



# SunZia Southwest Transmission Project

**August 25, 2014**  
Silver City, NM

New Mexico Legislature  
Military and Veterans' Affairs Committee

# Project Sponsors



**SOUTH WESTERN**  
**Power Group**  
*A MMR Group Company*

**SouthWestern Power/  
MMR Group**



**Shell WindEnergy**

**Shell Wind Energy**



**Salt River Project**



**TRI-STATE**  
Generation and Transmission  
Association, Inc.  
A Touchstone Energy® Cooperative

**Tri-State G&T**



**Tucson  
Electric  
Power**

A UniSource Energy Company

**Tucson Electric Power**

# Project Summary

- ⚡ 515 mile, 500 kV independent transmission project
- ⚡ Brings high-quality renewable energy to AZ and CA markets
- ⚡ WECC granted Phase 3 status in Mar 2011, which affirmed a rating of 3,000 MW for two 500kV AC lines
- ⚡ Obtained Declaratory Order from FERC in May 2011
- ⚡ One of 7 pilot projects supported by the Federal Rapid Response Team for Transmission (RRTT), announced Oct 2011
- ⚡ Letter of Intent with First Wind for up to 1,500 MW of transmission capacity
- ⚡ Total capital cost estimated at \$2 billion
- ⚡ Commercial operation expected in 2018

