RETA
New Mexico Renewable Energy Transmission Authority

New Mexico
Renewable Energy Transmission Authority
Projects Update

Presentation to
Water & Natural Resources Committee

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Executive Director

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RETA

NM RETA Background

- Established by the NM legislature in 2007 to plan, finance, develop and acquire high voltage transmission lines and storage projects in order to promote economic development in New Mexico.
  - A *"public body, separate and apart from the state, constituting a governmental instrumentality for the performance of essential public functions."*
  - Six-member Board, three appointed by the governor, one appointed by the speaker of the house, one appointed by the president pro-tem of the senate and the state treasurer or designee. The secretary of the Energy, Minerals and Natural Resources Department serves as non-voting ex-officio member.
- Project selection process outlined in regulation - 17.8.2 NMAC (12/15/2011)
  - Relationship levels – all beyond NDA require Board approval
    - NDA
    - Letter of Support
    - MOU (this step triggers notice provisions to utilities, Public Regulation Commission and public)
    - Master Lease Agreement
      - Enables tax and eminent domain benefits for project
- RETA sponsored projects must transmit at least 30% of their energy from renewable resources. RETA's current projects are planned to have 100% of their energy originate from renewable resources.

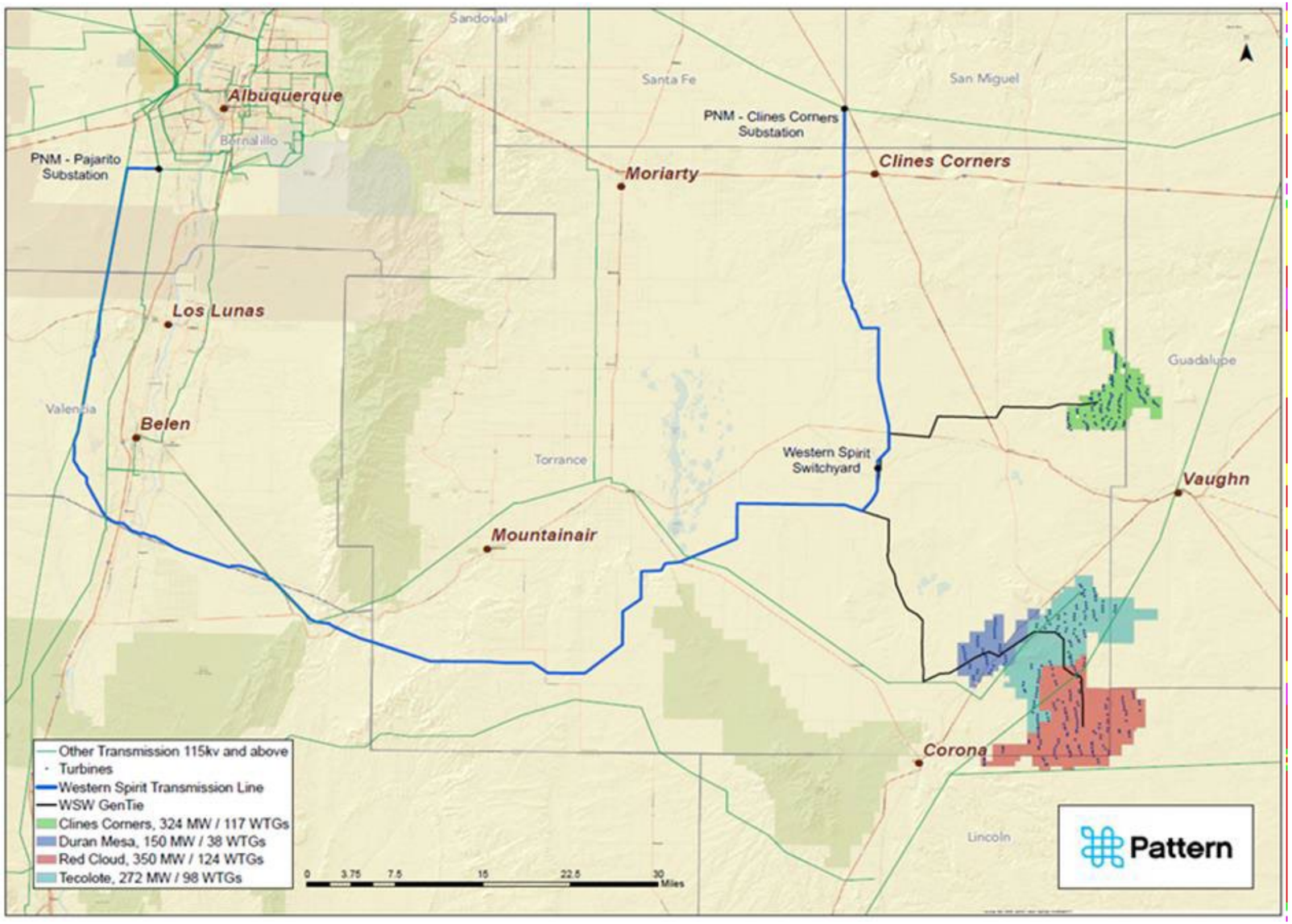
RETA's Benefits for Developers are Critical

