Roles and Opportunities of State Transmission Authorities

Claire Vigesaa

- North Dakota Transmission Authority

Jeremy Lewis

- New Mexico Energy Conservation and Management

James Lester

- Colorado Energy Office

NASEO TRANSMISSION PLANNING WEBINAR

Claire Vigesaa, Executive Director, NDTA

November 18, 2025

North Dakota Transmission Authority

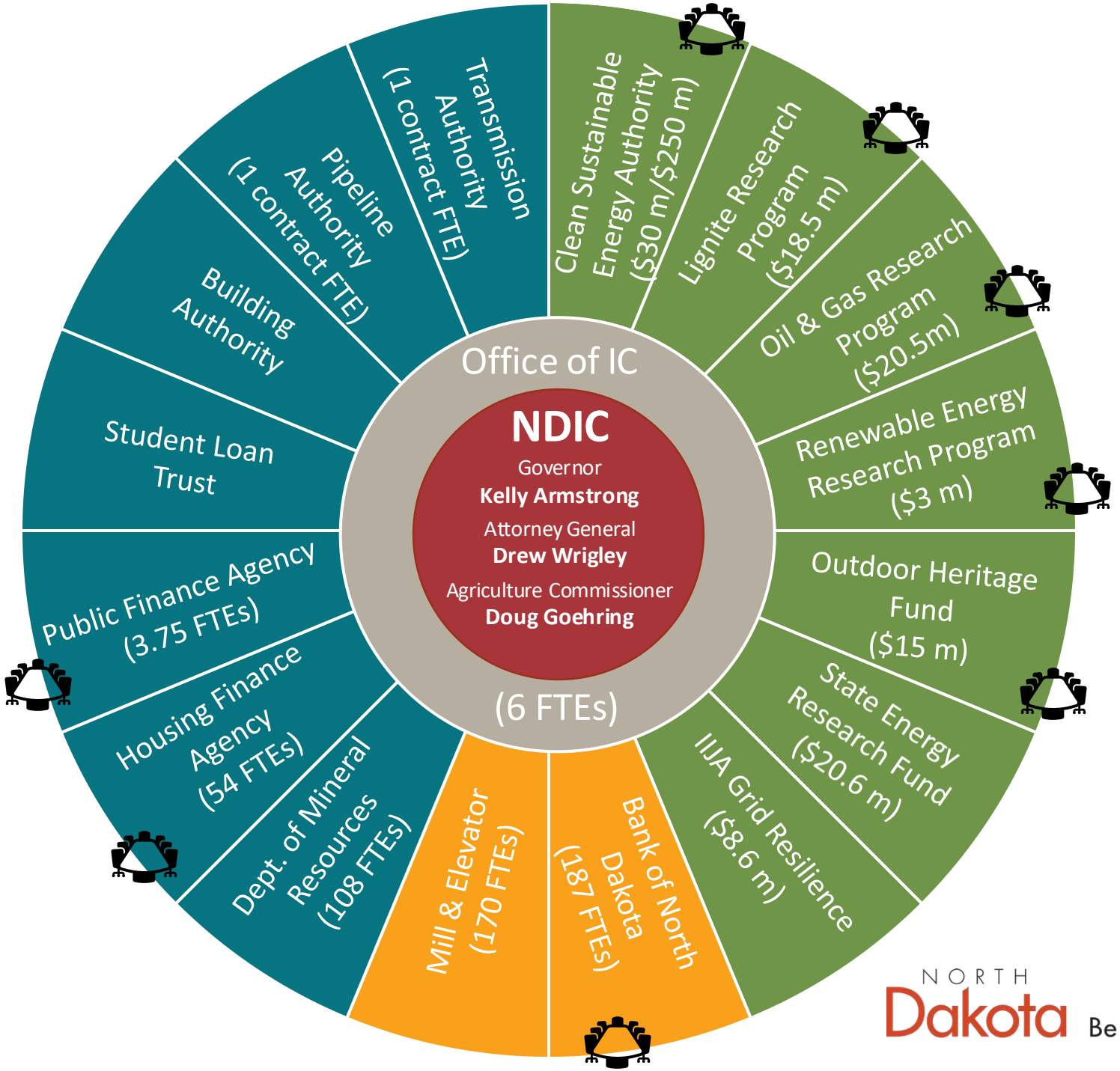
ND TRANSMISSION AUTHORITY

- **Established - 2005**

- **Organizational Structure**
  - Office within the ND Industrial Commission – 14th Floor
  - Budget line item – ND Industrial Commission
  - Executive Director – Appointed, a contractor

NDTA North Dakota Transmission Authority

Industries, Agencies, and Programs



Legend

- Commission
- Office of IC
- Agency Role
- Grant Program
- State-Owned Enterprise
- Advisory Board

Updated to reflect 68th Legislative Assembly changes

NORTH Dakota Be Legendary.

STATUARY AUTHORITIES - RESPONSIBILITIES

- Make grants or loans to transmission projects
- Issue up to $800 million in revenue bonds
- Enter lease-sale contracts
- Own, lease, rent and dispose of transmission facilities
- Enter contracts to construct, maintain and operate transmission facilities
- Investigate, plan, prioritize and propose transmission corridors
- Participate in regional transmission organizations

- Annual Report to the ND Legislative Council & NDIC
- Annual Resilience of the Electric Grid in North Dakota

NDTA North Dakota Transmission Authority

NDTA WORK EVOLUTION…TODAY

- ❑ Resource Adequacy Studies
- ❑ Load Forecast Studies
- ❑ Transmission Capacity and Large Load Impact Studies
- ❑ Facilitate Discussion with Developers/RTOs/Utilities/Regulators/Policy Makers
- ❑ Educate & Inform
- ❑ IIJA DOE Grants

NDTA North Dakota Transmission Authority

NORTH

Dakota

Be Legendary.

