

Appendix C-3

Scoping Meeting Presentation

**BUREAU OF LAND MANAGEMENT
and
COUNTY OF IMPERIAL**

**Ocotillo Express Wind Energy
Project**
Pattern Energy

SCOPING MEETING

January 5, 2011



BLM's Role

■ BLM Authority

- ❖ Administration of public lands under Federal Land Policy and Management Act of 1976 (FLPMA)
- ❖ Review of the Land Use Plan and processing of an EIS-Level Land Use Plan Amendment (PA/EIS)
- ❖ California Desert Conservation Plan (1980, as Amended)
- ❖ Issuance of right-of-way grants for use of federal land
- ❖ Lead federal agency for National Environmental Protection Act (NEPA), National Historic Preservation Act, and other federal law compliance
- ❖ Lead agency for consultation with the Fish and Wildlife Service under Section 7 of the Endangered Species Act



Department of the Interior Secretarial Orders

- **Secretarial Order 3283 – Enhancing Renewable Energy Development on Public Lands (January 16, 2009)**
 - **Purpose.** This Order facilitates the Department's efforts to achieve the goal Congress established in Section 211 of the Energy Policy Act of 2005 to approve non-hydropower renewable energy projects on the public lands with a generation capacity of at least 10,000 megawatts of electricity by 2015.
 - **Policy.** The Department supports the permitting of environmentally responsible wind, solar, biomass, and geothermal operations and required electrical transmission facilities on the public lands.
- **Secretarial Order 3285 – Renewable Energy Development by DOI (March 11, 2009)**
 - **Purpose:** This Order establishes the development of renewable energy as a priority for DOI and establishes a Departmental Task Force for Energy and Climate Change.
 - **Policy:** Encourage the production, development, and delivery of renewable energy is one of DOI'S highest priorities.



Summary of BLM ROW Processing and Administration

- BLM:
 - Regulations: 43 CFR 2800
 - Right-of-Way Toolkit Information:
 - ❖ General ROW
[http://www.blm.gov/wo/st/en/prog/energy/cost_rec
overy_regulations.html](http://www.blm.gov/wo/st/en/prog/energy/cost_rec
overy_regulations.html)
 - ❖ Wind ROW
[http://www.blm.gov/wo/st/en/prog/energy/wind_en
ergy.html](http://www.blm.gov/wo/st/en/prog/energy/wind_en
ergy.html)
 - ❖ NEPA
[http://www.blm.gov/ca/st/en/prog/planning/guidan
ce.html](http://www.blm.gov/ca/st/en/prog/planning/guidan
ce.html)



BLM Authorized Officer's Role

- ❖ Initial Response to Proposal
- ❖ Pre-application Screening
- ❖ Accept Application or Reject Proposal
- ❖ Process Application / Land Use Plan Amendment (PA)
 - Conduct Formal Scoping
 - Prepare BLM Planning / NEPA Document (PA/EIS)
- ❖ Approve LUP Amendment / Decision on Application
- ❖ Authorize the Use and Establish Monitoring
- ❖ Administer through Termination