- Private development partners:
  - Provide transmission design and construction expertise
  - Contribute to RETA administrative expenses via lease agreements.
- Tax incentives:
  - Property, gross receipts, and compensating tax.
- Assistance with permitting and siting:
  - Powers of eminent domain
  - Government-level relationships with State Land Office, Dept. of Transportation, Middle Rio Grande Conservancy District, other state and local agencies
  - Streamline permitting, but not skirting environmental requirements.
- Bond financing:
  - if developer needs financing support.

RETA

Western Spirit Transmission Line: Operating

- Western Spirit is a 155-mile 345-kV AC transmission line rated at 800 MW
- 100% of the power comes from renewable resources located in Central New Mexico
- A first of its kind public-private partnership
  - Owned by RETA and jointly developed with Pattern Energy
- Initially identified by RETA in a study of the NM Transmission System by Los Alamos National Labs more than a decade ago
  - Western Spirit co-development started in 2010
- Completed in 2021, the Project was acquired by PNM and is now a part of their grid
  - No rate payers' impact
  - 100% of cost is borne by the wind farms delivering clean electricity



Western Spirit Project Map

Four Projects Currently in Development Under Master Lease Agreement

- SunZia (Pattern Energy) – Central New Mexico to South Central Arizona
  - 550 miles, 525 kV HVDC – 3,000 MW capacity, 2026 completion date
- RioSol (Southwestern Power Group) – co-located with SunZia (NM to AZ)
  - 550 miles, 500kV AC – 1,500MW, 2028 completion date
- NM North Path (Invenergy) – Northeast to Northwest New Mexico
  - 400 miles, 525 kV HVDC – 4,000 MW, 2028 completion date
- Mora Line (Ameren) – Northeast New Mexico
  - 114 miles, 345 and 115 kV, 182 MW, 2025 completion date
- Links to project websites at https://nmreta.com/transmission-lines/

SunZia Transmission Line Project

- 350-mile, 525-kV HVDC transmission line
  - New Mexico portion
  - 3,000 MW
  - Operating 2026
- 100% of the power comes from renewable resources located in Central New Mexico
  - Largest wind farm in the U.S.
- A public-private partnership
  - Owned by RETA and jointly developed with Pattern Energy

