

# **SunZia Project Update**

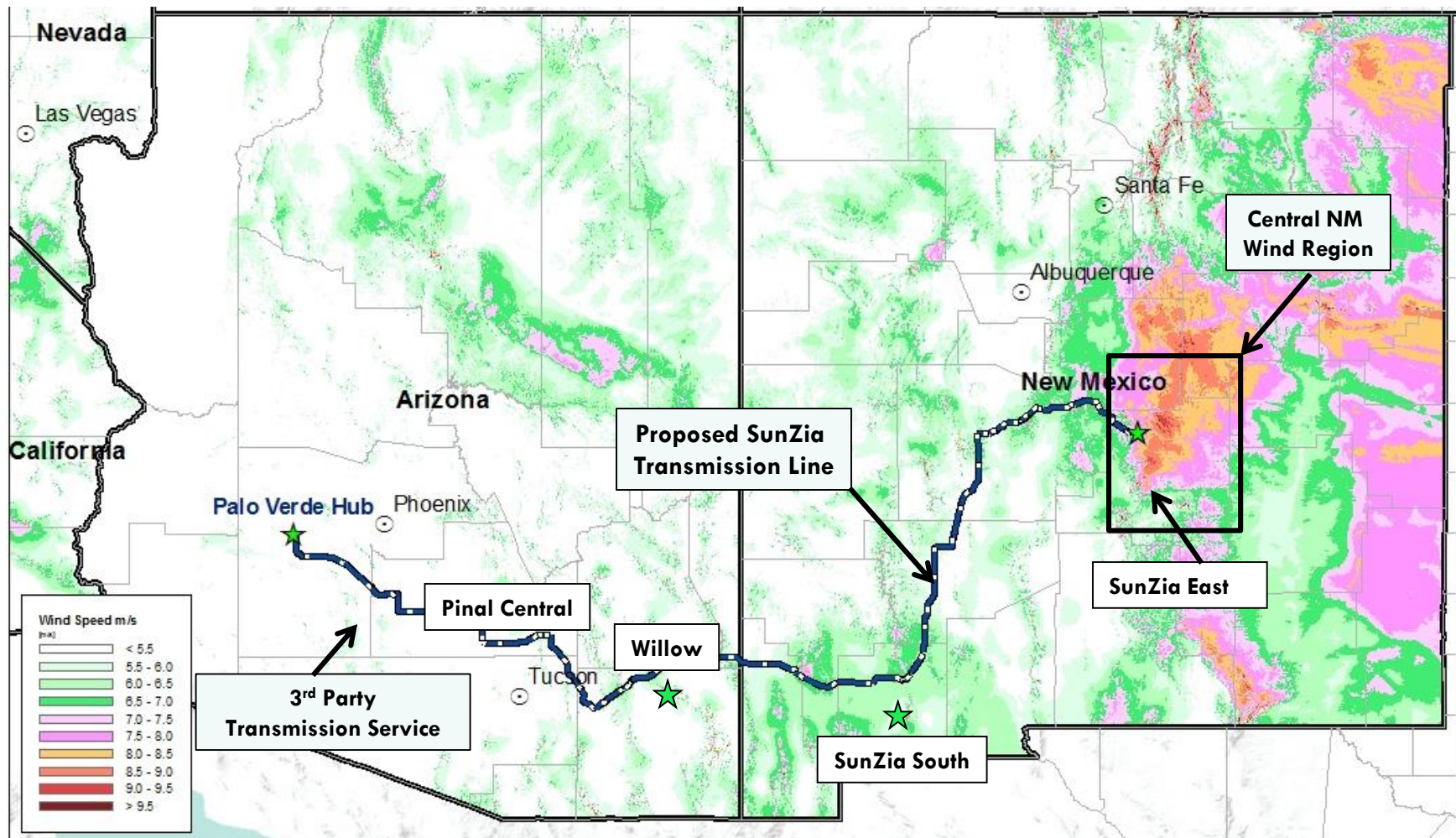
## **2020 Western Transmission Summit**

January 22-23, 2020

Costa Mesa, CA



# SunZia: 500kV Project delivering NM Wind to the Palo Verde Hub



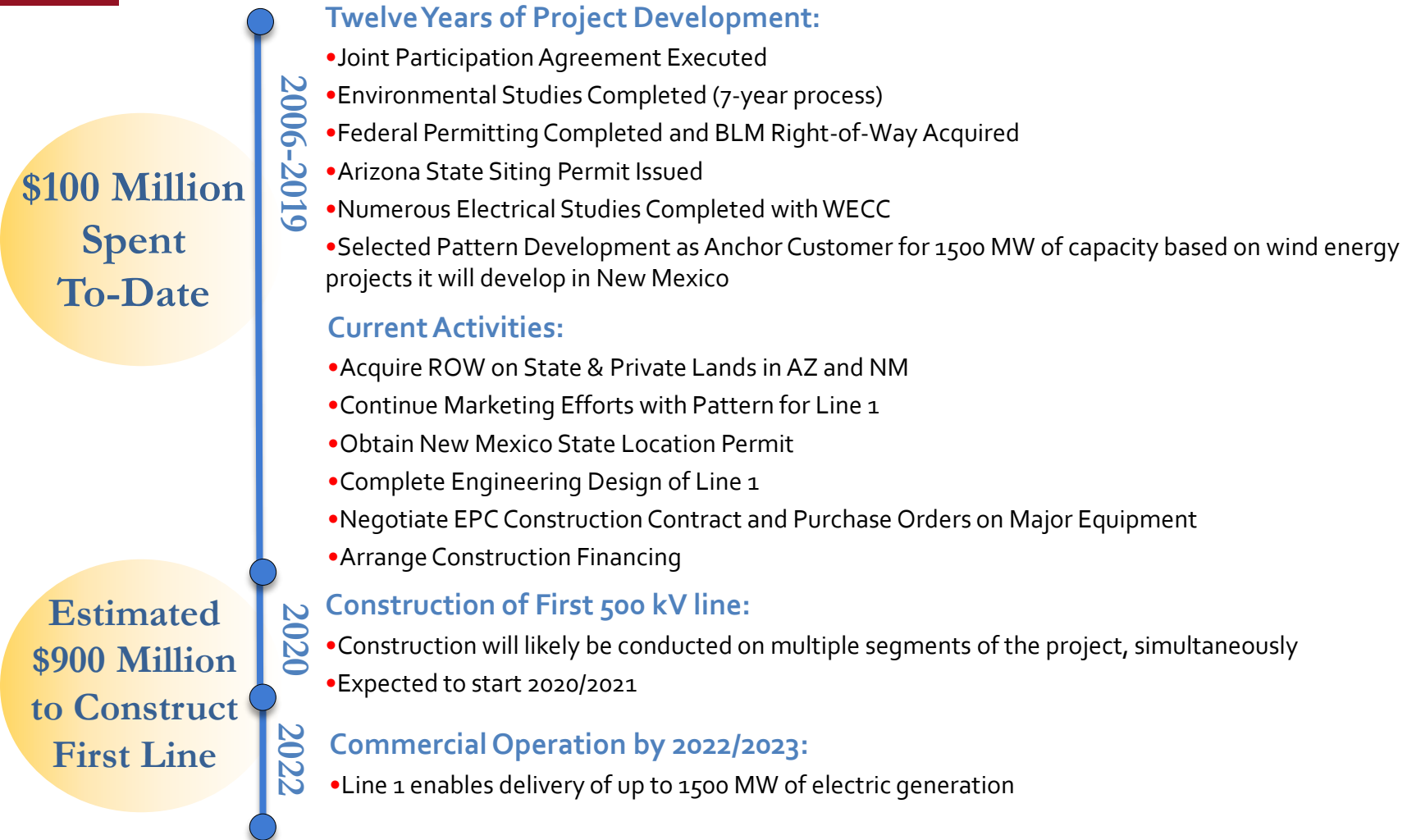
# Project Summary

- 520-mile independent transmission project in New Mexico and Arizona
- Two 500kV AC lines providing 3,000 MW of transfer capacity from NM to AZ and CA
- Brings high-quality renewable energy to western utilities and power markets
- Pattern Development was selected in August 2016 as the anchor customer for the first 500 kV transmission line and awarded 1,500 MW of transmission capacity
- Obtained Declaratory Orders from FERC in May 2011 for negotiated rate authority and Sept 2017 for allocating 100% of capacity to anchor customers
