

Radioactive & Hazardous Materials Committee

Jeremy Turner, Executive Director

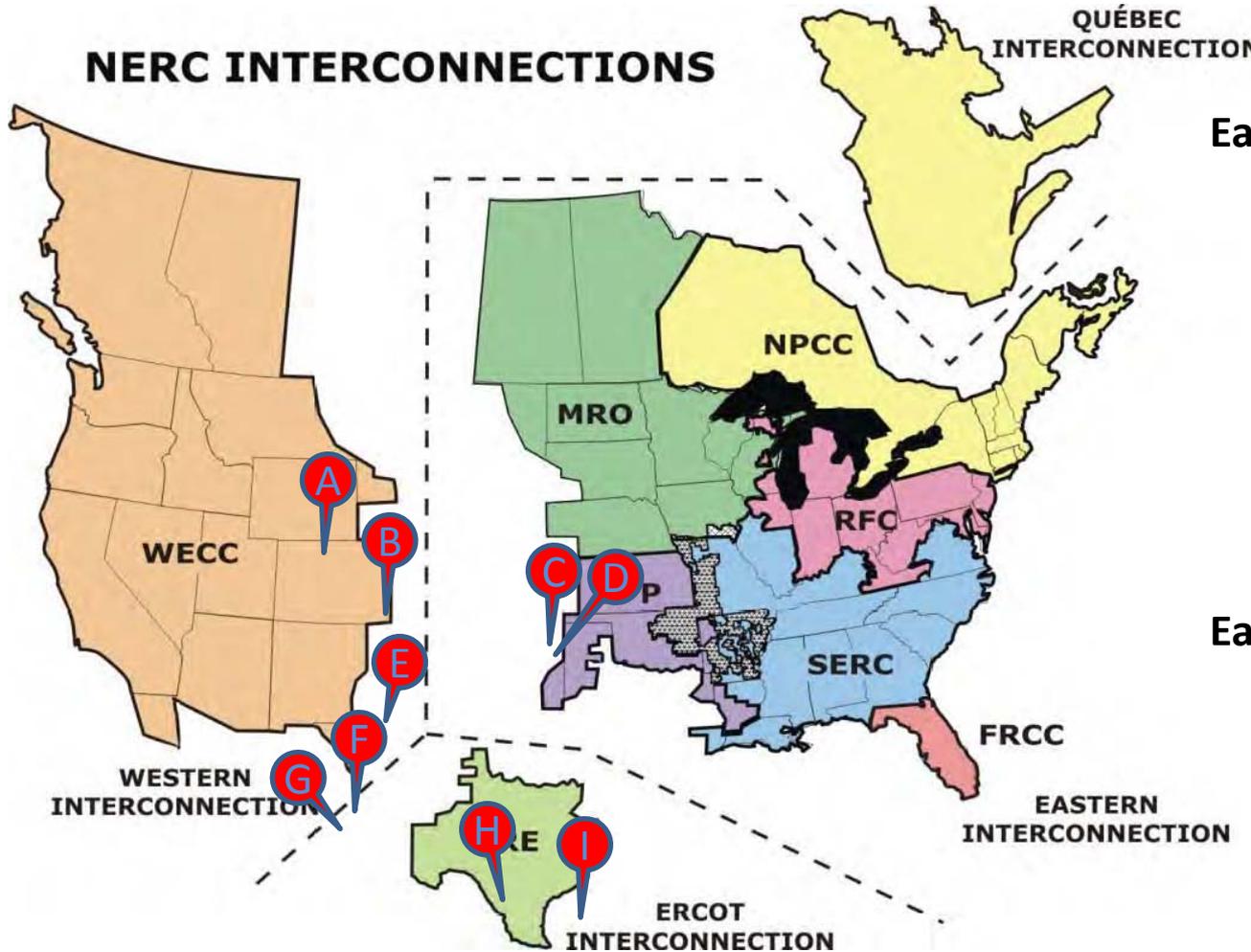
Angela Gonzales-Rodarte, Assistant Director

October 22, 2012

State-Level Authorities

- Eight state-level authorities:
 - Wyoming Infrastructure Authority (2004)
 - Idaho Energy Resources Authority (2005)
 - Kansas Electric Transmission Authority (2005)
 - North Dakota Transmission Authority (2005)
 - South Dakota Energy Infrastructure Authority (2005)
 - Colorado Clean Energy Development Authority (2007)
 - *New Mexico Renewable Energy Transmission Authority (2007)*
 - Utah Generated Renewable Energy Electricity Network (2010)
- RETA was Statutorily Created in 2007 by the NM Legislature
 - Governed by a seven member board
 - Plan, finance, acquire, and own transmission and storage facilities
 - 30% of the power on a RETA project has to be from renewable sources
 - Empowered with eminent domain

Interconnection Areas



Eastern to Western

- A: Miles City, MT—200MW
- B: Rapid City, SD—200MW
- C: Stegall, NE—100MW
- D: Sidney, NE—200MW
- E: Lamar, CO—210MW
- F: Blackwater, NM—200MW
- G: Artesia, NM—200MW

