



Kelly Flenniken Community Relations Director



**Heather Brickey** Project Manager



Connie Paoletti Transmission Planning Manager



Carly Rowe
Siting & Land Rights
Manager

### WHAT WE'LL COVER TODAY

- 1. Xcel Energy Introduction
- 2. Community Benefits
- 3. Project Overview and Need
- 4. Regulatory Review

- 5. Electric System Benefits
- 6. Routing and Siting Studies
- 7. Provide Feedback and Connect
- 8. Question-and-Answer Session



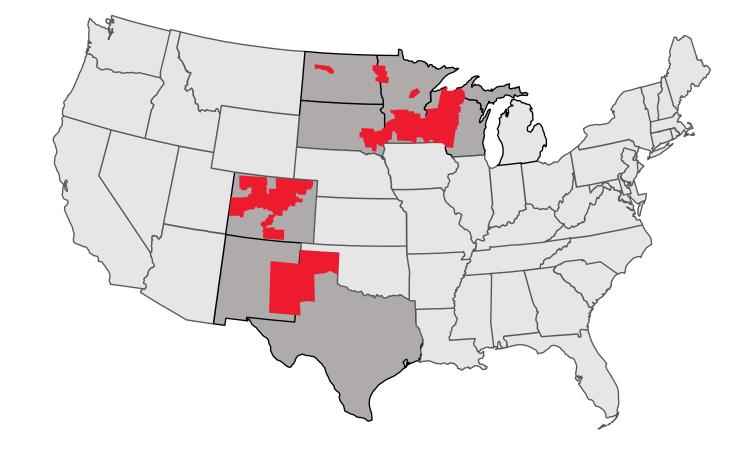
### **Xcel Energy**

#### **Serving eight states**

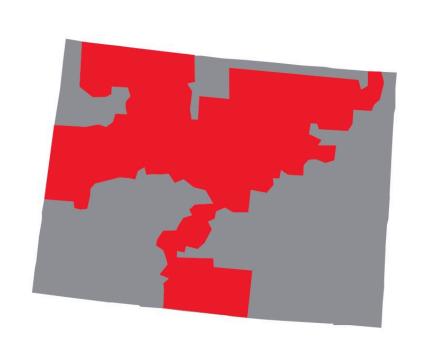
- 3.7 million electricity customers
- 2.1 million natural gas customers

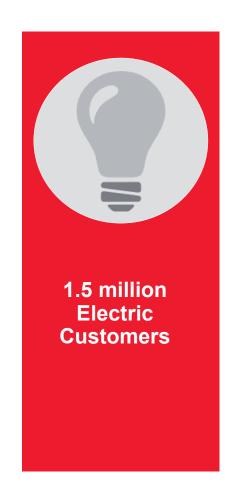
#### **Nationally recognized leader:**

Wind energy
Energy efficiency
Carbon emissions reductions
Innovative technology
Storm restoration

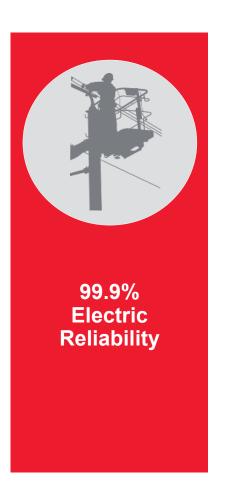


# **Xcel Energy Colorado Customers**









### **Benefits to your Community**



#### **POSITIVE IMPACT**

Short and long term positive economic impact



#### **JOBS & REVENUE**

New temporary and permanent jobs, lease revenue and increased tax revenue



#### **AND MORE...**

Increased reliability of the electric grid for all users and availability for new renewable energy projects



The 500-megawatts generated and carried by 70 miles of transmission line are enough to power 270,000 average Colorado homes.

Over its lifetime, Cheyenne Ridge will produce an estimated \$107 million in landowner payments and \$29 million in new tax revenue for surrounding communities and counties.

More than 200 workers built the project and 24 full-time operations and maintenance jobs were created.

