

**PLANNING AND COMMUNITY
DEVELOPMENT DEPARTMENT**

Lorelei H. Oviatt, AICP, Director

2700 "M" STREET, SUITE 100
BAKERSFIELD, CA 93301-2323

Phone: (661) 862-8600

FAX: (661) 862-8601 TTY Relay 1-800-735-2929

E-Mail: planning@co.kern.ca.us

Web Address: www.co.kern.ca.us/planning



DEVELOPMENT SERVICES AGENCY

Ted James, AICP, DSA DIRECTOR

Administrative Operations
Engineering, Surveying and Permit Services
Planning and Community Development
Roads

NOTICE OF PREPARATION

DATE: May 10, 2011

To: See Attached Mailing List

FROM: Kern County Planning and Community
Development Department
Attn: Michael D. Hollier
2700 "M" Street, Suite 100
Bakersfield, CA 93301
(661) 862-8787

**SUBJECT: NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL IMPACT
REPORT**

The Kern County Planning and Community Development Department as Lead Agency (per CEQA Guidelines Section 15052) has required that an Environmental Impact Report (per CEQA Guidelines Section 15161) be prepared for the project identified below. The Planning and Community Development Department solicits the views of your agency as to the scope and content of the environmental information which is germane to your agency's statutory responsibilities in connection with the proposed project. Your agency will need to use the EIR prepared by our agency when considering your permit or other approval of projects.

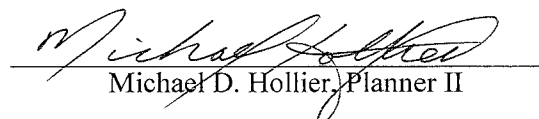
Due to the limits mandated by State law, your response must be received by **Thursday, June 9, 2011, at 5pm.** In addition, comments can be submitted at a **scoping meeting** that will be held at the Kern County Planning and Community Development Department on **Monday, May 23, 2011, at 1:30pm** at the address shown above.

PROJECT TITLE: Zone Change Case No. 66, Map 198; Zone Change Case No. 12, Map 199; Zone Change Case No. 7, Map 215; Zone Change Case No. 7, Map 216; Conditional Use Permit No. 15, Map 199; Morgan Hills Wind Energy Project by Alta Windpower Development, LLC. (PP11245)

PROJECT LOCATION: Three miles southwest of the intersection of Oak Creek Road and Tehachapi Willow Springs Road, seven miles south of the City of Tehachapi, eleven miles west of the unincorporated community of Mojave, within the Tehachapi Wind Resource Area of eastern Kern County; being portions of Section 5, T10N, R14W; portions of Section 1, T10N, R15W; portions of Sections 19, 20, 29, 31, and 32, T11N, R14W; and portions of Sections 25, 35, and 36, T11N, R15W; San Bernardino Base and Meridian, County of Kern, State of California

PROJECT DESCRIPTION: The proposed project is a renewable energy development that would generate up to 230 megawatts (MW) of electricity through the use of wind power on a 3,773-acre project site. Specifically, the applicant is requesting a: (a) change in zone classification from E(20) RS (Estate 20 Acres – Residential Suburban Combining) to A (Exclusive Agriculture) and A WE (Exclusive Agriculture – Wind Energy Combining) in Map 198; (b) change in zone classification from A to A WE District in Map 198; (c) change in zone classification from A to A WE in Map 215; (d) change in zone classification from A to A WE in Map 216, and (e) conditional use permit to allow for the use of temporary batch plants during the construction of the wind energy facility. The requested applications would allow for the construction and use of ancillary wind energy facilities and supporting infrastructure. The project would be supported by a 230-kV overhead transmission corridor that would be connected to the existing Southern California Edison (SCE) Windhub Substation. The project's permanent facilities would include up to up to 76 wind turbine generators, service roads, a power collection system, communication cables, overhead and underground transmission lines, electrical switchyards, project substations, meteorological towers, and operations and maintenance facilities.

Signature:
Title:


Michael D. Hollier, Planner II

Morgan Hills
I:\WP\LABELS\eir07-11mdh.nop.doc
jc (4/28/11)
W/O #11245

U.S. Bureau of Land Management
Ridgecrest Field Office
300 South Richmond Road
Ridgecrest, CA 93555

China Lake Naval Weapons Center
Tim Fox, RLA - Comm Plans & Liaison
429 E Bowen, Building 979
Mail Stop 4003
China Lake, CA 93555-6108

Edwards Air Force Base
AFFTC/XRX Bldg 0001, Room 110
#1 South Rosamond Blvd.
Edwards AFB, CA 93524-1936

Federal Communications Comm
18000 Studebaker Road, #550
Cerritos, CA 90701

U.S. Fish & Wildlife Service
2493 Portola Road, Suite B
Ventura, CA 93003

Antelope Valley Resource Cons Dist
44811 Date Avenue, #G
Lancaster, CA 93534-3136

Environmental Protection Agency
Region IX Office
75 Hawthorn Street
San Francisco, CA 94105

U.S. Dept of Agriculture/NRCS
5000 California Avenue, Ste 100
Bakersfield, CA 93309-0711

Federal Aviation Administration
Western Reg Office/
Airport Div - AWP 600
P.O. Box 92007
Los Angeles, CA 90009

State Dept of Conservation
Division of Oil & Gas
4800 Stockdale Highway, Ste 417
Bakersfield, CA 93309

State Mining and Geology Board
801 K Street, MS 20-15
Sacramento, CA 95814

State Air Resources Board
Stationary Resource Division
P.O. Box 2815
Sacramento, CA 95812

So. San Joaquin Valley Arch Info Ctr
California State University of Bkfd
9001 Stockdale Highway
Bakersfield, CA 93311

Caltrans/Dist 6
Planning/Land Bank Bldg.
P.O. Box 12616
Fresno, CA 93778

Caltrans/Dist 9
Planning Department
500 South Main Street
Bishop, CA 93514

State Clearinghouse
Office of Planning and Research
P.O. Box 3044
Sacramento, CA 95812-3044
CERTIFIED MAIL

State Dept of Conservation
Director's Office
801 "K" Street, MS 24-01
Sacramento, CA 95814-3528

California Energy Commission
James W. Reed, Jr.
1516 Ninth Street
Mail Stop 17
Sacramento, CA 95814

State Dept of Fish & Game
1234 East Shaw Avenue
Fresno, CA 93710

California Highway Patrol
Planning & Analysis Division
P.O. Box 942898
Sacramento, CA 94298-0001

Public Utilities Comm Energy Div
505 Van Ness Avenue
San Francisco, CA 94102

California Regional Water Quality
Control Board/Lahontan Region
14440 Civic Drive, Suite 200
Victorville, CA 92392-2306

State Dept of Water Resources
San Joaquin Dist.
3374 East Shields Avenue, Room A-7
Fresno, CA 93726

State Office of Historical Pres
Attention Susan Stratton
P.O. Box 942896
Sacramento, CA 95296-0001

Tehachapi Unified School Dist
400 South Snyder
Tehachapi, CA 93561

Kern County Superintendent of Schools
Attention Mary Baker
1300 17th Street
Bakersfield, CA 93301

KernCOG
1401 19th Street - Suite 300
Bakersfield, CA 93301

Golden Hills Community Serv Dist
P.O. Box 637
Tehachapi, CA 93581

Antelope Valley-East Kern
Water Agency
6500 West Avenue N
Palmdale, CA 93551

Kern County
Agriculture Department

Kern County Airports Department

Kern County Engineering, Surveying,
& Permit Svs/Floodplain

Kern County Engineering, Surveying,
& Permit Svs/Survey

Kern County
Env Health Services Department

Kern County Fire Dept
Brian Marshall

Kern County Fire Dept
Dave Goodell

Kern County Library/Beale
Local History Room

Kern County Library/Beale
Diane Duquette

Kern County Library
Tehachapi Branch
1001 West Tehachapi Blvd - Suite 400
Tehachapi, CA 93561

Kern County Sheriff's Dept
Administration

Kern County Roads Department

Kern County
Waste Management Department

Tehachapi Parks & Recreation Dist
P.O. Box 373
Tehachapi, CA 93561

East Kern Air Pollution
Control District

Tehachapi-Cummings Co Water Dist
P.O. Box 326
Tehachapi, CA 93561

U.S. Air Force
Western Regional Environmental Officer
50 Fremont Street, Suite 2450
San Francisco, CA 94105-2230

U.S. Army
Dir of Public Works/Master Plan Div
P.O. Box 105097
Fort Irwin, CA 92310-5097

U.S. Army
Peter Rubin
B790 5th Street
Parks RFTA
Dublin, CA 94568

U.S. Navy
Steve Chung
1220 Pacific Highway, Bldg 127
San Diego, CA 92132

U.S. Marine Corps
Patrick Christman
Building 1164/Box 555246
Camp Pendleton, CA 92055

Los Angeles Audubon
926 Citrus Avenue
Los Angeles, CA 90036-4929

Center on Race, Poverty
& the Environmental
47 Kearny Street, Suite 804
San Francisco, CA 94108-5528

Center on Race, Poverty
& the Environmental/
CA Rural Legal Assistance Foundation
1302 Jefferson Street, Suite 2
Delano, CA 93215

Kern County Water Agency
P.O. Box 58
Bakersfield, CA 93302-0058

Mojave Chamber of Commerce
P.O. Box 999
Mojave, CA 93502

Native American Heritage Council
of Kern County/Fay Van Horn
P.O. Box 1507
Bakersfield, CA 93302

Defenders of Wildlife/
Cynthia Wilkerson, M.S.
California Representative
1303 "J" Street, Suite 270
Sacramento, CA 95814

Smart Growth - Tehachapi Valleys
P.O. Box 1894
Tehachapi, CA 93581-1894

Southern California Edison
Planning Dept.
421 West "J" Street
Tehachapi, CA 93561

Beth Boyst
Pacific Crest Trail Program Manager
1323 Club Drive
Vallejo, CA 94592

Anitra Kass
Pacific Crest Trail Association
P.O. Box 3398
Idyllwild, CA 92549

Brendan Taylor
Pacific Crest Trail Association
645 East Ridgecrest Blvd, Apt B
Ridgecrest, CA 93555

Sierra Club/Kern Kaweah Chapter
Arthur Unger

Renewal Resources Group
Holding Company
Rupal Patel
5700 Wilshire Blvd, Suite 330
Los Angeles, CA 90036

Sempra Generation
Marilyn Burke
101 Ash Street HQ-14A
San Diego, CA 92101

PUT IN BUCKET

Terra-Gen
Steve Yatsko
11512 El Camino Real, Suite 100
San Diego, CA 92130

Nautilus Solar
Paul Steinway
P.O. Box 188
Fort Lupton, CO 80621

First Solar
Rick Williams
18300 Von Karman Ave, Ste 930
Irvine, CA 92612

Element Power Solar Dev, LLC
John Gaglioti
864 Portola Drive
Monterey, CA 93940

Congentrix Sunshine, LLC
Rick Neff
9405 Arrowpoint Blvd
Charlotte, NC 28273

Fotowatio Renewable Ventures
Sean Kiernan
44 Montgomery Street, Suite 2200
San Francisco, CA 94104

Gary Izing
enXco, Director of Land and Title
5000 Executive Parkway, Suite 140
San Ramon, CA 94583

Wind Stream, LLC
Albert Davies
1275 - 4th Street, No. 107
Santa Rosa, CA 95404

Darren Kelly
Sr. Business Manager
Terra-Gen Power, LLC
565 - 5th Avenue, Floor 27
New York, NY 10017

Bill Barnes
Dir of Asset Mgmt AES Wind Gen
4542 Ruffner Street, Suite 200
San Diego, CA 92111

Cash Long
Mogul Energy
7201 Panorama Drive
Bakersfield, CA 93306

Jeff Ciachurski, CEO
Western Wind Energy Corp/
Aero Energy
Box 1041
Vancouver, BC V6C 3E8

T. Alana Steele
General Counsel
Western Wind Energy Corporation
3500 Glenrose Avenue
Altadena, CA 91001

PG&E
Steven Ng, Manager
Renewal Dev, T&D Intercon
77 Beal Street, Room 5361
San Francisco, CA 94105

Wayne Mayes
Iberdrola Renewables
Dir Tech Serv
1125 NW Couch St, Ste 700, 7th Fl
Portland, OR 97209

Michael Strickler
Iberdrola Renewables, Sr Proj Mgr
1125 NW Couch St, Ste 700, 7th Fl
Portland, OR 97209

Recurrent Energy
Seth Israel
300 California Street, 8th Floor
San Francisco, CA 92109

Kelly Group
Kate Kelly
P.O. Box 868
Winters, CA 95694

Horizon Wind Energy
Charlie Turlinski
1600 Shattuck Avenue, Suite 222
Berkeley, CA 94709

Randy Jenks,
Sr. Director, Development
Terra-Gen Power, LLC
11512 El Camino Real, Suite 100
San Diego, CA 92130

Adams, Broadwell, Joseph & Cardozo
Attention: Janet M. Laurain
601 Gateway Boulevard, Suite 1000
South San Francisco, CA 94080

Cuddy Valley Statistical
11667 Steinhoff Road
Frazier Park, CA 93222

Eight Bar Ranch
Jon and Helen Lantz
11300 Cameron Canyon Road
Mojave, CA 93501

Janice Armstrong
25101 Bear Valley Boulevard
PMB 20
Tehachapi, CA 93561

URS Corporation
Planning Department
3500 Porsche Drive, Suite 300
Ontario, CA 91764

Vestas
Sarah Adams
1881 Southwest Naito Parkway
Portland, OR 97201

Linda Parker, Executive Director
Kern Wind Energy Association
5617 Spring Blossom Street
Bakersfield, CA 93313

Chumash Council of Bakersfield
P.O. Box 902
Bakersfield, CA 93302

David Laughing Horse Robinson
P.O. Box 1547
Kernville, CA 93238

Kern Valley Indian Council
Attn: Bob Robinson
P.O. Box 1010
Lake Isabella, CA 93240

Kern Valley Indian Council
Historic Preservation Office
P.O. Box 401
Weldon, CA 93283

Santa Rosa Rancheria
Clarence Atwell, Chairperson
P.O. Box 8
Lemoore, CA 93245

Tejon Indian Tribe
Kathy Morgan, Chairperson
2234 4th Street
Wasco, CA 93280

Kitanemuk & Yowlumne Tejon Indians
623 Hazel Street
Bakersfield, CA 93307-2523

Tubatulabals of Kern County
P.O. Box 226
Lake Isabella, CA 93240

Tule River Indian Tribe
Neal Peyron, Chairperson
P.O. Box 589
Porterville, CA 93258

Kern County Library
Mojave Branch
16916 1/2 Highway 14, Space D2
Mojave, CA 93501

Kern Audubon Society
P.O. Box 3581
Bakersfield, CA 93385

City of Tehachapi
115 South Robinson Street
Tehachapi, CA 93561-1722

Tehachapi Municipal Advisory Council
Attn: Ed Grimes
117 Sunrise Way
Tehachapi, CA 93561

Sheppard Mullin
Attn: Kendra Joy Casper
333 South Hope Street
Los Angeles, CA 90071

