ORIGINAL

SOUTHWESTERN
Power Group II, LLC
An Energy Company - Alliance Builder

0000170733

RECEIVED

Docket No. E-00000D-15-0041

AZ CORP COMMISSION
DOCKET CONTROL

June 3, 2016

Arizona Corporation Commission
DOCKETED
JUN - 3 2016
DOCKETED BY

Docket Control
Arizona Corporation Commission
1200 West Washington
Phoenix, Arizona 85007

Subject: 9th Biennial Transmission Assessment Workshop I

To Whom It May Concern:

Pursuant to A.R.S. § 40-360.02 (A) and (C), Southwestern Power Group ("SWPG") filed a Ten Year Plan for the SunZia Southwest Transmission Project ("SunZia") and the interconnection plan for the Bowie Power Station ("Bowie").

On June 1, 2016, The Arizona Corporation Commission ("ACC") held Workshop I related to the 9th Biennial Transmission Assessment. SWPG participated in Panel B *Interstate and Merchant Transmission Projects* and Panel C *Generation Interconnection Driven Transmission* to provide updates on the interconnection plans of SunZia and Bowie.

At the request of ACC staff, we submit the presentations for SunZia (Attachment A) and Bowie (Attachment B) that were used during Workshop I.

Please direct any questions that may arise from these presentations to the undersigned at (602) 808-2004.

Sincerely,

Tom C. Wray
Project Manager
SunZia Southwest Transmission Project

Attachments (2)

3610 North 44th Street • Suite 250 • Phoenix, Arizona 85018
888.332.4599 • Tel 602.808.2004 • Fax 602.808.2099
www.southwesternpower.com

Cc: File

Thomas M. Broderick, Utilities Division, Arizona Corporation Commission
Janice Alward, Esq., Legal Division, Arizona Corporation Commission
Kevin Torrey, Esq., Legal Division, Arizona Corporation Commission
David Getts, SouthWestern Power Group
Lawrence V. Robertson, Jr., Esq., Munger & Chadwick, P.A.

Attachment A

SunZia Southwest Transmission Project Presentation

9th BTA Workshop I

June 1, 2016

SunZia Southwest Transmission Project

June 1, 2016
Phoenix, Arizona

9th Biennial Transmission Assessment Workshop

SunZia Project Update

Project Owners

Shell Wind Energy

SouthWestern Power/ MMR Group

Tucson Electric Power

Salt River Project

Tri-State G&T

Project Summary

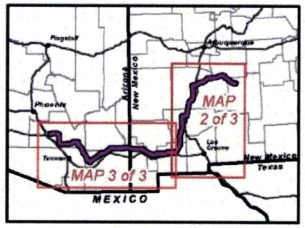
- 515 mile transmission project in New Mexico and Arizona
- Possible configurations are two 500 KV AC lines, or one AC and one DC 500 kV lines
- Brings high-quality renewable energy to western markets
- Obtained Declaratory Order from FERC in May 2011
- On-going Anchor-Tenant subscription process
- WECC granted SunZia an Accepted Rating of 3,000 MW for two 500kV AC lines in March 2011, rating was re-confirmed in January 2015
- Agreement with Department of Defense and Department of Army resolving all military-related conflicts, as of March 2016
- Total capital cost estimated at $2 billion
- Commercial operation expected by 2021

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

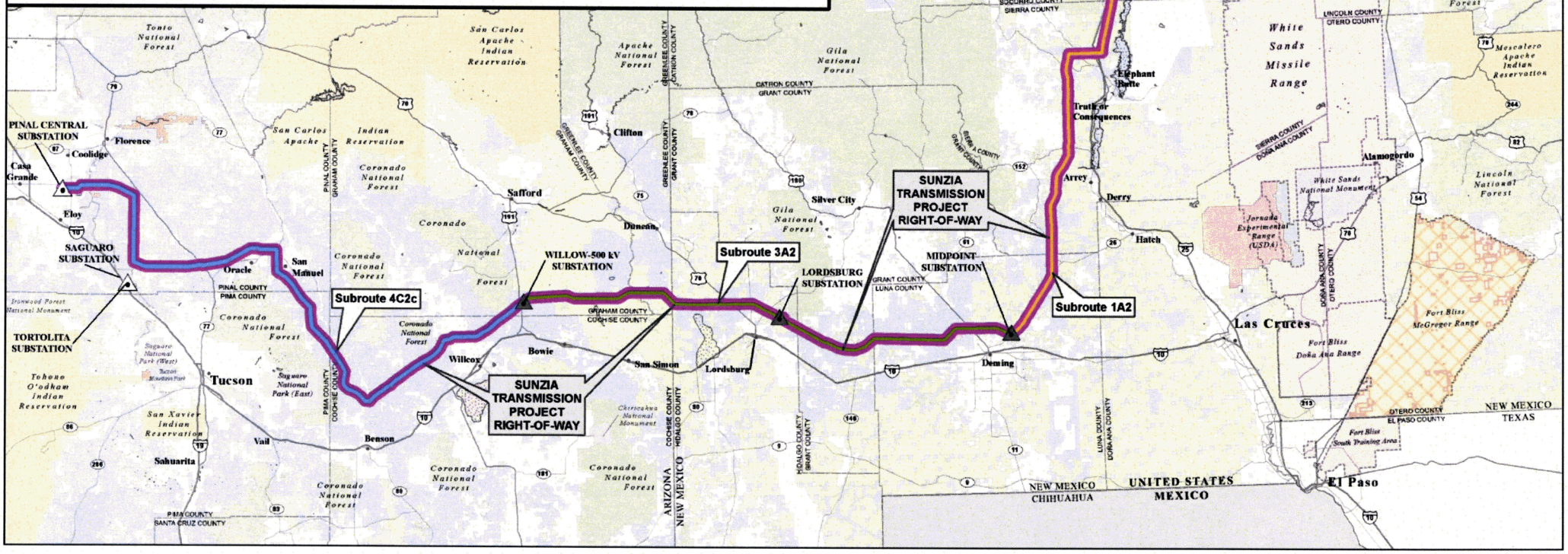
- Bureau of Land Management
- U.S. Department of Defense
- McGregor Range Withdrawal
- National Park Service
- U.S. Forest Service
- U.S. Fish and Wildlife Service
- U.S. Bureau of Reclamation
- Federal (Other)
- Indian Reservation
- State
- Private/Other

