SunZia Southwest Transmission Project

SunZia Project Update for the 9th Annual Transmission Summit West

October 13, 2017
SouthWestern Power Group

- Independent developer of utility-scale generation and transmission in the Desert Southwest

- Project Manager/Developer of SunZia

- Based in Phoenix, staff of ten: 175 years of experience, in business for 17 yrs

- Major References:
  - 2,400 MW CCGT Panda Gila River power plant (in operation)
  - 1,000 MW CCGT Bowie Power Station (permitted)
  - 600 MW Lignite CFB Rockdale Power Plant (in operation)
  - 200 MW (DC) Solar PV power project (in operation)

- Owned by MMR Group of Baton Rouge, LA
MMR Group

✓ Construction services firm based in Baton Rouge, LA

✓ 22 offices in USA, Canada & overseas

✓ In business +25 years; owned by senior management

✓ Approximately 5,000 employees

✓ One of the largest electrical contractors in the US

✓ Industrial markets only: power, oil & gas, process, etc.

✓ Built over 40,000 MWs of generation
SunZia: 500kV Project delivering NM Wind to the Palo Verde Hub

SunZia: Southwest Transmission Project

October 13, 2017
Project Summary

- 515 mile independent transmission project in New Mexico and Arizona
- Two x 500KV AC lines providing 3,000 MW of transfer capacity to AZ and CA
- Brings high-quality renewable energy to western markets
- Pattern Energy was selected in August 2016 as the anchor customer for the first 500 kV transmission line
- Obtained Declaratory Orders from FERC in May 2011 for negotiated rate authority and Sept 2017 for allocating 100% of capacity to anchor tenants
- 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
- Plan of Development is being prepared; NTP from BLM expected Q1 2018
- Construction start in mid-2018; Commercial operation by end-2020
New Mexico Wind compliments Solar

**Average Summer Hourly Production of 1,500 MW Corona Wind and 500 MW of CA Solar (PPT)**

Wind ramp at critical peak load
2,000+ Miles of Routes Studied by BLM (2009-2013)
BLM Selected Route in the ROD

Figure 1. Bureau of Land Management Selected (Preferred) Alternative
SunZia and Permits

- Started permitting activity in September 2008
- Completed NEPA with BLM in January 2015 (Record of Decision)
- Executed ROW Grant Agreement with BLM September 2016
- Received the AZ state permit in February 2016 (Certificate of Environmental Compatibility)
- Will apply for the following permits shortly:
  - Locational permit with NM Public Regulation Commission
  - Section 404 permit with US Army Corps of Engineers
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 45% complete; targeting 60% complete by Nov 2017
- EPC contractor will be joint venture of Kiewit + MMR
- We have signed LOIs with several suppliers for key items – Towers, Underground Cable & Series Compensation
- Expect to construct Line 1 in 4 segments, with 2 to 4 major subcontractors working concurrently
- Construction schedule is 30 months
SunZia and Rights of Way

- **Federal** ROW Grant with BLM signed September 2016
- **AZ State** ROW application submitted; Target completion in Q1 2018
- **NM State** Will submit application soon with an expected 6 to 9 months to process
- **AZ Private** Acquisition underway; 55% complete by miles
- **NM Private** Acquisition underway; 35% complete by miles
## Summary of Rights of Way

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<th>Category</th>
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Customers and PPAs

- SunZia selected Pattern Energy in August 2016 as the anchor tenant (pursuant to the original FERC Order)

- SunZia awarded Pattern 1,500 MW of capacity (100% Line 1) and FERC approved our decision in Sept 2017

- Pattern’s Corona Wind Project is SunZia’s customer and it will sign long-term transmission service agreements with SunZia

- Pattern will sell Corona Wind’s energy to utilities under long-term power purchase agreements (PPAs)

- Pattern and SunZia are meeting with utilities, corporates and others in AZ and CA to market Corona Wind energy

- Pattern has significant interest from a variety of potential customers and is negotiating proposals with several parties
Pattern Energy Group LP

Pattern Energy Group LP (Pattern Development) is a leading independent wind, solar and transmission development company.

Pattern develops and constructs renewable energy and transmission assets in the United States, Canada, Mexico, Chile, and Japan.

A highly-experienced team that has brought more than 4,500 MW of wind power to the market.

Current development pipeline includes 5,900 MW of wind and solar power projects in addition to transmission projects.

We have expertise in all project stages: resource analysis, site development, finance, construction and asset management.

Pattern Development’s affiliate company, Pattern Energy Group Inc. (Pattern Energy), is an independent power company listed on the NASDAQ (“PEGI”) and Toronto Stock Exchange (“PEG”) Pattern Energy has a portfolio of 18 wind power projects with a total owned interest of 2,644 MW in the United States, Puerto Rico, Canada, and Chile.