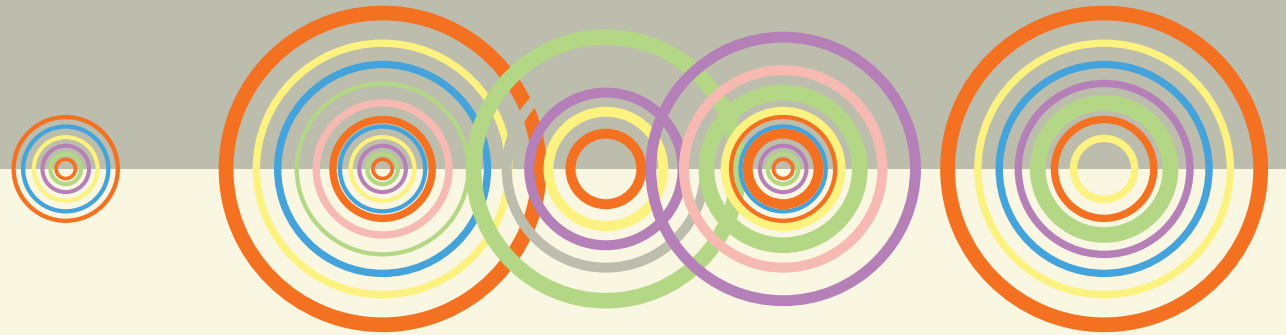


# NEW GENERATION & TRANSMISSION UPDATE

▶ 04.15.25 ▶



All Committee Meeting

April 15, 2025



# AGENDA

- Bringing New Stations Online
- Renewables and Storage
- Major Projects
- North Omaha Station Transition Project



➔ **BRINGING NEW  
STATIONS ONLINE**



## ➤ Standing Bear Lake Station

- 150MW Reciprocating Internal Combustion Engines (RICE)
- Commissioning & Performance Testing
- Next Milestone:
  - Engine Demonstration
  - Performance & Emission Testing



## ➤ Turtle Creek Station

- 450MW Simple Cycle Combustion Turbine (CT)
- Commissioning & Performance Testing
- Next Milestone:
  - Fuel Oil Firing
  - Performance & Emission Testing

# ➔ RENEWABLES AND STORAGE

# PIERCE COUNTY ENERGY CENTER

## Project Overview & Status

**Nameplate:** 420 MW Solar / 170 MW Storage

**Location:** Pierce County, Nebraska

**Developer:** NextEra

**Estimated COD:** 2027

Unique Partnership between Google and OPPD

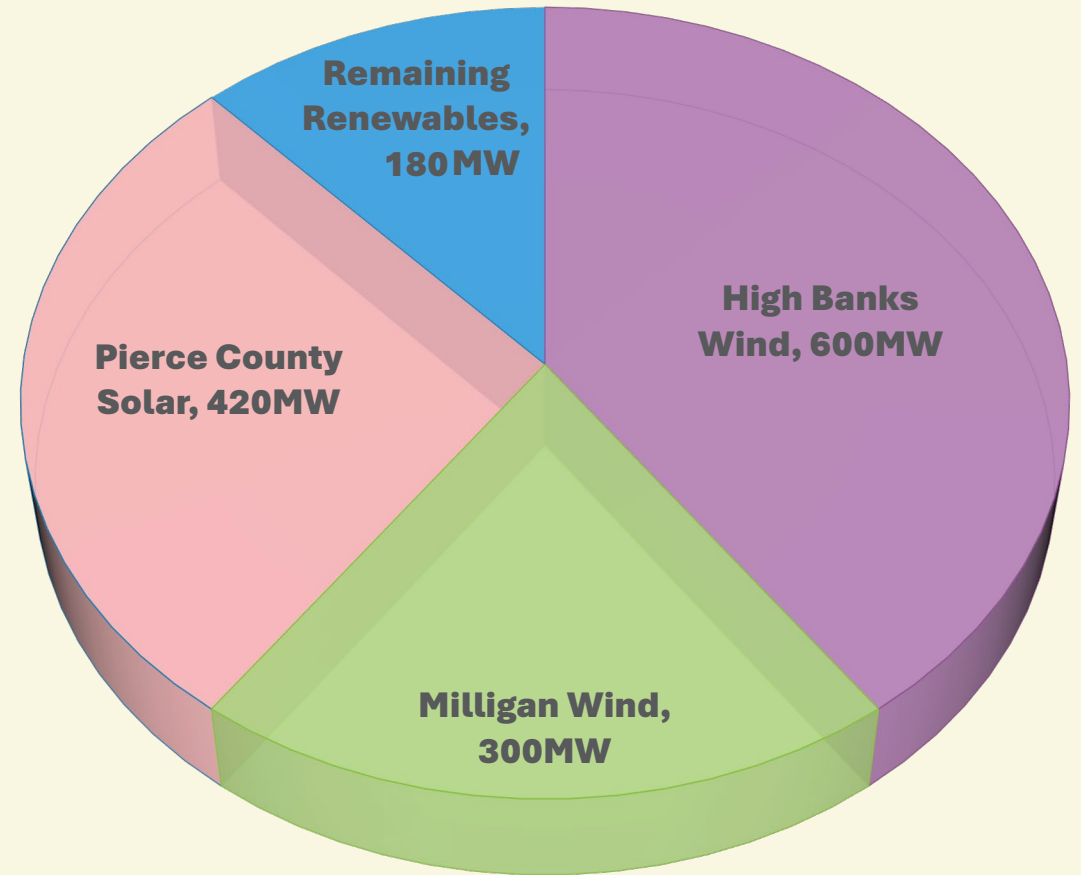
Contingent items include:

- Generation Interconnection Agreement
- Firm Network Transmission Service Study

Construction began Q4 2024

Initial focus: County road construction, grading and other civil site work

OPPD RENEWABLE SOURCING

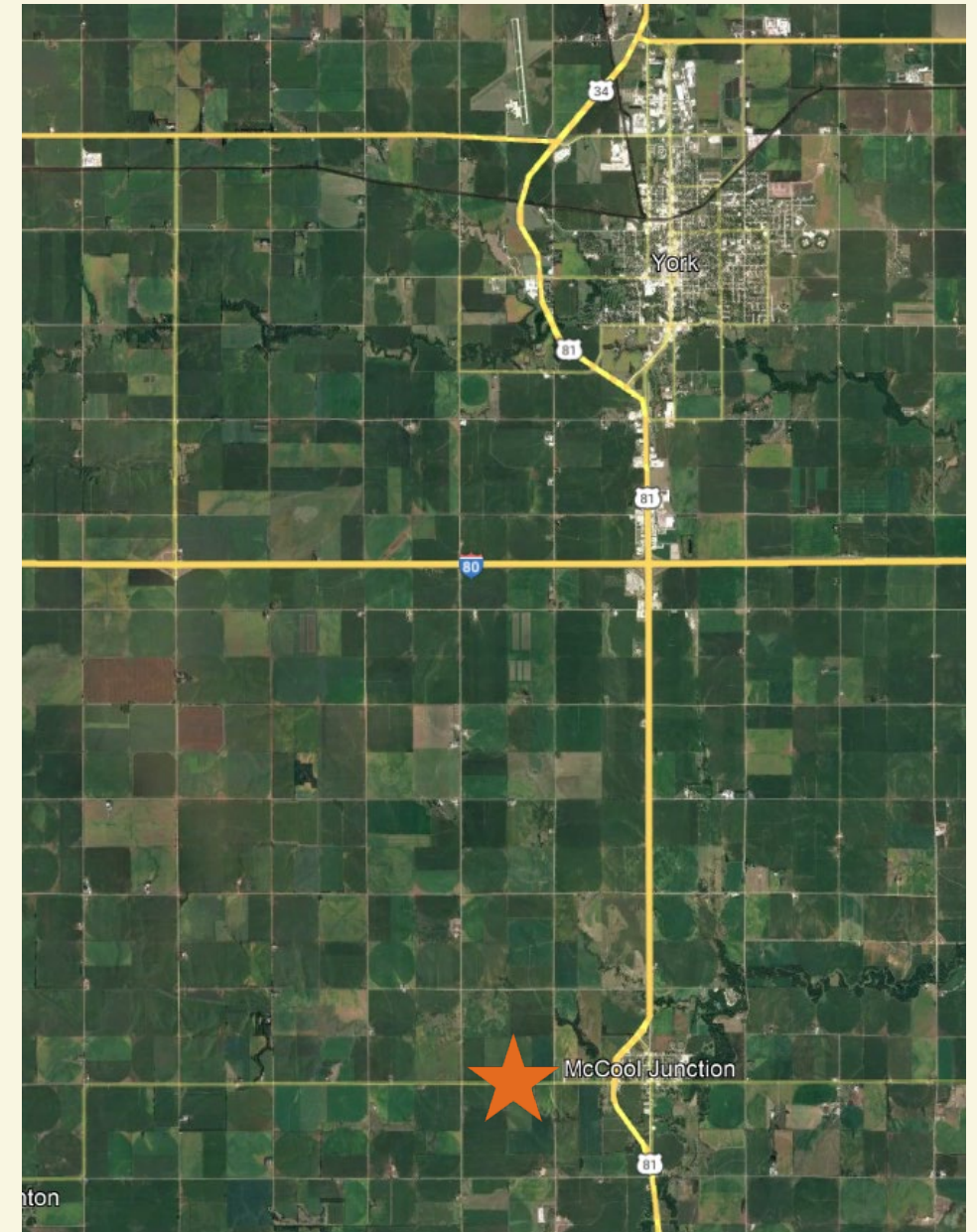




# K-JUNCTION SOLAR

## Project Overview & Status

- Generation Interconnection Agreement between OPPD, NPPD, and SPP effective August 2023
- OPPD support for York County to develop reasonable regulations.
- Timeline:
  - **July 2024:** County commissioners sent regulations to the Planning & Zoning Committee to re-develop
  - **Q3-4 2024:** County-hired consultant developed comprehensive plan and advice for solar regulations
  - **Feb. 2025:** Planning & Zoning Committee voted to send original regulations back to the County Commissioners with no changes
  - **April 1: 2025:** County Commissioners passed restrictive regulations
- Project Team evaluating contingencies and next steps



★ General solar facility location

# ➤ MAJOR PROJECTS



# PROGRESS: NEW GEN 2025



2025

Q1

## New Gen Projects

- EPC contract in place
- Kiewit kick-off
- Kiewit-Siemens alignment
- Construction begins:
  - Vegetation clearing
  - Grading
  - West entry road

## KEY WINS

- Integrated **lessons learned** from Power with Purpose
- Successful **public outreach**, focused on big picture of Cass County work
- NDEE officially showing **“technical completeness”** of air permit application for both sites