Frank Flores
Northrop Grumman Corporation
1 Northrop Grumman Avenue
El Segundo, CA 90245

Janice and Larry Alford
17937 Oak Creek Road
Mojave, CA 93501

Notice of Completion & Environmental Document Transmittal

Mail to: State Clearinghouse, P. O. Box 3044, Sacramento, CA 95812-3044 (916) 445-0613
For Hand Delivery/Street Address: 1400 Tenth Street, Sacramento, CA 95814

SCH # _____

Project Title: ZCC 66, Map 198; ZCC 12, Map 199; ZCC 7, Map 215; ZC 7, Map 216; CUP 15, Map 199; Morgan Hills Wind Energy / Alta Windpower Dev., LLC
Lead Agency: Kern County Planning and Community Development Department **Contact Person:** Michael D. Hollier
Mailing Address: 2700 'M' ST, STE 100 **Phone:** (661) 862-8787
City: Bakersfield **Zip:** 93301 **County:** Kern

Project Location: County: KERN City/Nearest Community: Tehachapi
Cross Streets: Oak Creek Road and Tehachapi-Willow Springs Road Zip Code: 93560
Lat. / Long.: 35° 01' 35" N / 118° 23' 50" W Total Acres: 3,773
Assessor's Parcel No.: Various Section: 1 Twp.: 10N Range: 15W Base: SBBM
Within 2 Miles: State Hwy #: None Waterways: None
Airports: None Railways: None Schools: None

Document Type:

CEQA: NOP Draft EIR NEPA: NOI Other: Joint Document
 Early Cons Supplement/Subsequent EIR EA Final Document
 Neg Dec (Prior SCH No.) Draft EIS Other _____
 Mit Neg Dec Other _____ FONSI

Local Action Type:

General Plan Update Specific Plan Rezone Annexation
 General Plan Amendment Master Plan Prezone Redevelopment
 General Plan Element Planned Unit Development Use Permit Coastal Permit
 Community Plan Site Plan Land Division (Subdivision, etc.) Other _____

Development Type:

Residential: Units _____ Acres _____ Water Facilities: Type _____ MGD _____
 Office: Sq.ft. _____ Acres _____ Employees _____ Transportation: Type _____
 Commercial: Sq.ft. _____ Acres _____ Employees _____ Mining: Mineral _____
 Industrial: Sq.ft. _____ Acres _____ Employees _____ Power: Type Wind MW 230
 Educational _____ Waste Treatment: Type _____ MGD _____
 Recreational _____ Hazardous Waste: Type _____
 Other: _____

Project Issues Discussed in Document:

Aesthetic/Visual Fiscal Recreation/Parks Vegetation
 Agricultural Land Flood Plain/Flooding Schools/Universities Water Quality
 Air Quality Forest Land/Fire Hazard Septic Systems Water Supply/Groundwater
 Archeological/Historical Geologic/Seismic Sewer Capacity Wetland/Riparian
 Biological Resources Minerals Soil Erosion/Compaction/Grading Wildlife
 Coastal Zone Noise Solid Waste Growth Inducing
 Drainage/Absorption Population/Housing Balance Toxic/Hazardous Land Use
 Economic/Jobs Public Services/Facilities Traffic/Circulation Cumulative Effects
 Other Greenhouse Gas Emissions

Present Land Use/Zoning/General Plan Designation: Vacant, grazing, recreation / A (Exclusive Agriculture); A GH (Exclusive Agriculture - Geologic Hazard Combining); E(20) RS (Estate 20 acres - Residential Suburban Combining); and E(20) RS WE (Estate 20 acres - Residential Suburban Combining - Wind Energy Combining) / 8.2 (Resource Reserve, 20 acre min.); 8.2/2.4 (Resource Reserve, 20 acre min./Steep Slope); 8.3 (Extensive Ag, 20 acre min.); 8.3/2.4 (Extensive Ag, 20 acre min./Steep Slope); 8.4 (Mineral and Petroleum, 5 acre min.); 8.4/2.4 (Mineral and Petroleum, 5 acre min./Steep Slope); 8.5 (Resource Management, 20 acre min.); 8.5/2.1 (Resource Management, 20 acre min./Seismic Hazard); and 8.5/2.4 (Resource Management, 20 acre min./Steep Slope)

Project Description: The proposed project is a renewable energy development that would generate up to 230 megawatts (MW) of electricity through the use of wind power on a 3,773-acre project site. Specifically, the applicant is requesting a: (a) change in zone classification from E(20) RS (Estate 20 Acres – Residential Suburban Combining) to A (Exclusive Agriculture) and A WE (Exclusive Agriculture – Wind Energy Combining) in Map 198; (b) change in zone classification from A to A WE District in Map 198; (c) change in zone classification from A to A WE in Map 215; (d) change in zone classification from A to A WE in Map 216, and (e) conditional use permit to allow for the use of temporary batch plants during the construction of the wind energy facility. The requested applications would allow for the construction and use of ancillary wind energy facilities and supporting infrastructure. The project would be supported by a 230-kV overhead transmission corridor that would be connected to the existing Southern California Edison (SCE) Windhub Substation. The project's permanent facilities would include up to up to 76 wind turbine generators, service roads, a power collection system, communication cables, overhead and underground transmission lines, electrical switchyards, project substations, meteorological towers, and operations and maintenance facilities.

Reviewing Agencies Checklist

Lead Agencies may recommend State Clearinghouse distribution by marking agencies below with and "X".
If you have already sent your document to the agency please denote that with an "S".

<input checked="" type="checkbox"/> Air Resources Board	<input type="checkbox"/> Office of Emergency Services
<input type="checkbox"/> Boating & Waterways, Department of	<input checked="" type="checkbox"/> Office of Historic Preservation
<input checked="" type="checkbox"/> California Highway Patrol	<input type="checkbox"/> Office of Public School Construction
<input type="checkbox"/> CalFire	<input type="checkbox"/> Parks & Recreation
<input checked="" type="checkbox"/> Caltrans District # <6 & 9>	<input type="checkbox"/> Pesticide Regulation, Department of
<input type="checkbox"/> Caltrans Division of Aeronautics	<input checked="" type="checkbox"/> Public Utilities Commission
<input type="checkbox"/> Caltrans Planning (Headquarters)	<input checked="" type="checkbox"/> Regional WQCB # <u>Lahontan</u>
<input type="checkbox"/> Central Valley Flood Protection Board	<input type="checkbox"/> Resources Agency
<input type="checkbox"/> Coachella Valley Mountains Conservancy	<input type="checkbox"/> S.F. Bay Conservation & Development Commission
<input type="checkbox"/> Coastal Commission	<input type="checkbox"/> San Gabriel & Lower L.A. Rivers and Mtns Conservancy
<input type="checkbox"/> Colorado River Board	<input type="checkbox"/> San Joaquin River Conservancy
<input checked="" type="checkbox"/> Conservation, Department of	<input type="checkbox"/> Santa Monica Mountains Conservancy
<input type="checkbox"/> Corrections, Department of	<input type="checkbox"/> State Lands Commission
<input type="checkbox"/> Delta Protection Commission	<input type="checkbox"/> SWRCB: Clean Water Grants
<input type="checkbox"/> Education, Department of	<input type="checkbox"/> SWRCB: Water Quality
<input checked="" type="checkbox"/> Energy Commission	<input type="checkbox"/> SWRCB: Water Rights
<input checked="" type="checkbox"/> Fish & Game Region # <u>Fresno</u>	<input type="checkbox"/> Tahoe Regional Planning Agency
<input type="checkbox"/> Food & Agriculture, Department of	<input type="checkbox"/> Toxic Substances Control, Department of
<input type="checkbox"/> General Services, Department of	<input checked="" type="checkbox"/> Water Resources, Department of
<input type="checkbox"/> Health Services, Department of	<input checked="" type="checkbox"/> Other <u>State Mining & Geology Board</u>
<input type="checkbox"/> Housing & Community Development	<input type="checkbox"/> Other _____
<input type="checkbox"/> Integrated Waste Management Board	
<input checked="" type="checkbox"/> Native American Heritage Commission	

Local Public Review Period (to be filled in by lead agency)

Starting Date May 10, 2011 Ending Date June 9, 2011

Lead Agency (Complete if applicable):

Consulting Firm: _____	Applicant: _____
Address: _____	Address: _____
City/State/Zip: _____	City/State/Zip: _____
Contact: _____	Phone: _____
Phone: _____	

Signature of Lead Agency Representative:  Date: 5-5-11

Authority cited: Section 21083, Public Resources Code. Reference: Section 21161, Public Resources Code.

INITIAL STUDY/NOTICE OF PREPARATION

Morgan Hills Wind Energy Project
by Alta Windpower Development, LLC

Zone Change Case 66, Map 198
Zone Change Case 12, Map 199
Zone Change Case 7, Map 215
Zone Change Case 7, Map 216
Conditional Use Permit No. 15, Map 199

(PP11245)

LEAD AGENCY:



Kern County Planning and Community Development Department
2700 M Street, Suite 100
Bakersfield, CA 93301-2370

*Contact: Mr. Michael Hollier
(661) 862-8787
HollierM@co.kern.ca.us*

May 2011



TABLE OF CONTENTS

1. Project Description

1.1	Project Location	1
1.2	Environmental Setting	1
1.3	Project Description	7
1.4	Project Facilities and Operations	10
1.5	Project Objectives	19
1.6	Proposed Discretionary Actions/Required Approvals	19

2. Environmental Determination

2.1	Environmental Factors Potentially Affected	21
2.2	Determination	21

3. Evaluation of Environmental Impacts

3.1	Aesthetics	23
3.2	Agriculture and Forest Resources	25
3.3	Air Quality	27
3.4	Biological Resources	30
3.5	Cultural Resources	32
3.6	Geology and Soils	33
3.7	Greenhouse Gas Emissions	35
3.8	Hazards and Hazardous Materials	36
3.9	Hydrology and Water Quality	40
3.10	Land Use and Planning	43
3.11	Mineral Resources	44
3.12	Noise	45
3.13	Population and Housing	47
3.14	Public Services	49
3.15	Recreation	51
3.16	Transportation/Traffic	52
3.17	Utilities and Service Systems	55
3.18	Mandatory Findings of Significance	57



1.1 PROJECT LOCATION

The Morgan Hills Wind Energy Project (Project) is located 3 miles southwest of the intersection of Oak Creek Road and Tehachapi Willow Springs Road in the Mojave Desert; in the Tehachapi Wind Resource Area (TWRA) of eastern Kern County (County), see Figures 1 and 2. The Project site is located on 3,773 acres of private land under County permitting jurisdiction and with lease agreements the current owners have authorized Alta Windpower Development, LLC (Project Proponent) to include their land within the Project boundaries.

The nearest major populated areas to the Project site are the City of Tehachapi and the unincorporated community of Mojave, which are located 7 miles north and 11 miles east of the Project site, respectively. Other communities within the vicinity of the Project site are the unincorporated communities of Rosamond and Willow Springs, which are 15 miles to the southeast. Smaller communities within proximity to the project include, but are not limited to, Old West Ranch, Oak Creek Valley, Water Canyon, and White Oak Lodge. Edwards Air Force Base is located 13.8 miles east of the Project site.

Primary access to the Project site would be located through the Oak Creek Valley, which is a private access currently controlled by Cal Portland Cement (CPC). The Project applicant has signed lease agreements with CPC for land use and grant of access. Alternative access to the Project would be provided via connector roads from the Alta-Oak Creek Mojave Project (located immediately north of the northeast corner of the Project site), which is an existing wind energy generation facility owned and operated by the Project applicant.

The Project is located entirely on the U.S. Geological Survey (USGS) 7.5-minute Tehachapi South Topographic Quadrangle of the San Bernardino Base Meridian and Township 10 North, Range 15 West, Section 1; Township 10 North, Range 14 West, Section 5; Township 11 North, Range 15 West, Sections 25, 35, and 36; Township 11 North, Range 14 West, Sections 19, 20, 29, 31, and 32.

1.2 ENVIRONMENTAL SETTING

As previously stated, the Project site consists of 3,773 acres of privately owned land. The Project vicinity is generally characterized as a sparsely developed, rural area located on the eastern flank of the Tehachapi Mountains. Land uses surrounding the Project area consist of open space, rural residences, recreation, grazing, and wind energy development. The nearest populated area is located northwest of the Project area in the City of Tehachapi. The Project site is located near established wind energy development corridors and on previously disturbed land, including roads and lands that are either currently or have previously been used for grazing, other agricultural uses, or other energy generating uses. A portion of the Pacific Crest National Scenic Trail (PCT) runs through the northern edge of the northeastern portion of the Project site as well as the western portion of the Project site. As a result, the PCT may need to be relocated a couple of hundred feet from its existing location in order to maintain proper setbacks from the proposed wind turbine generators (WTGs).

The Project lies entirely within the boundaries of the Kern County General Plan (KCGP) and is designated as listed in Table 1, below. Figure 3 shows the land use designations for the Project site. The entire Project is also subject to the provisions of the Kern County Zoning Ordinance (Kern County Ordinance Code, Title 19) and is zoned as specified in Table 1, below. Figure 4 shows the zoning classifications for the Project site.



Table 1 Project Site and Surrounding Land Uses

Location	Existing Land Use	Existing Map Code Designation	Existing Zoning Classification
Project Site	Vacant land, grazing, recreation	8.2 (Resource Reserve, 20 acre min.); 8.2/2.4 (Resource Reserve, 20 acre min./Steep Slope); 8.3 (Extensive Ag, 20 acre min.); 8.3/2.4 (Extensive Ag, 20 acre min./Steep Slope); 8.4 (Mineral and Petroleum, 5 acre min.); 8.4/2.4 (Mineral and Petroleum, 5 acre min./Steep Slope); 8.5 (Resource Management, 20 acre min.); 8.5/2.1 (Resource Management, 20 acre min./Seismic Hazard); and 8.5/2.4 (Resource Management, 20 acre min./Steep Slope)	A (Exclusive Agriculture); A GH (Exclusive Agriculture - Geologic Hazard Combining); E(20) RS (Estate 20 acres - Residential Suburban Combining); and E(20) RS WE (Estate 20 acres - Residential Suburban Combining - Wind Energy Combining)
North	Vacant land, dispersed residences, recreation (unauthorized), wind energy facility	1.1 (State and Federal Land); 8.2; 8.2/2.4; 8.2/2.5 (Resource Reserve, 20 acre min./Flood Hazard); 8.3/2.1 (Extensive Ag, 20 acre min./Seismic Hazard); 8.4/2.4	A; A FP (Exclusive Agriculture - Floodplain Combining); A GH FP (Exclusive Agriculture - Geologic Hazard Combining - Floodplain Combining); E(20) RS; E(20) RS WE; E(2 ½) RS MH (Estate 2.5 acres - Residential Suburban Combining - Mobilehome Combining); OS (Open Space); and PL RS MH (Platted Lands - Residential Suburban Combining - Mobilehome Combining)
South	Vacant land	1.1; 8.3; 8.3/2.4; and 8.4	A; and OS
East	Vacant land, wind energy facility	1.1; 8.2; 8.2/2.4; 8.3; 8.3/2.4; and 8.5/2.4	A; A WE (Exclusive Agriculture - Wind Energy Combining); E(20) RS; E(20) RS WE; RF (Recreation Forestry); and PL RS (Platted Lands - Residential Suburban Combining)
West	Vacant land	1.1; 8.3; 8.3/2.1; 8.3/2.4; 8.5/2.1; and 8.5/2.4	A; A GH; E(20) RS WE; and OS

No part of the Project site has not been designated by the California Department of Conservation (CDC) as Prime Farmland, Farmland of Statewide Importance, or Unique Farmland. The Project area comprises two CDC land-use designations: Grazing Land, and Nonagriculture and Natural Vegetation. Grazing Land is land on which the existing vegetation is suited for grazing of livestock. Nonagriculture and Natural Vegetation includes heavily wooded, rocky or barren areas, riparian and wetland areas, grassland areas which do not qualify for grazing, small water bodies, and constructed wetlands. The Project site is not located on any lands that are subject to Williamson Act or Open Space land use contracts.