Total: 1310MW

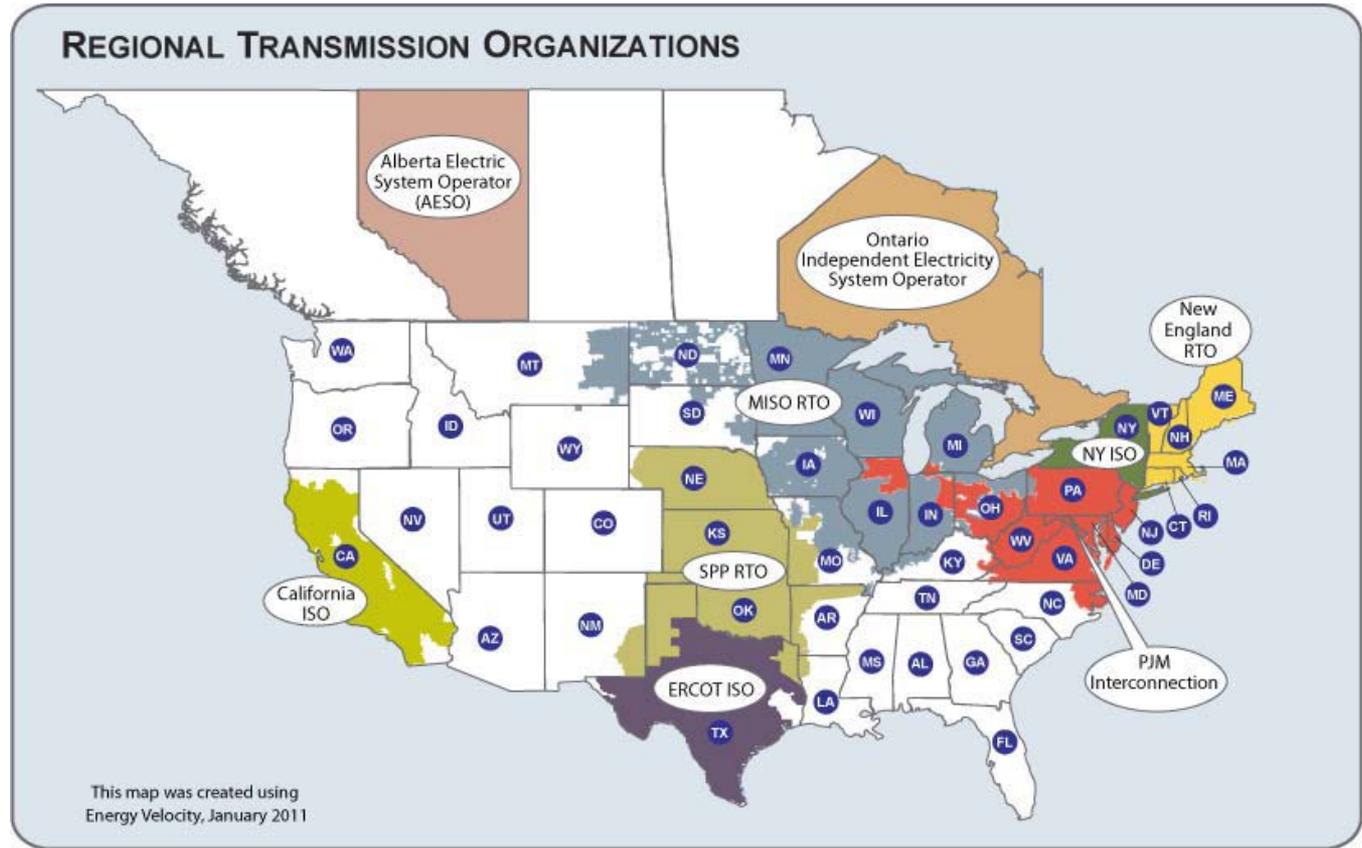
Eastern to ERCOT

- H: Oklaunion, TX—200MW
- I: Monticello-Welsh, TX—600MW

Total: 800MW

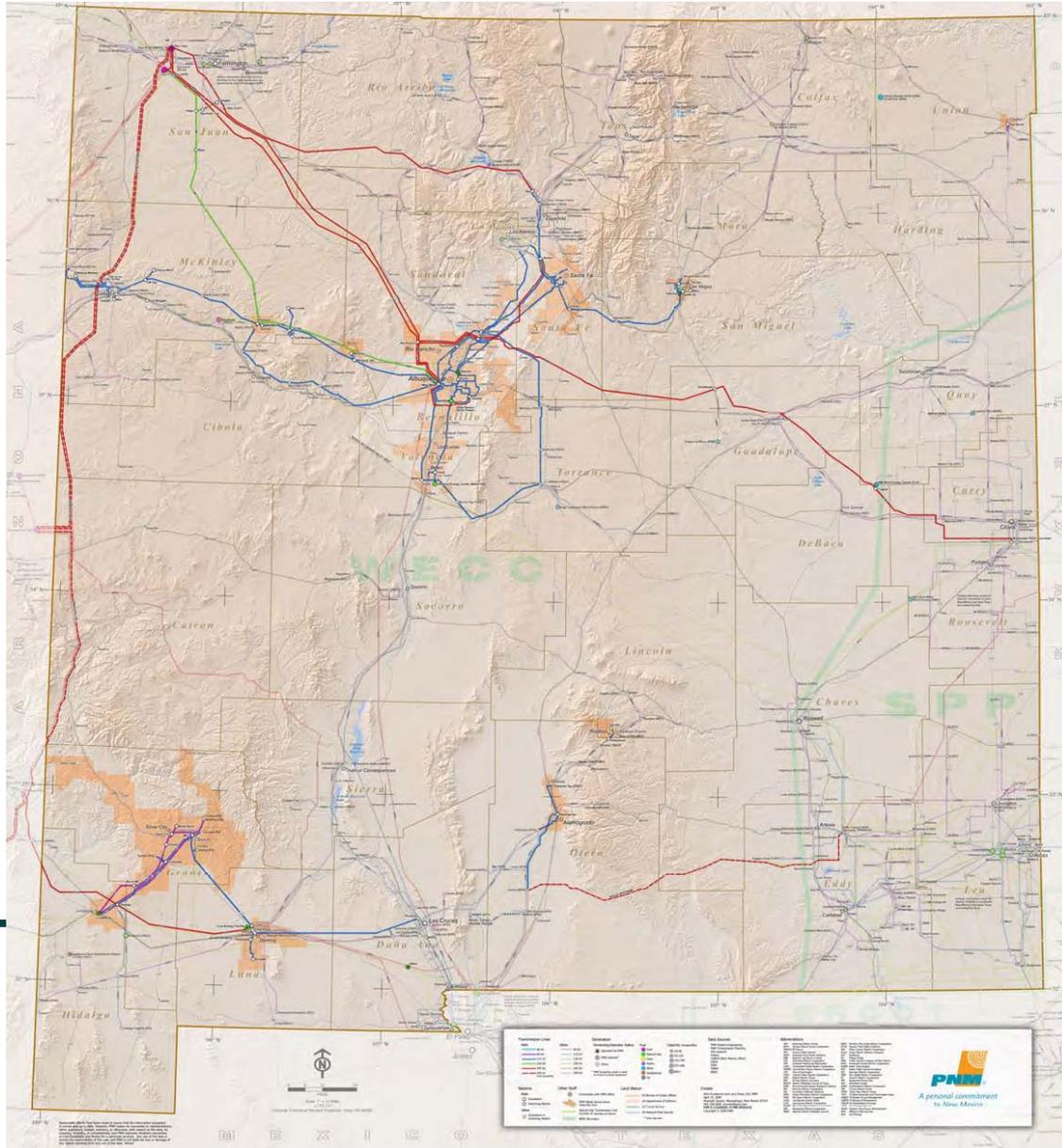
Regional Transmission Organizations

- RTOs move electricity over large interstate areas
- Create wholesale electricity market
- Keep supply and demand in balance over large area
- Cost recovery for Transmission infrastructure



*FERC rule 1000 institutes a plan for transmission cost allocation without the use of a Regional Transmission Organization