## Cass County Station Expansion and Upgrades



Electrical infrastructure improvements are needed in Cass County to accommodate the growing demand for electricity across all customer categories. The new infrastructure supports the long-range planning of OPPD's balanced portfolio of energy-generation resources.

OPPD is expanding operations at its Cass County Station (CCS) to include three new dual-fuel generators, bringing the total number of units on the site to five. Each new unit can generate up to 225 megawatts (MW) of electricity. Once construction is complete and the new units are available, the total capacity at the site will be about 1,000 MW.

These additions are part of an OPPD plan that will nearly double the utility's ability to produce energy in the next 10 years. The plan, approved by the OPPD's board of directors in August 2023, totals nearly 2.5 gigawatts (GW) of new thermal and renewable generation.

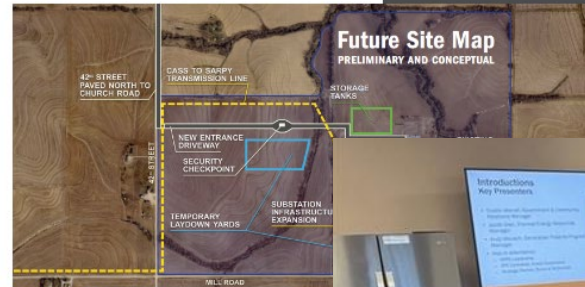
This growth in generation will allow OPPD to establish reliable power for our customers and meet regulatory requirements for decades to come.

Our plans for Cass County Station are beginning to progress. We secured a contract for the new turbines and finalized a contractor (Kiewit) that will perform the engineering, project-related purchasing and construction for the project (also referred to as an EPC contractor).

With our contractor secured, we will have more details about the project soon, including schedules and what to expect as construction progresses. Construction activities are expected to begin in March 2025.