The Project is not located within the boundaries of any airport as identified in the Kern County Airport Land Use Compatibility Plan (ALUCP). The closest airport is the Mountain Valley Airport, which is located 5 miles to the northwest of the site. The Project is located within the Mojave Desert Air Basin (MDAB). No known mine sites or known oil wells are located on the Project site.

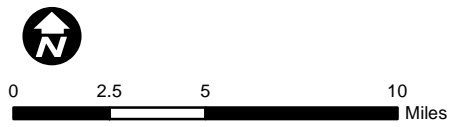


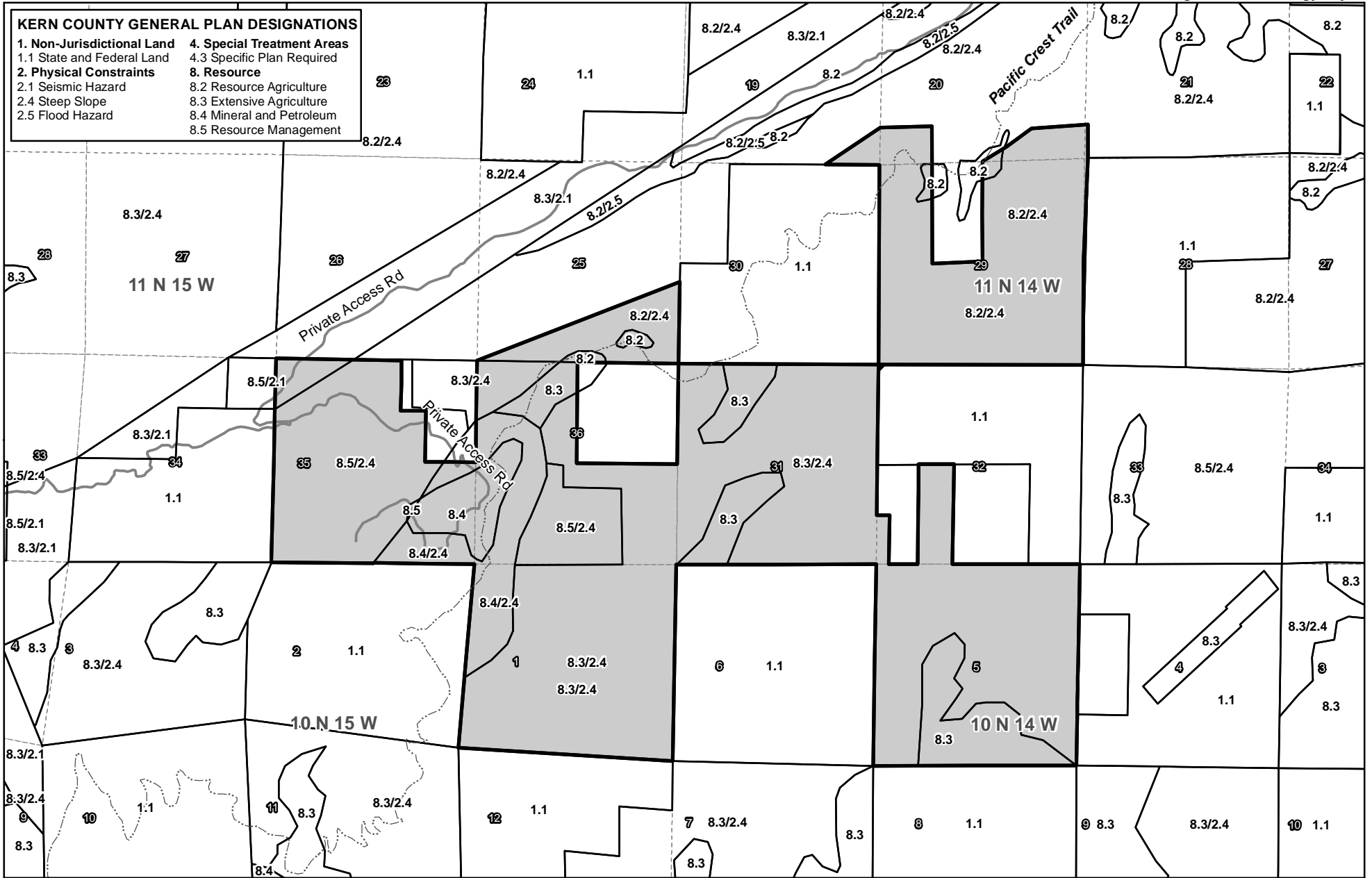
Figure 1
Project Vicinity



0 0.25 0.5 1 Miles

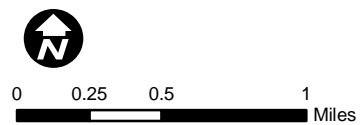
- | | | |
|--------------------|--|-------------------------------|
| ○ Turbines | ▨ BLM | ▣ Laydown Yard |
| — Access Roads | ■ Potential Project Substation Locations | ■ O&M Facility |
| ▭ Project Boundary | ▣ Batch Plant | ▨ Areas Proposed for Rezoning |

Figure 2
Project Site Plan



KERN COUNTY GENERAL PLAN DESIGNATIONS

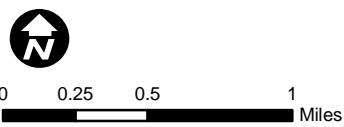
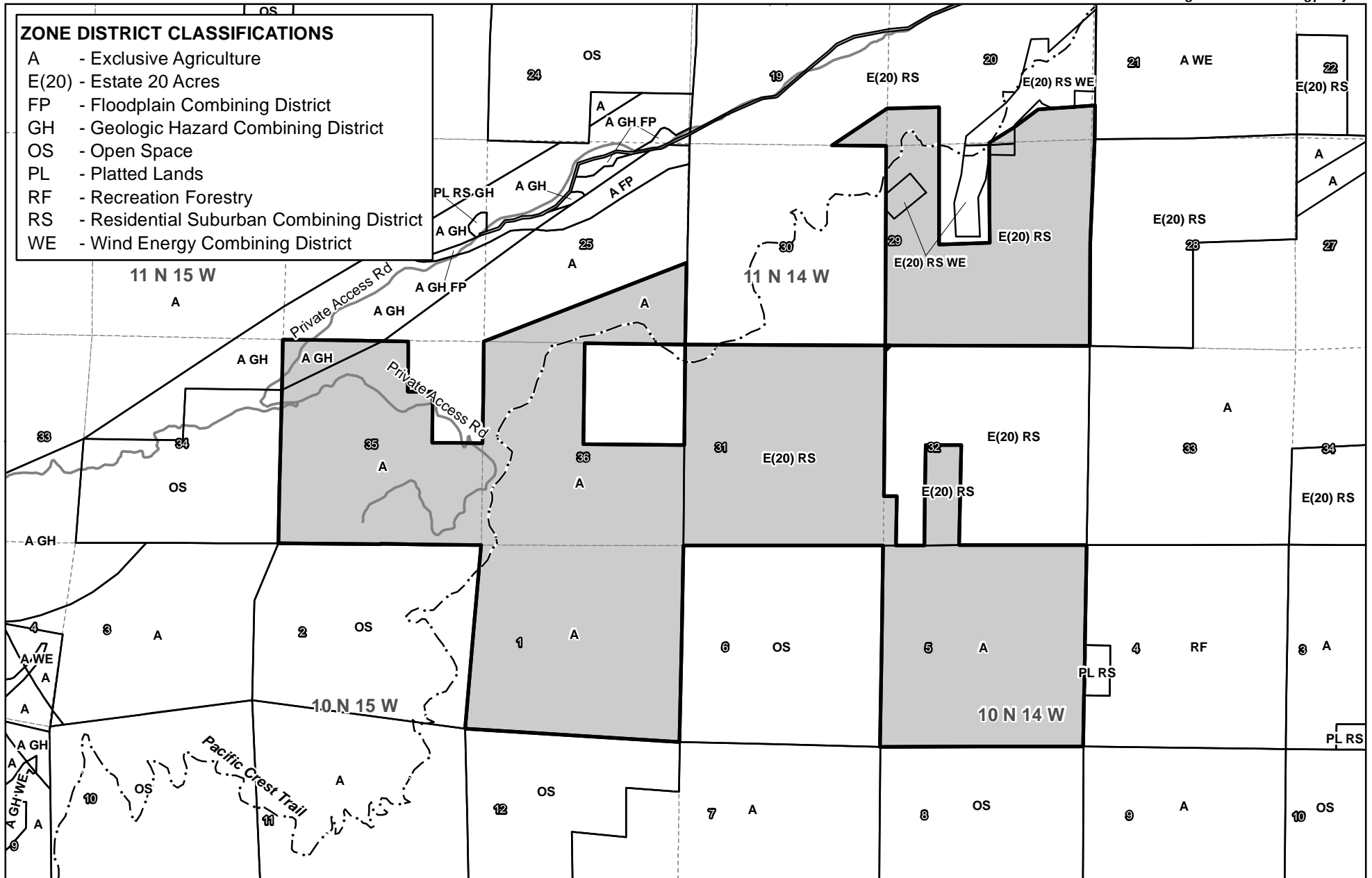
1. Non-Jurisdictional Land	4. Special Treatment Areas
1.1 State and Federal Land	4.3 Specific Plan Required
2. Physical Constraints	8. Resource
2.1 Seismic Hazard	8.2 Resource Agriculture
2.4 Steep Slope	8.3 Extensive Agriculture
2.5 Flood Hazard	8.4 Mineral and Petroleum
	8.5 Resource Management



Project Boundary

Figure 3

**Kern County General Plan
Map Code Designations in the Project Area**



□ Zoning Districts
■ Project Boundary

Figure 4
Existing Zoning -
Kern County Zoning Classifications



Surrounding Land Uses

Existing development in the area includes rural access roads, scattered rural residences, unauthorized off-highway vehicle use, and existing meteorological towers (met towers). There are several existing, permitted, and proposed wind energy and transmission projects proximate to the Project, including the Alta-Oak Creek Mojave Wind Project, the 300-megawatt (MW) and 151-MW Pacific Wind Projects, the PdV Wind Project, the Catalina Renewable Energy Project, the Pahnamid Wind Energy Project, and Southern California Edison’s (SCE) Tehachapi Renewable Transmission Project (TRTP).

1.3 PROJECT DESCRIPTION

The Project is a renewable energy development that would generate up to 230 MWs of electricity through wind power.

Table 2 Project Statistics				
Total Project Size	Proposed WE Zoning	Permanent Disturbance for Facilities	Maximum No. of WTGs	Total MW
3,773 Acres	1,184 Acres	312.8 Acres	76	230

Specifically, the Project Proponent is requesting: (a) a change in zone classification from the A (Exclusive Agriculture) District to the A WE (Exclusive Agriculture – Wind Energy Combining) District; (b) a change in zone classification from the E(20) RS (Estate 20 Acres – Residential Suburban Combining) District to the A District; (c) a change in zone classification from the E(20) RS District to the A WE District; and (d) a conditional use permit to allow for the use of a temporary concrete batch plant for the construction of the wind energy facility. Figure 5 displays the areas proposed for a zone change to the A District base zoning classification. Figure 6 displays the areas proposed for incorporation of the WE District.

The requested applications would also permit the construction of wind ancillary facilities and supporting infrastructure, including the concrete batch plants that are necessary to provide concrete and materials for WTGs, substation, and building foundations. The new facilities would create permanent site disturbance of 294.6 acres for the access road and crane path and 18.2 acres for the WTGs, substation, operations and maintenance (O&M) facilities, fifty 230-kilovolt (kV) generation tie-line poles, and met towers for a total of disturbance of 312.8 acres or 8.3 percent of the 3,773-acre Project site.

The Project would be supported by a 230-kV overhead transmission corridor, which would head east from the Project site and connect to the existing SCE Windhub Substation. The facility would include the construction of at least one substation facility within the area which would collect the power generated on site and convert it to 34.5-kV of power for transmission to the Windhub Substation. The conceptual site plan provides a possible location for the substation facility; refer to Figure 2.

During Project operations and maintenance, a new on-site groundwater well would be used to pump up to 0.224 acre-feet per year. During construction, water is expected to be supplied by the Mojave Public Utility District or the Tehachapi-Cummings County Water District. In addition, sewer facilities during operation would be provided by septic system.