RETA

New Mexico Renewable Energy Transmission Authority

RETA 101 Presentation

RETA's Mission

The New Mexico Renewable Energy Transmission Authority (RETA) facilitates planning, financing, developing and acquiring high-voltage transmission lines and energy storage projects to promote the expansion of carbon-free renewable energy use in state and regional markets and enhance economic development in New Mexico.

RETA

RETA Beginnings

- The Renewable Energy Transmission Authority Act was passed by the New Mexico legislature and signed by Gov. Bill Richardson in 2007 to plan, finance, develop and acquire high voltage transmission lines and storage projects to promote economic development in New Mexico.

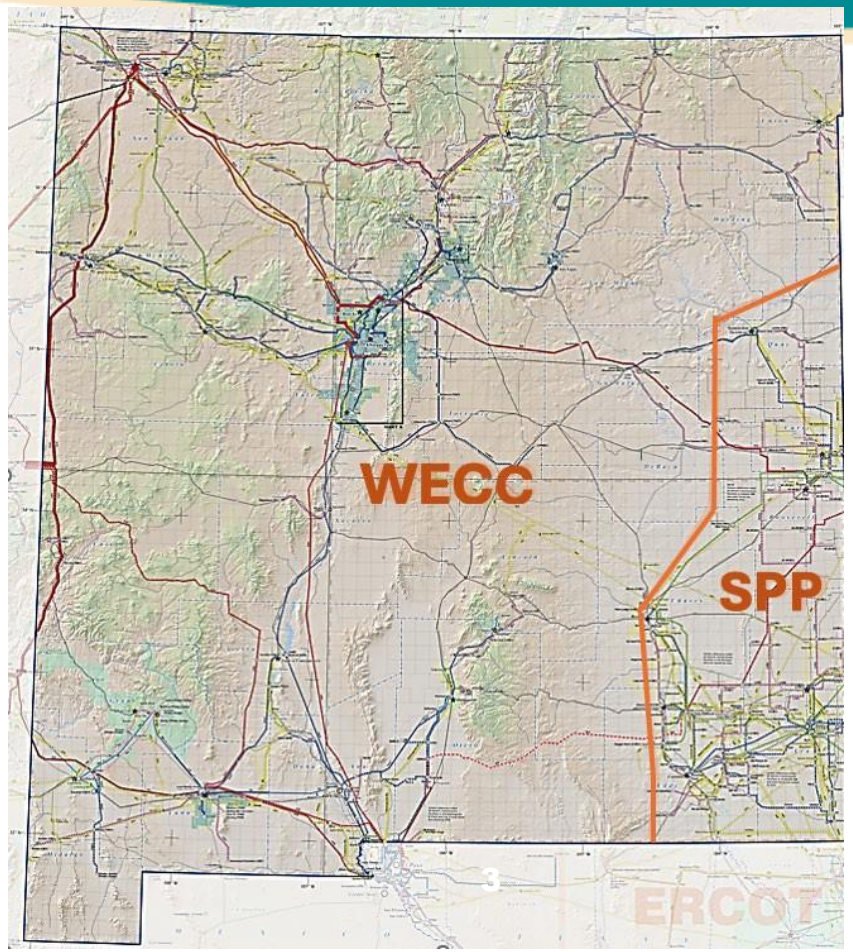
  RETA is a ***"public body, separate and apart from the state, constituting a governmental instrumentality for the performance of essential public functions."***

- There are 6 voting members on the RETA Board:
  - 3 appointed by the Governor
  - 1 appointed by the Speaker of the House
  - 1 appointed by the President Pro-tem of the Senate
  - State Treasurer or designee
  - Secretary of the Energy, Minerals and Natural Resources Department serves as a non-voting ex-officio member

RETA

New Mexico's Grid

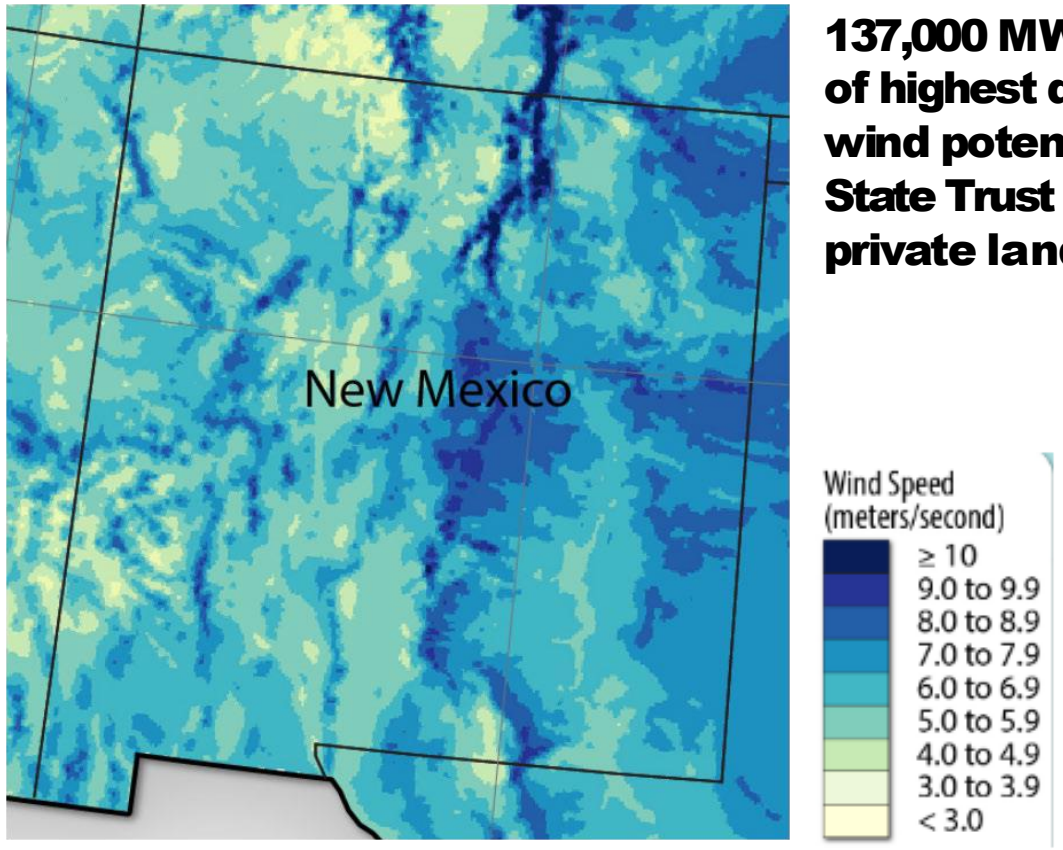
- Virtually unchanged since the 1980s
- Borders the seam of Eastern and Western Interconnections (Southwest Power Pool-Western Electricity Coordinating Council)
- WECC portion primarily fed from Four Corners coal plants both to export energy and to serve load throughout the state
- Grid is not configured to support economic development from expansion of renewable resources
- Compare this map to renewable resource potential on next slide