New Mexico's Grid



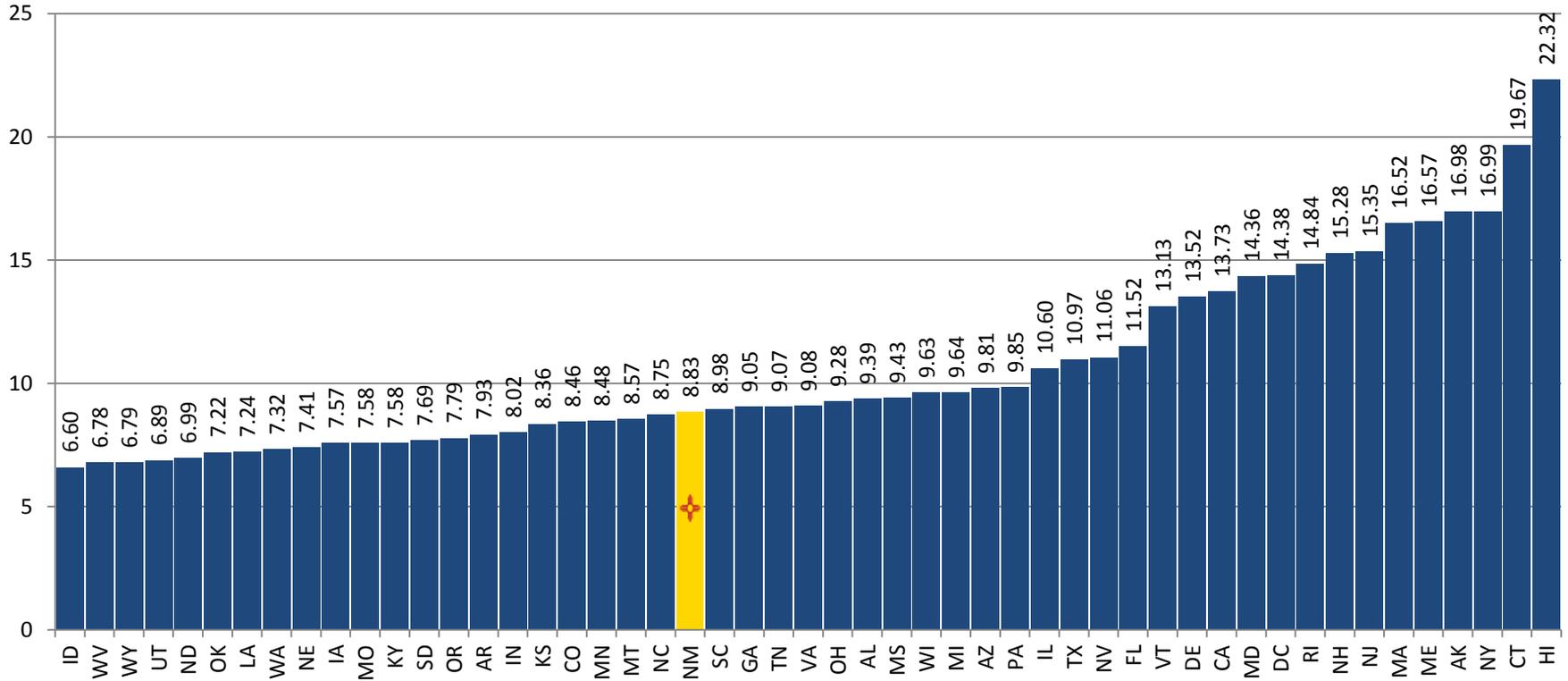
New Mexico's Providers

- Investor Owned Electric Utilities
 - Public Service Company of New Mexico, El Paso Electric, Xcel
- Electric Cooperatives (Co-Ops) - 19 distribution co-ops and two generation & transmission co-ops
 - Central NM Electric, Central Valley Electric, Columbus Electric, Continental Divide Electric, Duncan Valley Electric, Farmer's Electric, Jemez Mountain Electric, Kit Carson Electric, Lea County Electric, Mora-San Miguel Electric, Navopache Electric, Northern Rio Arriba Electric, Otero County Electric, Rio Grande Electric, Roosevelt County Electric, Sierra Electric, Socorro Electric, Southwestern Electric, Springer Electric
 - Tri-State Generation & Transmission Association and Western Farmer's Electric Cooperative
- Municipal Run Electric Utilities
 - Raton Public Service, Farmington Electric Utility, Gallup Electric Utility, T or C Utility and Los Alamos County Utility