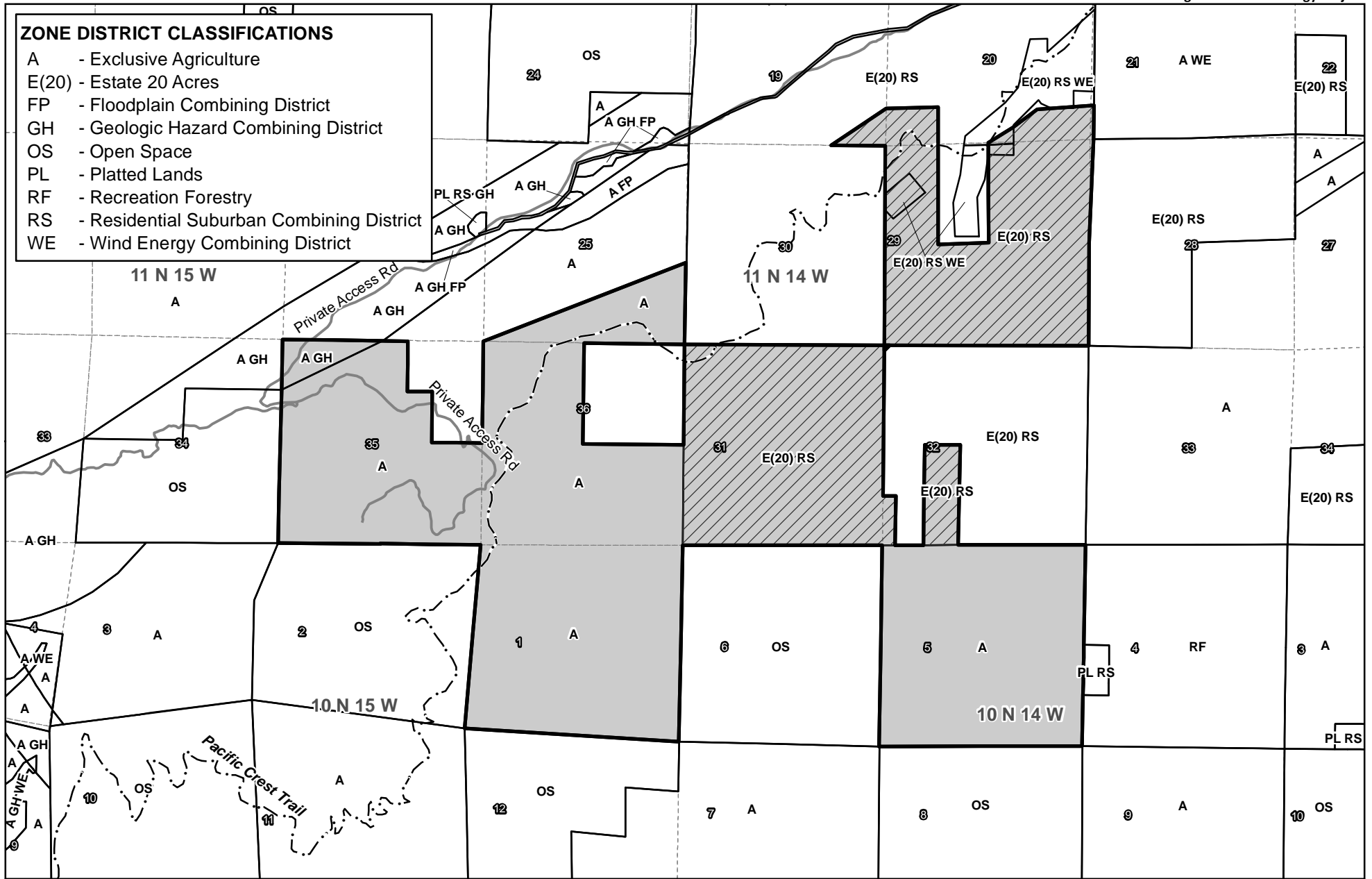
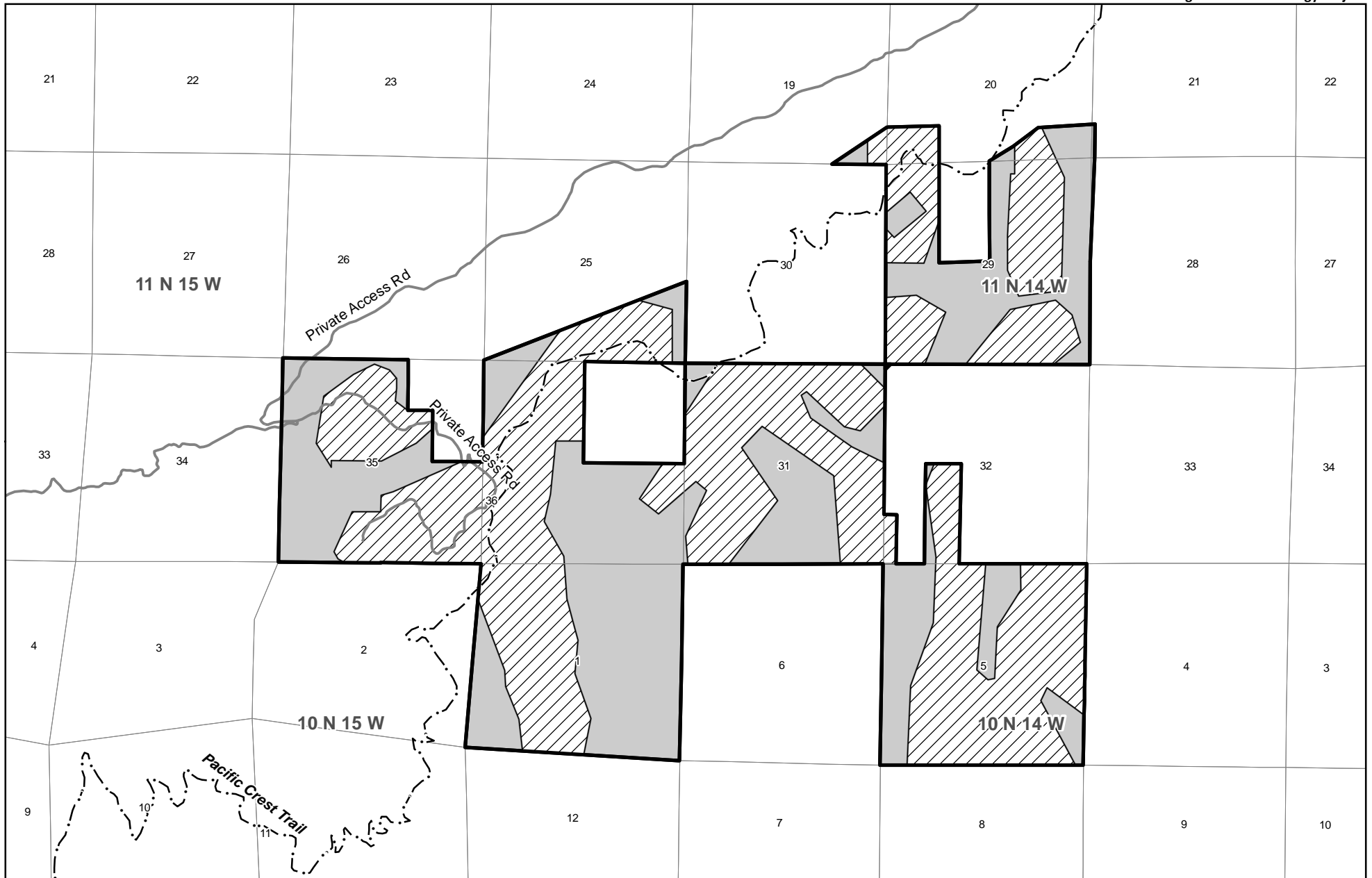


Figure 5

Project Areas that Require Base Rezoning to the A District



0 0.25 0.5 1 Miles



-  Areas Proposed for Rezoning to Wind Energy
-  Project Boundary

Figure 6
Project Site
and Areas Proposed for Zoning Change



As noted above, the base zones for the Project site are the A and E (20) Districts, which all allow for zone changes to include the WE Combining District. However, the E (20) RS District is not consistent with Map Code(s) 8.2 and 8.3; therefore, the applicant has requested that Project areas currently zoned E (20) RS District that are located within a Map Code(s) 8.2 and 8.3 be rezoned to the A District to achieve consistency to allow for the incorporation of the WE Combining District.

The purpose of the WE Combining District is to promote the use of an alternative to fossil fuel-generated electrical power in areas of the County that are identified to have suitable wind resources for production of commercial quantities of wind-generated electrical power. The WE Combining District contains specific development standards that apply to the associated construction and siting of WTGs and accessory facilities within the WE Combining District.

1.4 PROJECT FACILITIES AND OPERATIONS

Project Component Overview

The Project's permanent facilities would include up to 76 WTGs, one substation, transmission lines, access roads, an O&M facility, parking areas, and ancillary facilities. The Project would also include a 230-kV overhead transmission corridor, which would generally be aligned from the west to the east and would connect to the existing SCE Windhub Substation located six miles east of the site at the closest point. Fiber-optic communication wires would also be laid down using the same underground trenching channels, and overhead, in conjunction with the feeder circuits that would connect each of the proposed WTGs with the O&M building to the proposed substation.

The Project is comprised of the following components:

- Up to a maximum of 76 WTGs not to exceed 500 feet in height with associated towers, foundations, and pad mounted transformers for a total generation capacity not to exceed 230 MW of electricity (explained in greater detail below);
- Temporary construction staging and laydown areas to support WTG component staging, office trailers, portable concrete batch plants, portable rock crushers and equipment marshaling;
- An O&M facility
- A central Supervisory Control and Data Acquisition (SCADA) system to monitor the WTGs and allow for centralized O&M;
- Internal roadway system to access the proposed WTGs as well as O&M facility;
- Ingress/egress to the Project site from Oak Creek Road;
- At least one collector substation and underground and overhead electrical collection lines to collect energy from the WTGs;
- Met towers for ongoing wind resource data collection; and
- Generation interconnection line to the existing SCE Windhub Substation.

The lifetime of the Project is anticipated to be 30 years. Upgrading and replacing equipment could extend the operating life indefinitely, assuming a future demand (i.e., after the 30-year term) exists for the electricity generated by the Project. Therefore, the estimated Project life depends primarily on the demand for power, which would be expected to increase for the foreseeable future (i.e., in excess of 30 years).

Wind Turbine Generators

The installed WTGs would be multi-MW class machines and would be arranged in rows in accordance with applicable industry siting recommendations for optimum energy production and minimal land disturbance. Typically, WTGs in the TWRA are generally spaced 1.2 to 2.0 rotor diameters apart within rows that are spaced 8 to 10 rotor diameters apart. A preliminary site plan (Figure 2), shows the approximate location of the proposed placement of up to 76 WTGs.



Table 3 Wind Turbine Generator Specifications

Hub Height		Blade Length		Total Height
Meters	Feet	Meters	Feet	Feet
80	262	45-56	148-184	410-446

Wind Turbine Foundations and Pad Areas

The WTG foundations would have one of three designs, depending on geotechnical constraints and other factors, including wind patterns at the site, site access, and material availability. The three possible types of WTG foundations are (1) Patrick and Henderson Inc. (P&H) patented post-tensioned foundation, (2) rock anchor, or (3) a modified spread-footing.

The P&H foundation would be drilled or dug to 15 to 35 feet deep, depending on geotechnical conditions and loadings, and would be 18 feet in diameter. The foundation would be in the configuration of an annulus—two concentric steel cylinders. The central core of the smaller, inner cylinder would be filled with soil removed during excavation. In the cavity between the rings, bolts would be used to anchor the tower to the foundation, and the cavity would be filled with concrete. Bolting the tower to the foundation would provide post-tensioning to the concrete.

A rock anchor-type foundation is an alternative to the P&H foundation. Six to 20 holes, depending on geotechnical data, would be drilled 35 feet into the bedrock, and steel anchors would be epoxy-grouted in place. A reinforced concrete cap containing the anchor bolts would be poured on the top of the steel anchors to support the tower structure.

A spread-footing type of foundation also may be used. This foundation may be square or octagonal and formed with reinforcing steel and concrete. Depending on geotechnical data, this type of foundation may be as large as 60 by 60 feet and 6 to 10 feet thick.

Total combined cut-and-fill volumes for the WTG foundations would be determined after a site-specific geotechnical investigation. For all designs, the exposed concrete pad would be 18 feet in diameter and extend less than one foot above grade.

Tower

The tower portion of each WTG extends from the top of its concrete foundation at ground level up to its connection with the nacelle. While older-generation, commercial-scale WTGs typically used a lattice-tower design, today’s larger utility-scale turbines use a stronger monopole tubular tower. The monopole design has several additional advantages over the lattice-tower: it discourages bird perching, protects against vandalism, protects equipment and workers from adverse environmental conditions, and is manufactured to meet seismic building codes.

The WTGs would be mounted on tubular steel towers with internal maintenance access ladders. The total height of the tower to the hub of the rotor blades would generally be 262 feet. The base of the tower would be 10 feet in diameter. The towers and WTGs would be light gray in color and would have a non-reflective finish.

Nacelle

The nacelle is a large aerodynamic structure atop the tower and is constructed of welded steel and fiberglass coated with corrosion-protective paint. It contains the inner mechanical workings of the WTG, including the power-generating components comprising the main drive shaft/generator and the gearbox,



electrical components/cabinets, and depending on the WTG size and make, the power transformer, which steps up the WTG voltage to the voltage level of the internal wind farm electrical distribution network. The nacelle also contains the blade pitch control (a system that controls the angle of the blades), a cooling system, and the yaw drive, which controls the position of the WTG relative to the wind. All these components are mounted within the nacelle on the bed-frame. The outer visible shell of the nacelle is typically an insulated aerodynamic fiberglass cover installed over the bed-frame and serves to protect the equipment, streamline airflow, and absorb mechanical and vibration noise. The generator and electronic controls are standard equipment with main components made of steel and copper.

Hub

The hub is the fixture for attaching the blades to the main drive shaft and is usually made from a large iron casting. It sits on the front side of the nacelle and is covered by a composite nose-cone structure to streamline the airflow and protect the equipment. The hub also contains the mechanisms that allow the blades to pitch in response to wind, temperature, and air density conditions.

Blades/Rotor

The WTGs would have three large blades bolted to the hub, which in turn is affixed to the main drive shaft. The blades and hub together as a unit are called the rotor. The blades are long, tapered, small-chord airfoils that resemble airplane wings and vary in thickness (thinnest at the tip and thickest near the root where they attach to the hub). The blades use aerodynamic lift, somewhat like an airplane wing, to provide the driving force that spins the rotor. In a conventional WTG, the rotating rotor drives the main drive shaft which, in turn, drives a gearbox in the nacelle. The gearbox accelerates the comparatively low rotational speed of the rotor (10 to 30 revolutions per minute [rpm]) to the required rotational speed for the generator to produce electricity (usually 1,800 rpm). Composite materials such as fiberglass, wood, and carbon fiber are molded into each patented blade design. All blades are balanced in weight and size for each WTG for maximum stability and performance. The proposed rotors would be 295–367 feet in diameter. Blades would be transported to the site either individually or in groups of up to three blades on one trailer, depending on the available transportation equipment. After delivery, the blades would be attached to the hub on the WTG site.

Controller

The WTGs are equipped with a microprocessor, known as the controller, which automatically regulates the operation of the WTG. The controller is responsible for startup, shutdown, pitch control, yaw control, and safety monitoring. Information is communicated to the central O&M facility via fiber-optic cables or other means of communication, such as radio links. A central SCADA system would monitor the Project WTGs and allow centralized O&M.

If a control parameter deviates from its normal operating range, the controller would automatically shut down the WTG and notify the operating technician(s) of the fault. In many situations, the controller would analyze the data and restart the WTG if the fault were corrected or the operating conditions returned to normal. If the fault reoccurred, the controller might require a manual start.

Transformer

A step-up transformer would be used at each WTG to boost voltage to the collector system voltage of 34.5-kV because the low-voltage power generated by the WTG (500 to 1,000 volts) is not suitable for power transmission. The transformer would be contained within the WTG unit itself or would be pad-mounted next to the base of the WTG. The electricity from the transformer would be transmitted via underground or overhead collection system electrical cables to the collector substations.



Braking System

To prevent rotors from dislocating from the WTGs, each of the WTGs would be equipped with a braking system that controls the rotors. In the event of malfunctions, the automatic braking system would shut down the WTGs. As a second safety measure, personnel could stop, start, and rotate each of the WTGs parallel to the prevailing wind direction using the control panel inside the nacelle or from the bottom of the tower. To avoid operating the WTG while a maintenance worker is inside the nacelle, switches at the top of the tower would prevent service personnel at the bottom from operating certain systems. Each WTG could also be controlled from an on-site O&M building. Off-site remote control would also be possible.