- WECC granted SunZia an Accepted Rating of 3,000 MW for two 500kV AC lines in March 2011; rating was re-confirmed in January 2015
- Construction start expected in 2020/2021; Target commercial operation of the first 500kV line is 2022/2023

# Customers and PPAs

- SunZia selected Pattern Development in August 2016 as the anchor tenant (pursuant to May 2011 FERC Order)
- SunZia awarded Pattern 1,500 MW of capacity and FERC issued its decision in Sept 2017 approving selection
- Pattern's Corona Wind Project is SunZia's first 500 kV line customer under long-term transmission service agreements with SunZia
- Pattern will sell Corona Wind's energy to utilities and others under long-term power purchase agreements (PPAs) and is discussing PPAs with utilities in NM, AZ and CA
- Pattern has signed 400 MW of PPAs for Corona Wind with California load-serving entities

# SunZia Timeline

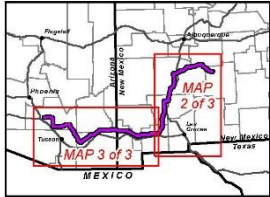




# Exhibit B Right-of-Way Grant NM - 114438

## SunZia Southwest Transmission Project

Map 1 of 3



### SunZia Southwest Transmission Project Features

#### 500 kV Transmission Line Right-of-Way

- Route Group 1
- Route Group 3
- Route Group 4

- Proposed SunZia 500 kV Substation Site
- Other 500 kV Substation
- Mitigation Proposal Segment (buried transmission line)

### General Reference Features

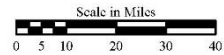
- City
- State Highway
- U.S. Highway
- Interstate
- Lake/Reservoir

### Land Ownership

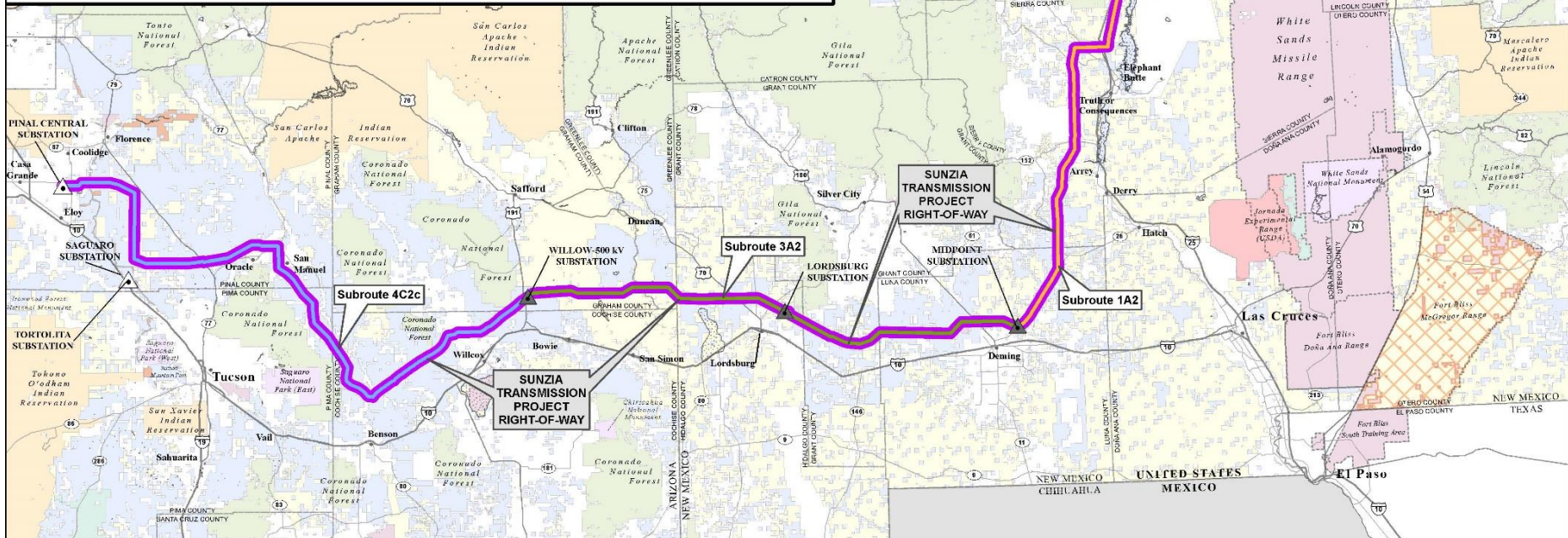
- Bureau of Land Management
- U.S. Department of Defense
- McGregor Range Withdrawal
- National Park Service
- U.S. Forest Service
- U.S. Fish and Wildlife Service
- U.S. Bureau of Reclamation
- Federal (Other)
- Indian Reservation
- State
- Private/Other