### **Colorado's Power Pathway**

\$1.7 to \$2 billion dollar investment

New double-circuit 345-kilovolt electric transmission line

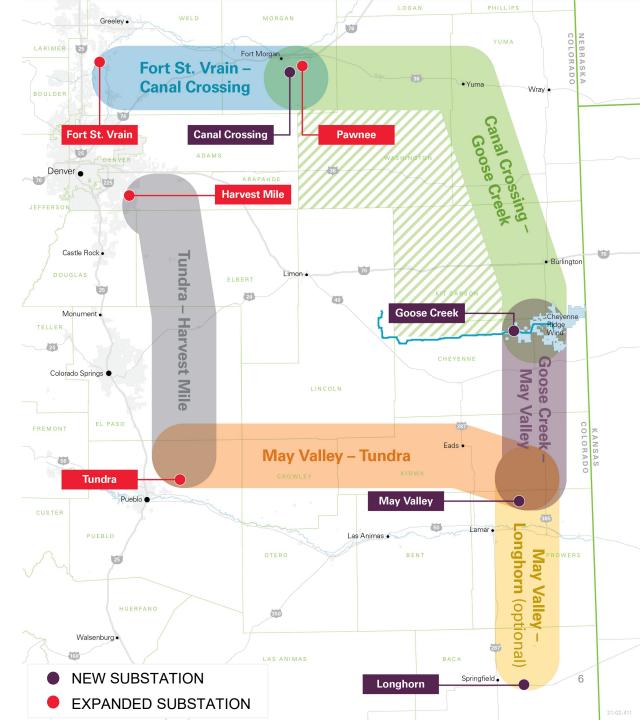
About 560 miles divided into 5 segments

Includes 3 new and 4 expanded substations

Additional 90 miles with the May Valley - Longhorn Extension (MVLE) segment

- Includes 1 new substation
- Access wind in SE corner of the State
- Reduces the number of generation tie lines that may be needed

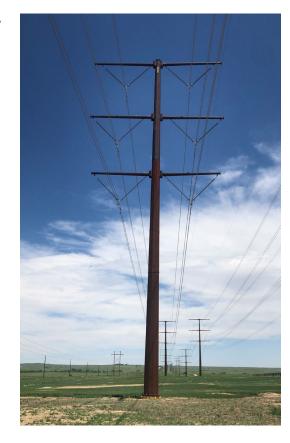
Access to low-cost wind/solar renewable energy in the Eastern Plains to bring to the Front Range population (demand) centers



### **Pole and Substation Design**

#### Structures and Right-of-Way (ROW)\*

- Single Steel Pole for tangent structures
- Two pole dead-end structures (angles and corners)
- Approximately 105 to 140 feet tall
- Concrete foundations
- 150-foot-wide ROW in most locations



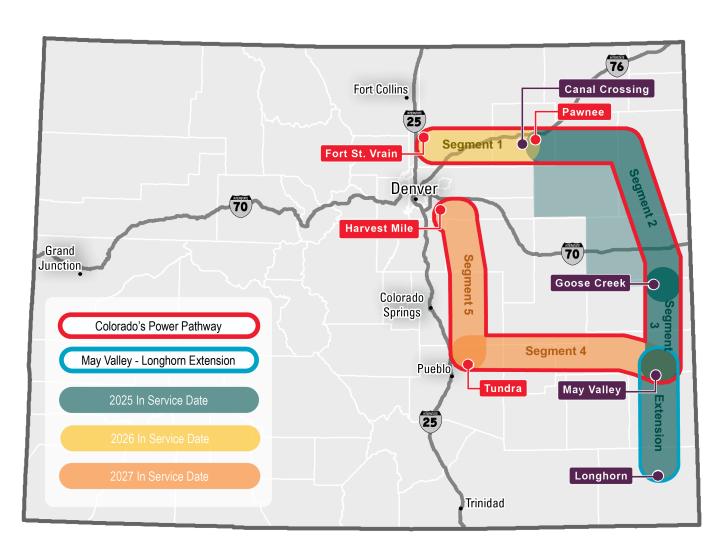


#### Substations\*

- Located on approximately 30 to 60 acres
- Contain electrical equipment to interconnect two or more transmission lines
- May also step up or step-down voltages between the transmission lines