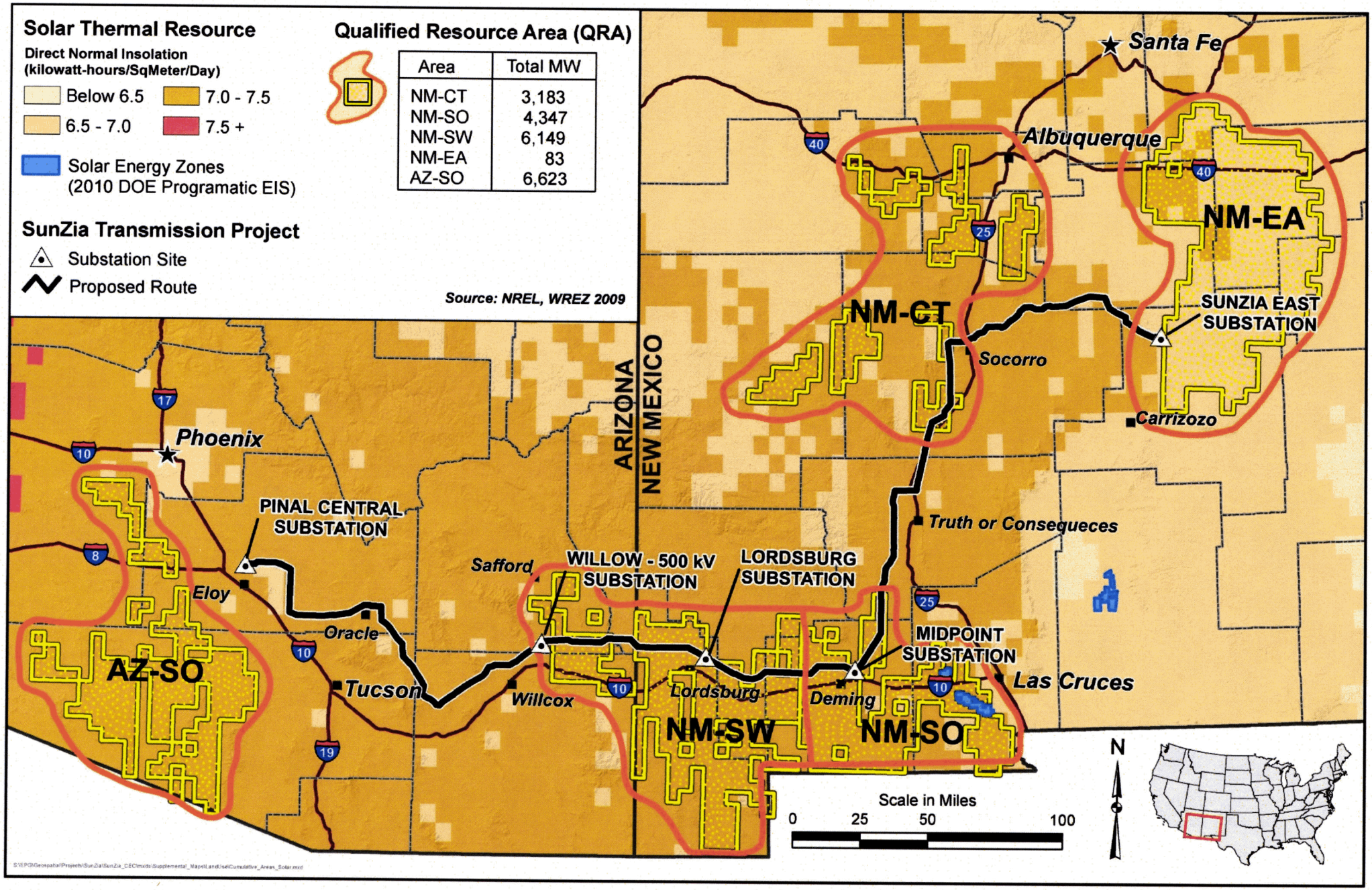
Sources

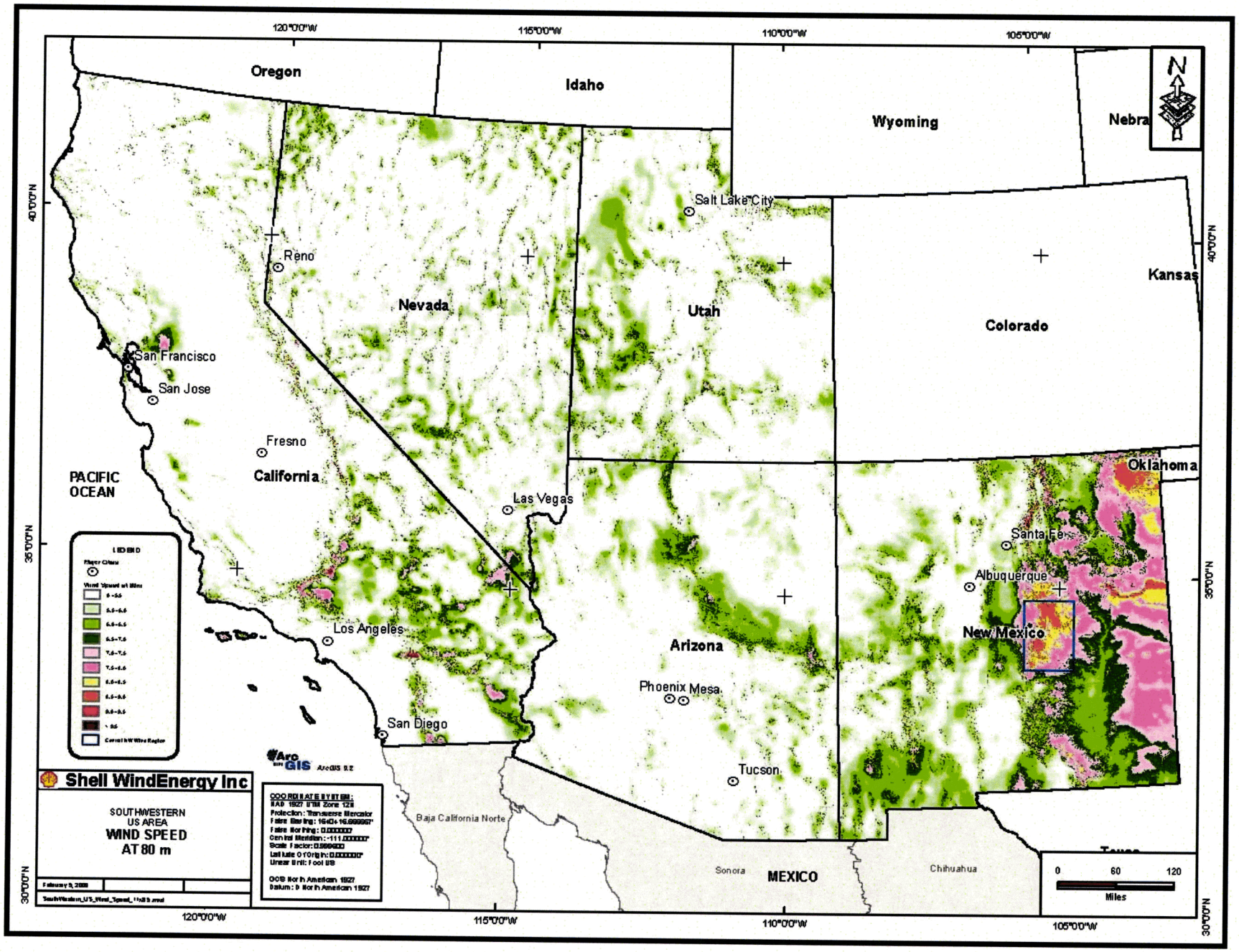
Arizona Bureau of Land Management 2010
Arizona State Land Department and ALRIS 2010
New Mexico Bureau of Land Management 2013
Esri StreetMap 2010
Environmental Planning Group LLC. 2014

