Supplier Diversity &
Current Initiatives

November 29, 2017
Agenda

• General Company Information
• Defining Diverse and Local Suppliers
• Diverse and Local Trends and Goals
• Unmanned Aircraft Systems
• Advanced Grid Infrastructure
• Cyber Security
• Renewable Development
• Questions
General Company Information

• States Served – Colorado, Minnesota, New Mexico, North Dakota, South Dakota, Texas, Michigan and Wisconsin
• Customers – 3.6 million electric customers, 2 million gas customers
• Total Revenue - $11.1 billion
• Earnings - $1.1 billion
• Generation Capacity – 17,400 MWs of owned capacity
• Employees – 12,000
Diverse and Local Defined

• Diverse Suppliers
  – Class definitions: Women Owned; Minority Owned; Veteran or Service-Disabled Veteran Owned; HUBZone Business; Disadvantaged Business
  – In 2018 will include GLBT Owned Businesses

• Local Suppliers
  – Remit to address
  – Companies with large offices in our service territories used to specifically serve Xcel Energy facilities
Diversity Trends

- **2011**: $248M, 8.3% Diverse Spend
- **2012**: $261M, 8.7%
- **2013**: $363M, 9.3%
- **2014**: $385M, 10.3%
- **2015**: $395M, 10.3%
- **2016**: $401M, 11.2%
- **2017 Goal**: $376M, 10.3%

**Total Spending**
- TS: $3.0B, 2012
- TS: $3.9B, 2013
- TS: $3.9B, 2014
- TS: $3.8B, 2015
- TS: $3.6B, 2016
- TS: $3.6B, 2017 Goal

**Compact Bar Chart**
- Y-axis: Diverse Spend (M) ranging from $0 to $450M
- Diverse % ranging from 0% to 12%
Local Spend Trends

- 2014: $2.2, 60%
- 2015: $2.3, 63%
- 2016: $2.4, 67%
- 2017 Goal: $2.5, 69%

The chart shows an increasing trend of local spend from 2014 to 2017, with a goal for 2017 of $2.5 billion, representing a 69% increase from the 2014 level.
Diverse Operating Areas

NSP-M - MN, ND, SD
- 9,843 miles Distribution Main
- 100 miles Gas Transmission
- 4,942 miles Electric T-Line
- 26,700 miles Electric D-Line

NSP-Wisconsin (NSPW)
- 2,300 miles Distribution Main
- 3 miles Transmission
- 2,403 miles Electric T-Line
- 9,747 miles Electric D-Line

Public Service Co. of Colorado (PSCo)
- 22,000 miles Distribution Main
- 2,000 miles Transmission
- 4,602 miles Electric T-Line
- 22,000 miles Electric D-Line

Southwestern Public Service (SPS)
- No residential gas customers
- 19 miles Transmission
- 6,839 miles Electric T-Line
- 15,689 miles Electric D-Line

Operate in 8 States
- Customers
  - 3.5 million electric
  - 2.0 million natural gas
- NSPM = 1.5+ million
- NSPW = 277,000+
- PSCo = 1.8+ million
- SPS = 369,000+
Unmanned Aircraft Systems

Xcel Energy views Unmanned Aircraft Systems (UAS) technology as transformational and believes it will redefine traditional working methods.

- Started experimenting with UAS technology in 2013
- Developed a small internal UAS team in 2014
- Researched various UAS technologies and capabilities
- Shared vision with our internal stakeholders and federal legislators
- Partnered with several organizations including EEI, EPRI, NPTS & more

Summer of 2015

- Mission planning and mission execution began…
Mission Completed
August 2015 – February 2016

Completed missions in 2015-2016

- Data collection at five energized substations
- Transmission line inspections
- Volumetric survey of ash storage facility
- Wind turbine blade inspection
- Transmission high pressure gas pipeline and leak detection
- Distribution gas pipeline bridge inspections
Transmission Line Inspection

January 2016 – Xcel Energy entered into safety partnership with the Federal Aviation Administration

The vision is to work together to facilitate the safe & routine BVLOS operation of UAS systems technology related to critical utility infrastructure.

Goals included:

- Inspect more than 20,000 miles of Xcel Energy’s transmission lines
- Examine ways to enable safe UAS flights over people and roads
- Research communication needs to support UAS BVLOS operations
- Help shape future FAA policies for safe and routine BVLOS operations to inspect the utility grid
POST STORM ASSESSMENT

Xcel Energy partnered with North Dakota stakeholders and submitted a $1M + joint grant proposal

August 2016 – August 2017

Project Objectives:

- Assess high/low altitude UAS capabilities to enhance post-event damage and restoration efforts
- Apply UAS capabilities to support reconnaissance/restoration functions for electric distribution infrastructure
- Develop a UAS Natural Disaster strategy in collaboration with emergency management
- Assess feasibility of utilizing UAS for post-event reconnaissance and restoration activities
Advanced Grid Infrastructure

• Reliability
  – Receive real-time information from line sensors
  – Intelligent substations and communication devices will proactively prevent and respond to grid issues

• Outages
  – System outage alerts help operators pinpoint where problem occurred, improving restoration times
  – Smart grid devices perform automated switching, minimizing number of affected customers while linemen work on impacted power line

• Billing
  – Customers access energy usage next day, reducing need to estimate bills, allowing customers service to be remotely connected/disconnected

• Customer Choice
  – Advanced Grid opens door for more energy-related products and services including rate design choices and cost-savings programs
Cyber Security

• Xcel Energy identified over 500,000 individual cyber attack on its network in 2016
• Our system is monitored 24/7 by dedicated team of cyber analysts
• Our control system is separated and protected from the internet
• We act immediately on actionable threat intelligence from government and private sources
• Xcel Energy performs third party penetration testing of the network to test the effectiveness of our defenses
Renewables

• Current Portfolio
  – Wind – 6,676 MW
  – Solar – 615 MW
  – Hydro – 378 MW
  – Biomass – 189 MW
  – Landfill – 107 MW

• Upcoming Renewable Additions
  – Wind
    • Colorado – 600 MW
    • Minnesota/Dakotas – 750 MW
    • Texas/New Mexico – 1,230 MW