Economic Development for New Mexico

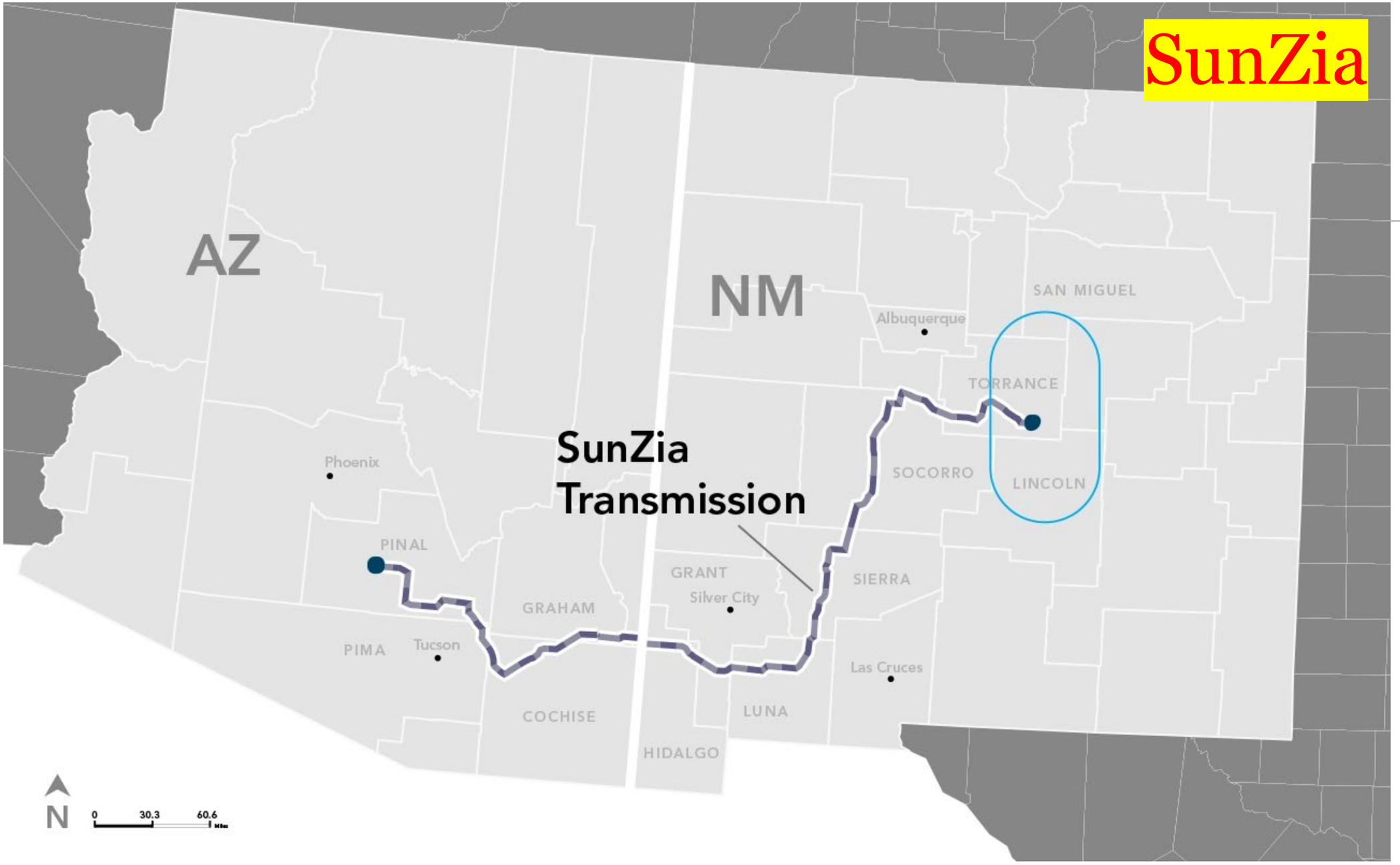
- ✓Project investment: $1.8B
- ✓State & local benefits: $7.1M
- ✓Construction jobs: 1,800

RioSol Transmission Line Project

- 350-mile, 500-kV AC transmission line
  - New Mexico portion, co-located with SunZia
  - 1,500 MW
  - Operating 2028

- 100% of the power comes from renewable resources located in Central New Mexico
  - Interconnection of NM wind and solar resources

- A public-private partnership
  - Owned by RETA and jointly developed with Southwestern Power Group