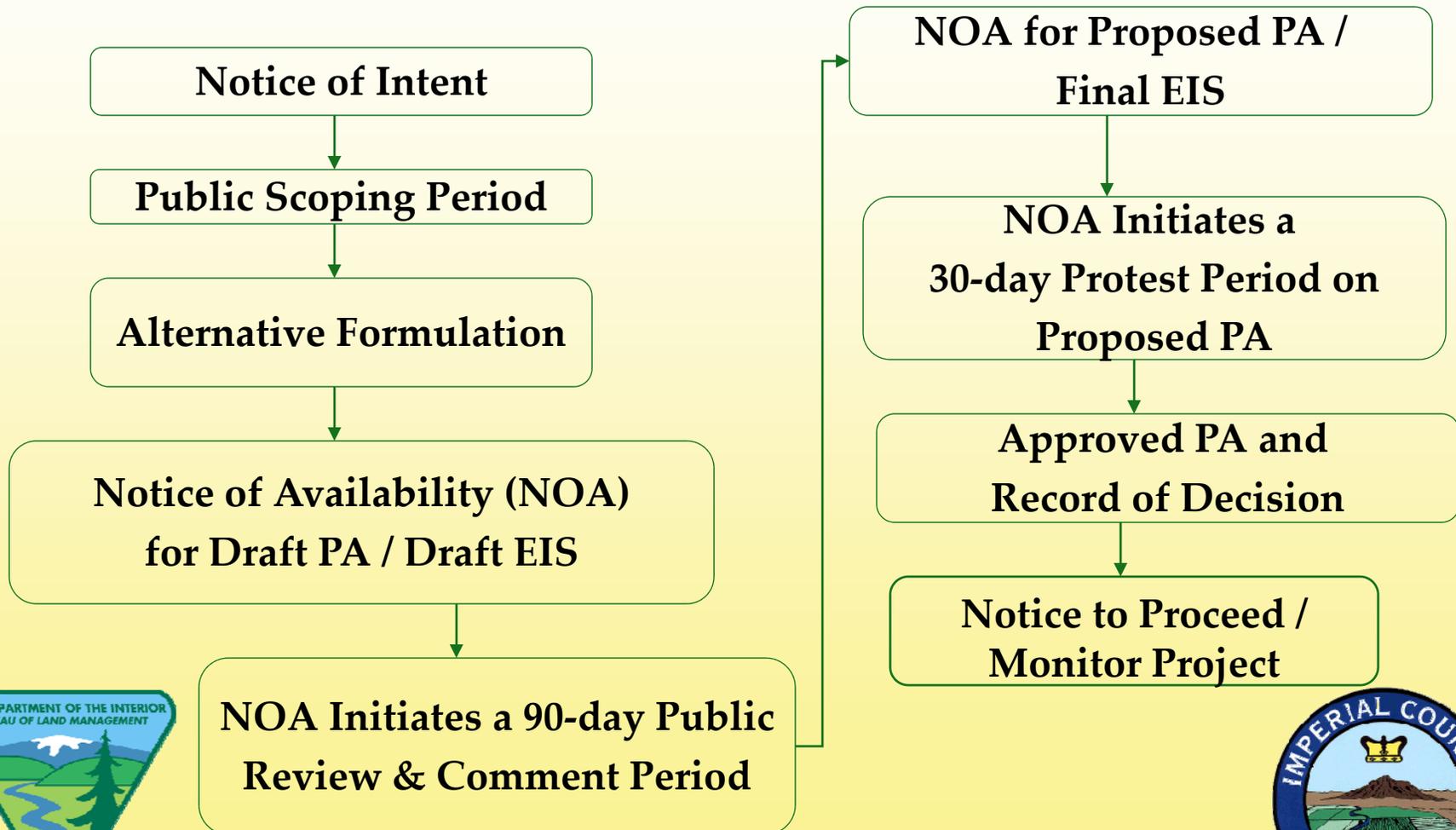
National Environmental Policy Act

NEPA

- **Establishes a public, interdisciplinary framework for Federal decision-making**
- **Ensures that agencies take environmental factors into account when considering Federal actions**
- **Required environmental analysis documents include environmental impact statements (EISs) and environmental assessments (EAs)**



BLM LUP Amendment / NEPA Process (PA / EIS)



Imperial County's Role

- **Approval of project elements on non-federal land**
 - **Conditional Use Permit**
 - **Variance (height)**
- **Lead agency for the California Environmental Quality Act (CEQA)**



California Environmental Quality Act

- **Requires environmental review of projects that need discretionary approvals by local and state agencies**
- **Focused on analysis of “significant” impacts**
- **Preparation of an environmental impact report (EIR) is required for projects that would have a significant impact on the environment**



The EIR Process

- ❖ **Distribute Notice of Preparation (NOP)**
- ❖ **Prepare Draft EIR**
 - Identify and analyze significant impacts
 - Recommend measures to avoid/reduce impacts
 - Evaluate a reasonable range of alternatives
- ❖ **Circulate the Draft EIR for public review**
- ❖ **Respond to comments and prepare the Final EIR**
- ❖ **After completion of the EIR process, decision makers can render a decision on the project**



BLM Contacts and Comment Web Site

- ❖ **Cedric Perry , Project Manager**
 - Phone: (951) 697-5388
 - e-mail: cperry@blm.gov
- ❖ **BLM Web Page:** <http://www.ca.blm.gov/elcentro>

- ❖ **Scoping comments to:**

Ocotillo Express Wind Energy Scoping Comments
c/o Cedric Perry, Project Manager
Bureau of Land Management
California Desert District Office
22835 Calle San Juan de Los Lagos
Moreno Valley, CA 92553

Or email comments to: caocotillo@blm.gov



Imperial County Contacts

❖ Angelina Havens, Planner III

- Phone: (760) 482-4236

- Email:

angelinahavens@co.imperial.ca.us

❖ County Web Page: <http://www.icpds.com/>





Harnessing the Winds of Imperial Valley

**BLM Public Scoping Meeting
January 2010**



Summary

- Up to \$1 billion dollar investment in Imperial Valley to build a 550 MW wind energy project that would harness the world-class winds just west of Ocotillo to produce power equivalent to that used by 300,000 Calif. homes
- Pattern Energy has strong financial backing and is a team that has completed over 20 projects totaling over 2,000 MW of wind power and \$4 billion in investment
- The Imperial Valley wind project would entail two project phases, creating up to 300 construction jobs and up to 20 permanent positions during operations
- Economic boost to local economy from the creation of jobs, business for construction subcontractors and property tax revenue





About Pattern Energy

Pattern Energy

<p>Pattern is Committed to Renewables and Transmission</p>	<ul style="list-style-type: none">• Pattern is an independent, fully integrated energy company that develops, constructs, owns and operates clean energy and transmission assets in the United States, Canada and Latin America• Formed in June 2009 by Riverstone and a premier management team with a proven track record	
<p>Riverstone Holdings LLC</p>	<ul style="list-style-type: none">• Riverstone is an energy focused private equity firm with the largest renewable energy fund in the world• Riverstone is committing a significant amount of capital to support and expand Pattern's business• Pattern will be the sole wind energy platform for Riverstone in North America	
<p>Growth Projected Strong & Steady</p>	<ul style="list-style-type: none">• More than 520 MW in operation or under construction within first 9 months• 4 GW of wind projects in development• Annual growth of 300 – 400 MW• 5 large-scale transmission projects in development	