Safety Lighting

The Project would be constructed and operated in accordance with Federal Aviation Administration (FAA) rules for structural lighting, locations, and height. Safety lighting would be installed on the exterior of some of the nacelles in compliance with FAA rules. Specific requirements for the Project would be developed in conjunction with the FAA based on the WTG heights and site-specific aviation conditions. The FAA recently changed its guidance for WTG lighting and now requires only synchronized red flashing lights at night (and none during daylight hours). Lighting for the Project would be consistent with all FAA requirements.

Lightning Protection System

For protection from potential lightning strikes, each WTG, including the rotor blades, would be equipped with a lightning protection system. The lightning protection system would be connected to an underground grounding arrangement to help lightning flow safely to the ground. In addition, all equipment, cables, and structures that constitute the WTGs would be connected to a metallic Project-wide grounding network.

Communication System

A SCADA system would monitor the Project WTGs and allow centralized O&M. The SCADA system is critical to proper O&M of the Project and uses proprietary software, a fiber-optic transmission system, a telephone communications network, and other means of communication such as radio-links and phase loop communication systems. The SCADA system manages the wind farm in several domains. It functions as a state-of-the-art monitoring and diagnostic tool that optimizes the Project's operations. It allows for the remote start, stop, reset, and tag-out for individual WTGs, minimizing the manpower and site visits needed to run the Project, and uses network interfaces to collect and analyze diagnostic information generated from the WTGs, met towers, and substations. The SCADA system would also control the collector substations allowing a fully centralized operation of the Project.

Data generated by the SCADA system would be used for optimizing operations and initiating, planning, and managing maintenance activities in line with manufacturer requirements, operational requirements, wind regime, and County conditions of permit approval.

Access and Service Roads

There would be two types of roads required for the Project: (1) temporary roads used during construction to access areas within the Project site, and (2) permanent roads used during operations to access Project facilities for maintenance. The Project road network would have a larger footprint during construction because of the size of the equipment—especially the cranes required to erect the WTGs, and the trailers



required to bring the nacelle, blades, tower and transformers to the site. Some of these roads may be removed and restored after initial construction; some may be reduced in size; and others may be maintained at their construction size for the life of the Project to allow for crane usage during O&M.

Temporary construction roads would make use of the permanent site roads along the WTG rows by temporarily widening these roads to 36 feet. These traffic ways would be engineered and compacted to carry the weight of heavy cranes and delivery vehicles. Following completion of construction, the temporary portions of these roads would be disked and revegetated, leaving 20- to 24-foot-wide permanent site roads.

Temporary Staging Areas and Concrete Batch Plants

The Project's temporary facilities would include construction access roads, laydown areas, and concrete batch plants. Construction laydown yards, with average dimensions of 10 to 15 acres, would be located at convenient points around the Project site to permit the staging of construction equipment, construction contractor trailers, and the offloading and temporary storage of Project equipment and materials. The yards would be cleared of vegetation and compacted to support the construction equipment. At the end of construction, most of these yards would be re-claimed and re-vegetated, but one or two of these areas may be retained for long-term parts and equipment storage and turn-around.

The Project may require the use of an on-site temporary, portable concrete batch plant to provide concrete and materials for the WTG foundations, transformer, substation, O&M building, and transmission line foundations. The concrete batch plant would usually operate between 7:00 a.m. and 7:00 p.m., Monday through Saturday. The concrete batch plant is anticipated to operate as needed for up to 6 months and would be removed after construction is complete. All remnant materials and debris would be hauled offsite and disposed of at a certified location. The batch plant would be located at the designated yards and moved to various areas of the Project site as required to minimize construction traffic. Operation of the concrete batch plant would require issuance of a Conditional Use Permit from Kern County.

Project Power Collection, Substation, and Transmission

As part of the TRTP, SCE has constructed a major power substation called the Windhub Substation, located on Oak Creek Road, east of the Project. The Windhub Substation will receive renewable wind energy generated from the TWRA. SCE will also be constructing 500 kV and 230 kV overhead transmission lines into the Windhub Substation from the southern side of the substation property that is part of this Project. The Project would deliver its electricity to SCE at the Windhub Substation.

Low voltage electricity is generated by the WTG at 500 to 1,000 volts. At each WTG, the transformer would step up the voltage (likely to be 34.5 kV) for collection purposes. Typically, the collection system consists of underground cables connecting individual WTGs together and conducting the electrical power to the collector substations. Underground electrical cables would be installed in trenches 3 to 5 feet deep for each cable circuit. In cases where the distance to the substation is excessive, or where terrain and/or obstacles dictate, the underground cables may connect to an overhead collection system on wood or steel poles that would more efficiently transport the power to the collector substations. The voltage is increased from 34.5 kV to the grid interconnection voltage. For this Project, the grid interconnection voltage would be 230 kV.

The Project Proponent may construct at least one 230/34.5-kV Project collector substation to minimize power losses in the collection system. The Project substation would cover an area of 300 feet by 300 feet, and would consist of the following: (1) a control house, (2) electrical breakers and switchgear, (3) one or more 230/34.5-kV transformers, (4) an overhead electrical bus connecting the various electrical apparatus, and (5) pole structures to support electrical conductors entering the substation and exiting to



the 230 kV transmission line, ending at the SCE Windhub Substation. The actual capacity of the Project substation would depend upon the total number of WTGs which would supply it power. The substation site within the Project would be graded to provide for storm water drainage. A suitable grounding grid would be installed to protect the substation against lightning and shorts. The substation would be built to Kern County building code requirements, and the site would be graveled and enclosed within a security fence.

The transmission line route from the Project's substation to the Windhub Substation has not been finalized. One alternative route could cross Bureau of Land Management (BLM) property and require National Environmental Policy (NEPA) documentation. Currently the project proponent has suggested routes through the project connecting to the existing Alta Oak-Creek Mojave Project to the east, or potentially connecting to the SCE Whirlwind substation to the south along 170th Street West.

Permanent Operations and Maintenance Facility

One O&M facility may be constructed for Project operations. The facility would be 2 to 3 acres in size and have a foundation footprint of 100 by 150 feet (building). The facility would include a main building with offices, SCADA system, control room, spare parts storage, restroom, shop area, outdoor parking facilities, lay-down and set up area, a turn-around area for larger vehicles, outdoor lighting, and gated access with partial or full perimeter fencing as well as a small information center for potential visitors. During construction, it is possible that the designated O&M facility area would be leveled and graded to temporarily serve as a central base of operations for construction trailers and portable toilets.

Meteorological Towers

Met towers have been installed over the past few years on and near the Project site prior to Project development to measure and collect data necessary to properly assess Project viability and determine optimum WTG layout. Once the Project has been constructed, some of the larger towers already installed would remain as permanent met towers and some additional permanent met towers would be installed to assist in the operation of the Project, help meet reporting obligations, and help to maximize Project efficiency during operations. The permanent met towers would be free-standing towers with concrete foundations. These towers support anemometers, wind direction sensors, and temperature and relative humidity gauges at the same height of the WTG rotor hubs to monitor wind and other climate data needed to support operations. The exact number and location of the permanent met towers would be determined based on site terrain and contractual obligations under the Master Development Agreement with SCE. All met towers would remain within the Project site. Bird flight diverters would be installed on the guy wire supports for the towers.

Where necessary to carry out WTG performance tests for the WTG performance warranty or for compliance with contractual requirements, temporary met towers may be installed in conjunction with some of the permanent met towers. Typically, the temporary met towers are placed on sites intended for installation of WTGs. Data is collected over a period of time and correlated to data collected by a corresponding permanent met tower installed upwind of the temporary met tower. Once the data collected by the permanent met towers is correlated to the temporary met tower's data, the temporary met towers would be removed to make room for the WTG. This WTG and the permanent met tower can then be used to verify that the WTGs actually produce in accordance with the guaranteed power curve of the WTG.

Security

Fencing for the Project would be installed in accordance with Kern County zoning requirements. Based on current Kern County ordinances, the exterior boundary of the property or each WTG cluster or row may be fenced. All Project fencing requirements would be evaluated and the best-fit scenario would be



incorporated into the Project based on the final determination by Kern County. Kern County's fencing requirements for proposed wind developments are found in Section 19.4.140(c) of the County Zoning Ordinance:

Fencing shall be erected for each wind machine or on the perimeter of the total project. Wind project facilities shall be enclosed with a minimum four (4)-foot high security fence constructed of four (4) strand barbed wire or materials of a higher quality. Fencing erected on the perimeter of the total project shall include minimum eighteen (18)-inch by eighteen (18)-inch signs warning of wind turbine dangers. Such signs shall be located a maximum of three hundred (300) feet apart and at all points of ingress and egress. Where perimeter fencing is utilized, the Planning Director may waive this requirement for any portion of the site where unauthorized access is precluded due to topographic conditions.

The Project Proponent would comply with the Kern County Zoning Ordinance and proposes to use site specific security fencing to secure the Project site consisting of new steel "T" posts installed at 10- to 15-foot intervals and with four strands of barbed wire a minimum of four feet high. Higher quality fencing materials may be used if site conditions warrant doing so. The bottom strand of barbed wire would be a minimum of 15 inches above ground to allow small animals to pass under the fence and mitigate habitat fragmentation. Portions of the perimeter are already fenced, and the Project Proponent would upgrade, repair, or replace the existing fencing as necessary to comply with the above standard. The Project Proponent would install 18-inch by 18-inch signs warning of WTG dangers on all perimeter fencing at 300-foot intervals and at all points of ingress and egress. Similarly, the Project substation would be surrounded by 8-foot-tall security fencing and with warning signs posted.

Two types of gates would be utilized:

- Main access entrances off county highways would require county highway encroachment permits. The main access gates would consist of two 12-foot wide swing gates, providing a 24-foot opening. The gates would be installed a reasonable distance off the highways to permit trucks delivering WTG components to pull completely off the highway before stopping to open the gate. The access areas would be graveled to prevent tracking of mud onto the paved highways.
- Interior access gates would be utilized to provide service access between the various fenced areas and would consist of one 10- to 16-foot wide swing gate, wide enough to permit access for the normal maintenance vehicles and equipment needed to maintain the WTGs and site. The post at the free end of the gate would be removable to permit the fence to be temporarily opened to 24 feet to allow access for large vehicles or cranes occasionally needed to maintain the WTGs.

If the land is being used for grazing, cattle guards would be installed if appropriate.

Temporary construction fencing would be installed, in accordance with applicable California Division of Occupational Safety and Health (Cal/OSHA) and county regulations, around work sites such as excavations for foundations and underground cabling, batch plants, substation sites, and set up areas, to assure security and personnel safety during construction. Where appropriate, construction fencing may be retained for permanent fencing, and would be constructed to meet standards for permanent installations. If additional permanent fencing is required, these permanent fences and gates would be installed following completion of construction.

The Project site contains multiple existing rights of way (ROWs) for transmission lines and gas pipelines across portions of the Project area. Project fencing would be installed in such a way as to not interfere with legal access to holders of the various ROWs.



CONSTRUCTION SCENARIO

The construction of the Project would last up to 12 months. Construction of the Project would be comparable to other renewable energy projects and can be divided into the following sequence: (1) roads and pads, (2) foundations, (3) electrical infrastructure, (4) turbine assembly and installation, (5) substation interconnection, (6) electrical system upgrades, (7) turbine commissioning, and (8) Project finalization. The various elements of the Project would be constructed concurrently on the Project site.

Construction employees would travel from respective population centers such as Tehachapi, Mojave, and Rosamond, California, and report to the designated construction staging yards prior to the beginning of each work day. It is anticipated that the employees would utilize a road through Oak Creek Valley as their point of ingress/egress to the Project site and that, once on site, they would access various sections via the existing and improved network of dirt roads.

Construction of the Project would include new roads or improvements to existing access roads to the Project site, the creation of local access roads to the proposed WTG locations, and construction of WTGs and crane pads. Other construction-related tasks would include the pouring of a concrete base for each proposed WTG and the installation of towers, rotor hub and blades, and related equipment. In addition, the Project would require the installation of underground/overhead electricity lines, electrical transformers, and maintenance facility and laydown yards, as well as construction of the Project substation and installation of overhead electricity lines from the Project site to the electrical interconnection point. Restoration of disturbed areas, temporary roadways, and equipment laydown sites not required as part of the ongoing operation of the facility would be reclaimed.

Staging, or laydown areas may be required for material handling, temporary storage, and Project staging activities. In addition, concrete batch plants would be temporarily located within the Project site during the construction phase. A list of anticipated construction equipment and staff for the Project is provided in Table 4.

Construction Activity	Workforce	Equipment
Office Staff/Management	10	Pickup and small vehicles
Foundations	30	Dozer, grader, excavator or drill rig, crane, concrete pump trucks, concrete trucks, pickup trucks with trailers, all terrain forklifts, water trucks, dump trucks, compactors, generators, welders
Roads	24	Dozer, grader, front end loaders, compactor, roller, pickup trucks, water trucks, dump trucks, compactors, scrapers
Wind Turbine Generator (WTG) Component Unloading Crew (pad site)	15	Cranes, all terrain forklifts, pickup trucks with trailers
WTG Erecting	40	Cranes, pickup trucks with trailers
Environmental	8	Pickup and flatbed trucks
Substation	20	Cranes, forklifts, pickup trucks, water trucks, concrete pump trucks, concrete trucks, dump trucks, compactors, generators, welders, scrapers
Collection System	20	Trencher, grader, forklift, small cranes
Directional Boring	8	Boring machine, pickup truck
Transmission Line	35	Cranes, excavator, drill rig, pickup trucks
Laborers	20	Pickup trucks
Owner Representatives	7	Pickup trucks
Turbine Supplier	25	Pickup trucks
Total Number of People	262	



Construction activities would be expected to include excavation and grading of the Project site. Site preparation and construction of the Project would be in accordance with all federal, State, and Kern County ordinance codes and requirements. Noise-generating construction activities would be limited to the construction hours noted above. All stationary equipment and machines with the potential to generate a significant increase in noise or vibration levels would be located away from noise receptors to the extent practicable.

All applicable local, State, and federal requirements and Best Management Practices (BMPs) would be incorporated into the construction activities for the Project. The construction contractor would be required to incorporate BMPs consistent with the Kern County Zoning Ordinance and with guidelines provided in the *California Storm Water Best Management Practice Handbooks: Construction* including the preparation of a Storm Water Pollution Prevention Plan (SWPPP) and a Soil Erosion and Sedimentation Control Plan in order to reduce potential impacts related to construction of the Project. Should the construction period continue into the rainy season, supplemental erosion measures would need to be implemented, including, but not limited to, the following:

- Mulching,
- Geotextiles and mats,
- Earth dikes,
- Temporary drains and gullies,
- Silt fence,
- Straw bale barriers,
- Sandbag barrier,
- Brush or rock filter, and
- Sediment trap.

Wherever possible, grading activities would be undertaken outside the normal rainy season (i.e., October 15 to April 15 for most of Southern California), thus minimizing the potential for increased surface runoff and the associated potential for soil erosion. However, it is anticipated that the recommended construction period would begin early spring in order to minimize effects on sensitive species and habitats. BMPs to control surface runoff and soil erosion would be required for construction taking place during rainy periods.