### Cass County Station expansion work includes:

- Adding three dual fuel, simple cycle combustion turbines.
- Expanding and modifying the existing substation at Cass County Station.
- Installing water and fuel-oil storage tanks and converting existing generators to dual-fuel.
- Expanding OPPD owned property to include the adjoining land to support facility needs: additional access to the station, expanded transmission and substation infrastructure, improved security perimeter, additional water wells and a construction "bypass" yard.
- Building a new entrance to the station along 42nd Street, complete with a security checkpoint and new fencing to surround the expanded footprint.
- Paving 42nd Street from the new entrance north to Church Road.



February Cass County meetings included public officials and landowners



Kiewit kick-off focused on such topics as safety, early schedule, org alignment and more



# 90-DAY OUTLOOK



2025

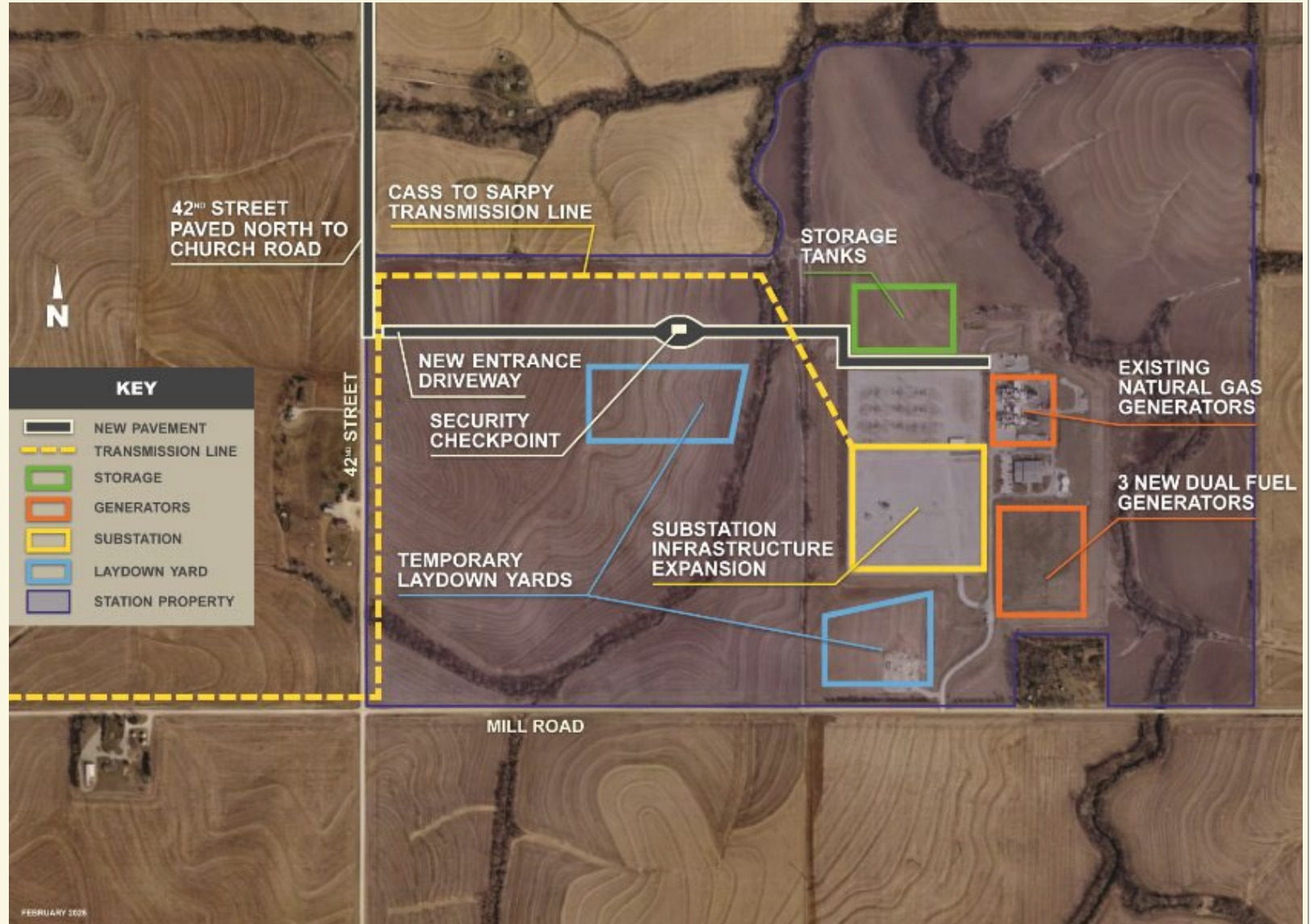
Q2

## Cass County Station

- New entry road in place
- Grading complete
- Construction of lay down yards for materials, construction trailers
- Construction begins for fuel oil storage tanks