<sup>\*</sup>Subject to change - final design not complete

### **Developing Colorado's Power Pathway**



#### Benefits of a transmission loop

- Enhances system reliability can withstand loss of one transmission path without interrupting power flow
- Allows for wind/solar generation diversity on the system

#### **Sequencing of construction**

- First segments in-service in 2025 to take advantage of Production Tax Credits
- Other segments in service in 2026 and 2027 allows resource addition to the system in stages

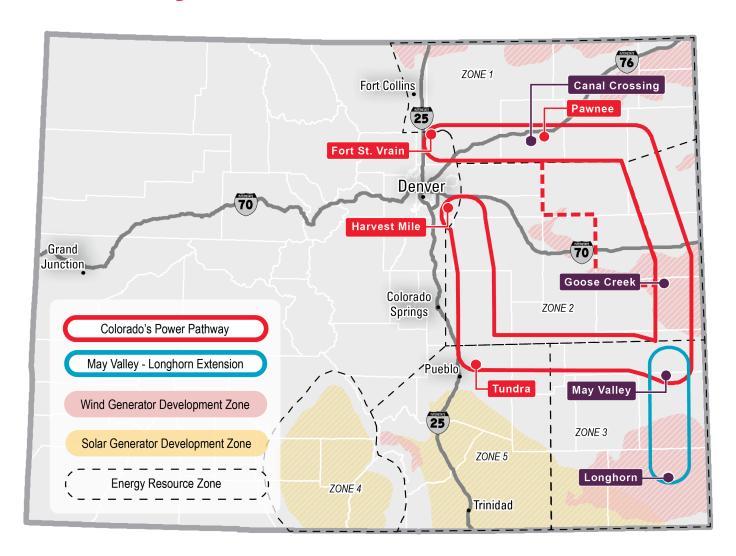
### Why is Colorado's Power Pathway Needed?

### The Eastern Plains of Colorado is one of the nation's best areas for wind and solar.

 New transmission lines encourage and support the construction of wind and solar power plants to bring more low-cost electricity to help meet the needs of our growing state.

# Colorado's Power Pathway supports Xcel Energy's Clean Energy Plan that will add ~5000 megawatts of new wind, solar and other resources through 2030 to:

- meet the state's growing electricity needs reliably and affordably
- meet the company's goal of 80% lower carbon emissions
- enable the state's transition to clean energy



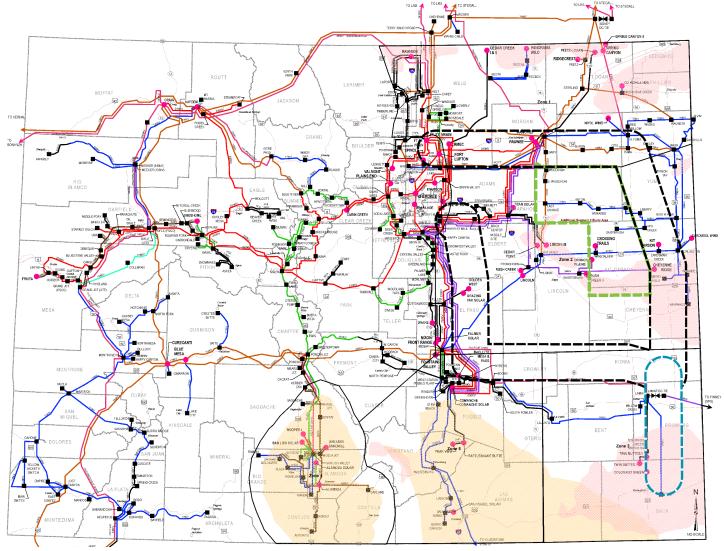
### Why is Colorado's Power Pathway Needed?

