

The PRC's Approval Requirements for Development of Wind Generation in New Mexico

Presentation to the Economic and Rural Development
Committee

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Commissioner, PRC District 2



Public Regulation Commission

- The Commission
 - Commission = 5 Commissioners Elected by District
 - Regulatory Oversight of Electric, Gas and Water Utilities
 - Rates & Service (NM only; not Interstate)
- Pursuant to NM Statute 8-8-12, PRC's Utility Division Staff represents "public interest in utility matters" by balancing the "public interest, consumer interest and investor interest".

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Public Regulation Commission

- Authority over Utilities (Open to Intervention & Public Comment)
 - Sets Retail Rates (e.g. Rate Cases)
 - Authorizes Acquisitions and Construction of Capital Assets through Issuance of Certificates of Convenience and Necessity (CCN)
 - Authorizes Sale or Abandonment (Shut Down) of Capital Assets
 - Renewable Portfolio Standard (RPS)
 - Energy Efficiency (EE)
- Integrated Resource Planning
 - Public Process
 - Opportunity for City/County Participation
 - Establishes Roadmap for Future Utility Resource Needs

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Renewable Energy

- Renewable energy includes generation by:
 - Solar, wind and geothermal facilities
 - Hydropower brought in service after July 1, 2007
 - Fuel cells that are not fossil fueled
 - Biomass
 - Low- or zero- emissions technology
- Renewables constituted 19.9% of electricity generated during 1st half of 2016
- Most of New Mexico renewables including wind generation is by merchant plants; not by public utilities

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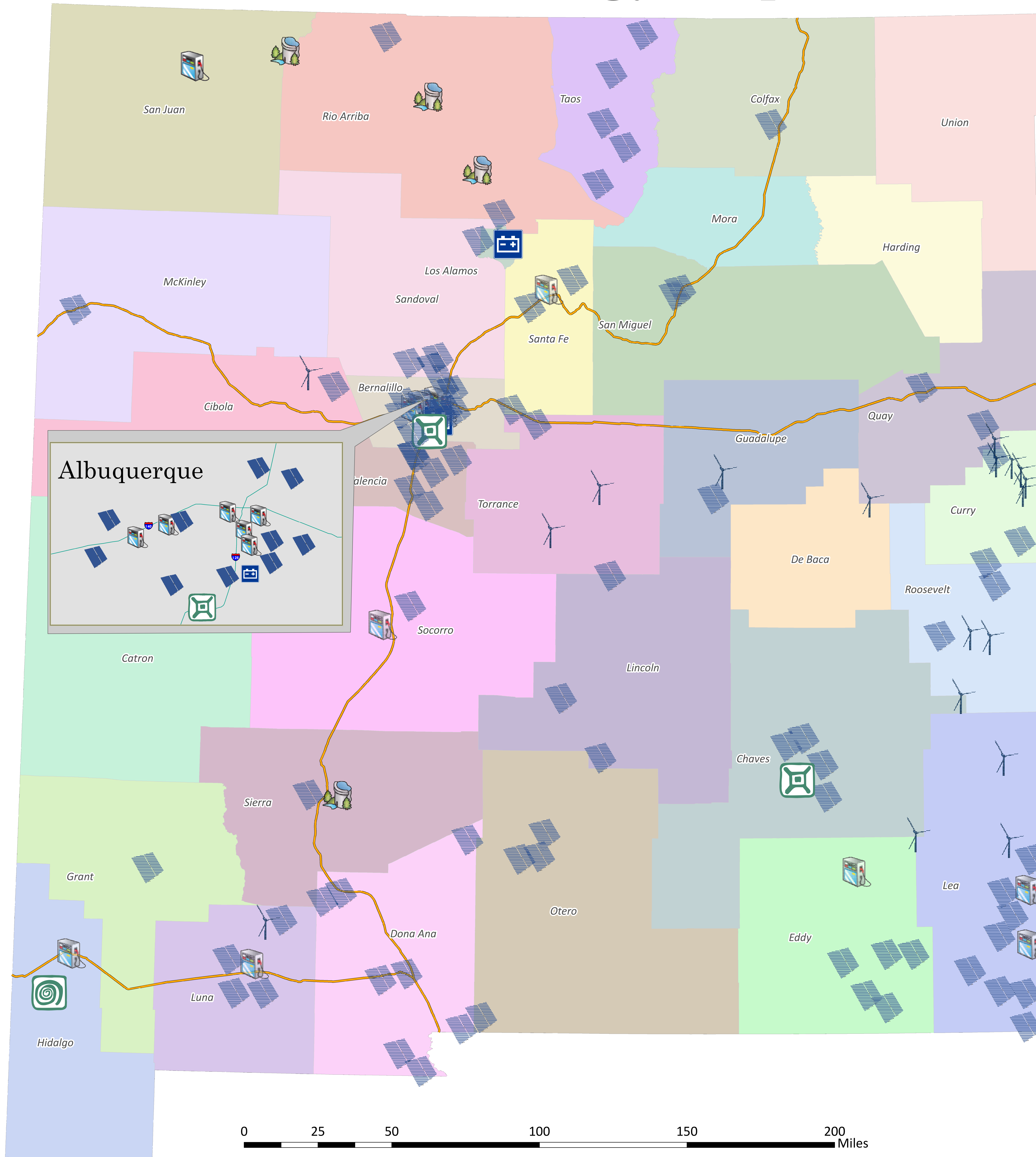
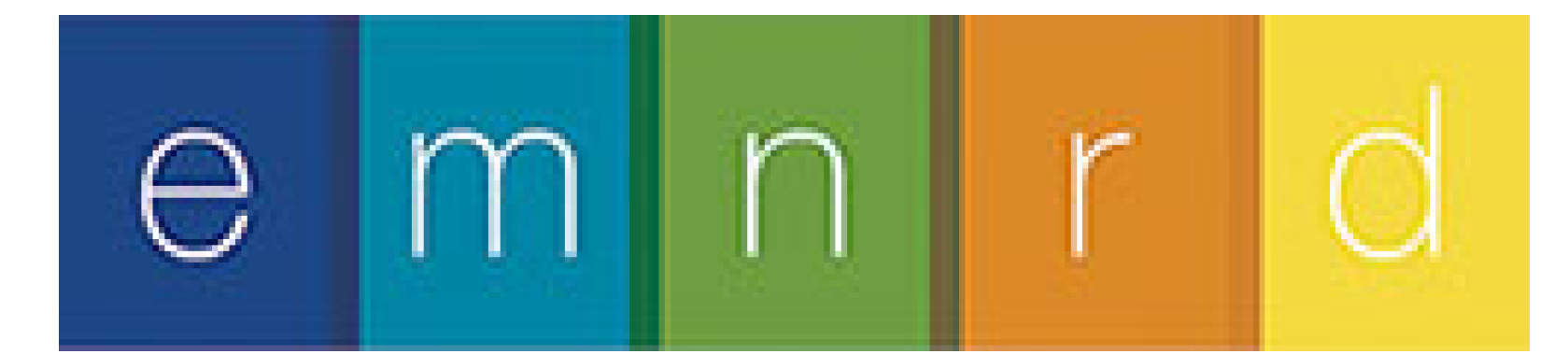
Renewable Energy National Trends

