Minnesota
GHG	Greenhouse Gas
GNTL	Great Northern Transmission Line
GRE	Great River Energy Cooperative
GRIP	Grid Resilience and Innovation Partnerships
Growth Plan	The proposed plan to meet the +1100 MW Growth Scenario
GSF	GridStar Flow
GW	Gigawatt
GWh	Gigawatt Hour
Hibbing	Hibbing Public Utilities
HREC	Hibbard Renewable Energy Center
HRSG	Heat Recovery Steam Generator
HVAC	Heating Ventilation & Air Conditioning
HVACR	Heating Ventilation Air Conditioning & Refrigeration
HVDC	High Voltage Direct Current
HVDC Line	High Voltage Direct Current transmission line connecting Center, ND and Hermantown, MN
HW	Hot Water Heater
ICAP	Installed Capacity
IDP	Integrated Distribution Plan
IE	Independent Evaluator
IIJL	Infrastructure Investment and Jobs Act
IOU	Investor-Owned Utility
IQ	Income-Qualified
IRP	Integrated Resource Plan
IRA	Inflation Reduction Act
Iron Range	A range of low hills containing iron-ore in northeastern Minnesota. It extends 110 miles from Babbitt (northeast) to Grand Rapids (southwest)
IRS	Internal Revenue Service
ITC	Investment Tax Credit
kW	Kilowatt
kWh	Kilowatt-hour
kV	Kilovolt
L&C	Load and Capability
Laskin	Laskin Energy Center
LCA	Life-Cycle Analysis
LDDES	Long Duration Energy Storage
LEAP	Local Energy Action Program
LEC	Laskin Energy Center

Acronym/Term	Definition
LEC1&2	Laskin Energy Center, Units 1 and 2
LEM	Limited Energy Market
LI	Low Income
LIHEAP	Low Income Home Energy Assistance Program
LLP Schedule	Minnesota Power's Large Light and Power Service Schedule
LNB	Low NO _x Burners
LOLE	MISO Loss of Load expectation Report
LRTP	Long Range Transmission Planning
MACT	Maximum Achievable Control Technology
MEA	Monoethylamine
MECT	MISO Module E Capacity Tracking
MHEB	Manitoba Hydro-Electric Board
MHI	Mitsubishi Heavy Industries, Ltd.
Minnkota	Minnkota Power Cooperative
MISO	Midcontinent Independent System Operator
MITI	Minnesota Industrial Transformation Initiative
MMBtu	Million British Thermal Units
MPRC	Minnesota Power Reliability Criteria
MPUC	Minnesota Public Utilities Commission
M-RETS	Midwest Renewable Energy Tracking
MW	Megawatts
MWac	Megawatt alternating current
MWh	Megawatt hour
NAAQS	National Ambient Air Quality Standard
NERC	North American Electric Reliability Corporation
NGEA	Minnesota Next Generation Energy Act of 2007
NOI	Notice of Intent
NO _x	Oxides of Nitrogen
NPV	Net Present Value
NRRI	University of Minnesota Natural Resources Research Institute
NTEC	Nemadji Trail Energy Center
O ₂	Oxygen
O&M	Operating and Maintenance
OAG	Residential Utilities Division of the Office of the Attorney General
Oconto	Oconto Electric Cooperative
OEM	Original Equipment Manufacturers
PAC	Powdered Activated Carbon
PAD	Pre-Application Documents
Pb	Lead
PC	Pulverized Coal
PM	Particulate Matter

Acronym/Term	Definition
PM control	Fabric Filter for Particulate Matter
PM _{2.5}	Particulate Matter 2.5
Potential Study	Minnesota State Demand Side Management Potential Study
PPA	Power Purchase Agreement
PRM	Planning Reserve Margin
PSIA	Pounds per Square Inch
PTC	Production Tax Credit
Pumped Hydro	Pumped Hydroelectric Plant
PV	Photovoltaic
R&D	Research and Development
Rankine Cycle	Steam Turbine Cycle
RAP	Resilience and Preparedness Project
RBDC	Reliability-Based Demand Curve
REC	Renewable Energy Credit
REMI	Regional Economic Model, Inc.
RES	Renewable Energy Standard
RFP	Request for Proposals
RICE	Reciprocating Internal Combustion Engine
RIIA	Renewable Integration Impact Assessment
RRA	MISO Regional Resource Assessment
RRR	Renewable Resources Rider
SAC	Seasonal Accredited Capacity
SC Aero	Simple Cycle Aero Derivative
SCBA	Societal Cost-Benefit Analysis
SCR	Selective Catalytic Reduction
SES	Solar Energy Standard
SMR	Small Modular Reactor
SNCR	Selective Non-Catalytic Reduction
SO ₂	Sulfur Dioxides
SPP	Southwest Power Pool
Square Butte	Square Butte Cooperative
SREC	Solar Renewable Energy Credit
SUN	Solar United Neighbors
SWLP	Superior Water Light & Power
TAG	Technical Advisory Group
TCC	Tri-County Community Action
TCR	Transmission Cost Recovery Rider
THEC	Taconite Harbor Energy Center
THEC1	Taconite Harbor Energy Center Unit 1
THEC2	Taconite Harbor Energy Center Unit 2
THEC3	Taconite Harbor Energy Center Unit 3

Acronym/Term	Definition
Taconite Ridge	Taconite Ridge Wind Energy Center
TOD	Time-of-Day
TRM	Technical Reference Manual
UCAP	Accredited Unforced Generating Capability
UFLPA	Uyghur Forced Labor Prevention Act
WACC	Weighted Average Cost of Capital
WECC	Western Electricity Coordinating Council
WFGD	Wet Flue Gas Desulphurization
Young 2	Square Butte's Milton R. Young 2 Generating Station