### Sources

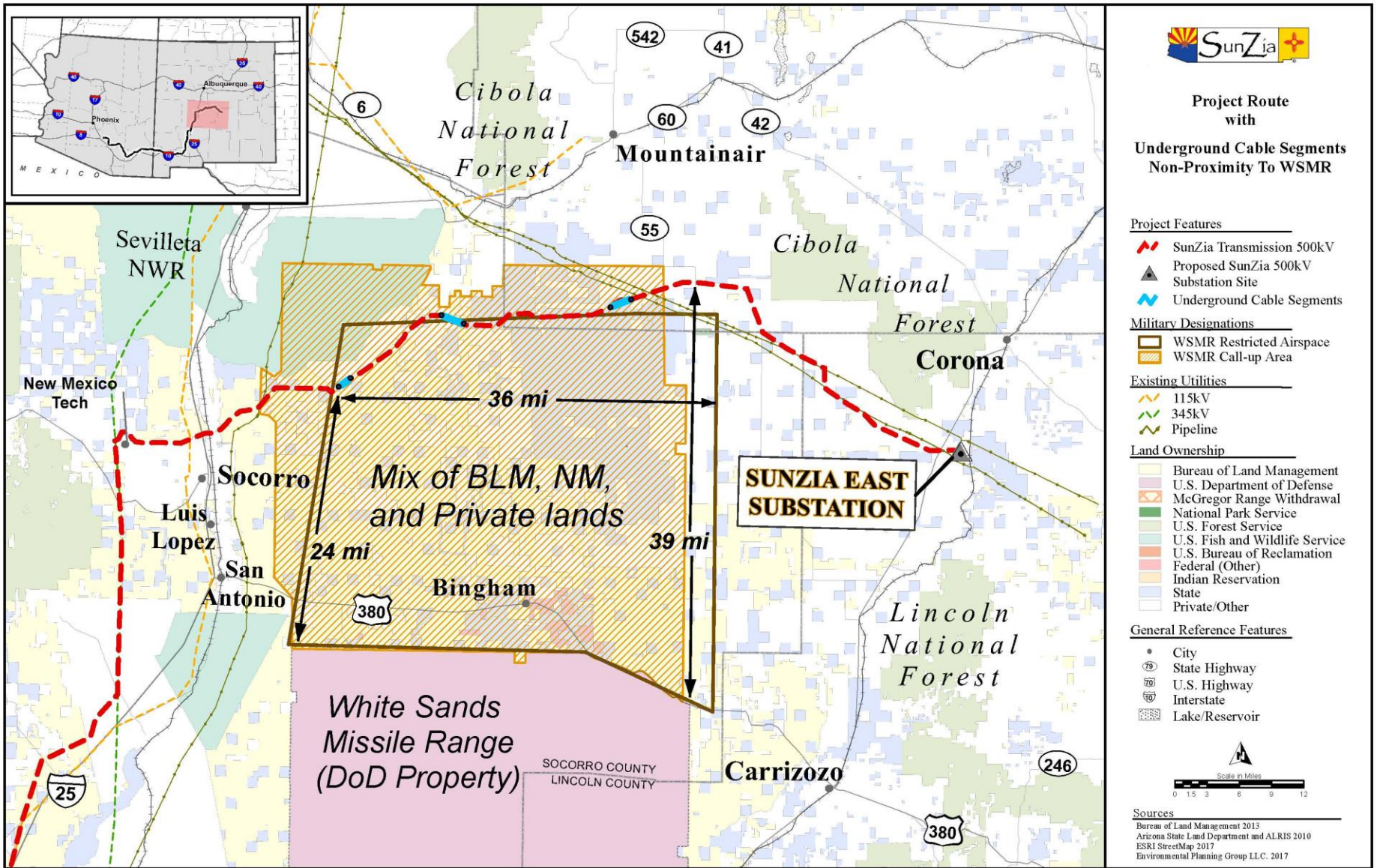
Arizona Bureau of Land Management 2010  
Arizona State Land Department and ALRIS 2010  
New Mexico Bureau of Land Management 2013  
Isen StreetMap 2010  
Environmental Planning Group I.J.C. 2014