Average Utility Rates

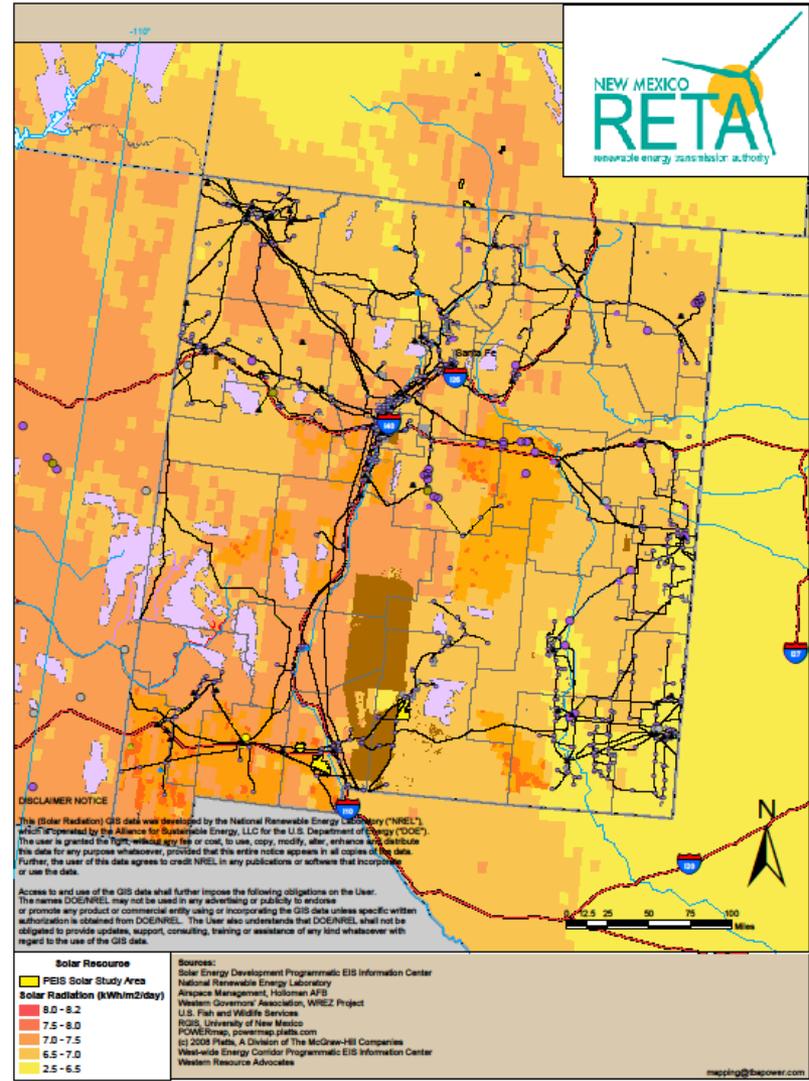
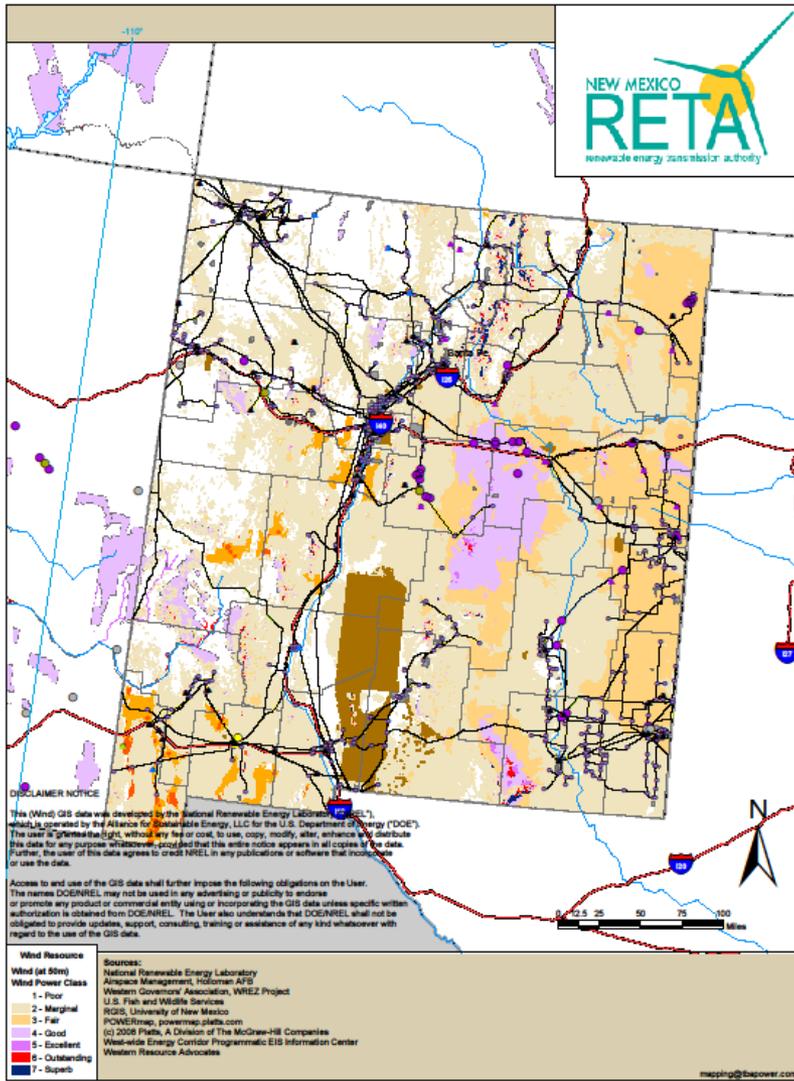
Average consumer cost per kWh (¢) by state.

*calculated by $\text{SUM}(\text{consumers per company} * \text{avg cost for that company}) / \text{total consumers in that state}$



SRC: eia.gov

New Mexico Wind & Solar Resources



Projects Being Studied in NM

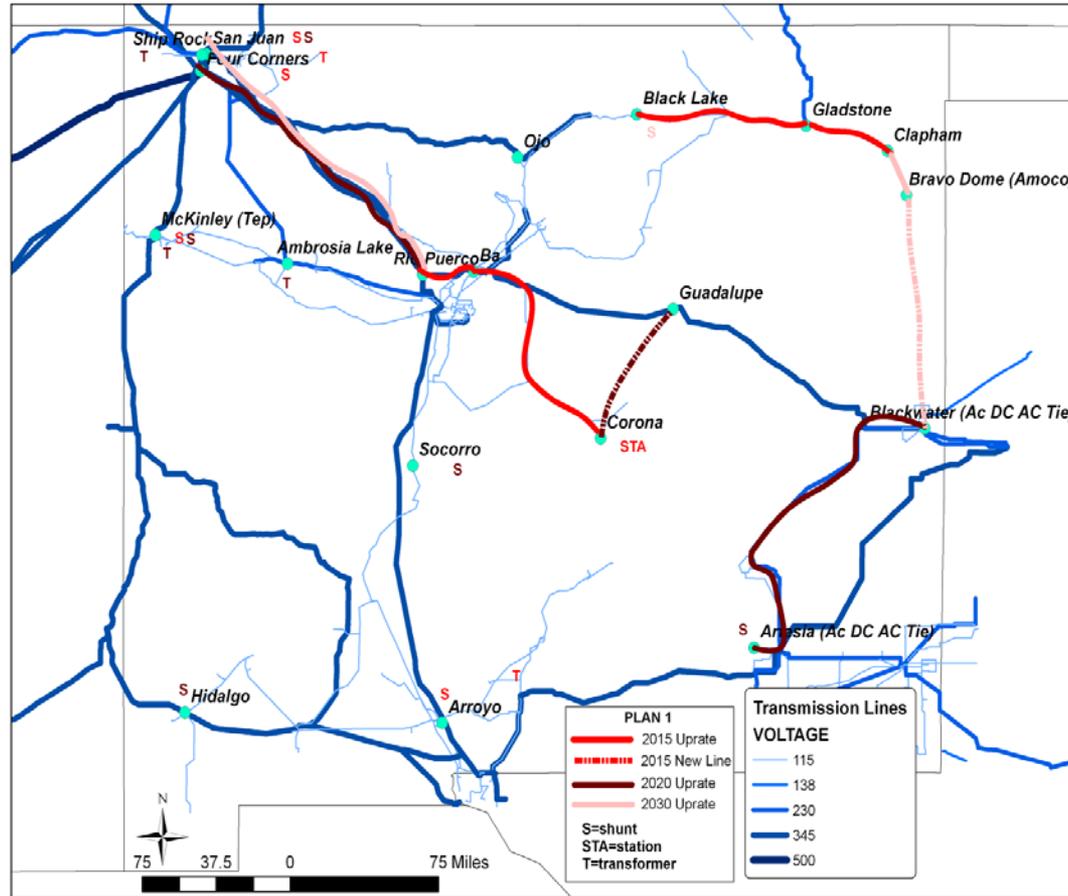
- Central NM Collector System – Line in central NM
 - www.nmreta.net
- Centennial West – Line from New Mexico to California
 - www.cleanlineenergy.com
- Lucky Corridor – Line in Northern New Mexico
 - www.luckycorridor.com
- Southline – Line from New Mexico to Arizona
 - www.blackforestpartners.com
- Tres Amigas Superstation – Interconnection of three Grids
 - www.tresamigasllc.com
- High Plains Express - Line from Wyoming to New Mexico
 - www.highplainsexpress.com
- SunZia – Line from New Mexico to Arizona
 - www.sunzia.net