# All Alternatives Studied (2009-2013)

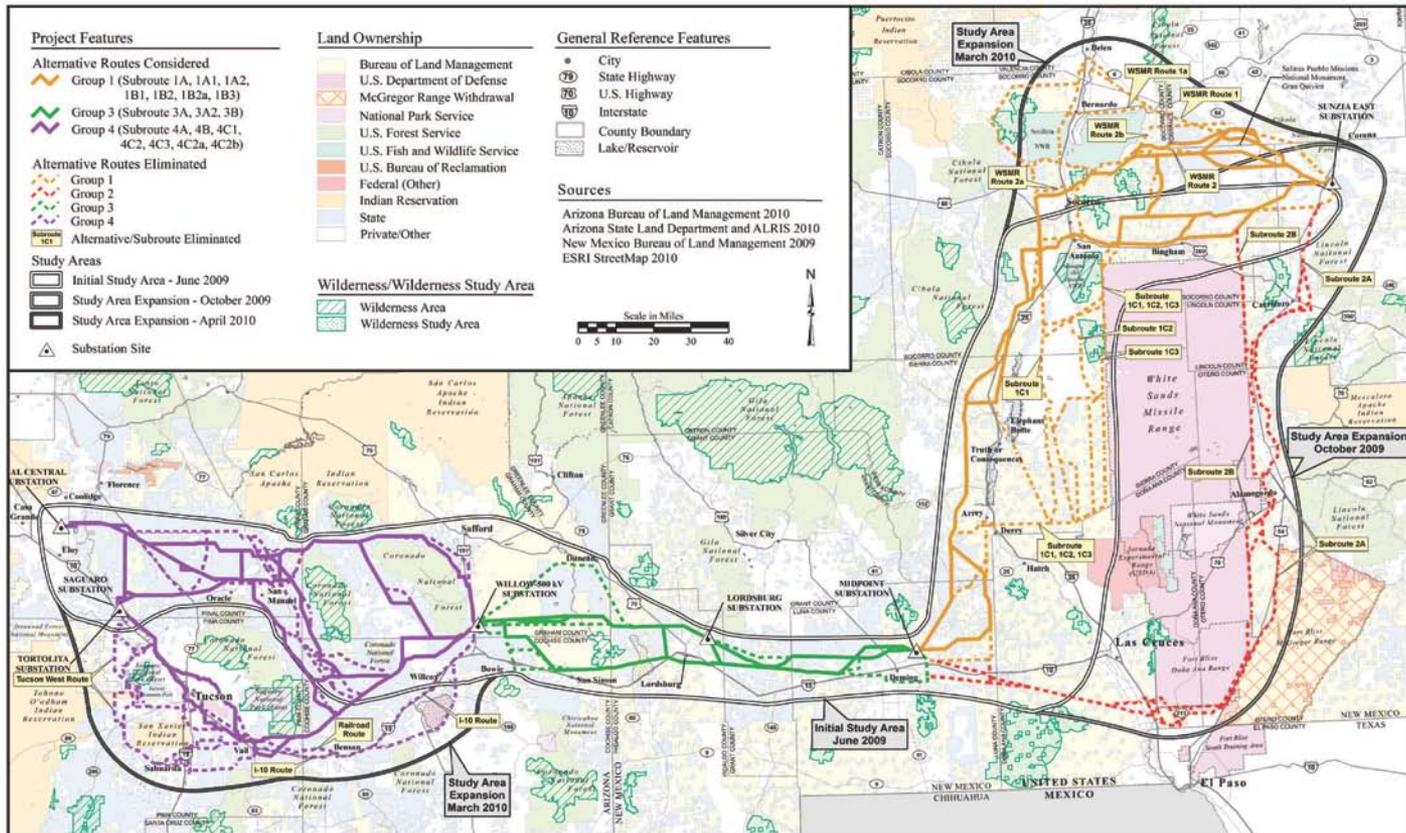


Figure 2-7. Alternatives Considered but Eliminated

# BLM Preferred Alternative

(June 2013)