# **Existing transmission in eastern plains** primarily serves local needs

- is nearly "full" due to existing and new generation expected by 2024
- additional transmission capacity needed to integrate more renewable generation

# Colorado's Power Pathway provides high voltage "backbone" transmission

 positive impact on jobs and tax revenue in rural areas



### **Regulatory Review**

## Colorado's Power Pathway requires approval from the Colorado Public Utilities Commission (CPUC)

- In March 2021, we filed for a Certificate of Public Convenience and Necessity (CPCN)
- The CPUC follows a procedural schedule to determine if the project is in the public interest
- Procedural activities include the review of filed testimony, interventions, hearings, statements of position and opportunity for public comment

**CPUC** decision deadline is February 1, 2022

Xcel Energy's application with the CPUC for Colorado's Power Pathway can be found by visiting the Public Utilities Commission website, <a href="mailto:puc.colorado.gov">puc.colorado.gov</a>. Navigate to E-Filings and enter **Proceeding No. 21A-0096E** in the Search field.

Xcel Energy's 2021 Electric Resource Plan filing can be found by entering **Proceeding number 21A-0141E**.



Visit the CPUC website to view regulatory documents associated with the project, including notices, filings, public comments and more.

Filing materials can also be found on <u>Colorado's</u>

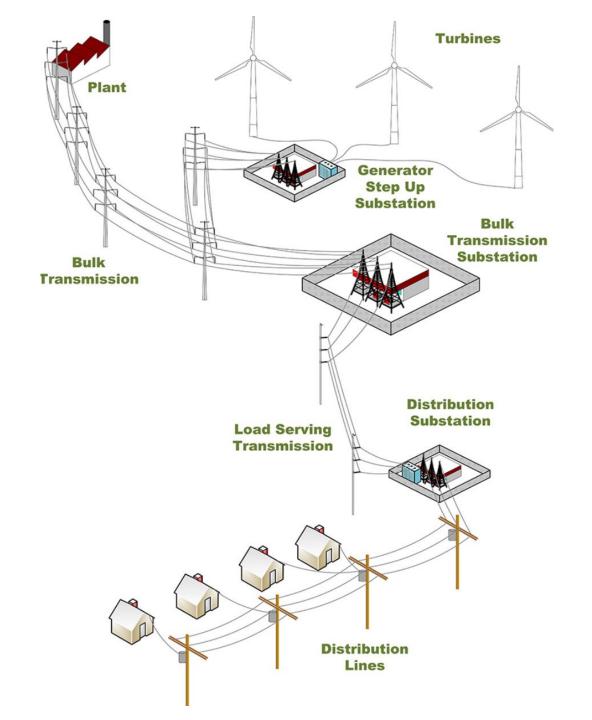
<u>Power Pathway Regulatory Filings</u> webpage or the <u>2021 Clean Energy Plan Filings</u> webpage.

### **Electric System Benefits**

# Transmission is the backbone of the electricity network – supporting generation and distribution

- Networked transmission system supports all utilities and cooperatives in the state
- Coordinated transmission system planning approach in Colorado
- Transmission expansion improves resource availability and reliability for all electricity users

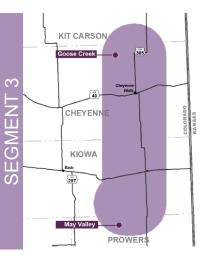
Colorado's Power Pathway will bring benefits to Colorado communities and customers



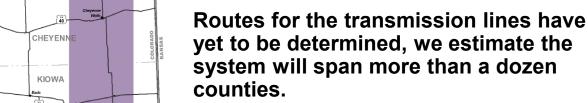
### Where Will Colorado's Power Pathway be Located?