RETA's Goal for the State

- Commissioned Los Alamos National Laboratory to complete an independent study to evaluate statewide transmission concepts, economic benefits, and cost allocation methodology
- The Study Analyzed
 - Two potential systems, looped vs. radial line upgrades, necessary to export 5,200 MW of generation
 - Upgrades on a 5, 10, and 20 year planning cycle
 - Economic benefits and cost recovery options
 - Total direct and indirect jobs that will be created
 - Potential tax implication of each plan
 - Energy tax required to support each potential system
 - RETA MOU with Lucky Corridor, LLC and Joint Development with GSIP directly advances the build-out of the system identified by this study

RETA's Goal for the State

Suggested Grid Improvements:



RETA Support

- How does RETA help bring Economic Investment into NM?
 - RETA has defined through Rule the types of support that can be provided:
 - Letter of Support – provides evaluation and validation to early stage developments
 - Blue Mesa Energy – 150 MW Wind Farm
 - Memorandum of Understanding – provides for the use of RETA’s staff and resources for the advancement of the project
 - Centennial West – 3,500 MW transmission project
 - Lucky Corridor, LLC – 1,100 MW transmission project

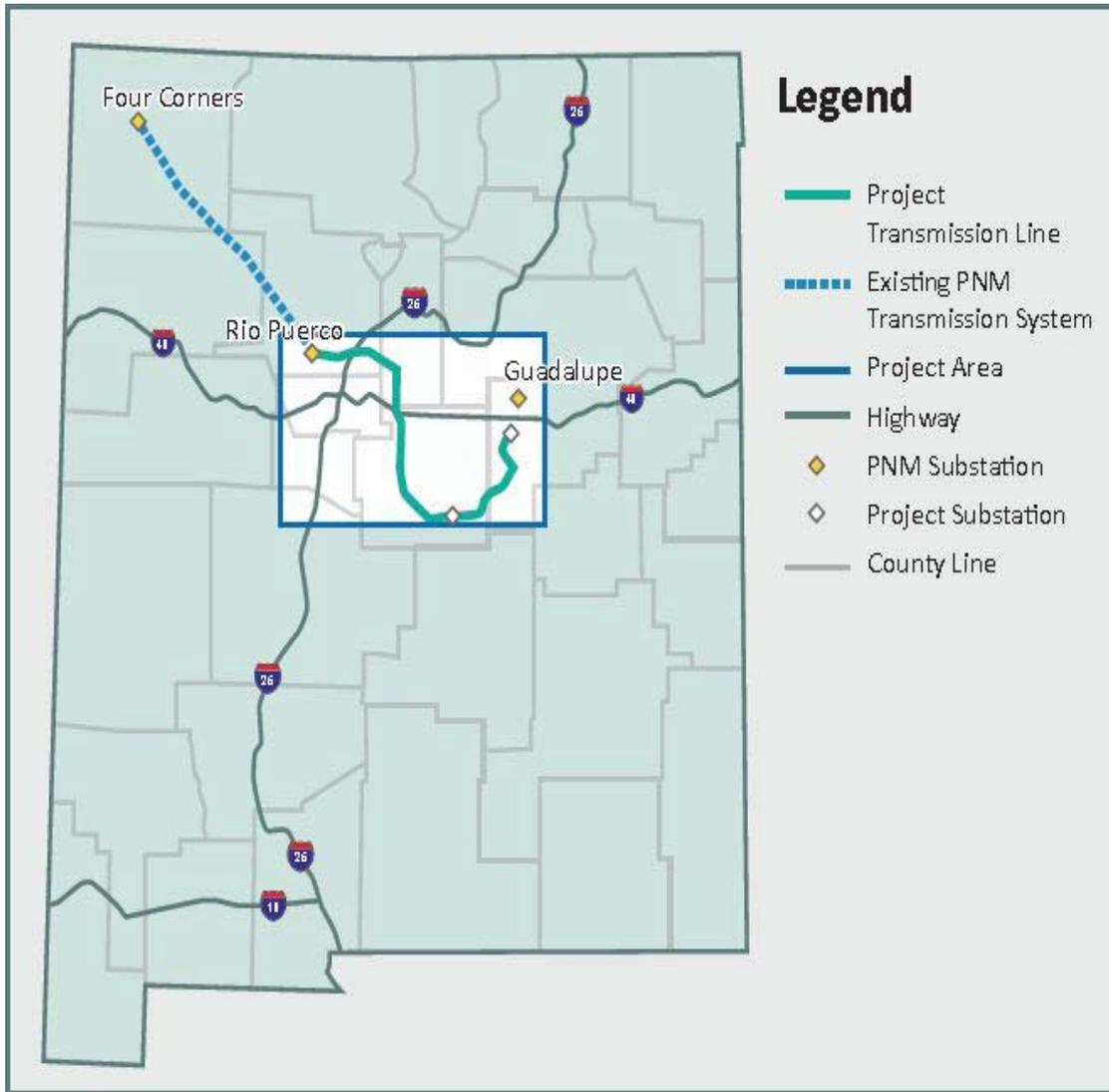
RETA Support Cont.