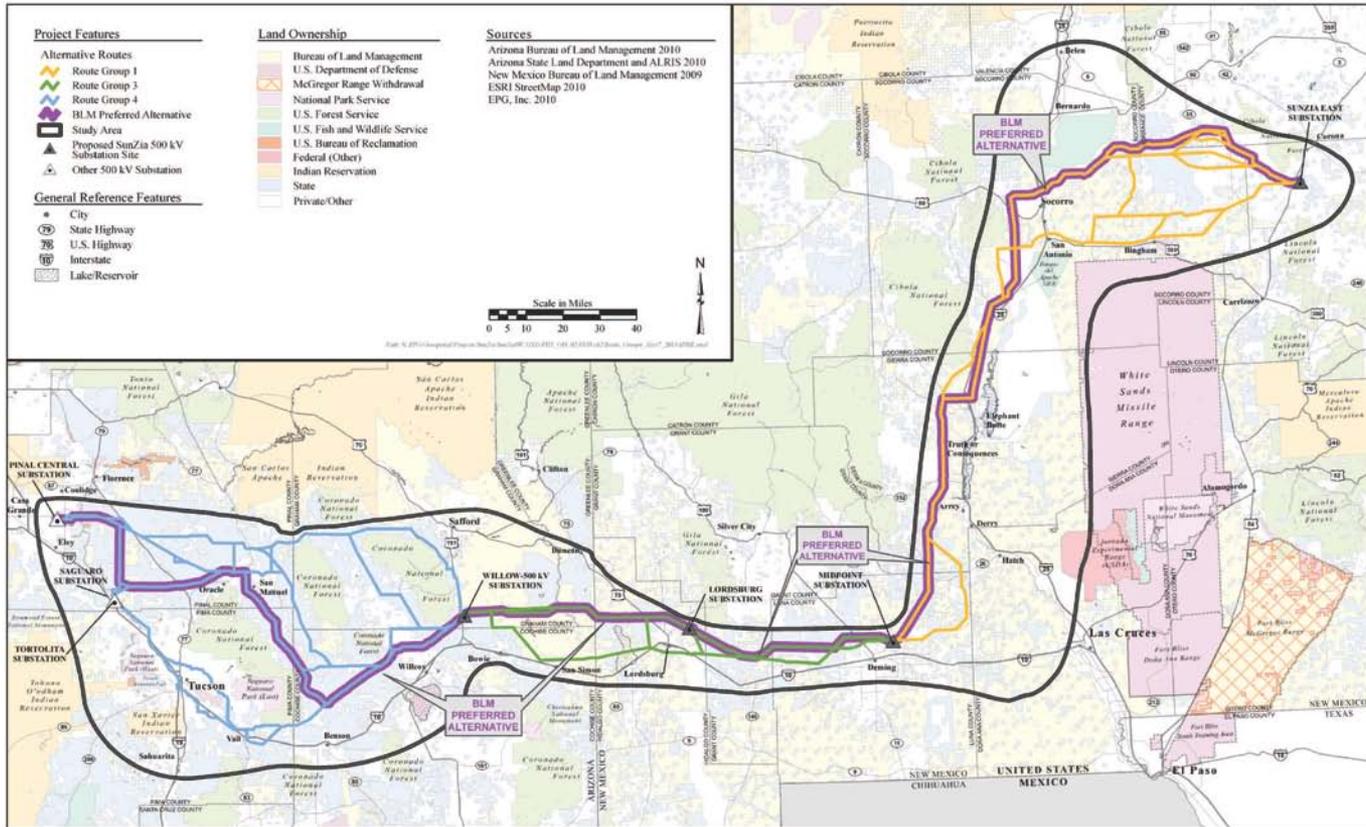


Figure 2-3. Alternative Routes

# BLM Cooperating Agencies

1. U.S. Army Corps of Engineers
2. Department of Defense, Energy Siting Clearinghouse
3. Department of the Army, Fort Bliss Army Installation Base
4. Department of the Army, White Sands Missile Range
5. Department of the Army, Fort Huachuca
6. U.S. Air Force, Holloman Air Force Base
7. U.S. Fish & Wildlife Service
8. National Park Service
9. New Mexico State Land Office
10. New Mexico Spaceport Authority
11. Arizona State Land Department
12. Arizona Game and Fish Department
13. Arizona Department of Transportation

# Project Conception to Operation

## 12 Years +

| MILESTONE   | DATE          | DURATION  |
|---|---------------|---|
| ✓ Concept emerges in regional planning                        | Starting 2006 | <b>Pre-Permitting</b><br>2 years                |
| ✓ Sponsors sign MOA   | April 2008    |   |
| ✓ Submit BLM SF-299 ROW Application                           | Sept 2008     | <b>Federal Permitting</b><br>6 years (estimate) |
| ✓ Initiate Scoping  | May 2009      |   |
| ✓ Draft EIS   | May 2012      |   |
| ✓ Final EIS   | June 2013     |   |
| ✓ Environmental Assessment                                    | Q4 2014       |   |
| ✓ Record of Decision  | Q1 2015       |   |
| ✓ State permits   | Q2 2015       | <b>State Permitting</b><br>1 year (estimate)    |
| ✓ Financial Close   | 2015-2016     |   |
| ✓ Final Design, ROW Acquisition,<br>Procurement, Construction | 2015-2016     |   |
| ✓ COD   | 2018          |   |

# Completed Major Milestones

| Date                  | Milestone   |
|-----------------------|---|
| May 2009              | Published Notice of Intent (NOI) for BLM to prepare EIS   |
| June 2009 – June 2010 | Public Scoping on Project Alternatives  |
| March 2011            | WECC granted Phase 3 status, which affirmed the project's transfer capacity at 3,000 MWs for (2) 500kV AC lines |
| May 2011              | Declaratory Order from FERC   |
| October 2011          | Selected as a pilot project for the Federal Rapid Response Team for Transmission (RRTT)                         |
| November 2011         | Commenced anchor tenant process   |
| May 2012              | Draft EIS issued  |
| June 2013             | Final EIS issued  |
| August 2013           | Signed LOI with First Wind for up to 1,500 MW of capacity   |
| May 2014              | Resolved routing conflicts with military bases in New Mexico  |

### Solar Thermal Resource

Direct Normal Insolation  
(kilowatt-hours/SqMeter/Day)

Below 6.5      7.0 - 7.5

6.5 - 7.0      7.5 +

 Solar Energy Zones  
(2010 DOE Programmatic EIS)

### Qualified Resource Area (QRA)

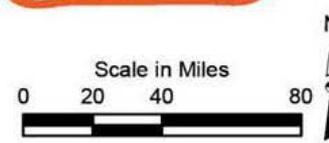
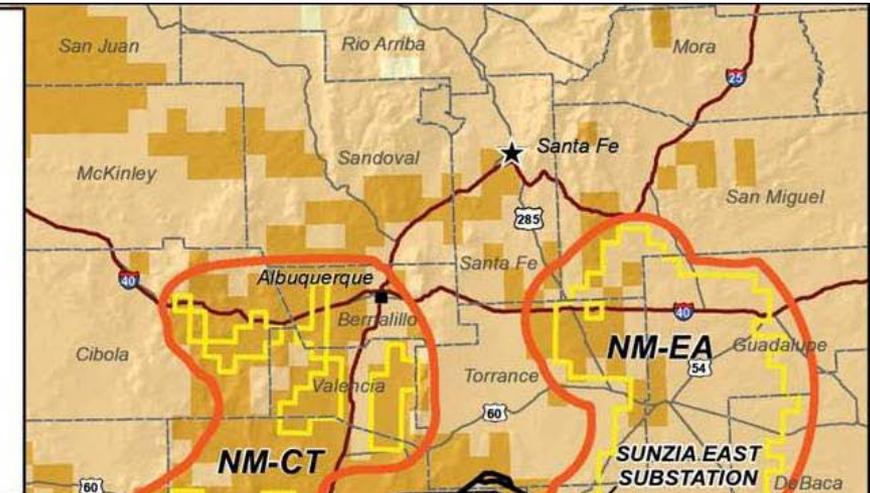