RETA

Wind Development Potential

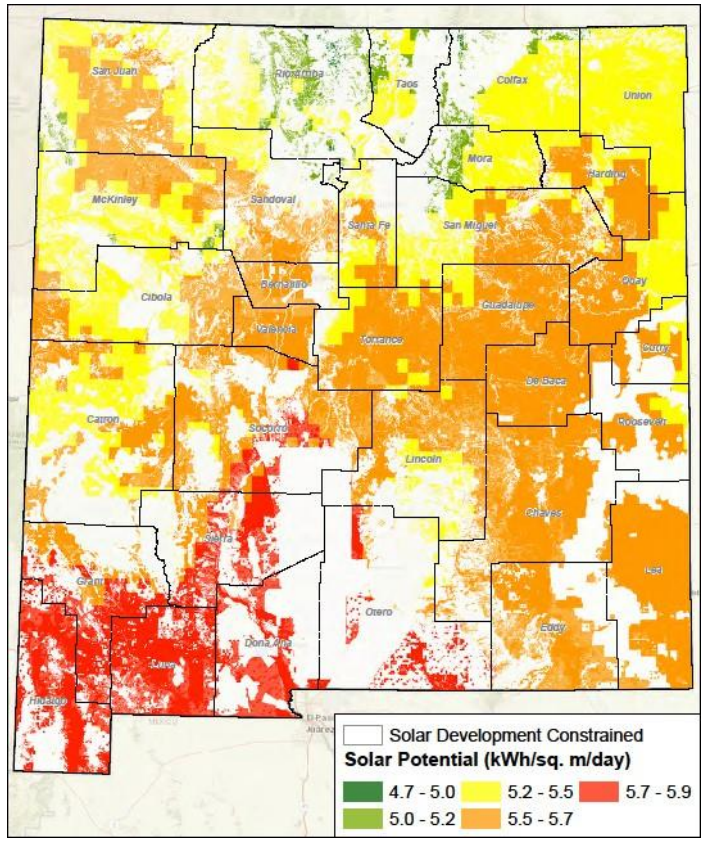
- Total developable land area for commercially viable wind equals 20,500 square miles
- 18,500 square miles on State Trust and private lands



137,000 MW of highest quality wind potential on State Trust and private lands

Solar Development Potential

- Total developable solar land area equals 68,000 square miles
- 49,000 square miles on State Trust and private lands
- Over 9,300 square miles in highest output areas



824,000 MW of highest quality solar potential on State Trust and private lands

How can RETA help a project get built?

RETA's Benefits for Developers are Critical

- **Tax incentives**
  - Gross receipts and compensating tax deductions
  - Property tax exemption for real property and improvements
- **Assistance with permitting and siting**
  - Government-level relationships with State Land Office, Department of Transportation, Middle Rio Grande Conservancy District, other state and local agencies
  - Streamline permitting, without skirting environmental requirements
  - Powers of eminent domain
- **Bond financing**
  - Available for developers needing financing support (not often used)
- **Reduced regulatory burden**