Scale in Miles: 0 5 10 20 30 40

N

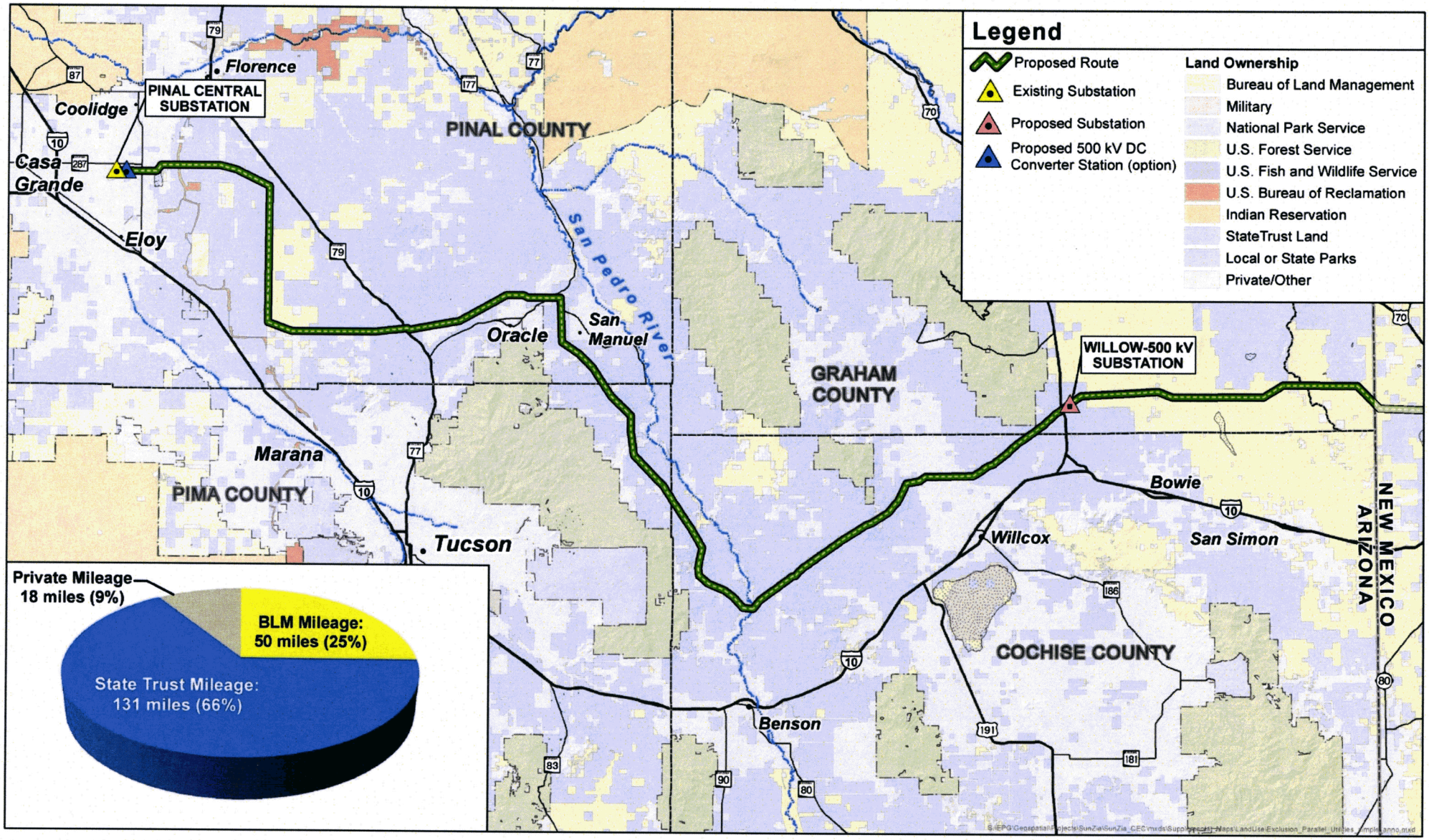



Solar Thermal Resource
Direct Normal Insolation (kilowatt-hours/SqMeter/Day)
Below 6.5
6.5 - 7.0
7.0 - 7.5
7.5 +
Solar Energy Zones (2010 DOE Programatic EIS)
SunZia Transmission Project
Substation Site
Proposed Route
Source: NREL, WREZ 2009
Qualified Resource Area (QRA)
Area | Total MW
NM-CT | 3,183
NM-SO | 4,347
NM-SW | 6,149
NM-EA | 83
AZ-SO | 6,623
Santa Fe
Albuquerque
NM-EA
NM-CT
SUNZIA EAST SUBSTATION
Socorro
Carrizozo
Truth or Consequeces
ARIZONA
NEW MEXICO
Phoenix
PINAL CENTRAL SUBSTATION
Eloy
Oracle
Tucson
AZ-SO
Safford
WILLOW - 500 kV SUBSTATION
Willcox
LORDSBURG SUBSTATION
Lordsburg
NM-SW
Deming
MIDPOINT SUBSTATION
NM-SO
Las Cruces
Scale in Miles
0 25 50 100
N