## Turtle Creek Station

- TCS expected to transition from COD to expansion work



## GENERATION PROGRAM HEALTH



Schedule



Budget



Scope



*All dates are directional and subject to change.*

# PROGRESS: NEW TRANSMISSION



2025

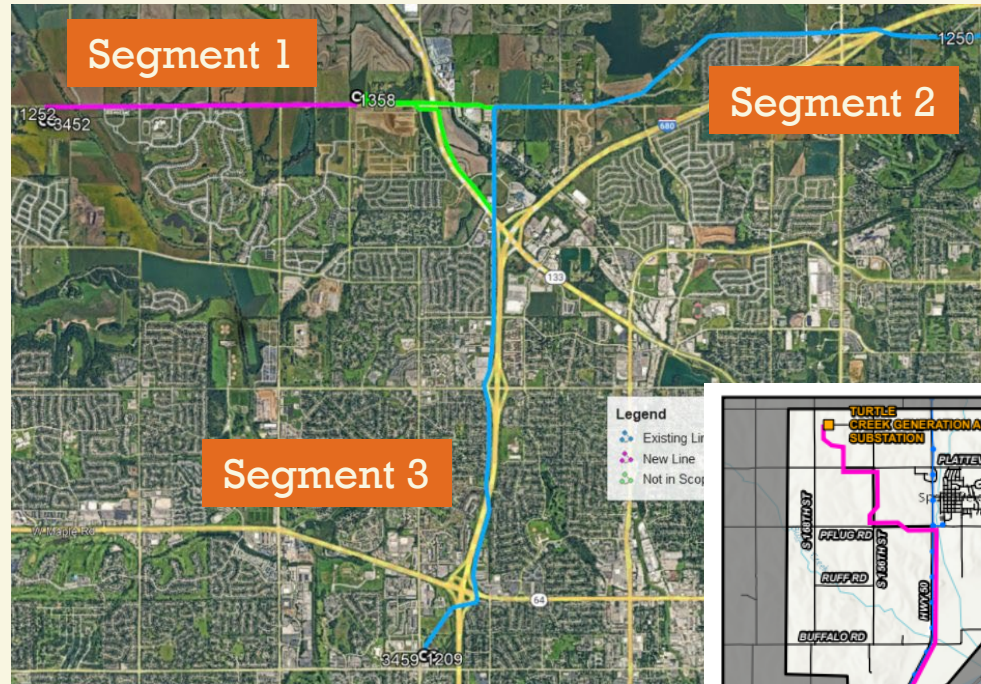
Q1

## Cass-to-Sarpy T-Line

- Landowner agreements largely completed

## North Douglas County T-Line

- Focused on schedule acceleration
- One-on-one landowner conversations
- Easement acquisitions