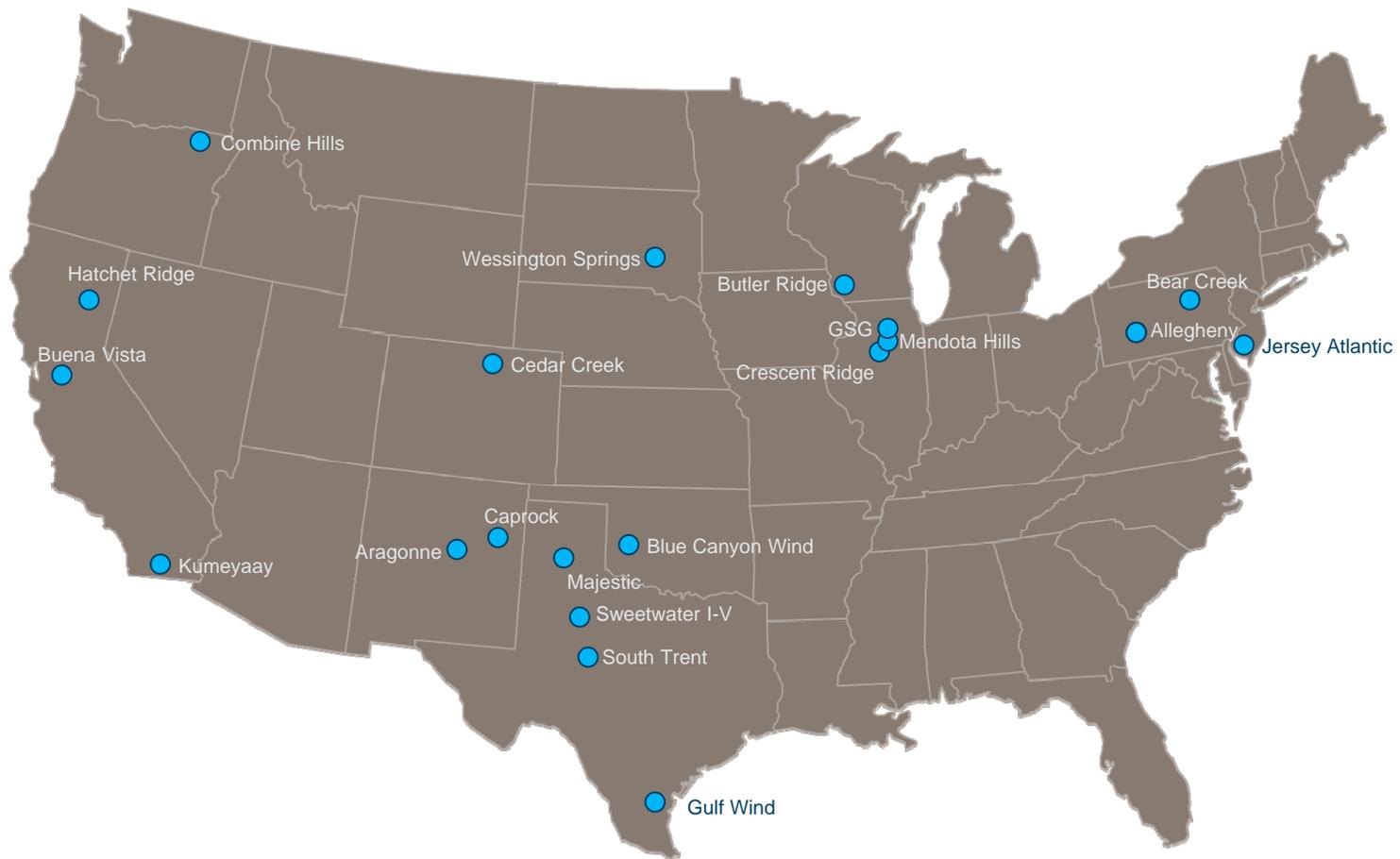
Pattern Energy

Financially strong, long-term developer, owner and operator of energy assets

- One of the most experienced and best-capitalized development companies in the U.S. renewable energy and transmission industry
- 100-person team of dedicated professionals with proven track record of developing, constructing, financing, and placing into operation 2,000 MW of wind power
- Expertise & experience at all project stages: resource analysis, site development, finance, construction and operation
- Dedicated to delivering the highest values for our partners and the communities where we work
- Strong commitment to promoting environmental stewardship and corporate responsibility



Projects the Pattern Team Brought To Operation





Pattern

Wind Project Overview

Overview of Wind Energy Development Process

- Find a site with a commercially viable wind resource
- Study the transmission line capacity
- Define the boundaries of prospect area
- Determine who owns the land
- Contact the landowners and obtain land rights
- Design the potential wind farm layout
- Monitor the wind
- Perform environmental analyses
- Obtain the necessary permits and approvals
- Obtain grid interconnection rights
- Enter into a contract to sell the electricity (PPA)
- Begin construction



Wind Energy Project Overview

- Up to \$1 billion investment in Imperial County
- 550 MW wind energy generation project
- Power equivalent: approximately 300,000 California homes
- Constructed in 2 phases for a total construction period of 18 – 24 months
- Up to 300 jobs during construction
- Up to 20 permanent jobs during operations
- Millions of dollars in property taxes each year
- 15,000-acre project area
- Surface area affected during operations is typically less than 3% of total project area