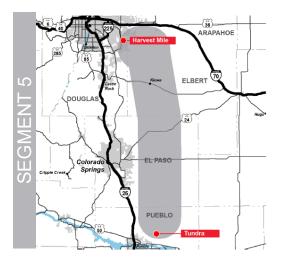




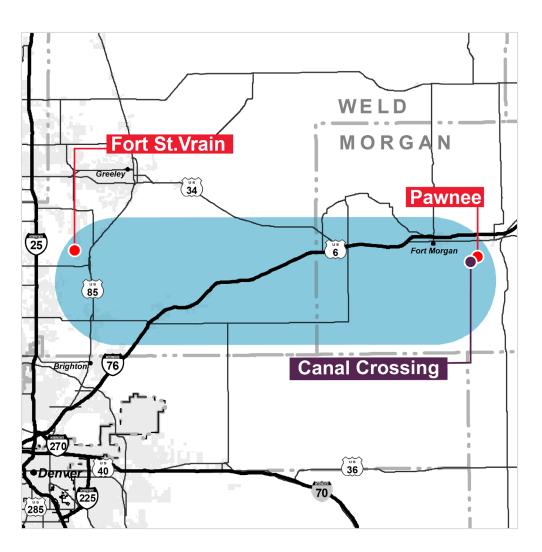


- 20-mile-wide Transmission Study Areas identified between substation end points
- 20-mile-wide Substation Siting Areas for Goose Creek, May Valley and Longhorn substations
- Expanded substations and Canal Crossing located on property currently owned by Xcel Energy





### **Segment 1: Fort St. Vrain – Canal Crossing**



#### **Endpoints:**

Fort St. Vrain Substation, Canal Crossing Substation

Counties in Study Area: Morgan, Weld

#### **Schedule**

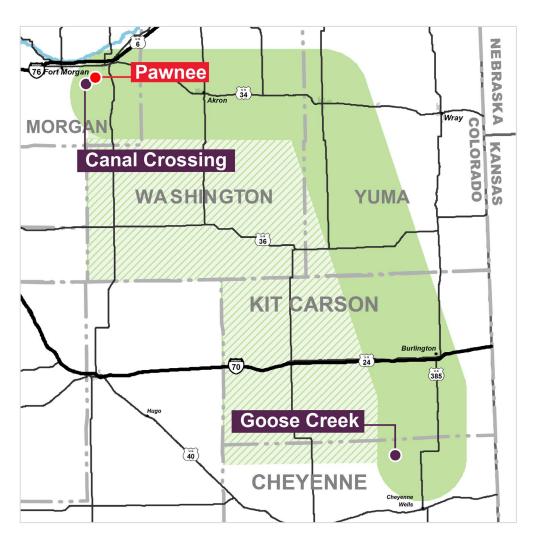
Current Activities: Routing and Siting Studies

• Permitting: 2022-2023

Construction: 2024-2026

• In-service: 2026

### **Segment 2: Canal Crossing – Goose Creek**



#### **Endpoints:**

Canal Crossing Substation, Goose Creek Substation

Counties in Study Area: Cheyenne, Kit Carson, Morgan, Washington, Yuma

#### Schedule

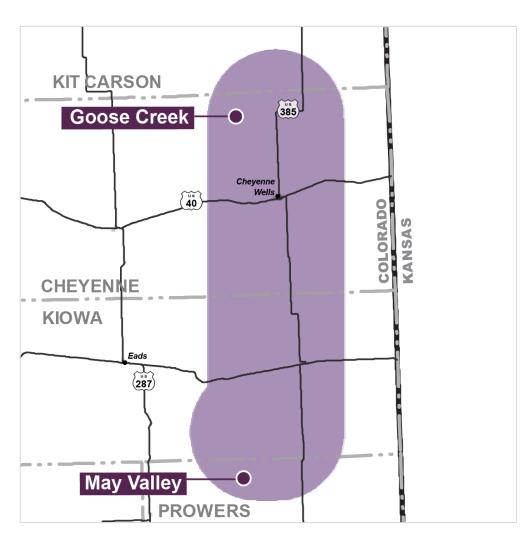
Current Activities: Routing and Siting Studies