- Financial Assistance – provides for the issuance of debt in the public market to complete project construction. Bonds are not secured by the State of NM
 - High Lonesome Mesa – 100 MW wind farm
 - Issued \$50 million in revenue bonds for transmission upgrades
 - Current outstanding amount of \$44,015,000
 - \$14 million in lieu of taxes to Torrance County and Estancia Schools
 - \$19 million in lease payments to Torrance County Landowners
- Lease Agreement – provides for RETA ownership and co-development of project
 - RETA entered into an agreement with GS Global Infrastructure Partners II (GSIP) to jointly develop a transmission project called the Central NM Collector System

Investing in NM

- On March 30, 2011 RETA created a first of its kind public-private partnership with Goldman Sachs Infrastructure Partner II to develop critical infrastructure in central NM
 - Project is intended to address transmission constraint identified by renewable energy developers
 - Arrangement provided for RETA ownership with all financial burdens borne by private investor
 - To date GSIP has invested approximately \$5 million in private capital to develop this project
 - GSIP has stated publicly that it would not have invested in NM without the partnership of RETA

Central NM Collector System



- 1,500 MW capacity
- \$350 million, Double-circuit 345 kV AC line
- Approximately 200 miles
- Project Participants
 - RETA
 - Power Network NM
- Approximately \$3 billion in renewable development
- Approximately 1,700 construction jobs
- Approximately 120 permanent jobs

RETA Funding

Year	Amount
Laws 2007 – HB2	\$1,000,000
Laws 2008 – HB2/SB165	\$500,000
Laws 2009 – HB2	<u>\$500,000</u>
Total Amt. from NM Legislature	\$2,000,000
2010 HLM Bond Closing Fees	\$550,000
2011 Reimbursable Expenses for the Central NM Collector System	\$77,174
2012 Reimbursable Expenses for the Central NM Collector System	\$142,933
2013 Reimbursable Expenses for the Central NM Collector System	<u>\$47,873</u>
Total Amt. from Project Fees	\$817,980

- RETA has received 29% of its total operation costs from outside sources

- RETA will continue to move towards 100% self sufficiency

RETA Budget

Operating Cash Flow Budget Fiscal Years 2012 and 2013

	<u>Actual</u> FY 2012	<u>Budget</u> FY 2013
Opening Cash Balance	_ \$ 885,203	\$ 543,343
Source of Funds		
		\$ -
Interest Income	292	700
Project Fees	142,933	
		[a]
Total Sources	<u>\$ 143,225</u>	<u>\$ 700</u>
Use of Funds		
Salary and Benefits Expenses	\$ 369,023	\$ 397,900
Travel Expenses	5,560	5,500
Office Supplies	9,865	8,850
Contractual Services	65,122	43,328
Operating Costs	35,515	37,680
Total Uses	<u>\$ 485,085</u>	<u>\$ 493,258</u>
Ending Cash Balance	<u>\$ 543,343</u>	<u>\$ 50,785</u>

Future of RETA

- Continue to bring substantial economic investment opportunities to NM to insure construction of projects that are technically and financially viable
 - RETA's current arrangements have the ability to bring over \$3 billion in economic development to the State
 - Projects currently being studied in NM have a planned in service date within the next 5 years
- Create a complimentary industry to NM's oil and gas markets through formal arrangements with all projects being studied in NM
- RETA to become self sufficient within 5 years
- Requesting \$395,000 special appropriation for operations

Contact Us

New Mexico Renewable Energy Transmission Authority

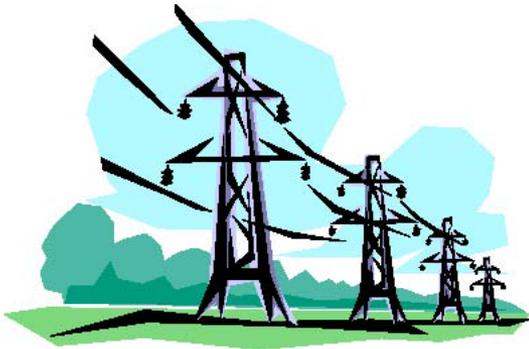
Jeremy Turner, Executive Director

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Appendix – Maps

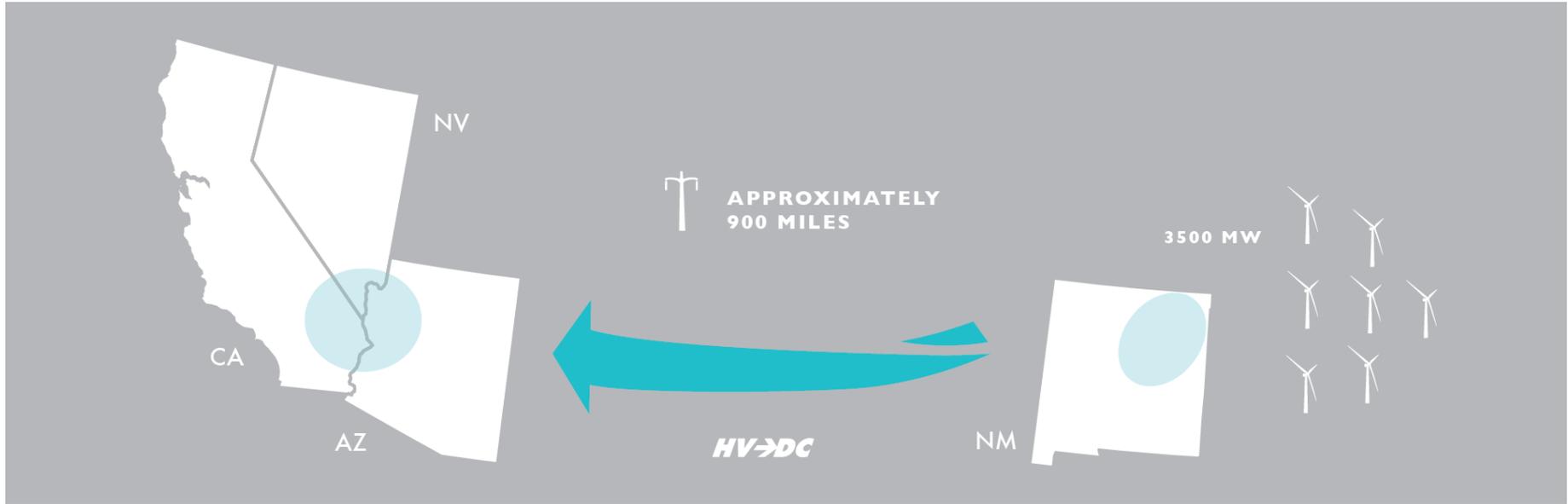
- Page 21: Blue Mesa Energy – Wind Farm in Eastern NM
- Page 22: Clean Line Energy/Centennial West – Line from NM to CA
- Page 23: Lucky Corridor, LLC – Line between Taos & Farley NM
- Page 24: Central NM Collector System - Line located in the central part of NM
- Page 25: Southline – Line from NM to AZ
- Page 26: SunZia – Line from NM to AZ
- Page 27: High Plains Express – Line from WY to NM
- Page 28: Tres Amigas Superstation – Interconnection of the three US Grids