Proposed Wind Turbines

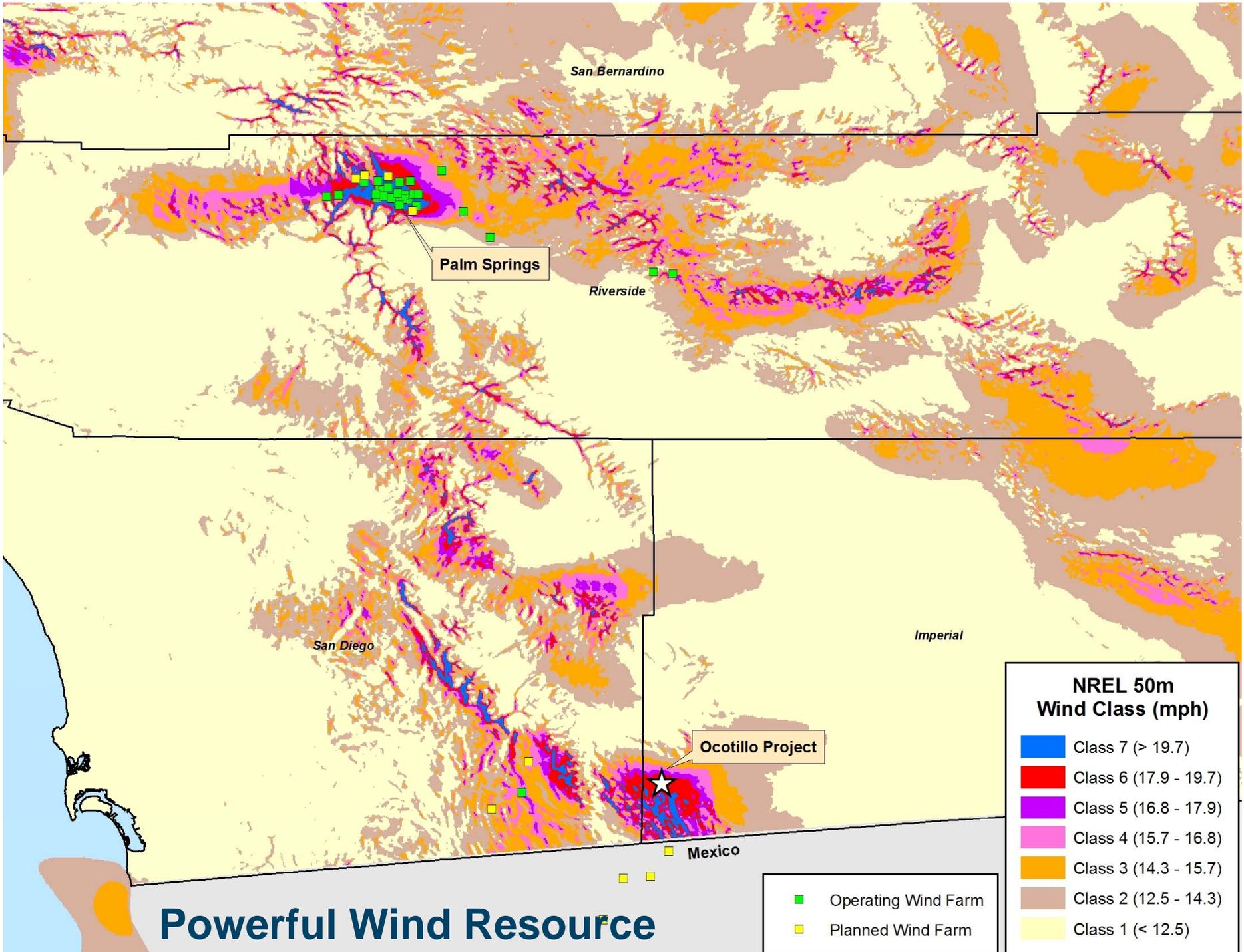
- Turbine Model: Siemens SWT-2.3-101
- Number of Turbines: 193
- Rotor speed: 6 – 16 rpm
- Hub height: 80 m or 263 ft
- Blade length: 50.5 m or 165.6 ft
- Cut-in speed: 4 m/s or 9 mph
- Cut-out speed: 25 m/s or 56 mph