Operation and Maintenance Activities

The Project Proponent would develop a Project O&M protocol to be implemented throughout the life of the Project. The protocol would specify routine WTG O&M, which typically adheres to the maintenance program developed by the WTG manufacturer. O&M personnel would conduct maintenance activities for WTGs as required by the routine maintenance schedule provided by the WTG supplier or as required to keep the equipment in operation. On average, each WTG would require 40 to 50 hours of scheduled mechanical and electrical maintenance per year. Routine maintenance may include, but would not be limited to, replacing lubricating fluids, checking parts for wear and replacing, as required, and recording data from data-recording chips in all pertinent equipment including anemometers. O&M personnel would also inspect and maintain access roads, crane and WTG pads, erosion control systems, and perimeter fencing areas regularly and maintaining them to ensure minimal degradation.

The WTGs would also be monitored continuously by the Project SCADA system. Each WTG would be equipped with monitors that communicate major aspects of operation through communication lines. The SCADA system would send notifications to the operations group if operational characteristics deviate outside set limits. As described previously, the WTGs would be equipped with an automatic braking system to shut down the WTGs and slow or stop blade rotation in such an event. O&M personnel would address all operational deviations and place the equipment back in service in a safe and timely manner.



Project fencing would be provided, in accordance with Kern County zoning requirements. Based on current Kern County ordinances, the exterior boundary of the property or each WTG cluster or row may be fenced. All Project fencing requirements would be evaluated and the best-fit scenario would be incorporated into the Project based on the final determination by Kern County. Additional security measures would be identified on an as-needed basis, and would fall under the control of the assigned O&M provider.

During Project operations and maintenance, a new on-site groundwater well would be used to pump up to 0.224 afy. In addition, sewer facilities during operation would be provided either through connection to the local municipal sewer system or via septic system.

1.5 Project Objectives

The following objectives are identified by the Project Proponent:

- Develop up to 230 MW of installed electrical capacity on privately-owned land,
- Be a major supplier of clean renewable energy that helps meet the growing demands of California,
- Assist in realizing the full potential of wind resources on lands within or near the TWRA,
- Offset the need for additional electricity generated from fossil fuels and assist the State in meeting its air quality goals and reduce greenhouse gases (GHGs) as mandated by Assembly Bill 32,
- Increase the tax base of Kern County and increase employment opportunities,
- Further reduce GHG emissions. The reduction in GHGs would not only offset the Project's own GHG emissions but also provide additional emission offset to other projects, therefore reducing regional GHG emissions, and
- Use land located near existing industrial facilities, mines, and existing wind projects to minimize the environmental and visual impact of the Project.

1.6 Proposed Discretionary Actions/Required Approvals

Construction and operation of the Project may require certain discretionary actions and approvals including, but not limited to, the following:

Federal

- United States Fish and Wildlife Service Section 7 Consultation
- Bureau of Land Management Right of Way Agreement for Aerial Crossing of Alternative Generation Tie-Line Routes
- Federal Aviation Administration
 - Determination of No Hazard to Air Navigation
 - Wind Turbine Generator Lighting Plan
- United States Army Corps of Engineers
 - Section 404 - permit for discharge of fill material to waters of the US

State

California Department of Fish and Game

- Section 1602 et seq. permits (Streambed Alteration Agreements)
- Section 2081 Permit (State-listed endangered species)

Lahontan Regional Water Quality Control Board

- Section 401 – Water quality certification (if Section 404 required)



- Section 402 - Stormwater Pollution Prevention Plan for coverage under the National Pollutant Discharge Elimination System General Construction Permit or Waste Discharge Requirements (WDRs) under the Porter Cologne Act

Local

Kern County Board of Supervisors

- Land Use Approval (Zone Change, Conditional Use Permit)
- Certification of Environmental Impact Report
- Mitigation Monitoring Program

Eastern Kern County Air Pollution Control District

- Fugitive Dust Control Plan
- Authority to Construct
- Permit to Operate
- Plan for the Disposal of Drainage Waters
- Grading and Building Plans

Kern County Public Health Services Department, Environmental Health Division

- Hazardous Materials Business Plan
- Septic and Water System Permits

Kern County Fire Department

- Fire Safety Plan
- Kern County Board of Supervisors

Kern County Roads Department

- Proposed Access Road Design and Encroachment Permit

Kern County Engineering, Surveying and Permit Services Department

- Building Permits



KERN COUNTY ENVIRONMENTAL CHECKLIST FORM

Environmental Factors Potentially Affected:

The environmental factors checked below would be potentially affected by this proposed Project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

- | | | |
|--|--|--|
| <input checked="" type="checkbox"/> Aesthetics | <input checked="" type="checkbox"/> Agriculture and Forestry Resources | <input checked="" type="checkbox"/> Air Quality |
| <input checked="" type="checkbox"/> Biological Resources | <input checked="" type="checkbox"/> Cultural Resources | <input checked="" type="checkbox"/> Geology / Soils |
| <input checked="" type="checkbox"/> Greenhouse Gas Emissions | <input checked="" type="checkbox"/> Hazards & Hazardous Materials | <input checked="" type="checkbox"/> Hydrology / Water Quality |
| <input checked="" type="checkbox"/> Land Use and Planning | <input checked="" type="checkbox"/> Mineral Resources | <input checked="" type="checkbox"/> Noise |
| <input checked="" type="checkbox"/> Population and Housing | <input checked="" type="checkbox"/> Public Services | <input checked="" type="checkbox"/> Recreation |
| <input checked="" type="checkbox"/> Transportation and Traffic | <input checked="" type="checkbox"/> Utilities / Service Systems | <input checked="" type="checkbox"/> Mandatory Findings of Significance |

DETERMINATION (To be completed by the Lead Agency)

On the basis of this initial evaluation:

- I find that the proposed Project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed Project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the Project have been made by or agreed to by the Project Proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed Project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- I find that the proposed Project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect (a) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and (b) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENT IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed Project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed Project, nothing further is required.

Signature on file.
Signature

Michael D. Hollier
Printed Name

May 5, 2011
Date

County of Kern
For



Evaluation of Environmental Impacts:

- (1) A brief explanation is required for all answers except “No Impact” answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A “No Impact” answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A “No Impact” answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
- (2) All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
- (3) Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. “Potentially Significant Impact” is appropriate if there is substantial evidence that an effect may be significant. If there are one or more “Potentially Significant Impact” entries when the determination is made, an EIR is required.
- (4) “Negative Declaration: Less Than Significant With Mitigation Incorporated” applies where the incorporation of mitigation measures has reduced an effect from “Potentially Significant Impact” to a “Less Than Significant Impact.” The lead agency must describe the mitigation measure and briefly explain how they reduce the effect to a less than significant level (mitigation measures from Section XVII, “Earlier Analyses,” may be cross-referenced).
- (5) Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or Negative Declaration, Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
 - (a) Earlier Analysis Used. Identify and state where they are available for review.
 - (b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
 - (c) Mitigation Measures. For effects that are “Less Than Significant With Mitigation Measures Incorporated,” describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
- (6) Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
- (7) Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
- (8) This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
- (9) The explanation of each issue should identify:
 - (a) The significance criteria or threshold, if any, used to evaluate each question.
 - (b) The mitigation measure identified, if any, to reduce the impact to less than significance.



	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
AESTHETICS. <i>Would the project:</i>				
a. Have a substantial adverse effect on a scenic vista?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings and historic buildings within a state scenic highway?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Substantially degrade the existing visual character or quality of the site and its surroundings?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion:

- (a) The California Department of Transportation states that a highway may be designated scenic depending upon how much of the natural landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which development intrudes upon the traveler's enjoyment of the view. Placement of wind turbine generators (WTGs) that range in height from 400 to 500 feet high in the foothills of the Tehachapi Mountain Range and on the northern portion of the Antelope Valley would alter the views of the Project area. Persons traveling in vehicles on nearby roads and hikers/equestrians passing near the Project area along the Pacific Crest National Scenic Trail (PCT) would observe alterations to these scenic vistas. The Project would potentially result in significant alteration to existing scenic vistas and; therefore, this potential impact will be further evaluated in the EIR.
- (b) The Project would not be visible from any Officially Designated State or County Scenic Highway. However, both State Route (SR)-14, north of Mojave and SR-58, east of Mojave are designated as Eligible (E) for State Scenic Highway status. With placement of WTGs (not to exceed 500 feet in height) in the Project area, and considering the orientation of these two designated scenic highways that look directly at the Project area, there is potential for an adverse visual effect on the viewsheds of these E State Scenic Highways. Therefore, this impact will be further evaluated in the EIR.
- (c) Most of the Project area supports native desert plant communities that are partially degraded by past and current grazing activities and by a network of paved and dirt roads. Existing land uses in the vicinity of the Project site include existing WTGs of varying heights and ages, grazing areas with rural fences, paved and unpaved roads, and open-space areas. Off-road vehicle or off-highway vehicle activities occur in the Project vicinity and the PCT traverses the Project site. Overall, the undeveloped character of the area may be adversely affected by the Project, and therefore the Project's potential to substantially degrade its existing visual character or quality of the site and its surroundings will be further evaluated in the EIR.



- (d) The only existing source of light and glare on the Project site is from existing WTGs in the surrounding area and rural residential development. The Federal Aviation Administration (FAA) may require nighttime lighting on some meteorological towers and on top of some of the WTGs, which could adversely affect nighttime views in and of the area. The type of lighting that the FAA would require has not yet been determined. Lighting associated with the operation and maintenance building would be as required by the Kern County Zoning Ordinance. Further analysis of the specific lighting required and the effects of nighttime light are warranted. This potentially significant impact will be evaluated in the EIR.



	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
--	--------------------------------	---	------------------------------	-----------

AGRICULTURE AND FORESTRY RESOURCES. In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state’s inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. -- Would the project:

a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to nonagricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Conflict with existing zoning for agricultural use, or Williamson Act contract?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)) or timberland zoned Timberland Productions (as defined in Public Resources Code section 51104(g))?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Result in the loss of forest land or conversion of forest land to non-forest use?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Result in the cancellation of an open space contract made pursuant to the California Land Conservation Act of 1965 or Farmland Security Zone Contract for any parcel of 100 or more acres (Section 15206(b)(3) Public Resources Code)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Discussion:

- (a) There is no designated Prime Farmland, Unique Farmland, or Farmland of Statewide Importance within the Project area according to the California Division of Land Resource Protection Farmland Mapping and Monitoring Program Important Farmland maps. The Project site has two land use designations according to the Department of Conservation: Grazing Land and Nonagriculture and Natural Vegetation. Grazing Land is land on which the existing vegetation is suited for grazing of livestock. Nonagriculture and Natural Vegetation includes heavily wooded, rocky or barren areas, riparian and wetland areas, small water bodies, and constructed wetlands, and grassland areas, which do not qualify for grazing. Although the Project would remove some grazing land from agricultural use, the Project would not result in the direct conversion of designated Prime Farmland, Unique Farmland, or Farmland of Statewide Importance to a nonagricultural use. However, there is no evidence in the record at this time to show that implementation of the Project would not have indirect impacts resulting in the conversion of designated Farmland to a nonagricultural use; therefore, the Lead Agency has determined that construction and operation activities may create less than significant impacts.
- (b) The base zoning districts for the Project area are the Exclusive Agriculture (A), and Estate with a minimum of 20 acres (E-20), with Geologic Hazard and Residential Suburban Combining Districts. The Project Proponent is requesting that the County adopt the Exclusive Agriculture (A) District for the entire Project area and incorporate the Wind Energy (WE) Combining District overlays to the A District to facilitate Project development. No part of the Project area is being actively farmed and the site is not subject to the County's "estrays" ordinance, which would facilitate lease agreements in place for grazing operations. Prior to the construction of any wind turbine generators (WTGs) on the site, the Project Proponent may be required to confirm that there are no grazing lease agreements and if such agreements are found, to cancel lease agreements for all those portions of the site that would include the WE Combining District and installation of WTGs. The need for this will be further analyzed in the EIR. The Project parcels are not subject to Williamson Act land use contracts. Due to potential impacts to grazing operations, this impact will be evaluated in the EIR.
- (c)/(d) Both the Project site and potential transmission line routes (including immediate surrounding properties) do not contain any land defined as forest land (as defined by Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or land zoned Timberland Production (as defined by Government Code section 51104(g)). However, there is no evidence in the record at this time to indicate that implementation of the Project would not have potentially significant indirect impacts resulting in conflicts with existing zoning for, or cause rezoning of, forest land or timberland; or the loss of forest land or conversion of forest land to non-forest use. Therefore, due to potential impacts, this issue will be evaluated within the EIR.
- (e) As discussed above in checklist question (b), construction and operation of the Project would remove some land from agricultural use. Potential impacts from this change may occur and will be further analyzed in the EIR.
- (f) The Project site is not located on lands that are under any land preservation contracts such as Williamson Act contracts. Therefore, the Project would not result in the direct cancellation of an open space contract made pursuant to the California Land Conservation Act of 1965 or Farmland Security Zone Contract for any parcel of 100 or more acres (Section 15206(b)(3) Public Resources Code. However, there is no evidence in the record at this time to indicate that implementation of the Project would not have potentially significant indirect impacts resulting in the cancellation of an open space contract made pursuant to the California Land Conservation Act of 1965 or Farmland Security Zone Contract for any parcel of 100 or more acres. Therefore, due to potential impacts, this issue will be evaluated within the EIR.



	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Potentially Significant Impact Less Than Significant Impact	No Impact
--	--------------------------------	---	---	-----------

AIR QUALITY. Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:

- a. Conflict with or obstruct implementation of the applicable air quality plan?
- b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

c. Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? Specifically, would implementation of the project exceed any of the following Eastern Kern Air Pollution Control District (EKAPCD) and/or San Joaquin Valley Air Pollution Control District (SJVAPCD) thresholds:

i. San Joaquin Valley Unified Air Pollution Control District:

Operational and Area Sources:

- Reactive Organic Gases (ROG) 10 tons per year.
- Oxides of Nitrogen (NO_x) 10 tons per year.
- Particulate Matter (PM₁₀) 15 tons per year.

Stationary Sources

determined by District Rules:

- Severe Nonattainment 25 tons per year.
- Extreme Nonattainment 10 tons per year.