\\BPG\geoprocessing\Projects\SunZia\Map1\MXD\FRZ\_025\_000\SW\_000\SunZia\_Southwest\_Group1\_1x17\_2013A01\_A.mxd







# Environmental Permits

- September 2008: Started permitting activity
- January 2015: Completed NEPA with BLM (Record of Decision)
- September 2016: Executed ROW Grant Agreement with BLM
- February 2016: Received the AZ state permit (Certificate of Environmental Compatibility)
- March 2016: Executed agreement with Department of Defense and Department of Army to mitigate all impacts
- September 2018: The NM Public Regulation Commission approved SunZia's ROW width and denied without prejudice SunZia's location; we will re-file the location portion of the permit.



# Engineering and Construction

- Engaged Burns & McDonnell in May 2016 for design & engineering of SunZia Line 1 for Final Plan of Development
- Engaged Power Engineers as Owners Engineer in May 2017
- Design is 60% complete (underground design is 90% complete); triple bundled 1590 ACSR (Lapwing), 70% series compensated line
- Selected EC Source as the preferred contractor in July 2018
- Have signed contracts with several suppliers for key items – Towers, Underground Cable & Series Compensation
- Have fully tested the family of lattice towers
- SunZia and EC Source have finished a constructability review and all tower locations and access plans are being finalized

