

The logo features a thick, green, curved line resembling a rainbow arch above the text. The text is centered and consists of two lines: the top line is in a bold, blue, serif font, and the bottom line is in a green, italicized, serif font. The background is white with a light blue gradient and decorative halftone patterns in the corners.

**RAINBOW**  
*ENERGY CENTER*

# Rainbow Energy Center – Who We Are

- Life-long North Dakotans formed REC in 2022
- Assets
  - Coal Creek Station
  - Nexus Line
- MISO Market Participants
  - Independent Power Producer
    - No load, generation only
- Partnerships
  - NACCO Natural Resources
  - Great River Energy
  - Harvestone (Blue Flint)
  - Many others



# Rainbow Energy Center

---

- What We Do & Why We Do It
  - Building a stronger energy future through innovation
  - Committed to connection to our communities and their success
    - 600+ careers
    - \$1.5 billion annual economic impact to North Dakota
    - Endless opportunity



# Coal Creek Station

- Coal Creek Station
  - 1,151 MW
  - Located near Underwood, ND
  - Purchased by REC in 2022
  - Coal-fired power plant
    - Mine-mouth operation
    - Approximately eight (8) million tons of beneficiated lignite coal fuel
    - Celebrated 45 Years of coal delivery

# HVDC transmission system

*The HVDC transmission line delivers electricity from Coal Creek Station to Minnesota.*



## Nexus Line

- Nexus Line
  - High-voltage direct current (HVDC) transmission
  - 99.5% availability
  - Purchased by REC in 2022

# Rainbow Energy Center's Vision

- REC's vision remains unchanged
  - Continued capital investment to execute our long-term business strategy for Coal Creek Station to exist beyond 2040
- **Safety**
  - Everyone & everyday
- **Community**
  - Committed to connection
- **Innovation**
  - Leave no stone unturned
- **Collaboration**
  - Accountability & execution
- **Sustainability**
  - A generational mindset



# Rainbow Energy Center's Vision



Coal Creek Station

Optimize Operational Efficiencies



Nexus Line

Maximize Power Delivery



Renewable Generation

Wind Generation



Carbon Management

Commercialization of Capture

The image shows a large industrial facility with two tall, white smokestacks emitting thick white plumes of smoke against a blue sky with scattered clouds. In the foreground, three workers wearing hard hats and safety gear are standing on a platform, looking towards the smokestacks. One worker in a green hard hat is pointing towards the left stack. The overall scene is a mix of industrial activity and environmental impact.

# Coal Creek Station

- Generate at full capacity
- Maximize operational efficiencies
- Generational mindset of sustainability
  - Reduce carbon footprint
    - Beneficiated coal
    - Ash utilized in concrete market
      - 95% of our fly ash is recycled
  - Eliminate waste streams
    - Constructing processing facilities for bottom ash and FGD materials
    - Utilize processed materials in the concrete and gypsum markets
  - Assist in North Dakota's race to carbon neutrality





# Nexus Line

- Nexus Line
  - High-voltage direct current (HVDC) transmission
  - 99.5% availability
  - 436 miles from Coal Creek Station to Buffalo, MN
    - REC generated power is delivered directly to Minnesota
      - No reliance on ND AC system
    - Allows flexibility in power generation portfolio

# 400 MW of Wind Generation

- Integral to the longevity of Coal Creek Station and Falkirk Mine through the ability to maximize the capacity of Nexus Line
- Nexus remains committed to support the delivery of 400 MW of wind generation utilizing Nexus Line
- All opportunities are being explored





# Carbon Management

- Carbon Capture Development Process
  - Two studies to evaluate the most efficient design for capture will run concurrently over the next year with EERC
    - Front End Engineering & Design (FEED)
    - Bridge Study
    - Commercialization pathway to be identified following FEED & Bridge Studies
- Safe & Permanent Carbon Dioxide Storage
  - US DOE CarbonSAFE grant received in 2023 and will be ongoing over the next two years
  - Investigates storage potential around Coal Creek Station

Questions?