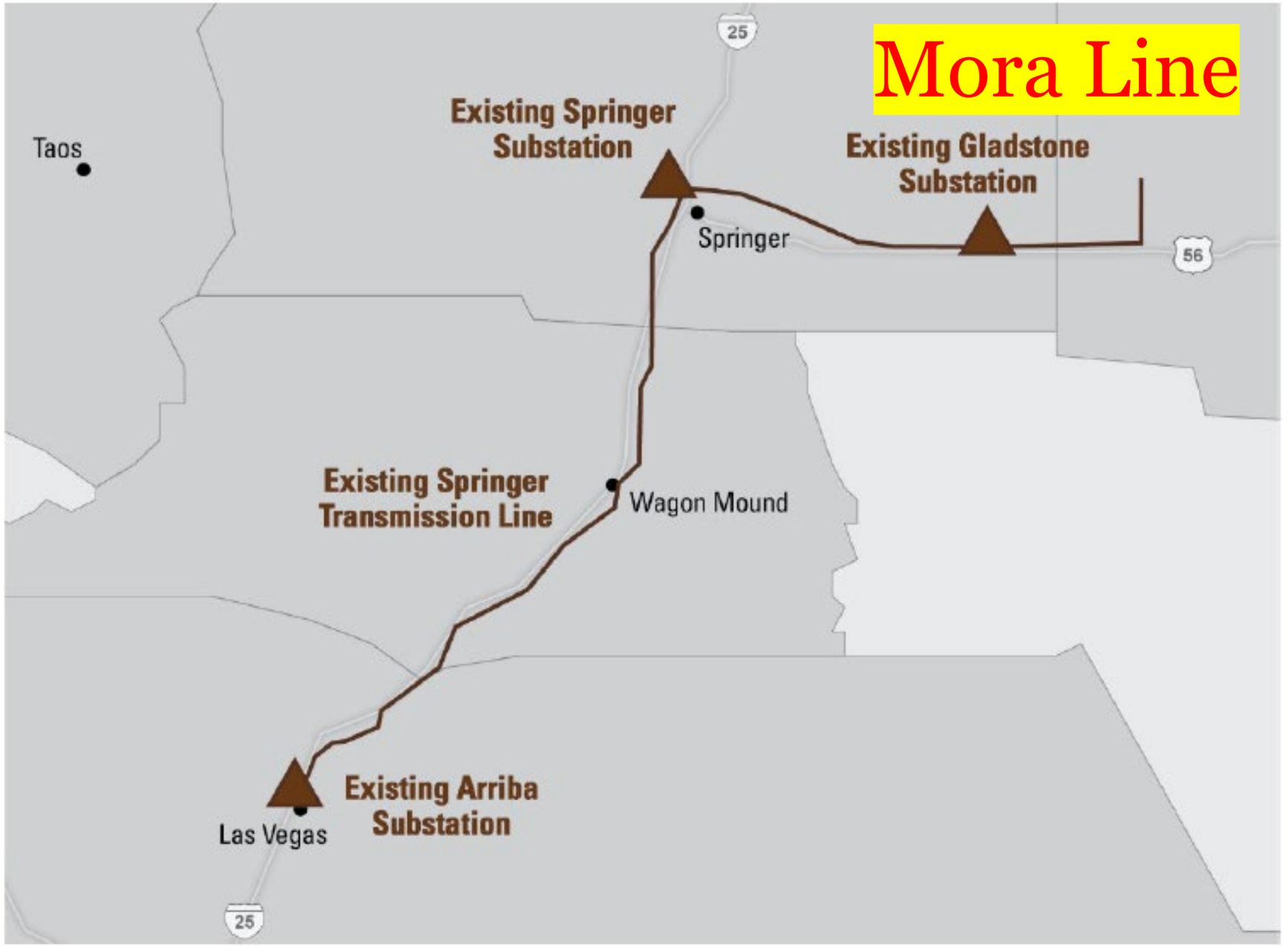

SunZia
AZ
NM
SAN MIGUEL
Albuquerque
TORRANCE
SunZia
Transmission
Phoenix
SOCORRO
LINCOLN
PINAL
GRANT
SIERRA
Silver City
GRAHAM
PIMA
Tucson
Las Cruces
COCHISE
LUNA
HIDALGO
N
0
30.3
60.6