# Rights of Way

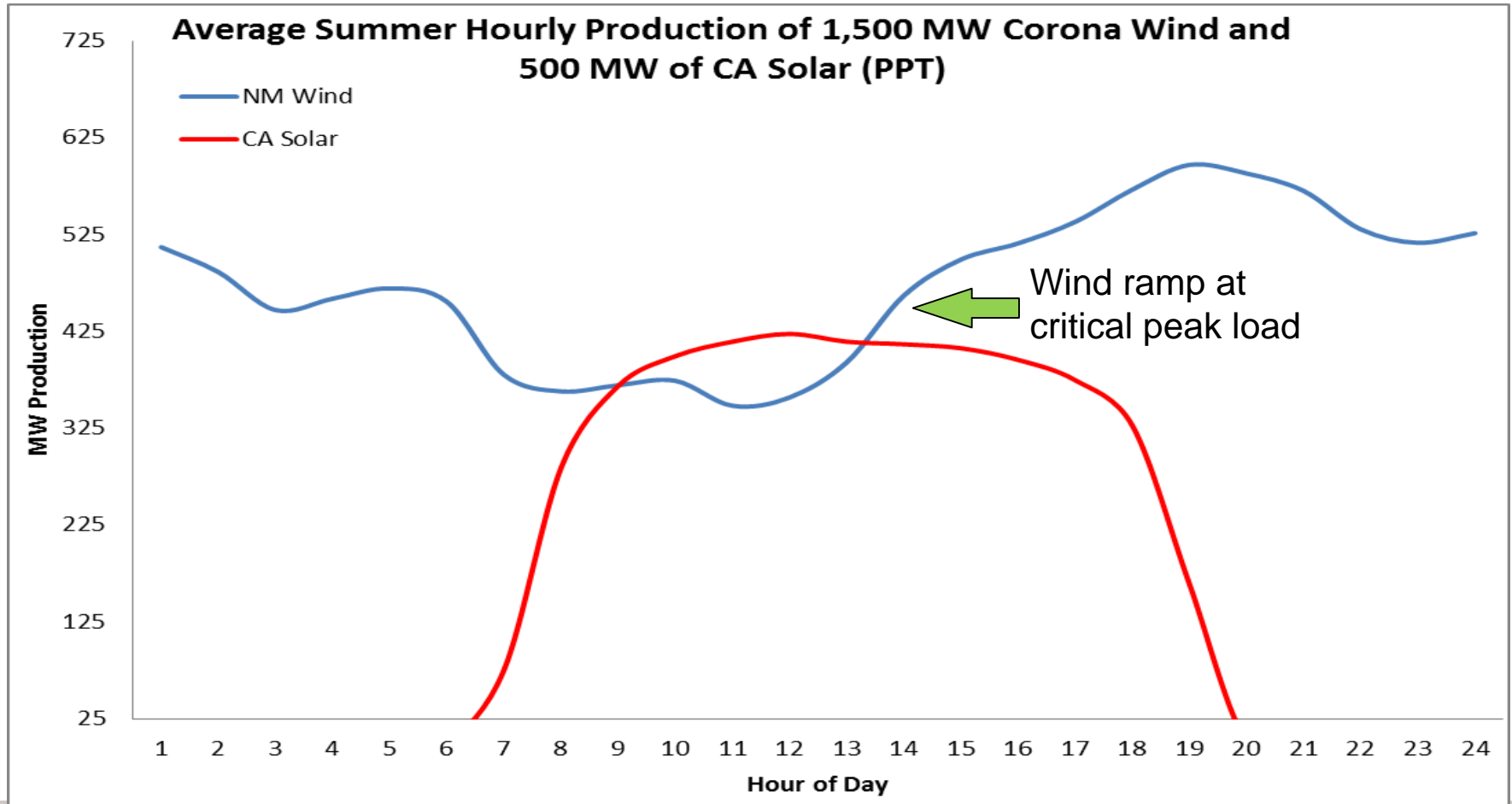
Category	Entity	AZ	NM	Total Miles	Number	Status
Federal	BLM	50	134	184	1	ROW Grant signed, being amended
State	Arizona	134		134	1	ROW Application in-process
	New Mexico		96	96	1	ROW Application in-process
Private	Arizona	16		16	39	Nearly complete
	New Mexico		90	90	85	Nearly complete
Aerial Crossings	Various				89	In-progress
	<b>Total</b>	<b>200</b>	<b>320</b>	<b>520</b>		

# Summary of Rights of Way

- ⚡ **Federal** ROW Grant with BLM signed September 2016; being amended pursuant to an EA
- ⚡ **AZ State** Application in-process; Target completion in 2019
- ⚡ **NM State** Application in-process; Target completion in 2019
- ⚡ **AZ Private** 87% complete; 8% terms agreed + unsigned; 5% terms not agreed
- ⚡ **NM Private** 88% complete; 12% terms agreed + unsigned



# New Mexico Wind Compliments Solar



# NM Wind + SunZia = Commercial Success

- Pattern has signed 400 MW of PPAs with load-serving entities using SunZia for delivery.
- In mid-2018, Pattern signed two 15-year power purchase agreements with CA load-serving entities:
  - Silicon Valley Clean Energy (SVCE) for 110 MW
  - Monterey Bay Community Power (MBCP) for 90 MW
- In late-2018, Pattern Development signed a 3<sup>rd</sup> PPA for 20 years for 200 MW with a CA muni in Northern California.

# Contact Page

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