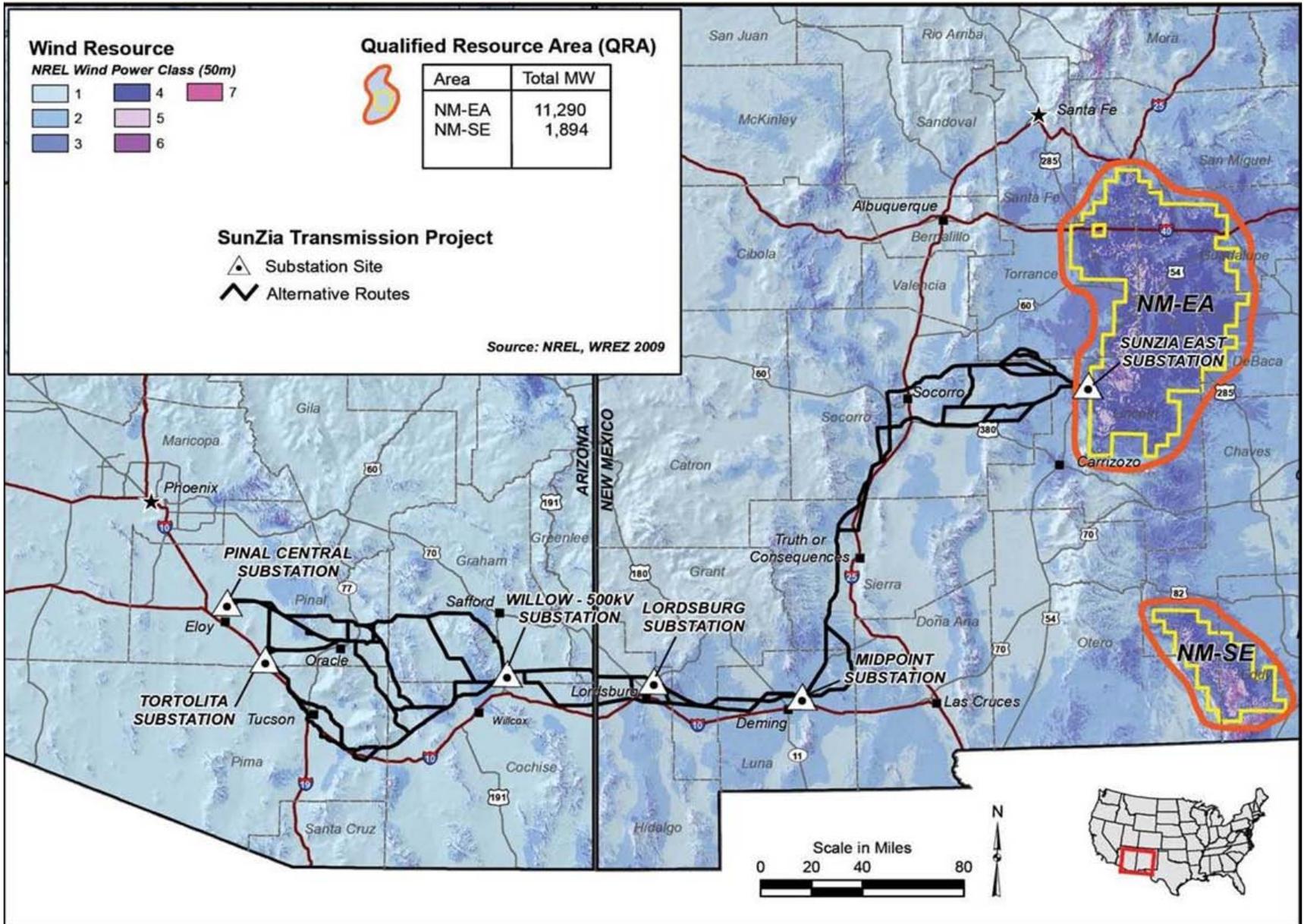
| Area  | Total MW |
|-------|----------|
| NM-CT | 3,183    |
| NM-SO | 4,347    |
| NM-SW | 6,149    |
| NM-EA | 83       |
| AZ-SO | 6,623    |