	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
Kern County Air Pollution Control District:				
<u>Operational and Area Sources:</u>				
Reactive Organic Gases (ROG) 25 tons per year.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Oxides of nitrogen (NO _x) 25 tons per year.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Particulate Matter (PM ₁₀) 15 tons per year.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<u>Stationary Sources – determined by District Rules:</u>				
25 tons per year.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i. San Joaquin Valley Unified Air Pollution Control District:				
<u>Operational and Area Sources:</u>				
d. Expose sensitive receptors to substantial pollutant concentrations?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Create objectionable odors affecting a substantial number of people?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion:

(a)/(b) The project would be located entirely within the jurisdiction of the Eastern Kern Air Pollution Control District (EKAPCD) in the Mojave Desert Air Basin (MDAB). The MDAB is designated non-attainment for both the State and federal ozone standards, and the State particulate matter of less than 10 microns in size (PM10) standard. Project construction would generate emissions of nitrogen oxides (NO_x) and PM10 that could result in significant impacts to air quality in the area. Equipment usage and activities during construction of the Project would result in emissions of PM10 and ozone precursors, including NO_x and volatile organic compounds (VOC), which could result in significant impacts to air quality in the area. The sources of emissions include heavy equipment used to excavate and grade the turbine pads and roads, cranes, and motor vehicles for equipment and material deliveries and workers commuting to the site. Activity on unpaved roads, laydown areas, and grading would contribute to PM10 emissions. This impact is potentially significant. Further analysis of air quality impacts is warranted to determine whether the Project would conflict with or obstruct implementation of the applicable plans for attainment and if so, to determine the reasonable and feasible mitigation measures that could be imposed. These issues will be evaluated in the EIR.

Short-term construction emissions and temporary facilities could significantly contribute to an existing or projected air quality violation of PM10 or ozone standards, requiring the consideration of mitigation measures. This impact is potentially significant and will be evaluated further in the EIR.



- (c) The EKAPCD is a nonattainment area for the State and federal ozone standards, and the State PM10 standard, and the EKAPCD rules and regulations apply to all Project activities. No Project activities would occur within the San Joaquin Valley Unified Air Pollution Control District; however, truck trips may be generated from this air basin. Contributions to the MDAB could be potentially significant. Construction and operational emissions will be analyzed in the EIR.
- (d) Land uses determined to be “sensitive” to air quality include residential areas, schools, convalescent and acute care hospitals, parks and recreational areas, and churches. The nearest receptors to the Project are residences within and adjacent to the Project boundaries. Additionally, Sonshine Place Preschool, located 5.4 miles northwest of the Project site, is considered as a sensitive receptor. Construction activities of the Project would result in particulate matter and fugitive dust emissions that could adversely affect air quality for the nearest residential and sensitive receptors. Therefore, construction and operation emission impacts on sensitive receptors will be analyzed in the EIR and mitigation measures for construction equipment and dust control that are recommended by the EKAPCD and the air quality element of the Kern County General Plan will be evaluated as part of the EIR to avoid or reduce the impacts to construction workers and affected residential and sensitive receptors.
- (e) Use of construction/operation equipment and vehicle exhaust may create odors. Construction odors would be temporary and are types of odors regularly experienced by the public; however, there is no evidence in the record at this time to show that construction/operation equipment and vehicle exhaust odors would not negatively affect a substantial number of people. Therefore, due to potential impacts, this issue will be evaluated within the EIR.



	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
--	--------------------------------	---	------------------------------	-----------

BIOLOGICAL RESOURCES. *Would the project:*

- | | | | | |
|---|-------------------------------------|--------------------------|--------------------------|--------------------------|
| a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan or other approved local, regional, or state habitat conservation plan? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Discussion:

- (a) Field surveys are currently being conducted at the Project location. A preliminary review of relevant literature has identified several special-status species, including federally and State-listed species, within the Project region that could potentially occur on site. Construction and operation of the Project has the potential to result in significant direct and indirect impacts to these species and their habitat. Therefore, this potential impact will be further evaluated in the EIR.



- (b)/(c) The Project area supports numerous intermittent drainages and washes that are likely under the jurisdiction of California Department of Fish and Game (CDFG) as waters of the State and potentially also under the jurisdiction of U.S. Army Corps of Engineers. Preliminary evaluations of the site have identified oak and Joshua tree woodlands in the Project area, and additional sensitive natural communities identified in local or regional plans, policies, and regulations, or by the CDFG or United States Fish and Wildlife Service (USFWS) may also be present. These potentially significant impacts to jurisdictional wetlands and other waters, as well as sensitive natural communities, will be evaluated in the EIR.
- (d) The Project area and vicinity may be used for migration or dispersal by wildlife, including bats, migratory birds, desert tortoise and other reptiles, as well as mammals. In addition, the Project area may contain movement corridors essential for population connectivity. Migrating birds and bats may be subject to mortality during wind turbine generator (WTG) operation if they collide with the towers or WTG blades. Construction of the Project would potentially impede migration and/or habitat connectivity. Bat nursery sites may also be present in or near the Project area, and could be subject to adverse impacts related to construction and/or operation of the Project. This impact is potentially significant and will be evaluated in the EIR.
- (e) As noted previously, preliminary evaluations of the site have identified oak and Joshua tree woodlands in the Project area. The Kern County General Plan includes oak tree conservation policies. Further analysis is warranted determine whether oak woodland plant communities are present on the Project site and to evaluate the potential for impacts to occur. Additionally, other policies from the Kern County General Plan pertaining to protection of biological resources may apply to the Project area. Consistency with this and other local policies or ordinances will be evaluated in the EIR.
- (f) The Project lies within the planning area of the California Desert Conservation Area Plan and its amendment, the West Mojave Plan. Consistency with these and any other proposed or approved local, regional, or State habitat conservation plans will be evaluated in the EIR.



	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
--	--------------------------------	---	------------------------------	-----------

CULTURAL RESOURCES. *Would the project:*

a. Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion:

- (a) Cultural resources surveys are currently being conducted and completed for the Project site and potential transmission line routes and will be included within the EIR. Further evaluation is warranted to identify potential impacts and formulate avoidance or mitigation measures, if applicable.
- (b) Archaeological surveys are currently being conducted and completed for the Project site and potential transmission line routes and will be included within the EIR. Further evaluation is warranted to identify potential impacts and formulate avoidance or mitigation measures, if applicable.
- (c) Paleontological records searches are currently being conducted and completed for the Project site and potential transmission line routes and will be included within the EIR. Potential impacts to paleontological resources and proposed mitigation measures will be evaluated in the EIR.
- (d) If human burial grounds are identified in any part of the Project area, the Project would be redesigned to avoid them. Given the sensitivity of the Project area, the potential for locating human remains is reasonably foreseeable, and therefore, potentially significant. The EIR will evaluate this potential impact and identify measures to be implemented if any are unexpectedly uncovered during the course of development.



	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
--	--------------------------------	---	------------------------------	-----------

GEOLOGY AND SOILS. *Would the project:*

a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Result in substantial soil erosion or the loss of topsoil?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion:

- (a) (i) Construction of the Project would be subject to all applicable ordinances of the Kern County Building Code (Chapter 17.08). Kern County has adopted the California Building Standards Code, 2007 Edition (CCR Title 24), which imposes substantially the same requirements as the International Building Code (IBC), 2006 Edition, with some modifications and amendments. Kern County is located entirely within a seismic Zone 4, a



designation previously used in the Uniform Building Code (UBC) (the predecessor to the International Building Code) to denote the areas of highest risk to earthquake ground motion. An Alquist-Priolo Special Study Zone does not cross the Project site or potential transmission line routes. However, the Project area is located near major earthquake faults, and, therefore, may have the potential to expose people or structures to adverse effects. Significant seismic activity in the area could adversely affect structures and workers on the site. This issue will be evaluated in the EIR.

- (ii) As discussed above in checklist question (a)(i), the Project is located in a seismically active area. Strong seismic ground shaking could occur at the Project site, resulting in damage to structures that are not properly designed to withstand strong ground shaking. The Project would potentially be subject to moderate to strong ground shaking from local and regional earthquakes. This potential impact will be evaluated in the EIR.
 - (iii) The Project area has not been identified by the Safety Element of the Kern County General Plan (2007) as an area that is subject to liquefaction hazards. The lithology at the Project site predominantly consists of bedrock or firm alluvial materials that are not typically affected by liquefaction potential. The potential for liquefaction to occur at the Project site is considered low; however, due to the potential for major seismic activity in the Project area, the potential for substantial adverse effects due to seismic-related ground failure, including liquefaction, will be examined in the EIR.
 - (iv) The wind turbine generators (WTGs) to be constructed under the Project would be placed on bedrock hill tops or ridges that are not subject to slope failure or loss of strength. The areas may also be graded to minimize the potential for movement. The potential for direct impact from mass wasting or landslides at the site and along potential transmission line routes is considered low; however, due to the potential for major seismic activity in the Project area, the potential for substantial adverse effects due to ground failure including landslides will be examined in the EIR.
- (b) The Project site is characterized by steep slopes and mountainous terrain. Grading and excavation would be required to improve and/or construct access roads throughout the site, and to prepare foundations for the installation of each WTG tower. Substantial earth-disturbing activities would occur during construction of the Project, and could result in soil erosion and/or the loss of topsoil. These issues and the potential for increased erosion will be evaluated in the EIR.
 - (c) The geotechnical report will examine the current baseline stability of the soils that underlie the Project area and the findings of that report will be presented and evaluated in the EIR. The Project would be designed such that it would not degrade the stability of the underlying soils. Because of this, potential impacts are expected to be less than significant. However, the findings of the geotechnical report and these issues will be evaluated in the EIR and mitigation measures will be presented, if necessary, to protect both structures and people from adverse effects due to landslide, lateral spreading, subsidence, liquefaction, or collapse.
 - (d) The soil present at the site and along the potential transmission line routes are primarily sands, gravels and rock that typically would not exhibit shrink and swell characteristics. Expansive soils generally result from specific clay minerals that expand when saturated and shrink in volume when dry. Although clays and other fine grained soils are not expected to be common at the Project site, the EIR will confirm and evaluate the presence or absence of expansive soils.
 - (e) The Project may include construction of a septic system and leach field. Therefore, the ability of soils within the proposed project area to support a septic tank and leach field will be examined in the geotechnical report, and the results of that report will be evaluated within the EIR.



	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
--	--------------------------------	---	------------------------------	-----------

GREENHOUSE GAS EMISSIONS. *Would the project:*

- | | | | | |
|--|-------------------------------------|--------------------------|--------------------------|--------------------------|
| a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Discussion:

- (a)/(b) Global climate change is an international phenomenon, and the regulatory background and scientific data are changing rapidly. In 2006, the California State legislature adopted AB 32, the California Global Warming Solutions Act of 2006. AB 32 describes how global climate change would affect the environment in California. The impacts described in AB 32 include changing sea levels, changes in snow pack and availability of potable water, changes in storm flows and flood inundation zones, and other impacts.

As required by AB 32, California Air Resources Board (CARB) determined what the Statewide greenhouse gas (GHG) emissions level was in 1990 and then approved a Statewide GHG emissions limit that is equivalent to that level, which is to be achieved by 2020. CARB approved the 2020 limit on December 6, 2007. CARB’s GHG inventory estimated the 1990 emissions level in California to be 427 million metric tons carbon dioxide equivalent (MMTCO_{2e}). In 2004, the emissions were estimated to be 480 MMTCO_{2e}.

The primary source of GHG emissions from the Project during operation would be mobile sources. Not all GHGs exhibit the same ability to induce climate change; therefore, GHG contributions are commonly quantified in carbon dioxide equivalencies. The carbon dioxide equivalent (CO_{2e}) portion of GHGs from the Project is being estimated in an air quality impact analysis using the URBEMIS program and California Climate Action Registry (CCAR) General Reporting Protocol. These emissions would be short term in duration and would not have a continual impact on the environment. The Project’s operational emissions are expected to be low. Regardless, since this project would replace the creation of energy through other methods, such use of a natural gas-fired turbine, the operational GHG emissions may have a net reduction in GHG emissions. Impacts related to GHGs and climate stemming from the construction of the Project is expected to be offset by the operation of the Project because it is an alternative to fossil fuel electric generation facilities. However the issue will be further evaluated in the EIR.



	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
--	--------------------------------	---	------------------------------	-----------

HAZARDS AND HAZARDOUS MATERIALS. *Would the project:*

a. Create a significant hazard to the public or the environment through the routine transport, use or disposal of hazardous materials?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. For a project located within the adopted Kern County Airport Land Use Compatibility Plan, would the project result in a safety hazard for people residing or working in the project area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
h. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
i. Would implementation of the project generate vectors (flies, mosquitoes, rodents, etc.) or have a component that includes agricultural waste? Specifically, would the project exceed the following qualitative threshold:				
i. Occur as immature stages and adults in numbers considerably in excess of those found in the surrounding environment; and	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii. Are associated with design, layout, and management of project operations; and	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
ii. Disseminate widely from the property; and	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
iv. Cause detrimental effects on the public health or well being of the majority of the surrounding population.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

- (a) The Project is not expected to result in impacts from hazards and hazardous materials with respect to creating a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials. This is because the Project would not involve the routine transport, use, or disposal of hazardous materials as defined by the Hazardous Materials Transportation Uniform Safety Act. The only hazardous materials expected to be transported to and from the site include transformer oil (which is used in electrical transformers), vehicle fuel, carburetor fluid, and various types and grades of lubrication oil, all of which are expected to be used in small quantities for Project construction and daily maintenance. The EIR will evaluate the transport and use of these materials. The Project does not anticipate the need for blasting to prepare wind turbine generator (WTG) foundations. However, in the unlikely event that blasting is required it will be evaluated in the EIR.
- (b) Potential impacts that may result from construction and operation of the Project include the accidental release of storage materials such as transformer oil, which is used in electrical transformers for WTGs, vehicle fuel, carburetor fluid, and various types and grades of lubricants, solvents, and oils. The toxicity and potential release of these materials will depend on the quantity, the type of storage container, safety protocols used on the site, the location and/or proximity to receptors, the frequency and duration of spills or storage leaks, and the reactivity of hazardous substances with other materials. The use of all materials used on site, how the materials will be transported, in what form they will be used, possible environmental contamination or worker exposure, and identification of all regulations and standard protocols to be followed during the storage, transportation, and usage of any hazardous materials will be evaluated in the EIR.
- (c) There are no schools located within one mile of the Project site or potential transmission line routes. The closest school is the Sunshine Place Preschool located 5.4 miles northwest of the



Project site. The use of materials such as transformer oil, which is used in electrical transformers for WTGs, vehicle fuel, carburetor fluid, and various types and grades of lubricants, solvents, and oils do not have the potential to extend beyond the work areas. Project-related infrastructure would not emit hazardous materials or involve handling hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. Therefore, no impacts would occur and further analysis is not warranted within the EIR.