Mora Line Transmission Project

- 114-mile transmission line at 115 kV and 345 kV
  - 182 MW
  - Operating 2025

- 100% of the power comes from renewable resources located in Northeast New Mexico
  - Unlocks exceptional wind resources for in-state utilization
  - Strengthens New Mexico grid

- A public-private partnership
  - Owned by RETA and jointly developed with Ameren Transmission


Mora Line
Existing Springer Substation
Existing Gladstone Substation
Taos
Springer
25
56
Existing Springer Transmission Line
Wagon Mound
Existing Arriba Substation
Las Vegas
25

North Path Transmission Line Project

- 400-mile, 525-kV HVDC transmission line
  - 4,000 MW
  - Operating 2028

- 100% of the power comes from renewable resources located in Northeast New Mexico
  - Unlocks exceptional wind resources

- A public-private partnership
  - Owned by RETA and jointly developed with Invenergy

Economic Development for New Mexico

✓Project investment: $2B

✓State & local benefits: $50M

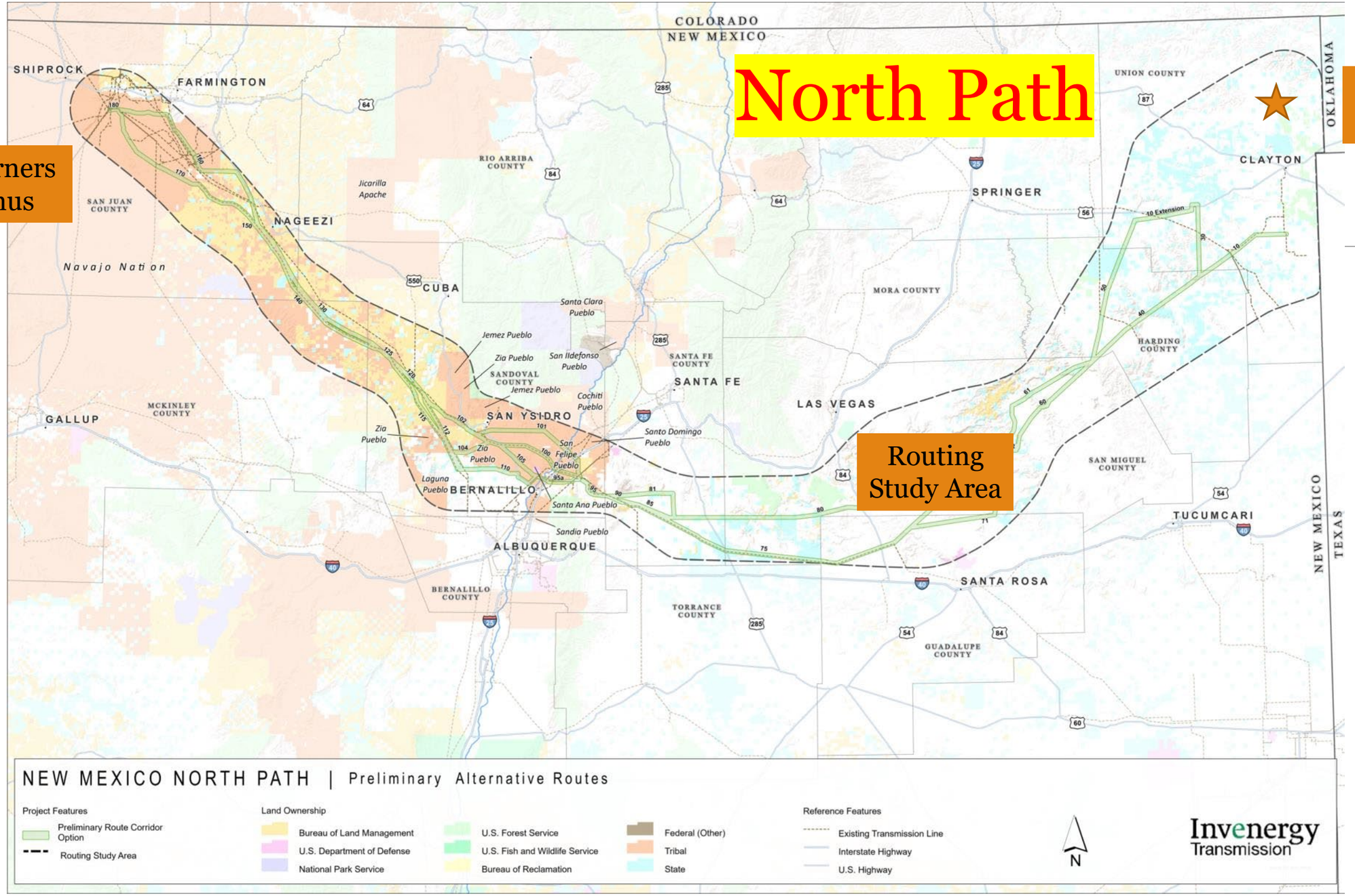
✓Construction jobs: 3,500

North Path

Four Corners Terminus

Union County Terminus

Routing Study Area



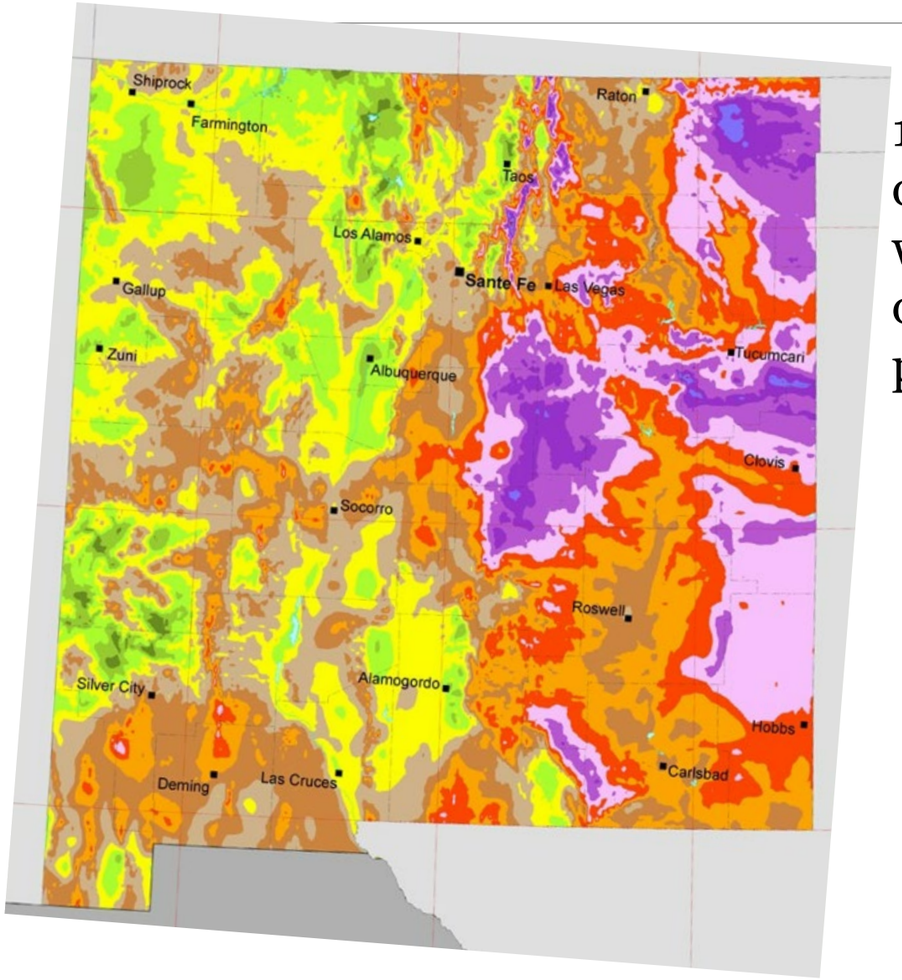
RETA

NM RETA Contracted with ICF to Study Renewable Energy Potential in New Mexico

- New Mexico Renewable Energy Transmission & Storage Study
  - Completed in 2020
  - Updated in 2022
- Study elicited significant interest by developers in bringing renewable energy and transmission projects to NM
- Executive summaries attempt to describe the issues and challenges in an easily understandable form
- Study, Study Update and Executive Summaries available online https://nmreta.com/nm-reta-transmission-study/