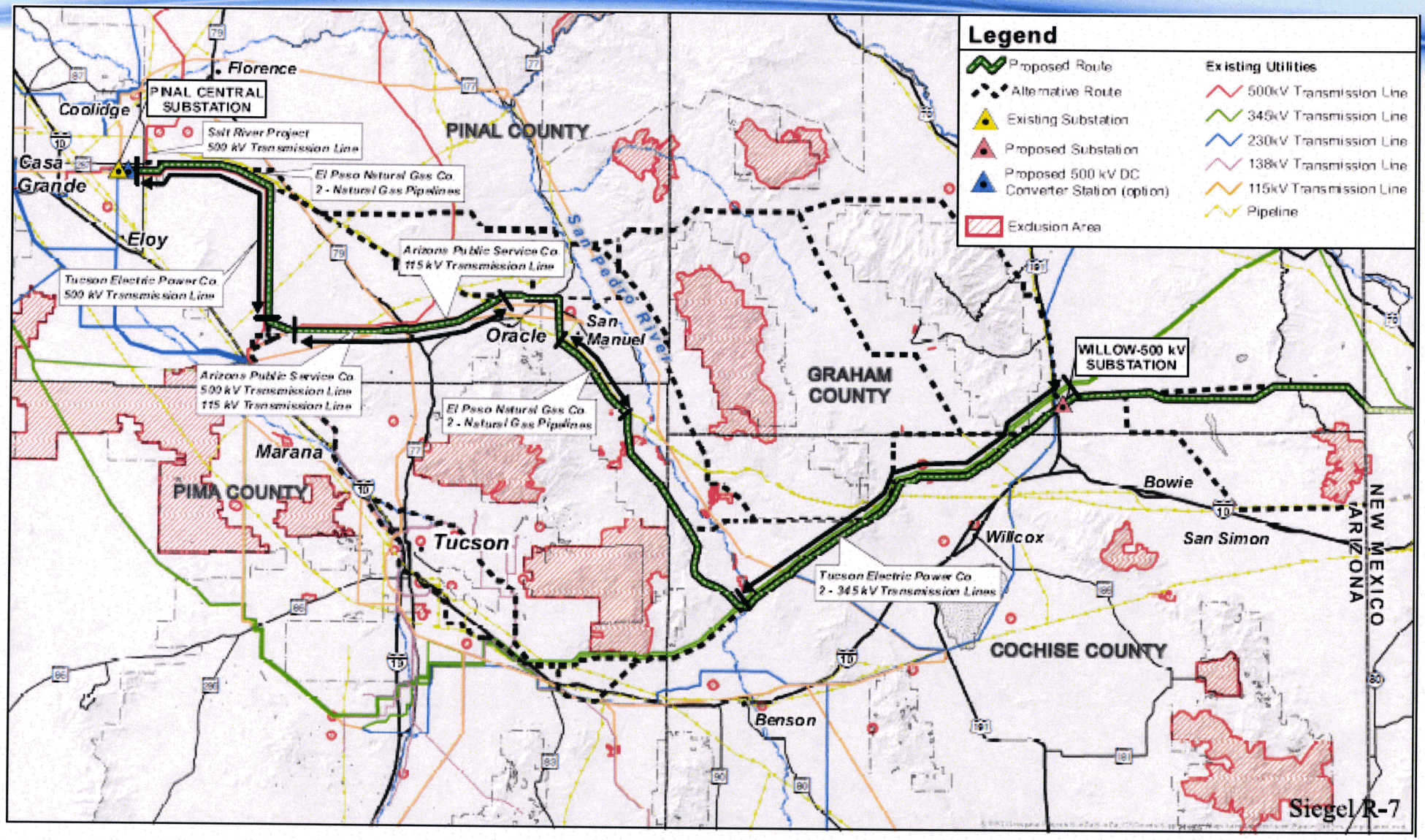

Oregon
Idaho
Wyoming
Nebra
Salt Lake City
Reno
Nevada
Utah
Colorado
Kansas
San Francisco
San Jose
Fresno
California
PACIFIC OCEAN
Las Vegas
Oklahoma
Santa Fe
Albuquerque
New Mexico
Los Angeles
Arizona
Phoenix Mesa
San Diego
Tucson
Baja California Norte
Sonora
MEXICO
Chihuahua
Shell WindEnergy Inc
SOUTHWESTERN US AREA
WIND SPEED AT 80 m
0 60 120
Miles
120°0'0"W
115°0'0"W
110°0'0"W
105°0'0"W
40°0'0"N
35°0'0"N
30°0'0"N

Arizona CEC Application Process

- September 2, 2015: Filed an application for an Arizona Certificate of Environmental Compatibility (CEC) from the AZ Power Plant & Line Siting Committee (LSC)
  - 13 days of LSC hearings held in Willcox, Tucson, Casa Grande and Florence
  - Two field tours
- November 19, 2015: unanimous vote by the LSC to issue the CEC
- February 3, 2016: ACC approved the CEC without changes


Legend
Proposed Route
Existing Substation
Proposed Substation
Proposed 500 kV DC Converter Station (option)
Land Ownership
Bureau of Land Management
Military
National Park Service
U.S. Forest Service
U.S. Fish and Wildlife Service
U.S. Bureau of Reclamation
Indian Reservation
StateTrust Land
Local or State Parks
Private/Other
PINAL CENTRAL SUBSTATION
WILLOW-500 kV SUBSTATION
Florence
Coolidge
Casa Grande
Eloy
PINAL COUNTY
San Pedro River
Oracle
San Manuel
GRAHAM COUNTY
Marana
PIMA COUNTY
Tucson
Bowie
Willcox
San Simon
COCHISE COUNTY
Benson
NEW MEXICO
ARIZONA
Private Mileage 18 miles (9%)
BLM Mileage: 50 miles (25%)
State Trust Mileage: 131 miles (66%)

Threading the Needle in AZ



BLM, ASLD, AZGF, and ADOT Letter

United States Department of the Interior
BUREAU OF LAND MANAGEMENT
Arizona State Office
One North Central Avenue, Suite 800
Phoenix, Arizona 85004-4427
www.blm.gov/az