Permitting: 2022-2023

Construction: 2023-2025

• In-service: 2025

### **Segment 3: Goose Creek – May Valley**



#### **Endpoints:**

Goose Creek Substation, May Valley Substation

**Counties in Study Area:** Cheyenne, Kiowa, Prowers, Kit Carson

#### Schedule

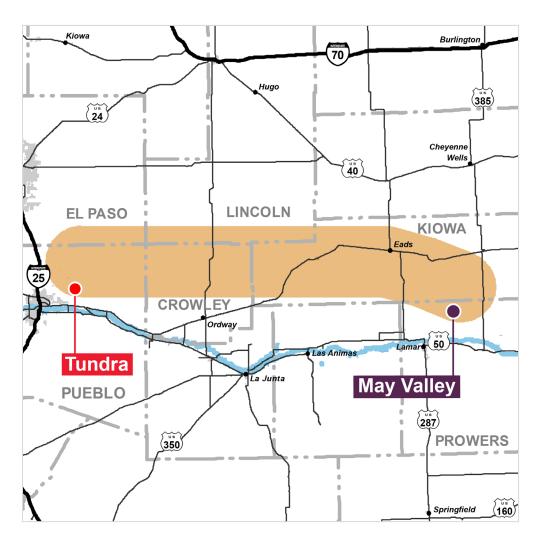
Current Activities: Routing and Siting Studies

• Permitting: 2022-2023

Construction: 2023-2025

• In-service: 2025

### **Segment 4: May Valley – Tundra**



#### **Endpoints:**

May Valley Substation, Tundra Substation

**Counties in Study Area:** Crowley, Kiowa, Prowers, Pueblo, El Paso, Lincoln

#### Schedule

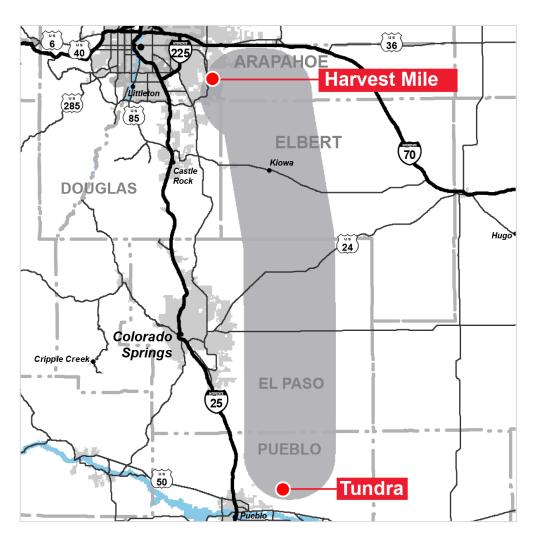
Current Activities: Routing and Siting Studies

• Permitting: 2022-2023

Construction: 2025-2027

In-service: 2027

### **Segment 5: Tundra – Harvest Mile**



#### **Endpoints:**

Tundra Substation, Harvest Mile Substation

**Counties in Study Area:** Arapahoe, El Paso, Elbert, Pueblo, Douglas

#### Schedule

Current Activities: Routing and Siting Studies

• Permitting: 2022-2023

Construction: 2024-2026

In-service: 2026

### **May Valley – Longhorn Extension**



#### **Endpoints:**

May Valley Substation, Longhorn Substation

Counties in Study Area: Baca, Prowers, Kiowa

#### **Schedule**

Current Activities: Routing and Siting Studies

• Permitting: 2022-2023

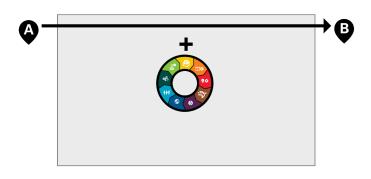
Construction: 2023-2025

• In-service: 2025

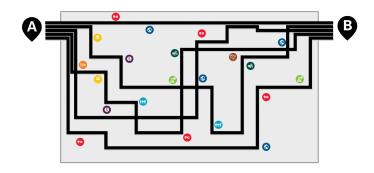
### **Routing and Siting Considerations**



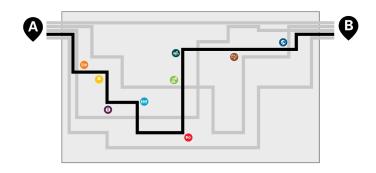
### **Routing Studies**



**Project Objective** 



**Alternative Routes** 



**Preferred Route** 

### **Opportunities to Provide Feedback and Connect**