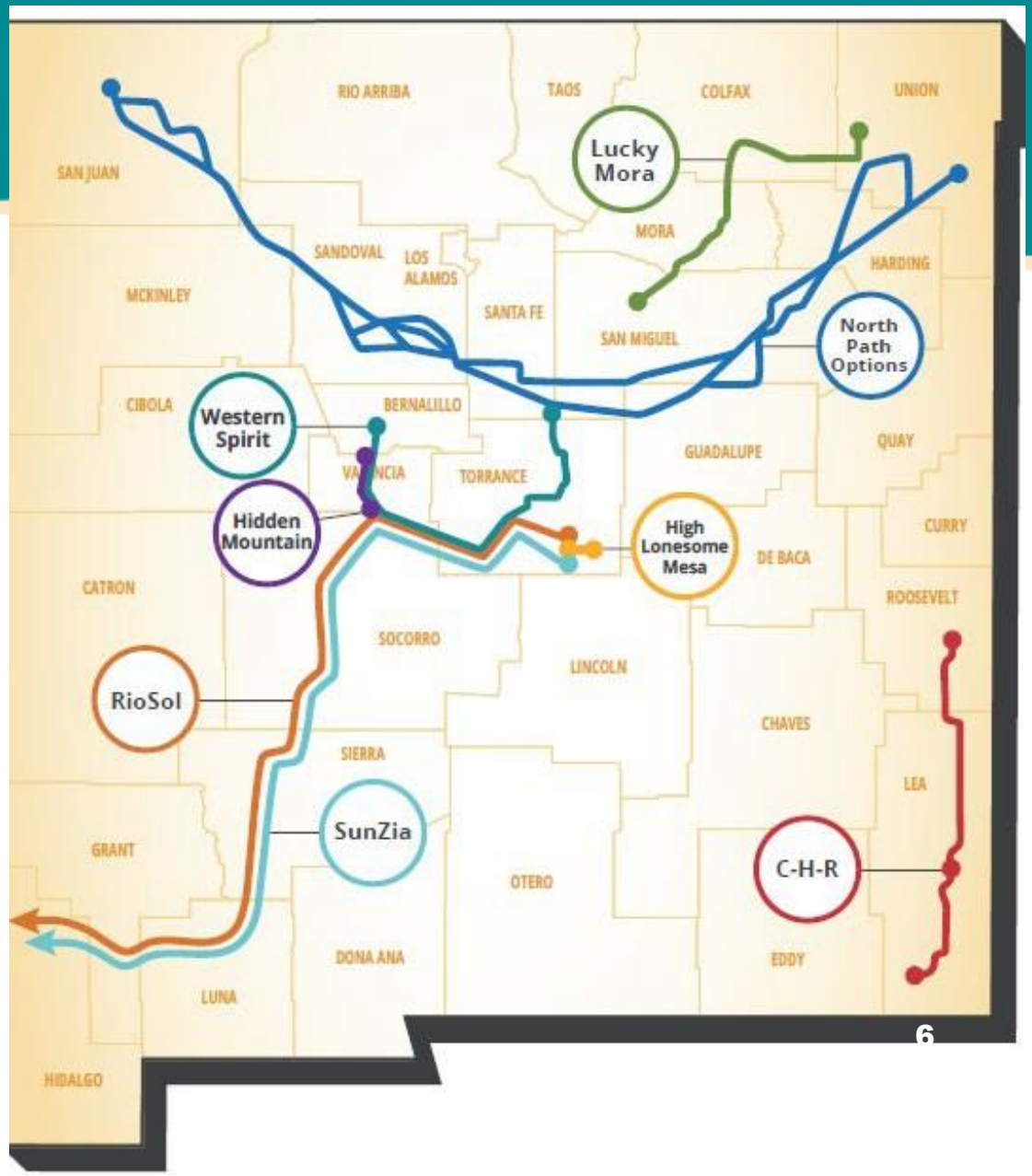
RETA Project Relationships

- **Project selection process outlined in regulation- 17.8.2 NMAC (12/15/2011)**
  - Relationship levels – all beyond NDA require Board approval
    - ✓ Non-Disclosure Agreement
    - ✓ Letter of Support
    - ✓ Memorandum of Understanding (this step triggers notice provisions to utilities, Public Regulation Commission and public)
    - ✓ Acquisition, Co-Development and Lease Agreement
      - Enables tax, eminent domain and regulatory benefits for project

RETA projects must transmit or store at least 30% of their energy from renewable resources. Most of RETA's current projects are planned to have 100% of their energy originate from renewable resources.

RETA

RETA's Transmission Projects:



RETA

One Project Completed, One Under Construction, Five More in Development, Two Under MOU

- **Western Spirit (Pattern Energy)** – Sold to Public Service Company of New Mexico (PNM)
  - 150 miles, 345 kV AC, 800 MW capacity, ***2021 Commercial Operation Date***
- **SunZia (Pattern Energy)** – Under construction, central NM to south central AZ
  - 550 miles, 525 kV HVDC – 3,000 MW capacity, ***2026 estimated completion date***
- **Crossroads/Hobbs/Roadrunner (NextEra Energy Transmission)** – In development, southeast New Mexico
  - 140 miles, double circuit 345 kV AC, 1,500 MW, ***2026 estimated completion date***
- **RioSol (Southwestern Power Group)** – In development, parallel to SunZia
  - 550 miles, 500 kV AC – 1,500 MW, ***2028 estimated completion date***
- **Mora Line (Ameren Transmission)** – In development, northeast New Mexico
  - 116 miles, 345 kV AC and 115 kV AC, 182 MW, ***2027 estimated completion date***
- **North Path (Invenergy Transmission)** – In development, northeast to northwest New Mexico
  - 400 miles, 525 kV HVDC – 4,000 MW, ***2032 estimated completion date***
- **Hidden Mountain Extension (Agua Fria, LLC)** – In development, Central New Mexico – connects RioSol to PNM
  - 21 miles, 345 kV AC, 1,000 MW, ***2028 estimated completion date***
- **Southline, Phase II (Grid United, LLC)** – Under an MOU, southwestern to south central New Mexico
  - 108 miles, 345 kV AC, 1,500 MW, ***estimated completion date TBD***
- **Eastern NM Connector (Southwestern Power Group II)** – Under an MOU, PNM's Pajarito to Blackwater substations
  - 278 miles, 500 kV AC, 3,000 MW ***estimated completion date TBD***