Blue Mesa Energy – Wheatland Project



- Approximate 150 MW development with more than 40,000 acres under option.
- Adjacent to Cap Rock Wind project
- Meteorological tower up for approximately 5 years which reflects an average wind speed of 8 meters per second at a height of 50 meters.
- The Project property has a prospective transmission intertie located within the optioned boundaries
- www.bluesaenergy.com

Clean Line Energy - Centennial West



Project Info:

3,500 MW from NM to CA

Overhead HVDC line

Approx. 900 miles

Projected Cost: \$2.5 Billion

Project Began in 2008 with a planned in service date of 2018

MOU with RETA

Lucky Corridor, LLC



Project Info:

Approximately 1,100MW bi-directional capacity

Double circuit 230 kV - Expansion of Taos & Blacklake substations

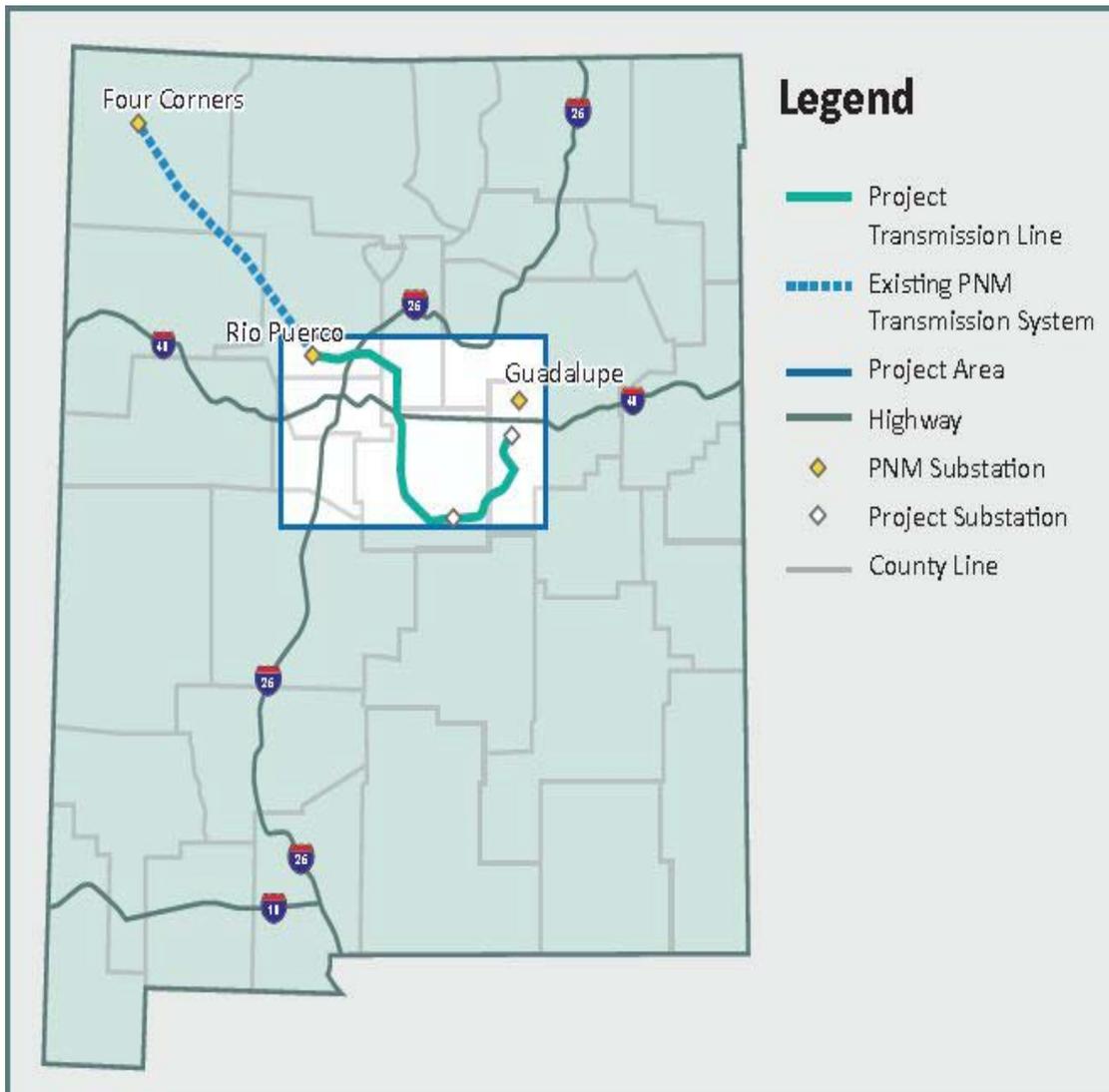
Along existing 115kV transmission line (upgraded) between Taos & Farley

Projected Cost: \$360 million

Project Began in 2007 with a planned in service date of 2016

MOU with RETA

Central NM Collector System



- 1,500 MW capacity
- \$350 million, Double-circuit 345 kV AC line
- Approximately 200 miles
- Project Participants
 - RETA
 - Power Network NM
- Approximately \$3 billion in renewable development
- Approximately 1,700 construction jobs
- Approximately 120 permanent jobs

Southline



Project Info:

1,500 MW from NM to AZ, Double-circuit 345 kV AC

Improvements to approximately 120 miles of existing transmission lines between the Apache (AZ) and Saguaro (AZ) substations