### SunZia Transmission Project

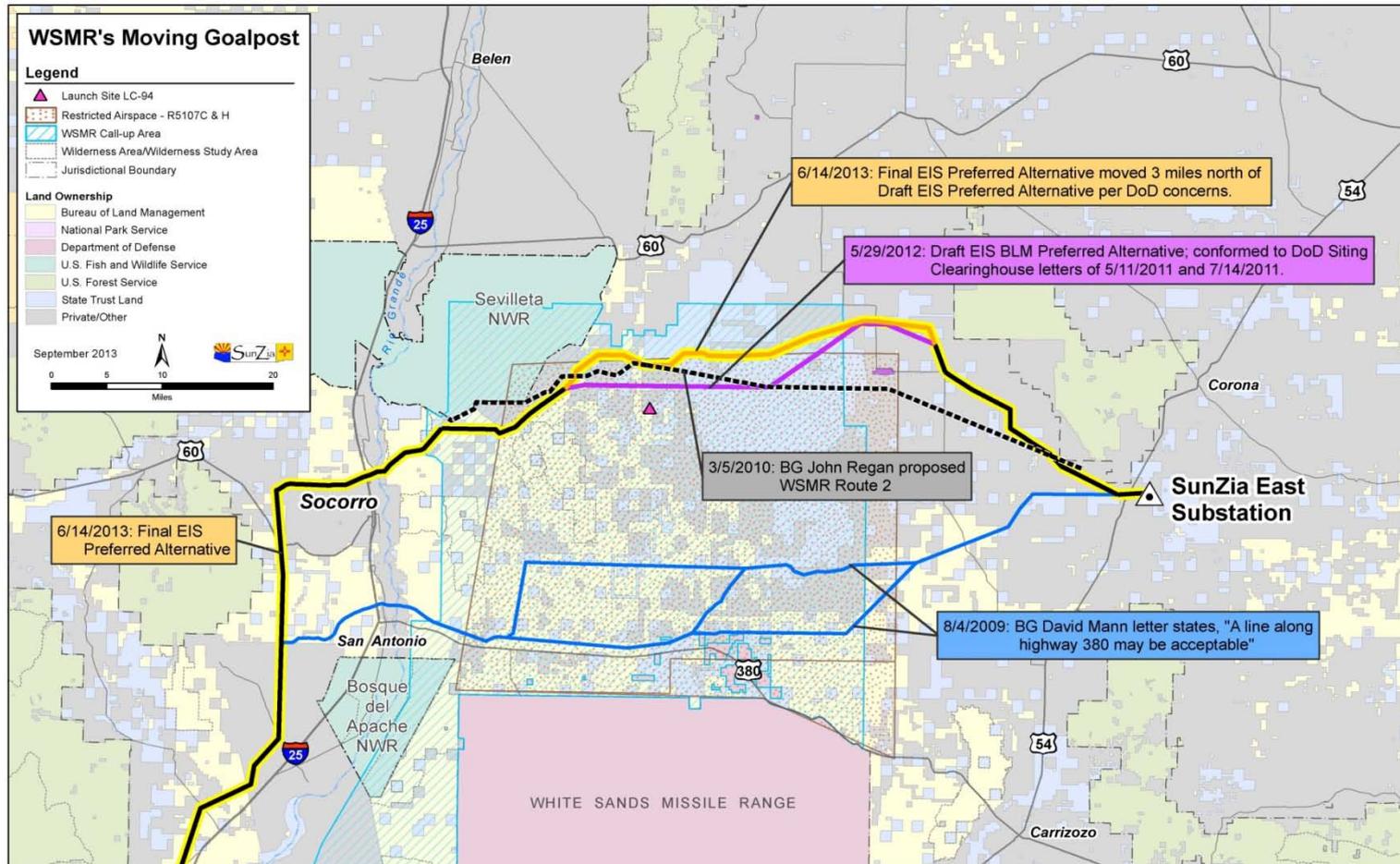
-  Substation Site
-  Alternative Routes