RETA

Project Capacity Summary

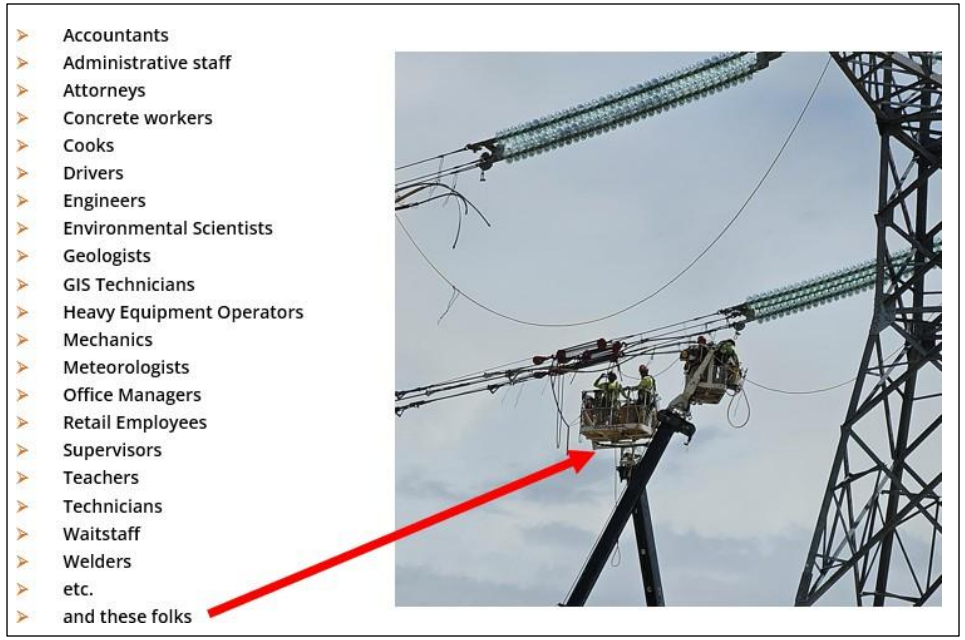
Western Spirit (Pattern Energy)	800 MW
SunZia (Pattern Energy)	3,000 MW
RioSol (Southwestern Power Group)	1,500 MW
North Path (Invenergy)	4,000 MW
Mora Line (Ameren)	182 MW
Crossroads/Hobbs/Roadrunner (NextEra)	1,500 MW
Hidden Mountain Extension (Auga Fria, LLC)	1,000 MW
Southline Phase II (Grid United, LLC)	1,500 MW
Eastern NM Connector	3,000 MW
RETA Transmission Capacity Total	**16,482 MW**

(Compare to New Mexico's peak load of less than 4,000 MW)

RETA

Building Transmission Lines in New Mexico Builds Our Workforce

Billions of dollars of transmission projects and thousands of jobs are some of the benefits of completed projects and others in development. RETA is the essential link in allowing our state to make renewables work and upgrading our transmission grid. RETA transmission projects are supporting renewable energy development that will help meet the requirements of the Energy Transition Act.



An economic impact report recently completed for the RioSol transmission line showed:

- **Project development began in 2008; development expenditures are anticipated to exceed $244 million through 2025.**
- **Project construction is estimated to begin in 2026 and continue through 2027 with total construction costs exceeding $1.75 billion.**
- **Operations and maintenance expenditures from 2028 create economic and fiscal impacts of nearly $12.3 million per year.**
- **These direct and induced expenditures do not include the estimated $8.6 billion investment in the renewables unlocked by the construction of RioSol.**

RETA

RETA

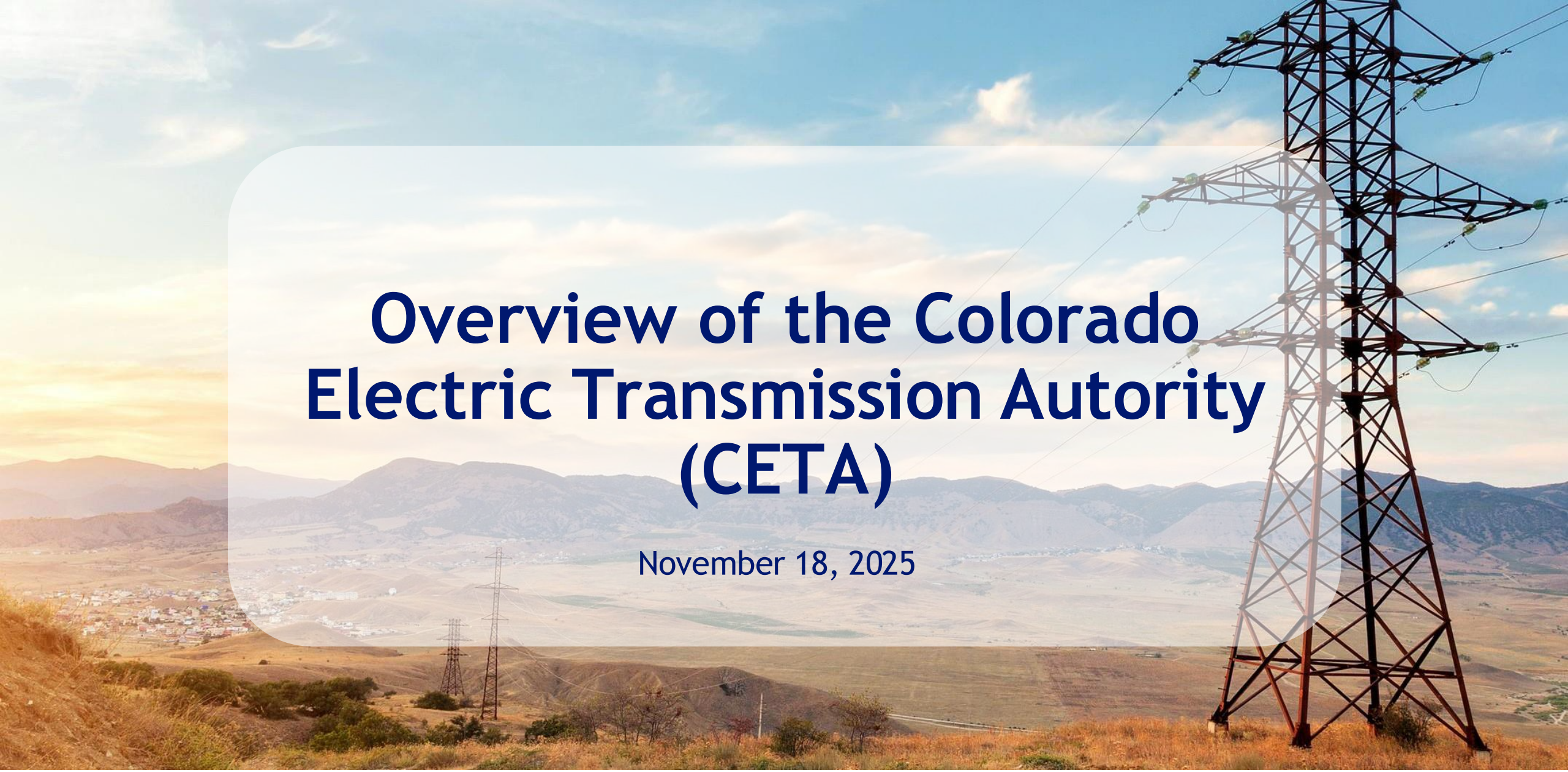
New Mexico Renewable Energy Transmission Authority