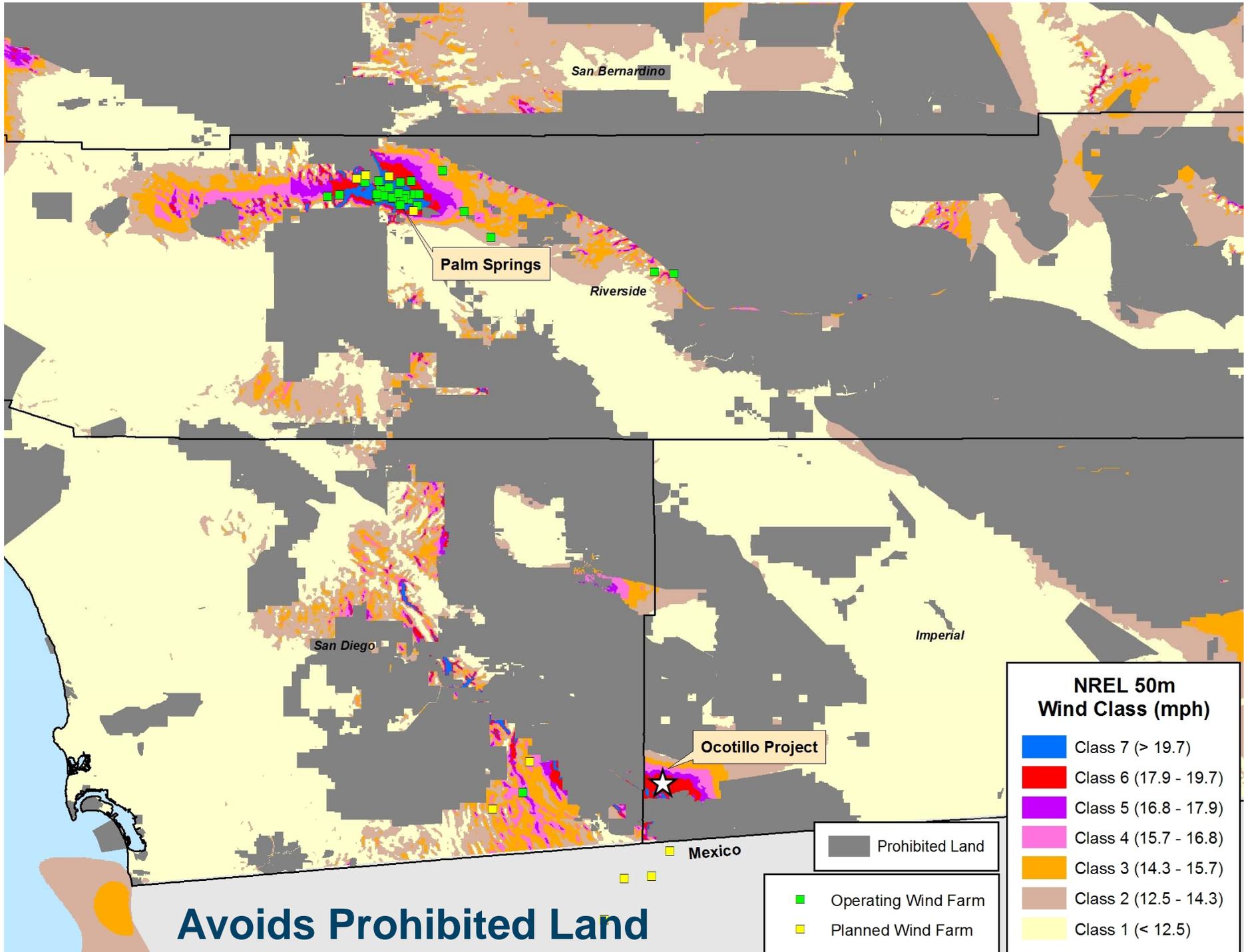


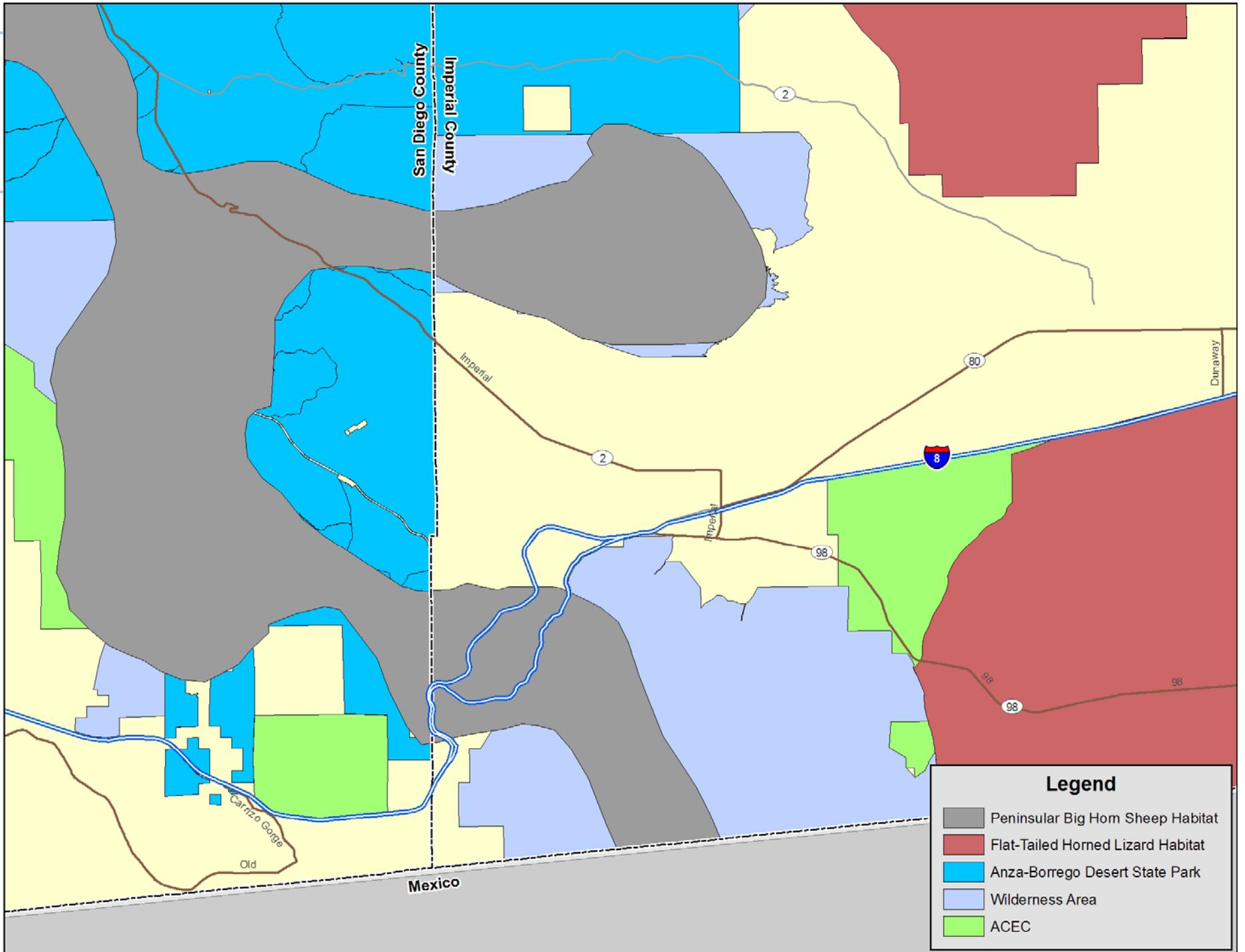
Wind Energy Project Purpose and Need

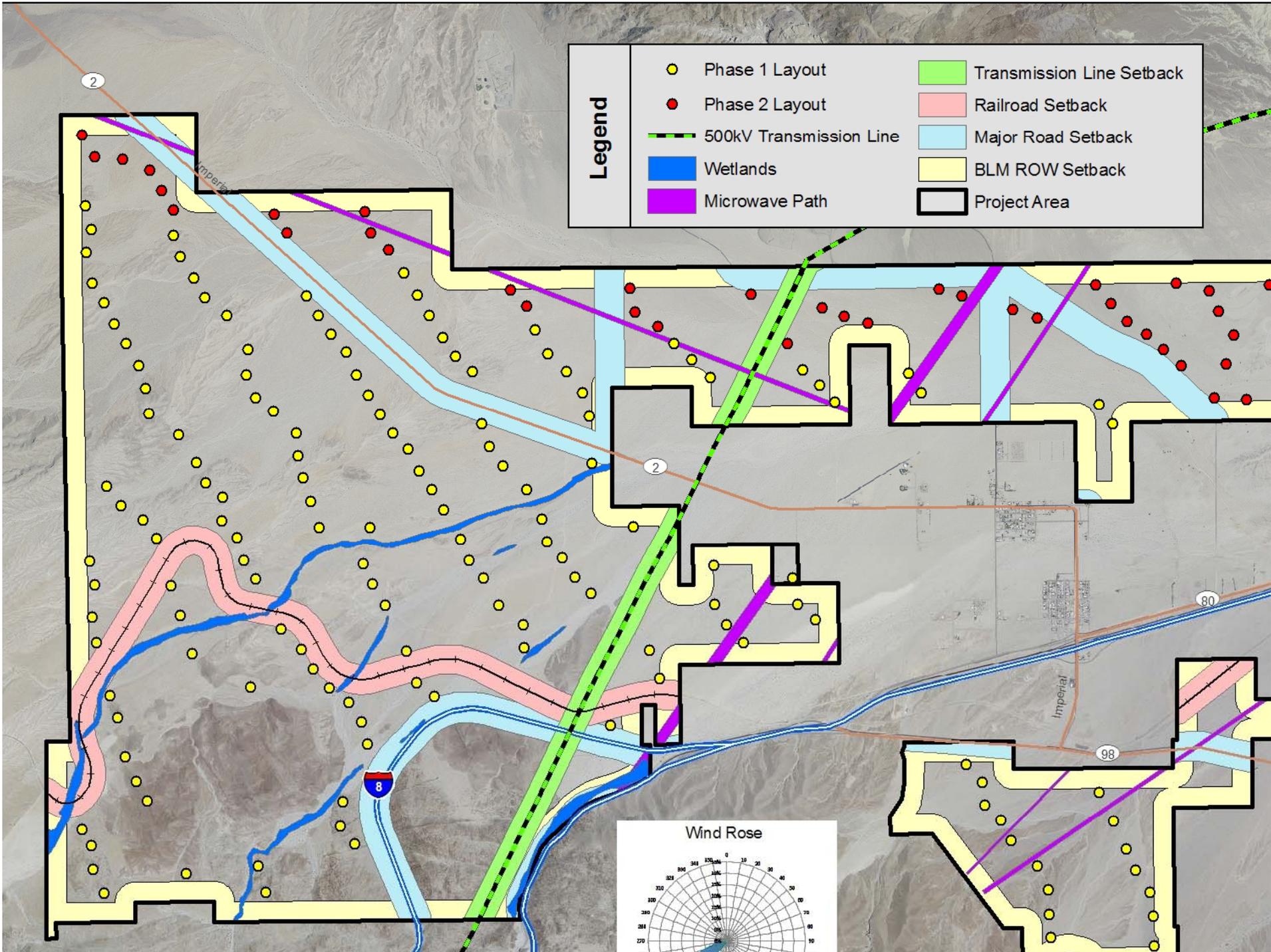
- Help California reach renewable energy and air quality goals,
- Provide an inexhaustible resource,
- Reduce reliance on imported fuel,
- Diversify California's generation sources,
- Stimulate the local and regional economy,
- Strengthen the tax base, helping to improve county services, including schools, police and fire departments,
- Produce energy with stable production costs, offering a hedge against other energy sources with volatile fuel markets.