Wind Development Potential

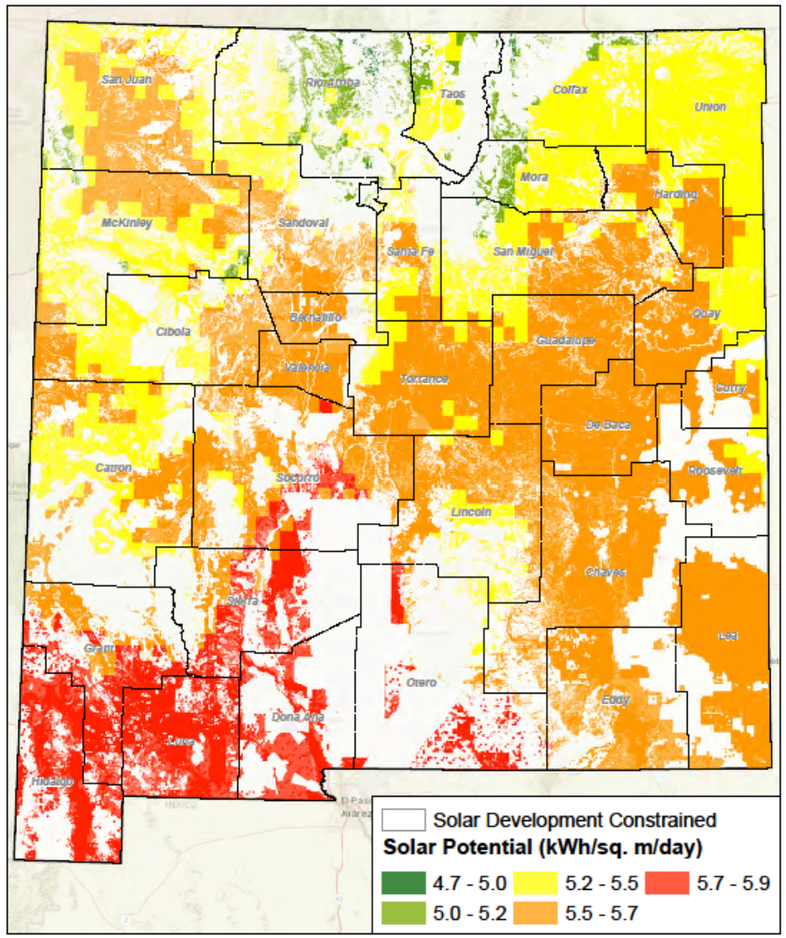
- **Total developable land area for commercially viable wind equals 20,500 sq. mi.**
- **18,500 sq. mi. on State Trust and private lands.**



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 sq. mi.**
- **49,000 sq. mi. on State Trust and private lands.**
- **Over 9,300 sq. mi. in highest output areas.**



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

New Mexico's Benefits from Transmission Development are Staggering

Put the projects together…

- North Path Project
  - Invenergy
    - $2B in transmission investment unlocks
    - $5B in renewables investment
- SunZia Project
  - Pattern
    - $1.8B in transmission investment unlocks
    - $6.2B in renewables investment
- RioSol Project
  - Southwestern Power Group
    - $1.3B in transmission investment unlocks
    - even more $Billions in renewables investment

…$16+ BILLION total investment opportunity

➔by 2030

➔unlocks wind and solar

➔partnerships may exceed RETA Study projections

Study Projections…

- 2022 RETA Study Update projects significant economic benefits:
  - Line construction
    - **$1-2 billion** of capital spending
    - 3,600 jobs
  - Wind and solar plant construction
    - **$8 billion** in capital spending
    - 20,000 jobs

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www.nmreta.com

https://nmreta.com/nm-reta-transmission-study/

New Mexico Renewable Energy Transmission Authority

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