Thank you

www.nmreta.com

505-699-0599

RETA



Overview of the Colorado Electric Transmission Autority (CETA)

November 18, 2025

COLORADO

Major Components of Colorado's Climate Policy

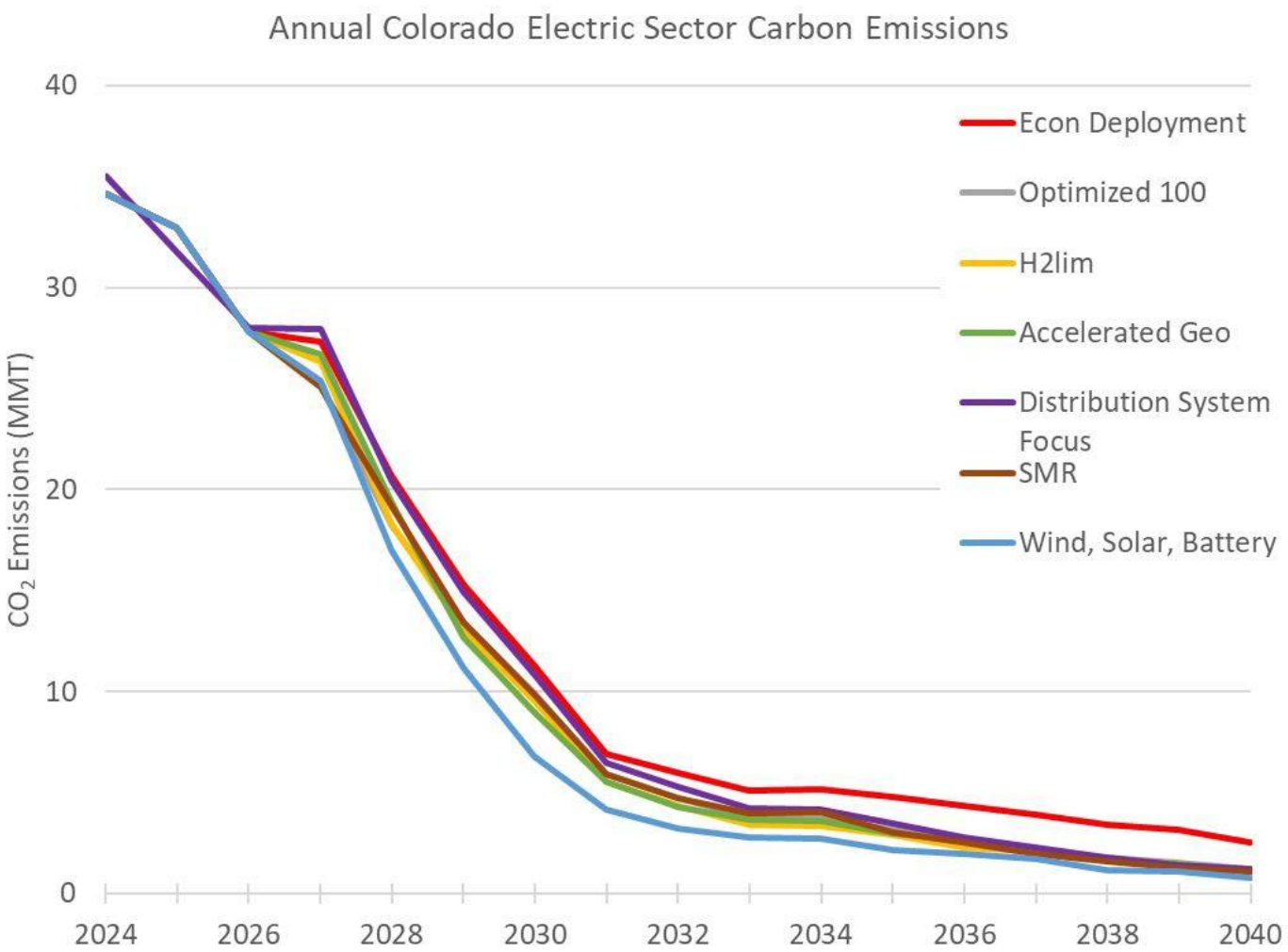
- Establish greenhouse gas inventory with 2005 baseline
- Reduce GHG emissions 26% by 2025, 50% by 2030, and net zero by 2050
- Develop rules and policies to reduce GHG emissions
- Creates regulatory path for electric utilities to meet 80% GHG reduction by 2030
- Requires annual tracking and reporting through CDPHE