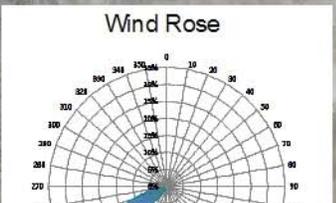








Legend	
● Phase 1 Layout	Transmission Line Setback
● Phase 2 Layout	Railroad Setback
--- 500kV Transmission Line	Major Road Setback
Wetlands	BLM ROW Setback
Microwave Path	Project Area





Wind Project Environmental and Economic Benefits

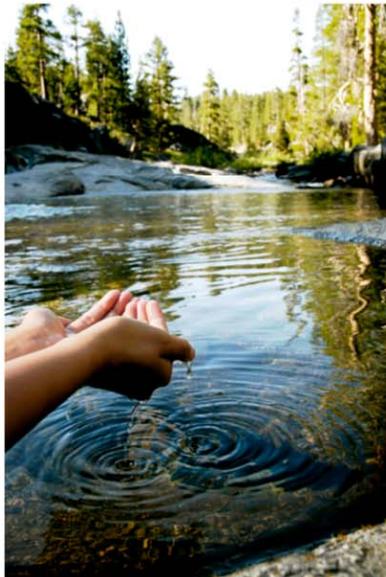
Environmental Benefits of 550 MW Wind Project

Conserved Water

304,626,722 gallons / yr*

*can supply 9,273 people/day

*freshwater savings can supply 1,118,022 people each day when compared to water usage of thermoelectric generation



Coal Preserved

112,741 tons/year

Carbon Dioxide Emissions Reduced

710,270 tons/year

113,643 cars/year equivalent



Natural Gas

7,873,294 million cubic feet / year



Sources: Based on information from the Energy Information Administration, National Energy Technology Laboratory, and U.S. Geological Survey. Coal and natural gas preserved and carbon dioxide emissions reduced are based on SDG&E 2008 fuel mix of 54% natural gas and 12% coal. Conserved water based off U.S. average fuel mix, source: American Wind Energy Association. Based on USGS estimation of 80-100 gallons/day per capita water consumption, US Geological Survey, "Water Q&A: Water use at home," <http://ga.water.usgs.gov/edu/qahome.html>. Freshwater savings are based on 2005 Freshwater Consumption and Withdrawal Average for all Thermoelectric Generation. National Energy Technology Laboratory, "Estimating Freshwater Needs to Meet Future Thermoelectric Generation Requirements", DOE/NETL- 2006/1235 (www.netl.doe.gov).

Economic Benefits from 550 MW Wind Project

- Creates job opportunities for local residents
 - Approximately 230 peak job positions supported during construction period for Phase 1 and 69 peak jobs for Phase II.
 - Up to 20 full time permanent jobs during operations, with 12 temporary contractors for 12 weeks each year
- Supports local economy by:
 - Purchasing goods and services during construction and operation
 - Significantly increasing revenue for all service businesses, i.e. local restaurants and hotels during construction and operation
- Significantly contributes to tax base annually



Example of Economic Impact from Construction

Pattern's Hatchet Ridge Wind project increased business for local subcontractors:

- Hat Creek Construction built roads and excavated turbine sites
- Hoy & Sons excavated roads, graded turbine sites
- Sharrah Dunlap Sawyer as surveyor
- Brown & Mills conducted inspections and testing
- Pit River Tribe as Cultural Monitors
- Iron Workers from Redding IW Local 118 (turbine erection)
- Electricians from IBEW Local 340 (turbine wiring)
- Laborers from Local 185
- Crane operators from Local 3 Operating Engineers Union
- Manual Brothers constructed underground facilities at Carberry and Hatchet Ridge Substations using local resources
- Power, water, telecoms, sewage, security, furniture, drilling, etc. from local contractors