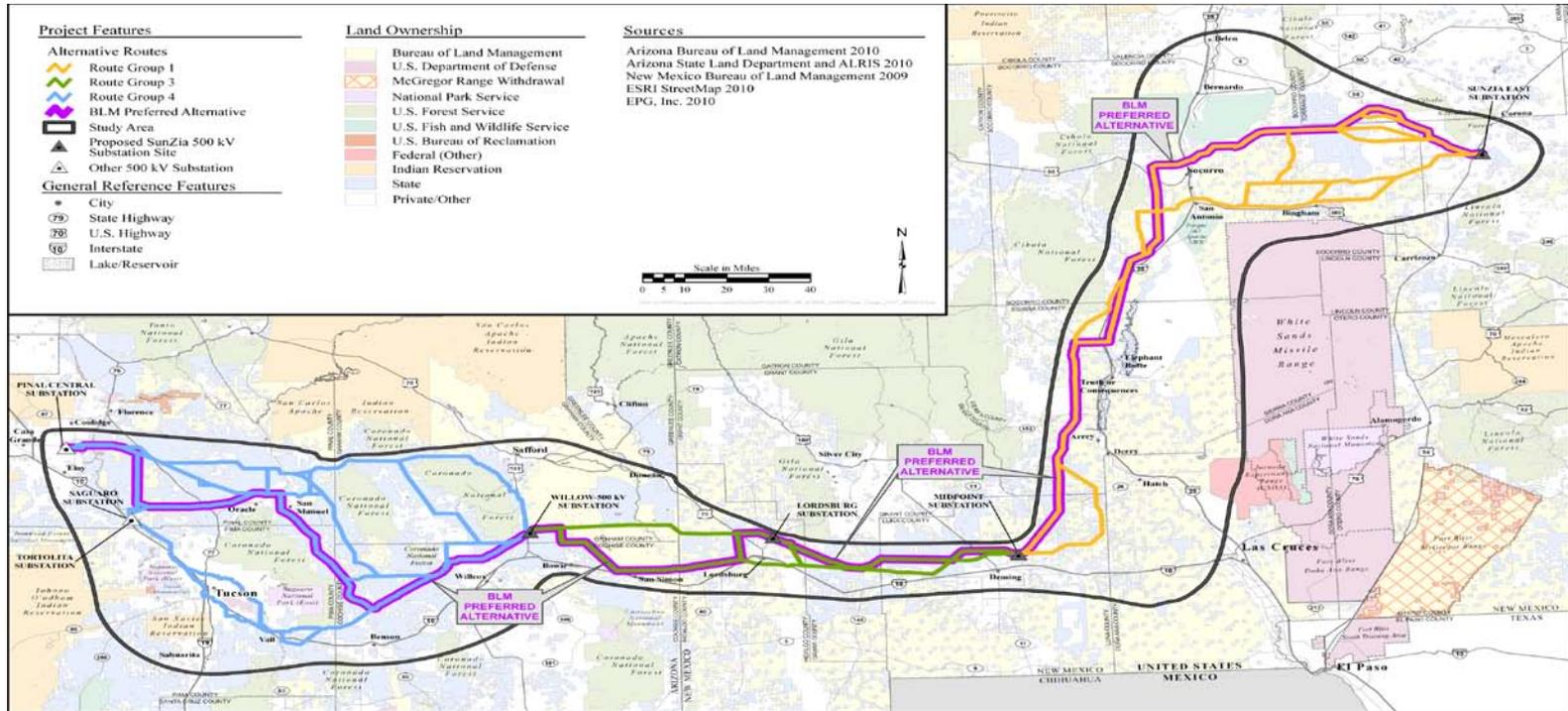
Approx. 240 miles

Projected Cost: \$550 million

Project Began in 2008 with a planned in service date of 2018

Project Owner – Southline/Hunt Trans

SunZia



Project Info:

3,000-4,500 MW
from NM to AZ

Double circuit 500 kV AC line or AC/DC
hybrid configuration

Approx. 460 miles

Projected Cost: \$2.1
billion

Project Began in 2006 with a planned in
service date of 2018

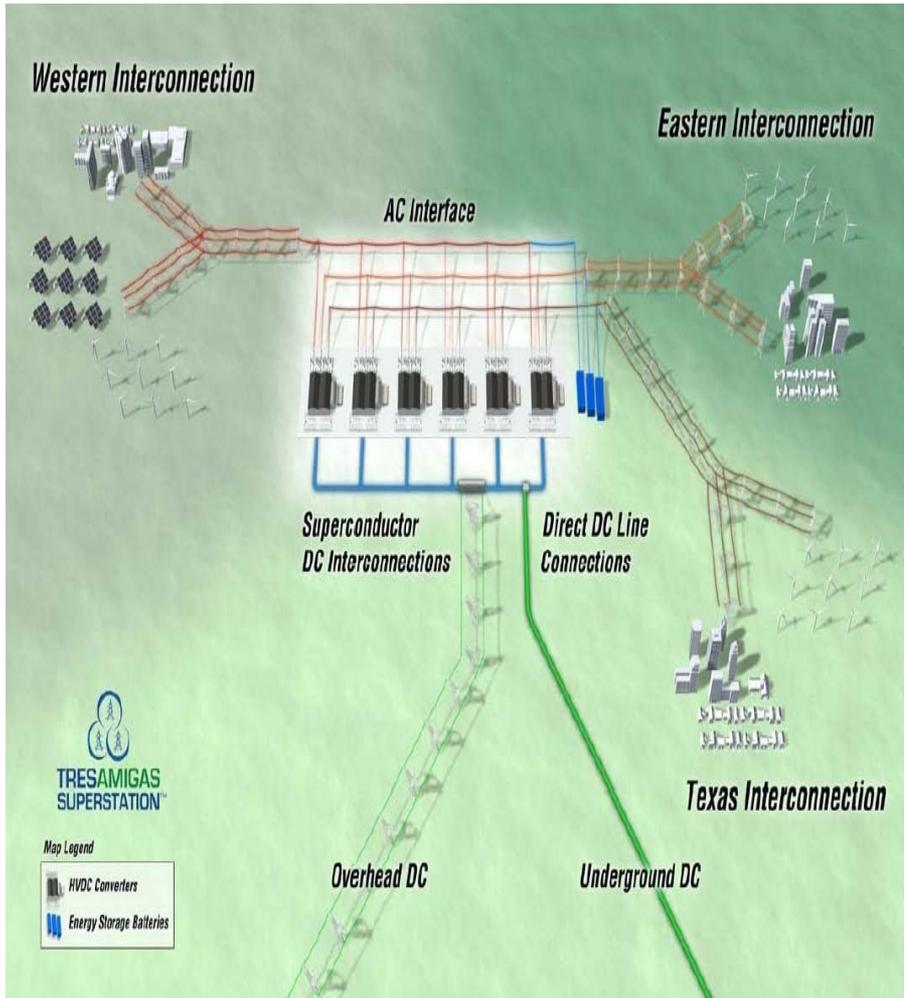
Several project
participants

High Plains Express



- 3,500 MW from WY to AZ
- Double-circuit 500 kV AC
- \$5 Billion
- Project participants
 - Black Hills Corp.
 - Colorado clean Energy Development Authority
 - LS Power
 - NextEra Energy Resources
 - Public Service Co. of NM
 - Salt River Project
 - Tri-State Generation & Transmission Assoc.
 - Western Area Power Administration
 - Wyoming Infrastructure Authority
 - XCEL Energy

Tres Amigas



- 5,000 MW Superstation to interconnect the Nation's three grids
- Underground Superconductor cable
- Location – Eastern NM, near Clovis, NM
- Project Owner – Tres Amigas, LLC.