- Renewable Portfolio Standard (RPS) statutorily requires a portion of electricity be generated from renewable resources. Below is the RPS for some states:
 - CA 50% RPS by 2013
SB 1368 limits emissions of new coal-fired power plants to 1,100 lbs. of CO₂ per MWh
 - AZ 15% RPS by 2025 (Current)
Evaluating 30% RPS by 2030 (AZCC E-00000Q-16-00289)
 - CO 30% by 2020
 - NM 20% by 2020



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Clean Energy Map



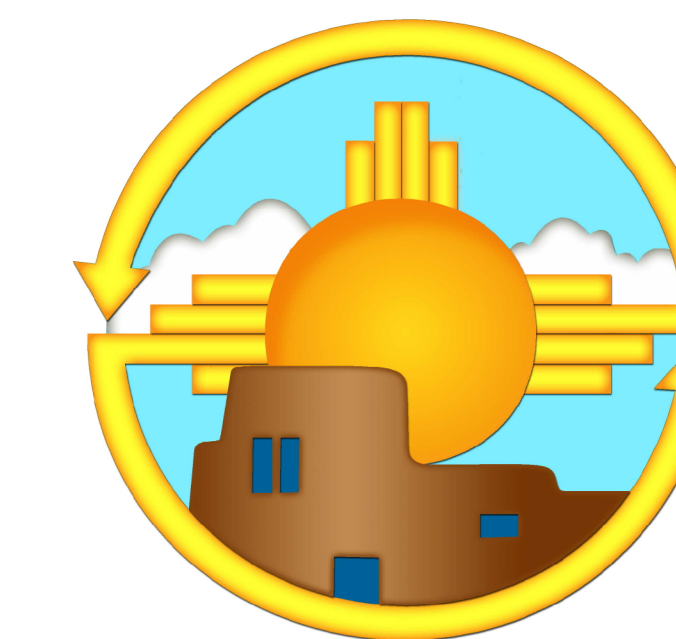
Clean Energy Type:

-  Compressed Nat Gas
-  Energy Storage
-  Geothermal
-  Hydro
-  Solar
-  Waste to Energy
-  Wind

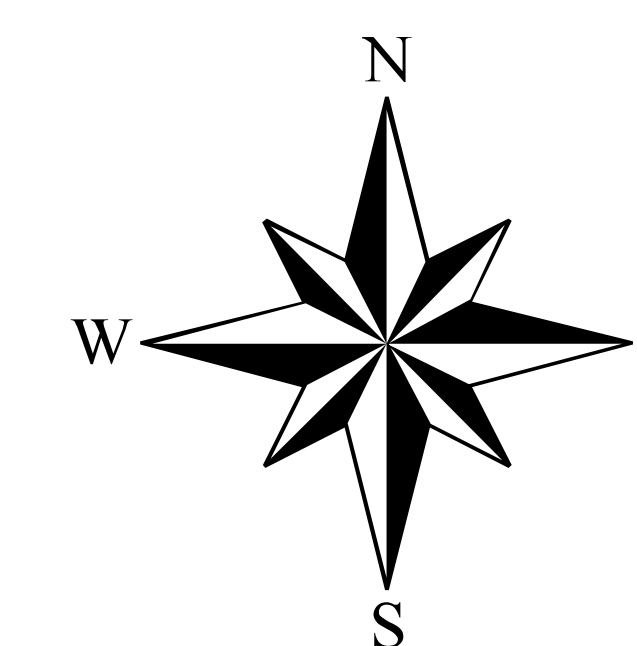
**Total Clean Energy Capacity in New Mexico:
3,215.2 MW (includes planned projects)**

**Residential Solar: 39 MW distributed on: 6357 homes,
50 farms/small businesses, and 13 multi-family homes.**

**Utility Scale (> 1 MW) Wind: 1,831.6 MW
Utility Scale (> 1 MW) Solar: 1,294.7 MW**



The Energy Conservation and Management Division (ECMD) develops and implements effective clean energy programs — renewable energy, energy efficiency, alternative fuels, and safe transportation of radioactive waste — to promote economic growth, environmental sustainability, and wise stewardship of our natural resources while protecting public health and safety for New Mexico and its citizens.



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Wind Projects in New Mexico

Utility/Coop	Wind Projects	County	Date Online	MW
PNM	NM Wind Energy Center	DeBaca/Quay	2003	204
	Red Mesa Wind Energy Center*			
PNM	Nextera Energy	Cibola County	2010	102
	Grady Wind Project			
Pattern Energy	Boadview Energy	Curry	2014	20
	Llano Estacado			
SPS	Cielo Wind Power	Curry	2003	2
	Caprock phase I & II*			
SPS	Cielo Wind Power	Quay	2004 & 2005	80
SPS	San Juan Mesa*	Roosevelt	2005	120
SPS	High Lonesome Mesa*	Torrance	2009	100
Arizona Public	Aragonne Mesa*	Guadalupe	2007	90
Tucson Electric	Macho Springs Power	Luna	2014	50
Exelon/ LCEC	Wildcat Wind Ranch	Lea	2012	27
	Anderson Wind Project	Chaves		15
	Guadalupe Mountains	Chaves		134
	Roosevelt Wind Farm	Roosevelt	EDF Renewable	250
Avangrid	El Cabo Wind Farm	Torrance County		278

Solar Projects in New Mexico

Electric Utility or Coop	New Mexico Solar Projects	County/Location	Date Online	MW
Mora-San Miguel Coop	Standard Solar	San Miguel County	May-14	1.5
Otero County Electric Coop	OCEC-owned	Otero County	Jan-14	76 kW
	KCEC-owned			
Kit Carson Electric Coop	Concentrated PV & PPAs	Taos County	2010	3
	Owned by Washington Gas			
Kit Carson Electric Coop	RCCLA Amalia Solar Array 1	Taos County	May-12	1.5
Springer Electric Coop	currently building one	Colfax County	estimate early 2015	1
	Cimarron Solar Facility – First Solar			
Tri-State G&T		Colfax County	Dec-10	30
Tri-State G&T	Escalante Station- case study	McKinley County		
El Paso Electric	Macho Springs Solar facility	Luna County	May-14	50
El Paso Electric	NRG Energy Roadrunner	Doña Ana County	2011	20
El Paso Electric	Hatch Solar Energy Center	Doña Ana County	2011	5
El Paso Electric	Centennial Farm– Sun Edison	Doña Ana County	May-12	12
El Paso Electric	El Chaparral Solar Farm	Doña Ana County	Jun-12	10
El Paso Electric	Rio Grande carport	Doña Ana County	2009	64 kw
PNM	Manzano Energy	5 plants	2011 & 2013	36.5
PNM	La Luz Solar Energy	Otero County	Dec-13	7.5
PNM	Meadowlake Solar Energy	Valencia County	2014	9.1
	Sandoval County Solar Energy Center			
PNM		Sandoval County	2014	6.1
PNM	Cibola Solar Energy Center	Cibola County	2014	7.6
SPS / Xcel Energy	Sun Edison solar project	Lea and Eddy Counties	2011	50
		Curry, Lea, and Chaves Counties		
SPS / Xcel Energy	NM Community Solar Project			0.1