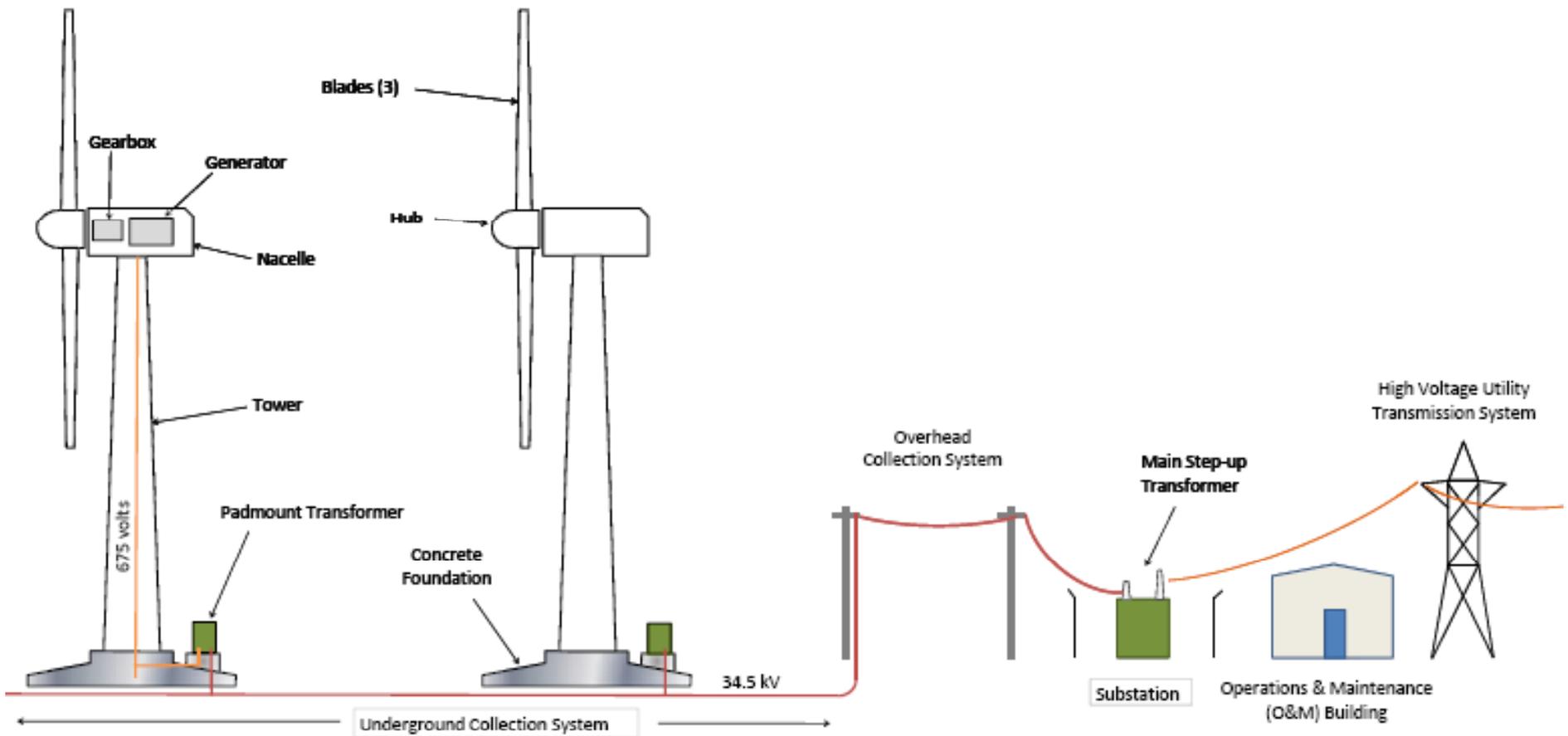


Wind Project Construction

Examples of Best Management Practices

- Traffic management plan would be prepared for the site access roads to ensure that no hazards result from increased truck traffic and traffic flow will not be adversely impacted
- Ongoing ground transportation planning would evaluate road use, minimize traffic volume, and ensure roads are maintained adequately to minimize impacts
- Project personnel and contractors would be instructed and required to adhere to speed limits to ensure safe and efficient traffic flow and to reduce wildlife collisions, disturbance, and airborne dust
- Dust abatement techniques would be used on unpaved, unvegetated surfaces to minimize airborne dust
- Project would comply with all applicable noise, health and safety regulations

Wind Project Components



Ocotillo Wind Project Phase I Construction Schedule

Start of Construction	September 2011
First Turbine Delivery to Site	June 2012
Initial Synchronization	August 2012
Full Operation	December 2012



Road Construction



Road Clearing



**Road Cleared, Graded
and Sub-base Prepared**



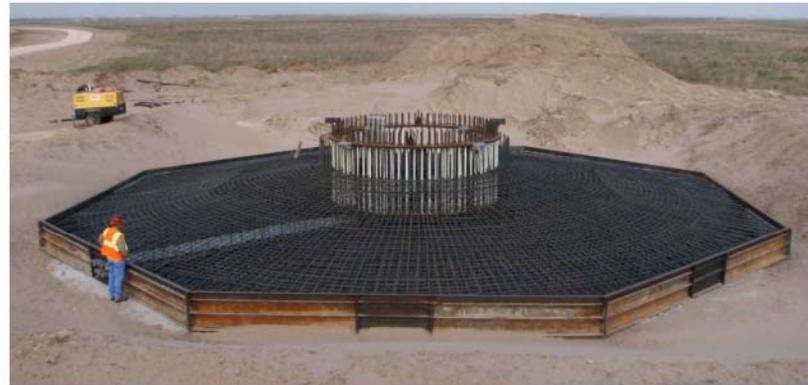
Completed Road

Foundation Construction

Bolt Cage and Rebar Installation



Completed Rebar



Completed Foundation



Backfilled Foundation

Turbine Installation

Rigging Rotor for Lift



Rigging Nacelle for Lift



Lifting Rotor



Erection Complete

Public Participation Opportunities

- ❖ **Submit written comments or statements**
- ❖ **Become a Formal Cooperating Agency with BLM**
- ❖ **Provide comments at public meetings**
- ❖ **Participate in workshops**
- ❖ **Provide written comments on Scoping, the DEIR/DEIS and FEIR/FEIS**