2015 SEP 28 P 1:15

SEP 18 2015

In Reply Refer To:
2800 (9310)
NM114438
AZA35058

Mr. Thomas Chenal, Chairman
Arizona Corporation Commission
Power Plant and Line Siting Committee
1275 West Washington Street
Phoenix, AZ 85007-2926

Re: SunZia Transmission Line Project

Dear Chairman Chenal:

Please accept this correspondence as a summary regarding the extensive cooperation between the Bureau of Land Management (BLM), the respective Arizona State agencies and other Federal cooperators on the SunZia Transmission Project. At a July 22, 2015, meeting with SunZia Transmission, LLC (SunZia) a request was made to the BLM, Arizona State Land Department, Arizona Department of Transportation, and Arizona Game and Fish Department to author a joint letter summarizing the process for the selected route for the project in the BLM's Record of Decision (ROD) dated January 23, 2015, as well as to outline the cooperation that occurred between all the parties involved in the project.

On September 11, 2008, SunZia submitted an application for a right-of-way for an electric transmission line process consisting of two parallel 500 kilovolt overhead transmission lines, approximately 515 miles in length. The proposed line originates in Lincoln County, New Mexico and terminates at the Pinal Central Substation, in Pinal County, Arizona, northwest of Tucson.

As the lead Federal agency, the BLM was responsible for completing an Environmental Impact Statement (EIS) under the authority of the National Environmental Policy Act (NEPA) that analyzed and disclosed the effects of the proposed project on both the natural and human environment. The analysis incorporated valuable input from the public as well as Federal, State, and local agencies having related jurisdiction or special expertise.

Some of the agencies elected to become "Cooperating Agencies", which afforded them the opportunity to participate in the BLM's interdisciplinary team process. The Cooperating Agencies were able to inform the BLM of resource and socio-economic impacts, policies, regulations, and laws of which they may have specific local knowledge. In the SunZia planning process, this cooperation and the significant public input through the public comment period resulted in the identification of four main alternatives and various sub-alternatives in Arizona. Federal agencies participating in this EIS process included the U.S. Fish & Wildlife Service; National Park Service; Fort Huachuca Army Base, AZ; White Sands Missile Range, NM; Holloman Air Force Base, NM; and Fort Bliss Army Base, TX. Arizona State agencies participating as Cooperating Agencies included the State Land Department, Game and Fish Department, and Department of Transportation.

The EIS thoroughly analyzed and disclosed the effects to the natural and human environment on Federal and non-Federal lands. The involvement of local and Federal agencies with jurisdiction and/or special expertise in the analysis was critical in analyzing those impacts to non-Federal lands, as the selected route in Arizona was comprised of a total of 198 miles (crossing 130 miles of State Land, 18 miles of private land, and 50 miles of BLM managed land).

Through this collaborative effort, the route that was ultimately selected resulted in mitigation development that reduced the resource impacts; and

- Optimized the use of existing utility corridors and infrastructure
- Minimized impacts to sensitive resources
- Minimized, to the extent practical, impacts at river crossings

The routes evaluated but not chosen would result in greater impacts to natural, cultural, and sensitive resources. For example, the other routes crossed the San Pedro River at points with critical habitat designated by the Fish and Wildlife Service. Also, those crossings and routes have lower levels of existing disturbance. The construction of a line of this scope and size would introduce new disturbance by aiding access to previously un-fragmented land. Additionally, the northern routes traverse through rugged terrain that contributes to the habitat and ecological function of the Aravaipa wilderness. Other concerns with the northern routes near Mount Graham included Native American Tribal areas of religious and cultural significance. These are a few resources that factored into making the decision of the selected route. While further details are in the Final EIS and the ROD, the BLM in Arizona, along with the State Agencies engaged as Cooperators, stand prepared to answer any questions regarding the NEPA process and the cooperative engagement that resulted in a Record of Decision.

If you have questions, please call me at 602-417-9500.

Sincerely,

Raymond Suazo
State Director

Lisa Atkins
Commissioner
Arizona State Land Department

Larry D. Voyles
Director
Arizona Game and Fish Department

John S. Halikowski
Director
Arizona Department of Transportation

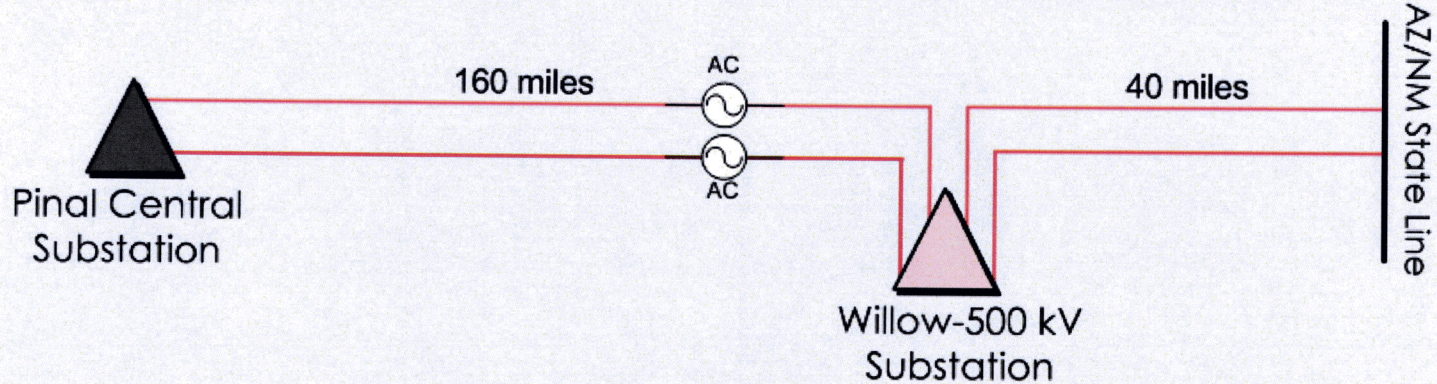
cc: Mr. Aden Seidlitz, Acting State Director
Bureau of Land Management
New Mexico State Office
Attention: Adrian Garcia
301 Dinosaur Trail
Santa Fe, NM 87508