Statewide Goals set by Legislature

In 2019, the CO Legislature passed HB19-1261 which created science-based targets for reducing greenhouse gas pollution, later updated in SB23-16. Our current reduction targets (below 2005 levels) are:

- **26% by 2025**
- **50% by 2030**
- **65% by 2035**
- **75% by 2040**
- **90% by 2045**
- **Net Zero by 2050**

Additional Renewables Needed to Reach 2040 Goals



- CEO 2040 Study modeling shows can reach 94% reduction in GHG emissions from electricity sector by 2040 at no incremental cost.
- This scenario entails additions of 5.5 GW wind, **11 GW solar**, and 9 GW storage, compared to 2022 levels of 5 GW wind, **2 GW solar**, and 0.5 GW of storage.

Colorado Senate Bill 21-072

Pursuant to statute, the Authority can:

- Identify And Establish Corridors For Electric Transmission
- Coordinate, Investigate, Plan, Prioritize, And Negotiate With Entities Within And Outside Colorado For The Establishment Of Interstate Transmission Corridors
- Engage In Other Transmission Planning Activities That Would Increase Grid Reliability, Help Colorado Meet Its Clean Energy Goals, And Aid In Economic Development;
- Conduct A Competitive Process To Select A Qualified Transmission Operator, To Assume The Responsibility To Carry Out All Required Financing, Planning, Acquisition, Maintenance, And Operation Of Eligible Facilities
- With Certain Limitations, Exercise Eminent Domain For Acquiring Any Property Or Rights-Of-Way
- The Authority Can Issues Bonds To Fund Transmission Projects That It Finds Necessary

CETA is a Transmission Developer with a Public Purpose

To advance statewide reliability, clean energy goals, and economic development.

- Independent special purpose authority and subdivision of the state
- Not subject to direction by a state agency or commission
- 9-member independent board appointed by governor and legislature

Colorado Has an Urgent Need for Transmission

Transmission Portfolios: Reference Case (+ Reconductoring)

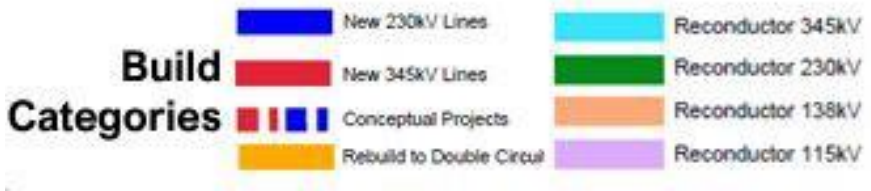
- Reference Case portfolio meets the 20-year reliability, deliverability and economic needs of high-voltage system in Colorado

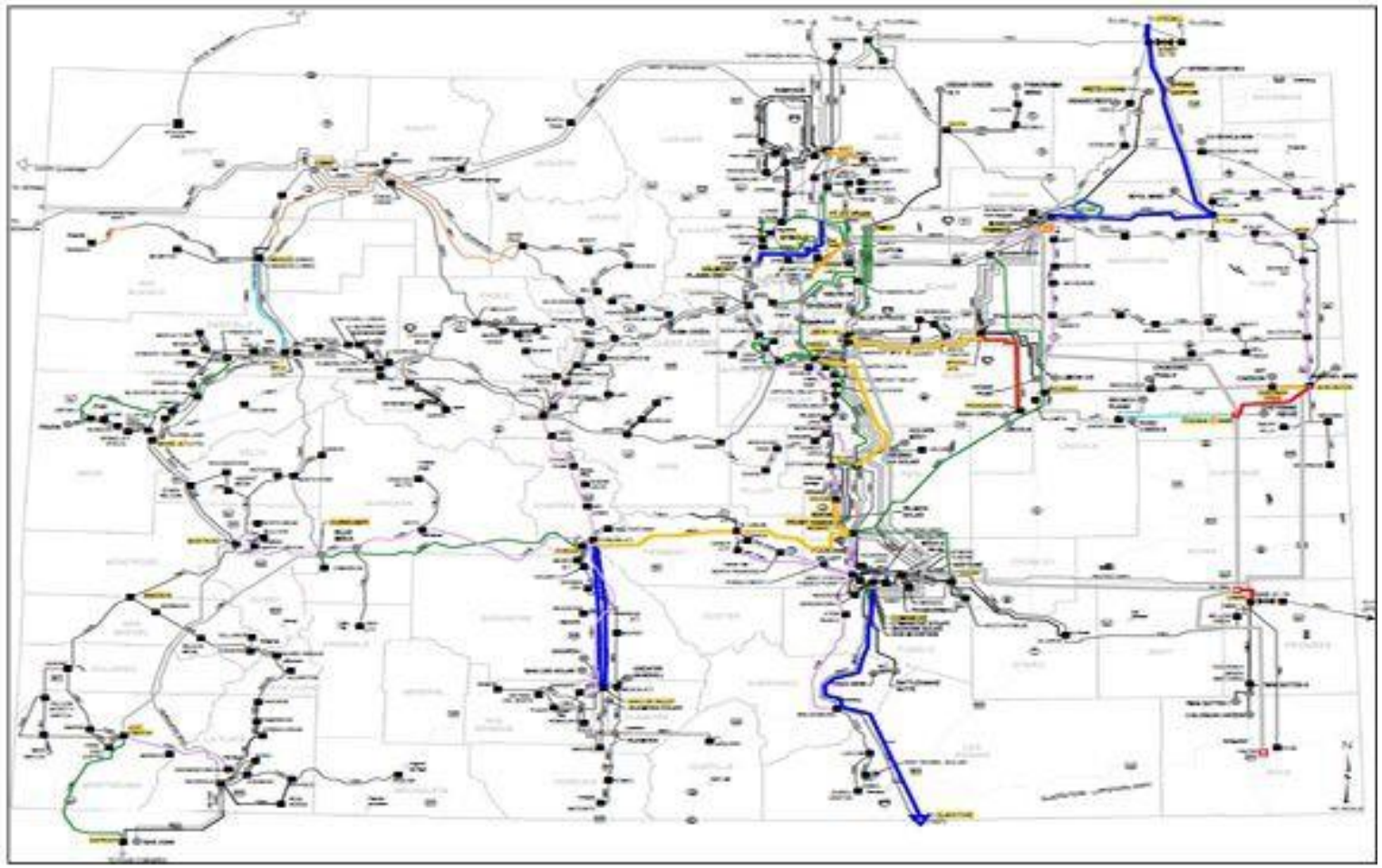
Capital Investment ($M)