Growth Drivers for Renewables

- New Mexico Renewable Portfolio Standard 2007 (§ 62-16-4)
 - Requires renewable energy to be 20% of a utilities' sales by 2020
- Federal Energy Policy Act 2005 directs federal agencies to:
 - Amend land use/range management plan for new transmission lines
- Climate Action Plan (Executive office of President 2013)
 - Goal of 20,000 MW of renewables on public lands by 2020
- Federal renewable energy production tax credit (ends 2020)
 - \$0.023/kWh for first 10 years of production
- State renewable energy production tax credit (ends 2018)
 - \$0.01/kWh of the first 400,000 MWh of electricity produced

Wind Generation in New Mexico



Applicable Statutes and Rules

- NEW MEXICO STATUTES ANNOTATED (NMSA) 1978
 - PUBLIC UTILITY ACT
 - CHAPTER 62: ELECTRIC, GAS AND WATER UTILITIES
- NEW MEXICO ADMINISTRATIVE CODE (NMAC)
 - RULES DERIVED FROM STATUTES
 - TITLE 17: PUBLIC UTILITIES AND UTILITY SERVICES
 - CHAPTER 9: ELECTRIC SERVICES
 - PART 592: LOCATION OF LARGE CAPACITY PLANTS AND TRANSMISSION LINES

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Certificate of Convenience and Necessity (CCN)

- § 62-9-6 Certificates; application; issuance
 - Applies to public utilities only
 - Certified copy of articles of incorporation or charter
 - Notice of application to Commission
 - Provide consent/franchise agreements with municipality which utility will serve
 - Public hearing is required
 - Merchant plants/transmission lines don't require a CCN
 - Wind generation in NM is mostly by merchant plants

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Location Control Statute

- § 62-9-3 Location control application:
 - Applies to Generating Plants of 300 MW capacity or more
 - Applies to Transmission lines of 230 kV capacity or more
 - Exempts additions at existing plants or transmission lines
 - Commission shall grant or deny in 6 months
 - Commission shall hold a public hearing
 - Commission shall approve transmission lines unless their location “unduly impairs important environmental values”
 - Commission shall approve generating plants unless it finds they will not comply with air and water pollution standards
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Right-of-way (ROW) Width Statute

- § 62-9-3.2 Application for ROW:
 - Applies to Transmission lines requesting a ROW width in excess of 100 feet
 - Commission shall hold a public hearing
 - Applicant shall give 20 days prior notice of public hearing to owners whose property may be taken
 - Commission shall approve/deny in 6 months
 - If Commission fails to issue an order within 6 months, the application is deemed to be approved

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Rule 592 for Generating Plants

- 17.9.592.9 NMAC Contents of application
 - Legal description of property and location map
 - Plant capacity, fuel description & startup date
 - Land use and administrative statues that apply and statement of compliance/noncompliance with each
 - Air and water pollution standards that apply and statement of compliance/noncompliance with each
 - Air and water quality authorizations
 - Proof application was served on each affected county, State Engineer, A.G. and Environment Department

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Rule 592 for Transmission Lines (1)

- 17.9.592.10 NMAC Contents of application
 - Location, landownership, length of line & startup date
 - Schematic of interconnections and connection to grid
 - Land use and administrative statues that apply and statement of compliance/noncompliance with each
 - NEPA EA, EIS and/or ROD, if applicable; otherwise a report comparable to an EIS
 - Federal, state and local environmental authorizations
 - Proof application was served on each affected county , State Engineer, A.G. and Environment Department

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Rule 592 for Transmission Lines (2)

- 17.9.592.10 NMAC Contents of application
 - Testimony that the transmission line will not “unduly impair important environmental values”
 - Important environmental values
 - Preservation of air and water quality
 - Land uses, soils, water, flora and fauna
 - Minerals
 - Socioeconomic
 - Cultural, historic and religious resources
 - Visual impacts
 - Geologic and geologic resources

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Questions?

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