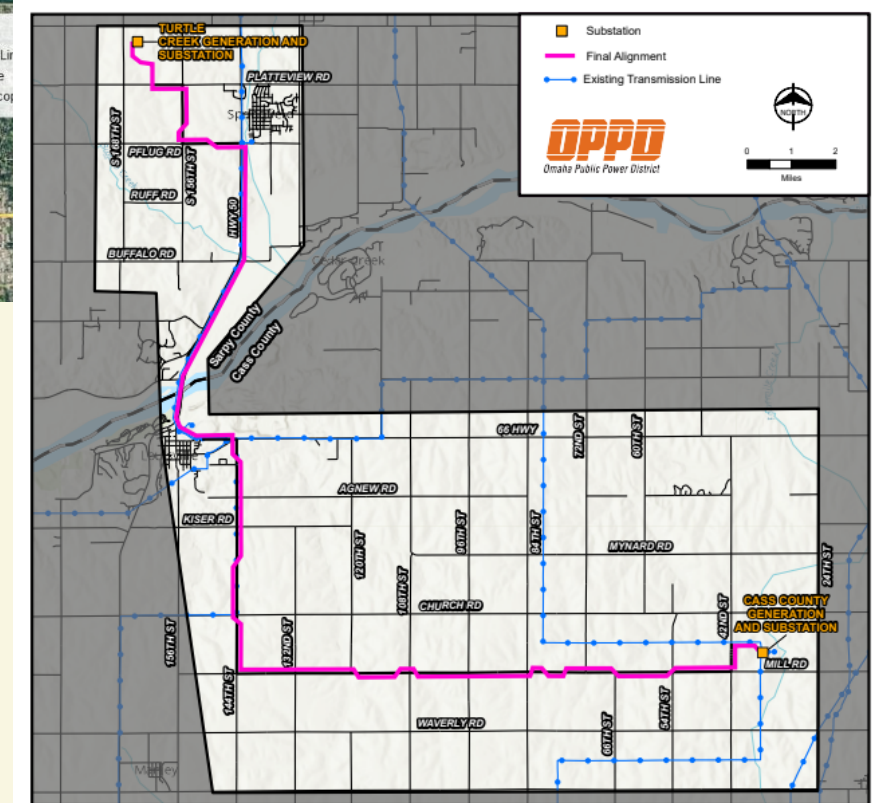


North Douglas County Transmission Line

## KEY WINS

- C-to-S: Secured **early manufacturing slots** for two long-lead transmission towers
- C-to-S: **Agreements in place** with all but one landowner
- NDCTP: **Compressed engineering schedules** to support further acceleration

Cass-to-Sarpy Transmission Line



Cass-to-Sarpy Transmission Project





# 90-DAY OUTLOOK

2025

Q2



### Cass-to-Sarpy T-Line

- Vegetation clearing begins
- Finalize detailed construction and outage sequencing
- RFP Issue for Bid: May 2025

### North Douglas County T-Line

- Landowner conversations continue
- Public hearings planned for May and July
- RFP Issue for Bid: June 2025

### DELIVERY PROGRAM HEALTH

- Schedule**  All projects are on track or ahead of schedule but challenged due to material lead times.
- Budget**  Projects are over budget primarily due to increases in steel and construction costs.