SunZia CEC

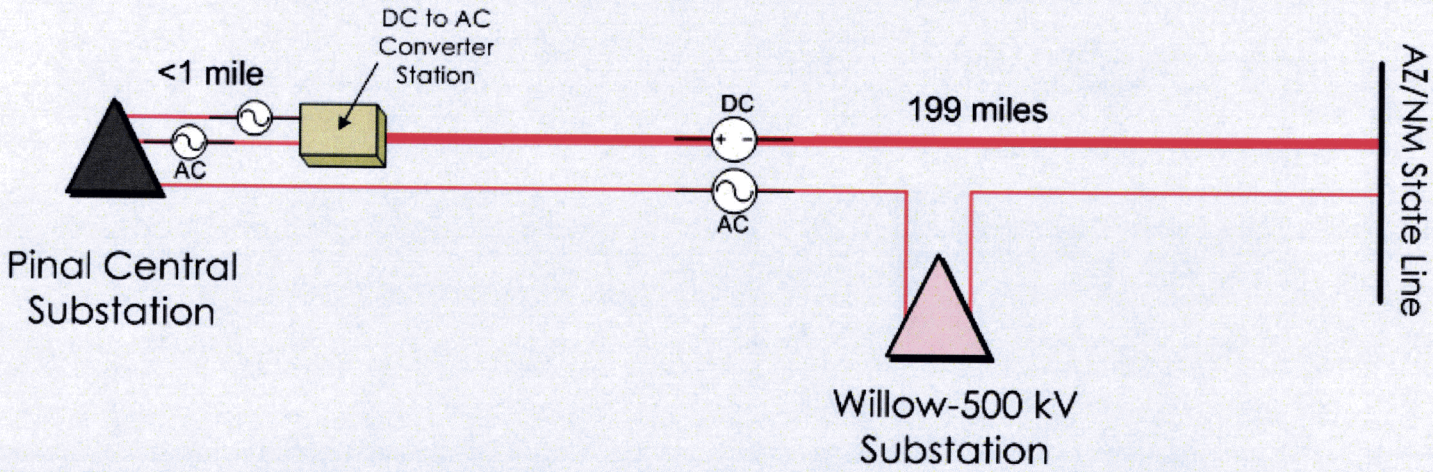
- CEC has two expiration terms:
  - » 10 years for the first 500kV line and Willow-500kV Substation
  - » 15 years for the second 500kV line and related facilities
- During preparation of the final Plan of Development, SunZia will invite the participation of stakeholders
- SunZia will not negatively impact Pima County's ability to claim credit under the Multi Species Conservation Plan
- Approves a 2,500 corridor for siting a 450-foot ROW
- CEC allows for either 2 AC lines or 1 AC, 1 DC line

Project Configuration Options

OPTION A – Two 500kV AC lines



OPTION B – One 500kV AC line, One 500kV DC line



Project Concept to Operation
15 Years

MILESTONE	DATE
Concept emerges in regional planning	Starting 2006
Sponsors sign MOA	April 2008
Submit BLM SF-299 ROW Application	Sept 2008
Initiate Scoping	May 2009
Draft EIS	May 2012
Final EIS	June 2013
Record of Decision	Jan 2015
State permits	2016-2017
Financial Close	2019
Final Design, ROW Acquisition, Procurement, Construction	2016-2021
Commercial Operation	2021

Upcoming Activity

2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 | 2024 | 2025

- BLM Issued Record of Decision Approving ROW across Federal Land
- Received a Certificate of Environmental Compatibility from the Arizona Corporation Commission
- [redacted] Private and State land ROW Acquisition
- [redacted] Interconnection Agreements
- [redacted] Engineering, Design and Plan of Development
- [redacted] Construction Financing
- [redacted] Procurement & Construction
- Line Energization
- [redacted] Operation

www.sunzia.net

Tom Wray, Project Manager
twray@southwesternpower.com

Cindy Freeman, Assistant Project Manager
cfreeman@southwesternpower.com

Mark Etherton, Engineering Manager
mark.etherton@transco.energy

Attachment B

Bowie Power Station – Interconnection Plan

9th BTA Workshop I

June 1, 2016

Bowie Power Station Interconnection Update

9th Biennial Transmission Assessment Workshop

June 1, 2016

ROWIE

Bowie Power Station

- Nominal 1,000 MW natural gas electric generating facility in Cochise County, Arizona
- May be comprised of both simple and combined-cycle turbine configurations depending on utility customer needs
- Interconnection is with TEP's existing Greenlee-Winchester 345kV transmission line at the proposed Willow-345kV substation
- Initial commercial operation is expected by December 2020