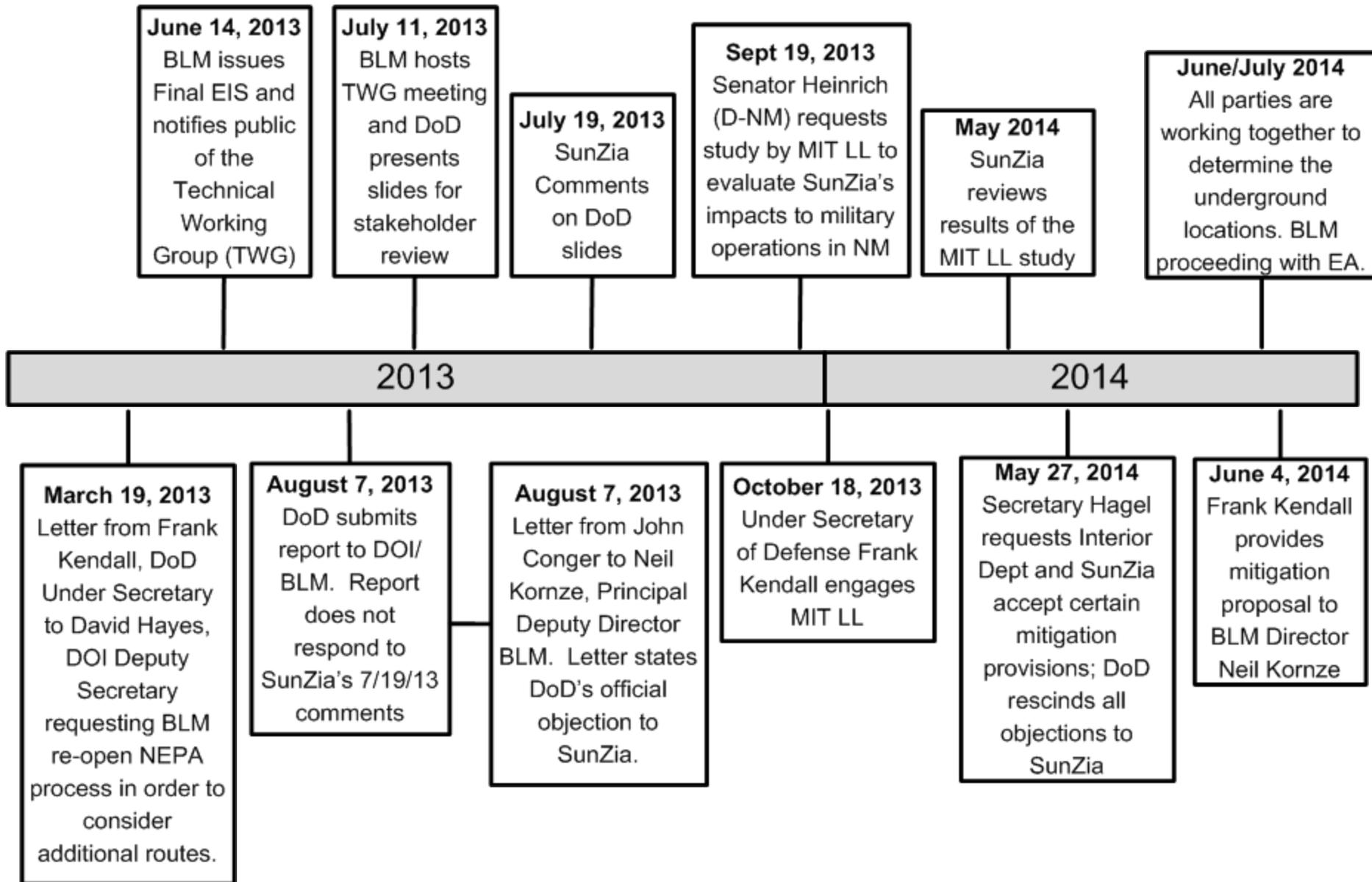
Source: NREL, WREZ 2009





# Routing Changes to Accommodate WSMR Concerns since 2009





# A Path Forward

- ⚡ 5/27/2014 letter from Secretary Hagel to Secretary Jewell approves the BLM's PAR if SunZia accommodates the following mitigation commitments:
  1. Hold Harmless mutual covenants;
  2. Close coordination and non-interference with WSMR testing activities;
  3. Micro-siting of tower locations; and
  4. Undergrounding up to three segments accumulating to a total of five miles
- ⚡ Agreement to these terms will allow DoD to rescind its prior objection to the BLM's PAR and Secretary Hagel encouraged BLM to promptly issue the ROD
- ⚡ BLM is conducting an EA to review/assess the environmental impacts of 500 kV underground line construction along the BLM PAR in their decision making process
- ⚡ Undergrounding SunZia is specific mitigation to national security impacts raised by DoD after the Final EIS was issued
- ⚡ This is a unique circumstance and this mitigation is not a standard form of construction for long distance EHV transmission projects



SECRETARY OF DEFENSE  
1000 DEFENSE PENTAGON  
WASHINGTON, DC 20301-1000

MAY 27 2014

The Honorable Sally Jewell  
Secretary of the Interior  
Washington, DC 20240

Dear Madam Secretary:

As you know, the Department of Defense (DoD) identified, and the Massachusetts Institute of Technology Lincoln Laboratory confirmed, that the proposed SunZia Southwest Transmission Project as originally proposed would adversely impact test missions at the White Sands Missile Range (WSMR). DoD formally objected to the Preferred Alternative Route described in the Final Environmental Impact Statement unless four specific mitigations were incorporated into the Record of Decision.