# DELIVERY PORTFOLIO



**600%**

Increase in OPPD new substation projects in the next 7 years

**14**  
new substations

**400%**

Increase in OPPD transmission line mileage in the next 10 years

**270**  
miles of new transmission

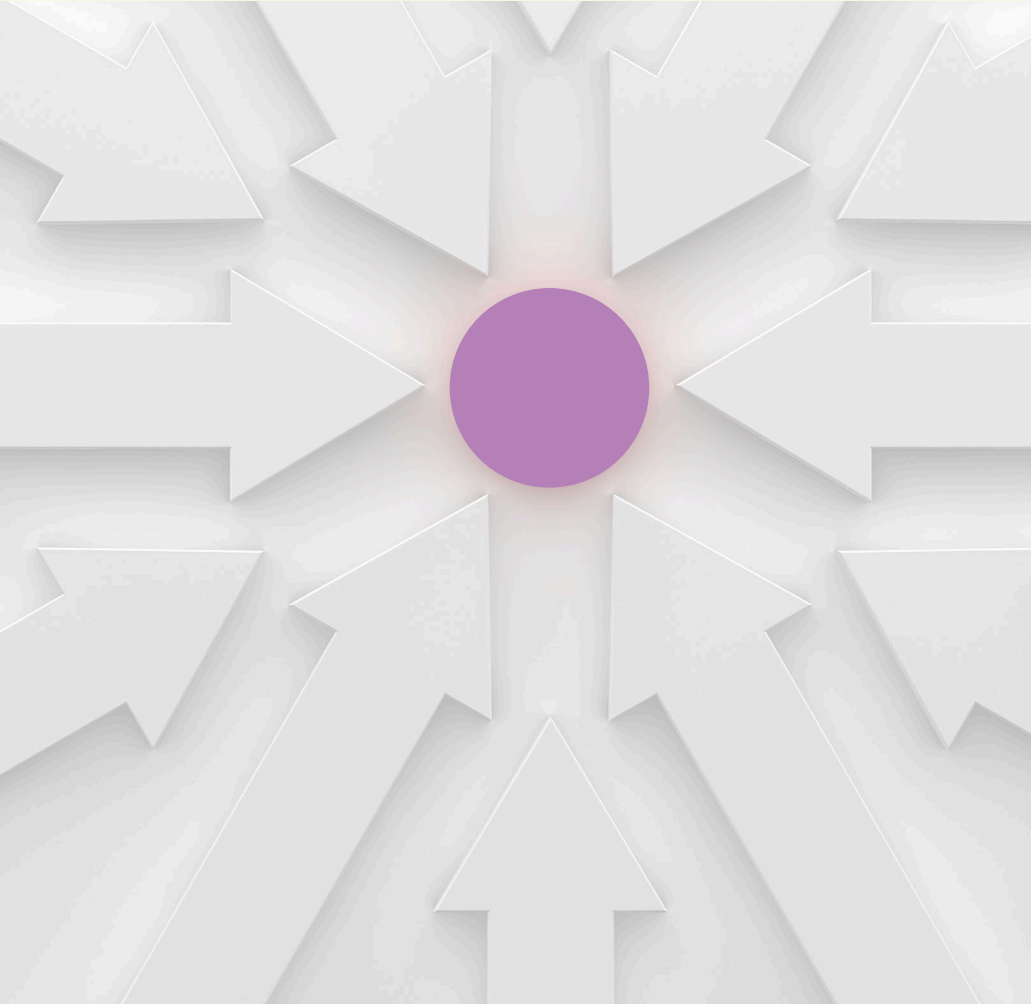
**221%**

Increase in OPPD existing substation expansion projects in the next 7 years

**31**  
substation expansions

Active delivery projects represent a **\$1.4 billion investment** in OPPD infrastructure

# EMERGING RISKS AND FOCUS AREAS



## **TARIFFS:**

- Watching for increased prices on imports
- Increased domestic demand could cause inflationary pressure and delays

## **SOURCING:**

- Significant resource constraints for labor, materials for transmission and substation work due to utility buildouts nationwide

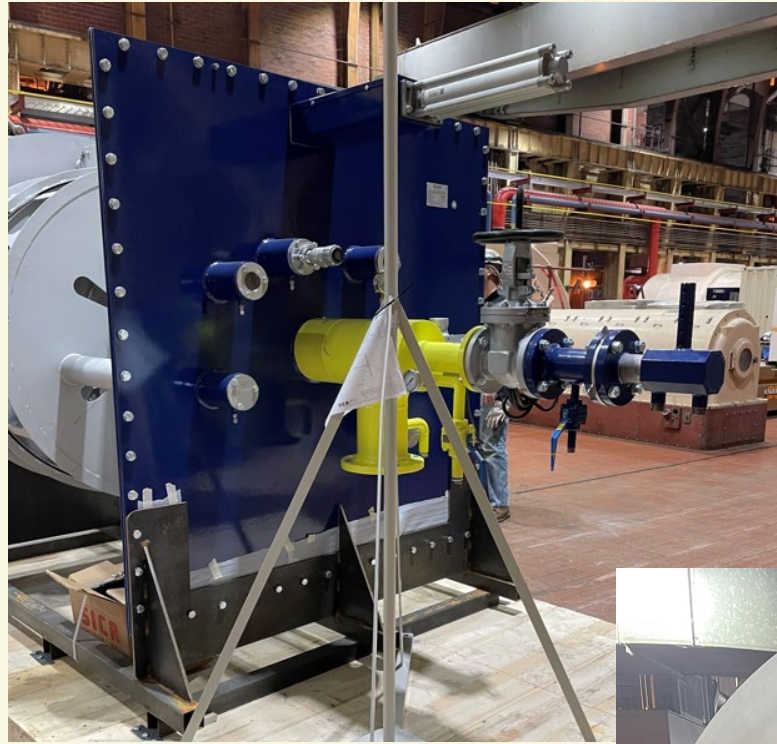
## **WORK MANAGEMENT:**

- Continued focus on finding efficiencies with strategic partnership
- Identifying process improvements within OPPD to streamline activities

# ➔ **NORTH OMAHA STATION TRANSITION**



# UNIT 5 BURNERS DELIVERED TO NORTH OMAHA STATION



# NORTH OMAHA STATION TRANSITION

## Upcoming major milestones for Units 4 and 5 gas conversion

- **Q2/Q3 2025:** Unit 5 gas burner installation RFP issuance and award
- **Q4 2026:** *Expected* start of fuel conversion outage – on track pending completion of Resolution 6518 (NOS Extension) prerequisites and regulatory approvals
- **Q2 2027:** Unit 4 and 5 conversion projects completed in time for summer operation on natural gas

» **QUESTIONS?**