$4,503

Portfolio Line Miles

Greenfield	548
Rebuild	269
Reconductor	2883





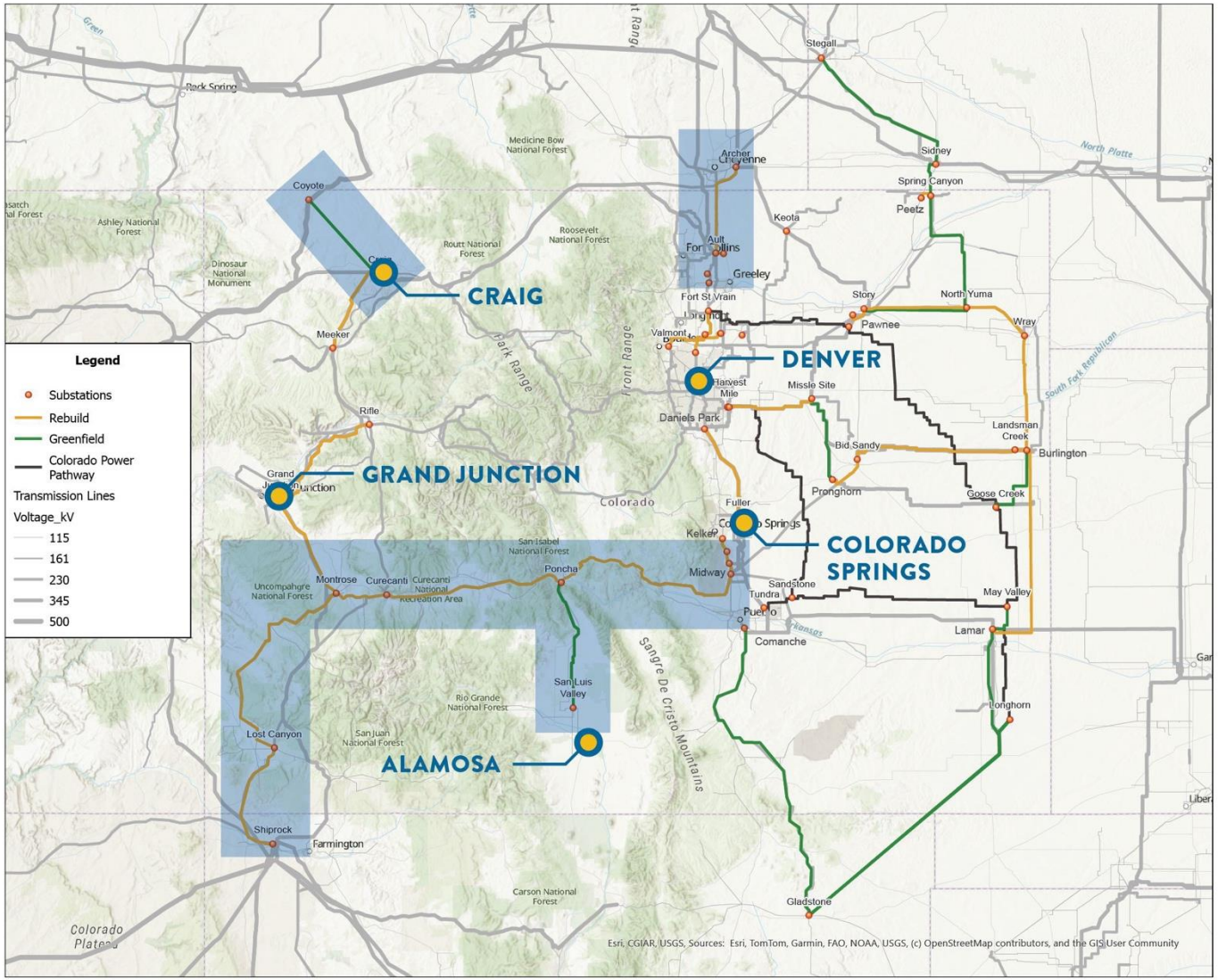
CETA's Work

Unique Tools

- Public-private partnerships
- Identify transmission corridors
- Revenue bonds
- Eminent domain

2026 Priorities

- Select a project(s) for development
- Revenue bonding policy
- Notification policy



Community Engagement Principles

Principles adopted by the CETA Board in October 2024 to guide partnership agreements

Questions?

james.lester@state.co.us

COLORADO