Approved double-circuit 345 kV line and Willow 345 kV Substation

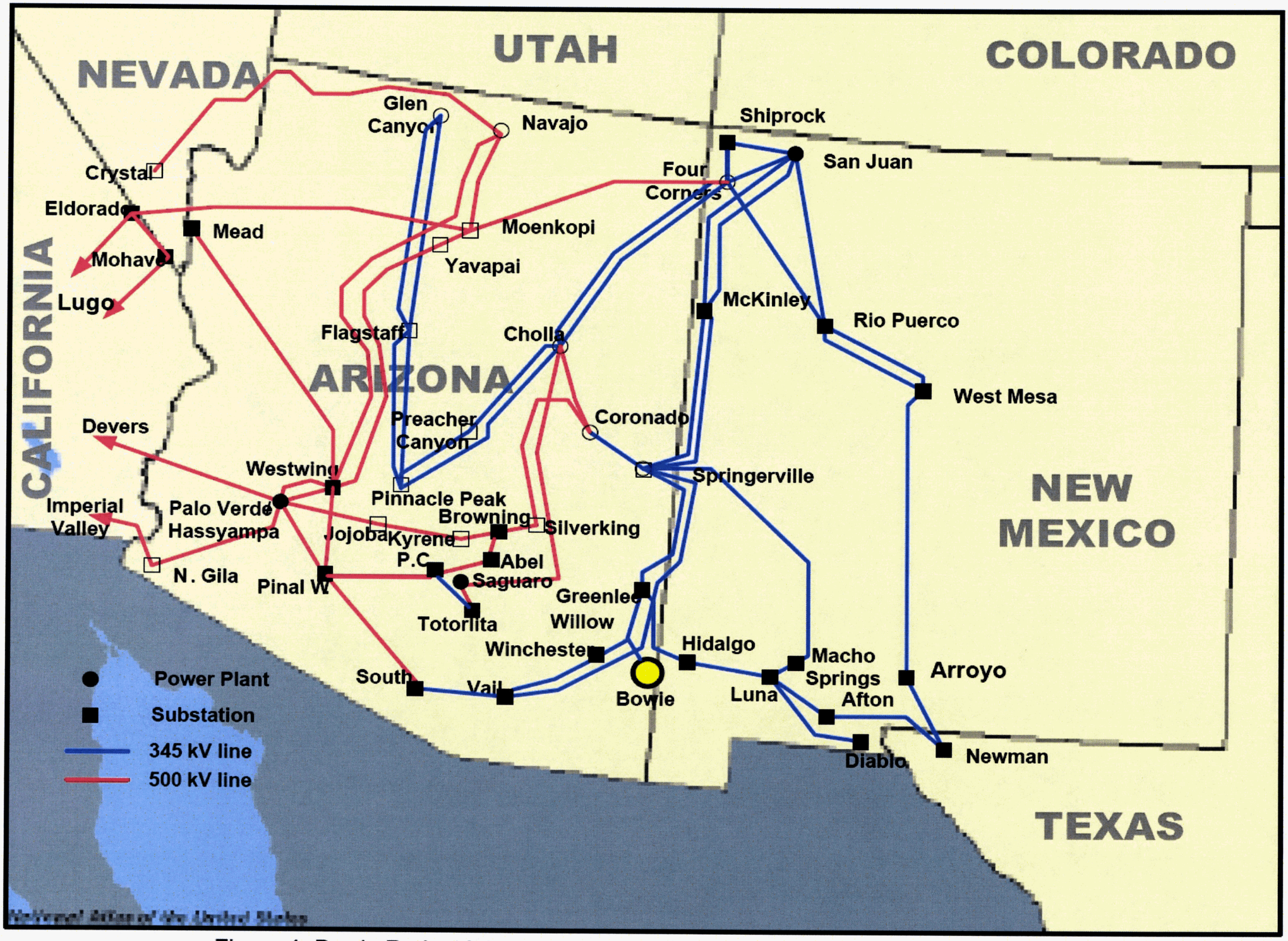


Figure 1: Bowie Project interconnection point and vicinity transmission system

Bowie's Interconnection Status

- SWPG & TEP entered into an Interconnection Facilities Study Agreement on October 12, 2012
- TEP provided the Facility Study for the Willow 345 kV Substation on October 29, 2013
- SWPG & TEP executed a Large Generator Interconnection Agreement (LGIA) on January 30, 2015
- The Bowie Generator Interconnection Study Report and Facility Study were filed in Bowie's ACC Docket (No. E-00000D-15-0001) on February 23, 2015

Transmission Planning Forums

- Bowie, through its owner SWPG, participates in:
  - Regional transmission planning forums
  - Southwest Area Transmission Group and its subcommittees
  - On-going activities of WestConnect
- SWPG is a Class 3 member in good standing in the Western Electricity Coordinating Council

For more information:

www.bowiepower.com

BOWIE