The applicant has for some time indicated acceptance of three of these mitigations (incorporation of appropriate hold harmless agreements, non-interference with WSMR operations during power line construction and maintenance, and micro-siting of the power line to avoid interference with test operations), and I understand that they are now prepared to consider a version of the fourth mitigation (burial of a portion of the line).

To mitigate mission impacts, in consultation with the Deputy Secretary of Defense, the Department of the Army, and the Chairman of the Joint Chiefs of Staff, I have determined that a total of five miles of the power line needs to be buried, in up to three separate segments, so that some low-altitude flight operations can occur. I will have my staff provide you with a mitigation proposal identifying the location of those segments by June 2, 2014.

I am hopeful that this mitigation proposal, which addresses our previous national security concerns, will be acceptable both to the Department of the Interior and to the applicant. If so, DoD formally rescinds its objection to the Preferred Alternative Route as described in the Final Environmental Impact Statement, with the expectation that the Bureau of Land Management will move promptly towards issuing a Record of Decision once it completes any other necessary steps.

Thank you.



[www.sunzia.net](http://www.sunzia.net)



# Supplemental Material

ROUTE GROUP 1:  
SunZia East Substation to Midpoint Substation

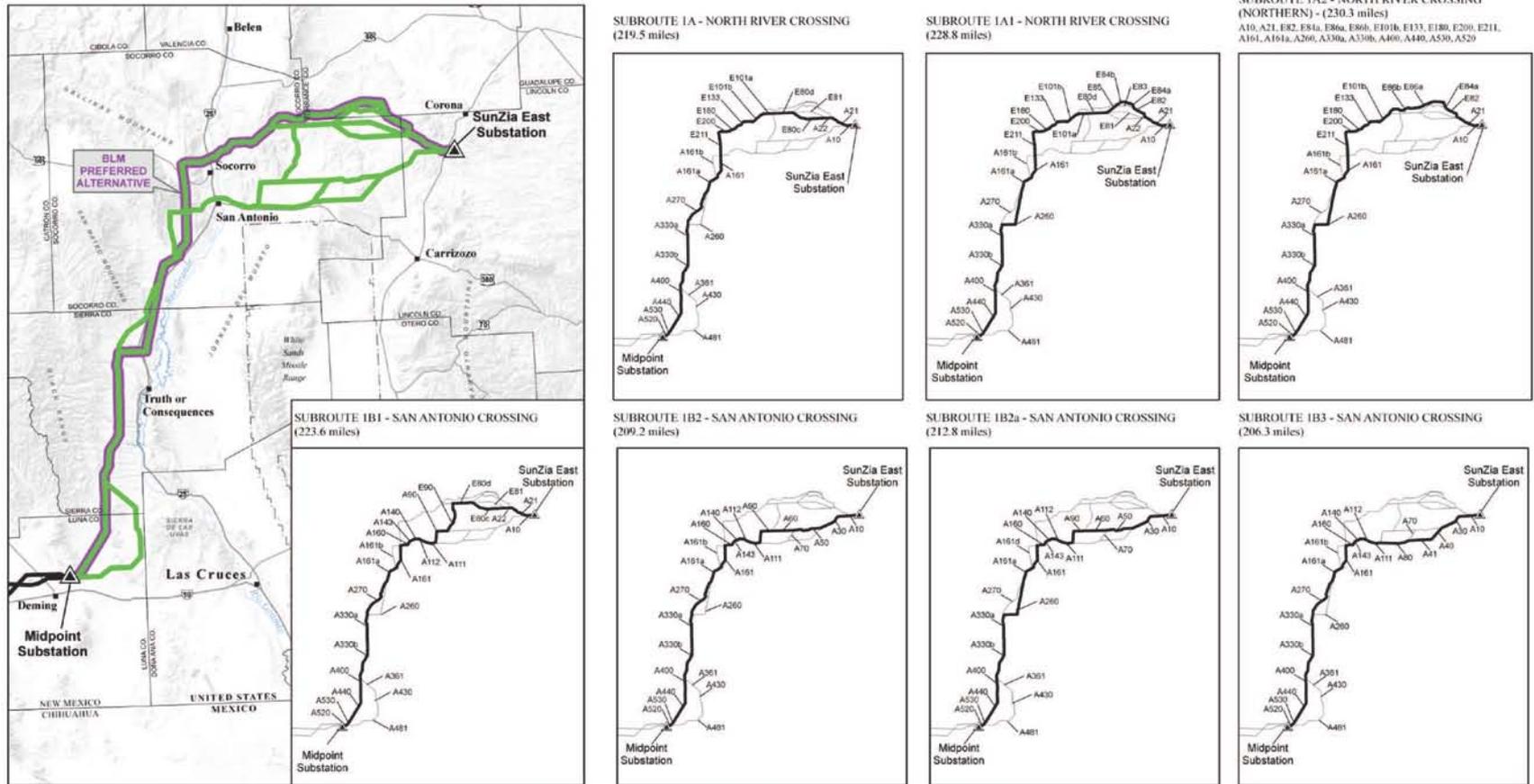


Figure 2-4. Route Group 1: SunZia East Substation to Midpoint Substation

ROUTE GROUP 3: Midpoint Substation to Willow-500 kV Substation

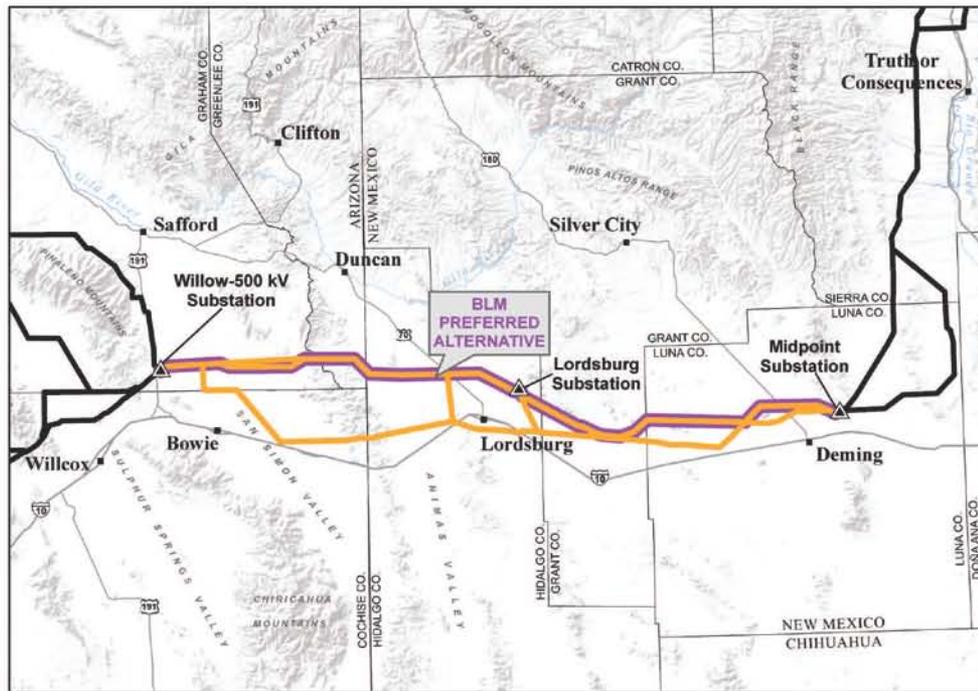
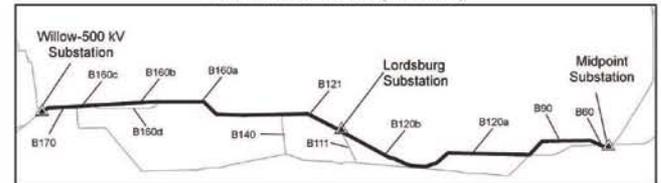


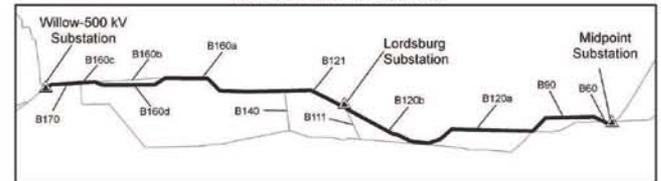
Figure 2-5. Route Group 3: Midpoint Substation to Willow-500 kV Substation

SUBROUTE 3A - NORTH (123.4 miles)



**BLM PREFERRED ALTERNATIVE**

SUBROUTE 3A2 - (123.9 miles)



SUBROUTE 3B - SOUTH (128.6 miles)