- (d) The Project is not located on sites that are included on any list of hazardous materials compiled pursuant to Section 65962.5 of the California Government Code. Therefore, no direct impacts would occur. However, there is no evidence in the record to date to indicate that the Project would not create indirect impacts to lands located on sites in the Project area that may be included on a list of hazardous materials compiled pursuant to Section 65962.5 of the California Government Code. Due these potential impacts, this issue will be evaluated in the EIR.
- (e) The Project area is located five miles from the Mountain Valley Airport, eight miles from the Tehachapi Municipal Airport, nine miles from the Lloyd's Landing Airport, 13 miles from the Mojave Airport, and 13.8 miles from Edwards Air Force Base. Safety hazards for people residing or working in the Project area with respect to the Project's proximity to a public or military use airport are expected to be less than significant due to the distances from such facilities. However, the EIR will evaluate potential impacts related to aviation safety hazards and compliance with the Kern County Airport Land Use Compatibility Plan, Federal Aviation Administration 7460, and military airspace requirements.
- (f) The Project site is not located within two miles of a private airstrip. No direct safety hazard for people residing or working in the Project area with respect to the Project's proximity to a private airstrip is expected to occur due to the distances from such facilities. Therefore, impacts to private airstrips are expected to be less than significant, and will be further analyzed within the EIR.
- (g) Operation of the Project is not anticipated to physically impede the existing emergency response plans, emergency vehicle access, or personnel access to the site. Therefore, no operational impacts related to impairment of the implementation of or physical interference with an adopted emergency response plan or emergency evacuation plan is anticipated. However, construction of the Project would generate construction trips and potential roadway lane closures that could temporarily increase the daily traffic volumes on local roadways and intersections, thereby impeding emergency access. Therefore, the potential for Project construction-related traffic to impair or interfere with emergency response or evacuation plans will be evaluated in the EIR.
- (h) The Project site is under the jurisdiction of the Kern County Wildland Fire Management Plan. This plan documents the wildland fire situation within the county. The Project site is within a State Responsibility Area (SRA), and the California Department of Forestry and Fire Protection (CAL FIRE) implements wildfire planning and protection for the SRA. The Project site and potential transmission line routes would be located in an area highly susceptible to wildfires. Preliminary evaluations of the site have identified oak and Joshua tree woodlands. The potential for construction and operation of the Project to result in increased risk of wildfires in the Project area will be evaluated in the EIR. The evaluation would include a review of the County's 2009 Wildland Fire Management Plan, 2005 Multi-Hazard Mitigation Plan, and CAL FIRE's and Kern County Fire Department's prevention measures for wildland fires.
- (i) The Project would result in construction of WTG towers, substations, transmission line infrastructure, and operations and maintenance facilities. Project-related infrastructure is not expected to result in features or conditions (such as standing water, agricultural products, agricultural waste, or human waste) that would provide habitat for vectors such as mosquitoes, flies, cockroaches, or rodents. Workers would generate small quantities of solid waste (i.e., trash)



that would be appropriately stored for permanent disposal. Therefore, impacts would be negligible and no further analysis is warranted within the EIR.



	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
--	--------------------------------	---	------------------------------	-----------

HYDROLOGY AND WATER QUALITY. *Would the project:*

a. Violate any water quality standards or waste discharge requirements?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on-site or off-site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on-site or off-site?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. Otherwise substantially degrade water quality?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h. Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
i. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
j. Inundation by seiche, tsunami, or mudflow?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion:

(a) Construction of the Project would be subject to County, State, and federal water quality regulations. This includes, but is not limited to, required adherence to the federal Clean Water Act, National Pollutant Discharge Elimination System (NPDES) requirements, the National Flood Insurance Act, requirements of the California Department of Water Resources, adherence to the requirements of the California Fish and Game Code, the California Water Code, the requirements of the KCGP and Kern County Zoning Ordinance (Kern County Ordinance Code, Title 19). Development of the Project would result in a significant impact to hydrology and water quality if associated construction, maintenance, or decommissioning activities would result in the violation of any water quality or waste discharge standards. Such violations could occur through the creation of erosion, sedimentation, and/or polluted runoff, through the accidental release of potentially hazardous materials required during construction or operational activities, or through the discharge of contaminated groundwater during dewatering activities. Due to potential impacts, this issue will be evaluated fully in the EIR.

(b) Construction or operation of the Project could affect groundwater resources due to water supply requirements, and/or the creation of impervious surfaces that could interfere with groundwater recharge. During construction of the Project, water would be obtained from local water purveyors in the Mojave area (e.g., Mojave Public Utility District) and/or in the Tehachapi area (e.g., the Tehachapi-Cummings County Water District); local (on-site) groundwater would not be used to meet construction water requirements. During Project operations and maintenance, a new on-site groundwater well would be used to pump up to 0.224 acre-feet per year to meet operational requirements. The Project site is not located within a groundwater basin that has been defined and evaluated by the California Department of Water Resources; however, groundwater resources are anticipated to be available in fractured rock below the Project site. If local hydrogeologic conditions are prohibitive to obtaining operational water from the proposed new well, an alternate water supply would be used. Construction and operational water requirements could result in impacts to groundwater supply, and will be analyzed in the EIR.

The Project could also affect groundwater resources through the introduction of compacted soils and impermeable surfaces that alter groundwater recharge rates and/or patterns. Construction of the Project would result in 344.1 acres of permanent disturbance, or 8.3 percent of the 3,773-acre site. This area of disturbance could result in localized alterations to groundwater recharge rates and patterns, but such alterations would be site-specific. The Project is not anticipated to interfere substantially with groundwater recharge. However, the EIR will analyze potential hydrology and water quality impacts associated with this issue.

(c) Grading would be required for access roads throughout the Project site. Leveling and excavation would be required for each wind turbine generator (WTG) installation site. The WTGs would require the construction of concrete pads and fencing and would be strategically placed on the topography in WTG rows. Transmission line poles would also require grading. The construction



of these Project features would alter site-specific drainage patterns of the site or area. Evaluation of impacts to drainage patterns resulting from Project components, as well as the potential for increased erosion and/or siltation will be evaluated in the EIR.

- (d) The foundations would not be placed within the existing drainage pattern because they would be strategically placed, generally along ridge tops. However, an increase in impervious surfaces could increase stormwater run-off. As discussed above, Project features would generate new impervious surfaces that could alter existing drainage patterns of the site or area. Evaluation of impacts related to the Project potential alteration of drainage patterns of the site will be evaluated in the EIR.
- (e) The Project would increase impervious surfaces, which could substantially increase stormwater runoff. The Project Proponent would be required to prepare a drainage plan to address potential stormwater run-off impacts. Further analysis is required to identify appropriate mitigation/design measures and evaluate their effectiveness; however, effects are anticipated to be less than significant. Evaluation of the Project's potential to affect existing or planned stormwater drainage systems or contribute polluted runoff will be evaluated in the EIR.
- (f) Project construction activities (such as grading of access roads) could potentially degrade water quality through erosion and sedimentation. Additionally, accidental release of potentially harmful materials, such as engine oil, diesel fuel, turbine lubricant, and cement slurry could degrade the water quality of nearby streams. This potential impact will be further evaluated in the EIR.
- (g) The Project does not include housing. Therefore, no impact would occur and no further analysis is warranted in the EIR.
- (h) According to the Federal Emergency Management Agency (FEMA), development is permitted in Flood Hazard Areas provided that the development complies with local floodplain management ordinances. All applicable floodplain management ordinances would be fully complied with in accordance with FEMA's regulations on development in Flood Hazard Areas. The permanent aboveground features associated with the Project would be designed and engineered to withstand potential flooding and erosion hazards. Impacts associated with Flood Hazard Areas would be most likely to occur where permanent infrastructure and facilities are constructed in or closely adjacent to a watercourse and/or designated Flood Hazard Area. None of the infrastructure associated with the Project would be situated within an existing watercourse. The potential for Project structures to redirect or impede flood flows within this floodplain zone will be evaluated in the EIR.
- (i) The Project is not located within an area that is subject to flooding due to failure of a levee or dam. However, other flooding risks may exist on the Project site and will be evaluated in the EIR.
- (j) The Project is not located near an ocean or enclosed body of water, and would not be subject to inundation by seiche or tsunami. Mudflows are a type of mass wasting or landslide, where earth and surface materials are rapidly transported downhill under the force of gravity. Mudflow events are caused by a combination of factors, including soil type, precipitation, and slope. Mudflow may be triggered by heavy rainfall that the soil is not able to sufficiently drain or absorb. As a result of this super-saturation, soil and rock materials become unstable and eventually slide away from their existing location. The potential for Project structures to be inundated by mudflow will be further evaluated in the EIR.



	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
LAND USE AND PLANNING. <i>Would the project:</i>				
a. Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

(a) The Project would be developed on vacant land and the surrounding area is also vacant. No established communities are located within or adjacent to the Project. Therefore, no impact would occur and no further analysis is warranted.

(b) The Project site is located within the boundaries of the Kern County General Plan (KCGP) and accordingly designated within the following map codes: 8.2 (Resource Reserve, 20 acre min.); 8.2/2.4 (Resource Reserve, 20 acre min./Steep Slope); 8.3 (Extensive Ag, 20 acre min.); 8.3/2.4 (Extensive Ag, 20 acre min./Steep Slope); 8.4 (Mineral and Petroleum, 5 acre min.); 8.4/2.4 (Mineral and Petroleum, 5 acre min./Steep Slope); 8.5 (Resource Management, 20 acre min.); 8.5/2.1 (Resource Management, 20 acre min./Seismic Hazard); and 8.5/2.4 (Resource Management, 20 acre min./Steep Slope).

Kern County zoning and combining districts in the Project site are: Exclusive Agriculture (A), Estate (E) District, Geologic Hazard (GH) Combining District, and Residential Suburban (RS) Combining District. Under the Project, a portion of the Project area would be changed from the existing classification to include the Wind Energy (WE) Combining District. The WE Combining District contains specific development standards and conditions that apply to all construction and siting of wind turbine generators in this zone. Consistency of the Project with the policies of the KCGP and any other applicable land use plan, policy, or regulation will be evaluated in the EIR.

(c) The Project is not located within the boundaries of any adopted habitat conservation plan or natural community conservation plan. However, the Project is encompassed in the area covered by the California Desert Conservation Area Plan and its amendment, the West Mojave Plan (WMP). The WMP covers 9.3 million acres of the Mojave Desert in southern California. The WMP applies to both public and private land and is consistent with the resource management plans adopted by the military bases within the region and the desert tortoise recovery plan. The WMP is slated to be evaluated for amendment or revisions in 2011. The WMP includes a proposed habitat conservation plan; however, the habitat conservation plan has not been completed. No impact would occur and no further analysis is warranted.



	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
--	--------------------------------	---	------------------------------	-----------

MINERAL RESOURCES. *Would the project:*

- | | | | | |
|---|-------------------------------------|--------------------------|--------------------------|--------------------------|
| a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Discussion:

(a)/(b) It is anticipated that mineral resources occur within the portions of the Project area given its designation under the Kern County General Plan as Map Code 8.4 (Mineral and Petroleum), which applies to areas that contain producing or potentially producing petroleum fields, natural gas, or geothermal resources, or mineral deposits of statewide significance. The Project may potentially preclude access for extraction of valuable or locally-important mineral resources if present within the Project area. Therefore, these potential impacts will be further evaluated in the EIR.



	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
--	--------------------------------	---	------------------------------	-----------

NOISE. *Would the project result in:*

a. Exposure of persons to, or generation of, noise levels in excess of standards established in the local general plan or noise ordinance or applicable standards of other agencies?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Exposure of persons to, or generation of, excessive ground borne vibration or ground borne noise levels?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. For a project located within the Kern County Airport Land Use Compatibility Plan, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f. For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Discussion:

- (a) Land uses determined to be “sensitive” to noise as defined by the Kern County General Plan (KCGP) include residential areas, schools, convalescent and acute care hospitals, parks and recreational areas, and churches. The nearest sensitive receptors to the Project are residences and recreational areas located within and adjacent to the Project boundaries.

Implementation of the Project would result in a change in the zone classification on various properties to include the Wind Energy (WE) Combining District. This classification requires that noise levels associated with wind turbine generator (WTG) operations not to exceed 45 dBA (A-weighted decibels) for more than five minutes out of any one hour time period or 50 dBA for any period of time if the WTG is located within 50 feet of any existing residence, school, hospital, church, or public library (Kern County Ordinance 19.64.140 (J)). A noise analysis will be included in the EIR to determine the Project’s consistency with the applicable noise regulations and provisions of the KCGP and Zoning Ordinance.



- (b) Ground-borne vibration and ground-borne noise could originate from earth movement during the construction phase of the Project as well as from the operation and maintenance of the facilities. The Project would be expected to comply with all applicable noise regulations and requirements for long-term operation, as well as with measures to reduce excessive ground-borne vibration and noise to ensure that the Project would not expose persons or structures to excessive ground-borne vibration. However, due to potential vibration impacts during construction, further analysis of ground-borne vibration and ground-borne noise will be included in the EIR.
- (c) The Project would introduce permanent noise sources from turbine operation, increased traffic, and general maintenance. Construction activity would also increase ambient noise levels above existing levels for up to twelve months as the site is developed. Further analysis of ambient noise levels and the Project's potential impact on those levels will be included in the EIR.
- (d) Heavy equipment use during construction would cause a temporary or periodic increase in ambient noise levels. Construction activity would increase ambient noise levels above existing levels for 12 months. Temporary or periodic increases in ambient noise levels caused by construction activities could be reduced with the incorporation of mitigation measures. Project-related construction noise levels will be quantified and evaluated in the EIR.
- (e) The Project is not located within the sphere of influence of an airport, as identified in the Kern County Airport Land Use Compatibility Plan (ALUCP). The Project area is located five miles from the Mountain Valley Airport, eight miles from the Tehachapi Municipal Airport, nine miles from the Lloyd's Landing Airport, 13 miles from the Mojave Airport, and 13.8 miles from Edwards Air Force Base. Aviation related noise hazards for people residing or working in the Project area are expected to be less than significant with respect to the Project's proximity to a public or military use airport. Because the nearest public airport/public use airport is located five miles from the site, the Project is not expected to expose individuals working in the Project area to excessive noise levels resulting from any airports located within the ALUCP; therefore, no further analysis related to public airports is warranted.
- (f) The Project is not located within five miles of a private airstrip; therefore, implementation of the Project is not expected to expose individuals working in the Project area to excessive noise levels generated from private airstrips. No further analysis related to private airstrips is required within the EIR.



	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
--	--------------------------------	---	------------------------------	-----------

POPULATION AND HOUSING. *Would the project:*

a. Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion:

- (a) The Project is expected to require up to 262 workers, which would be a minimal increase in employment over the 12-month construction period given the Project area's existing population. Construction workers are expected to travel to the site from various locations throughout southern California, and the number of workers expected to relocate to the surrounding area is not expected to be substantial. Therefore, the Project would not directly or indirectly induce the development of any new housing or businesses. Operation of the Project would also require up to 15 full-time or part-time staff on site.

Typical established local thresholds of significance for housing and population growth pursuant to the State CEQA Guidelines, Section 15064.7 include effects that would induce substantial growth or concentration of a population beyond County projections, alter the location, distribution, density, or growth rate of the population beyond that projected in the Housing Element, result in a substantial increase in demand for additional housing, or create a development that significantly reduces the ability of the County to meet housing objectives set forth in the General Plan Housing element. The effects of the Project in relation to these local thresholds are minimal.

Although the Project would produce additional electricity, it is intended to meet the demand for energy that is already projected based on growth in communities around California. While the Project's electricity would replace electricity generated by fossil fuels, thereby contributing to California's renewable energy goals, the production of additional electricity may indirectly be growth inducing. However, additional energy availability alone would not drive population growth. Additional factors that would be necessary for population growth in Kern County would include access to public utilities, housing, sufficient transportation capacity, and employment opportunities. The production of additional energy would not automatically cause an increase in jobs. Further local governments can minimize the potential growth-inducing effects of proposed projects through regulatory authority in relation to land use. In addition, the proposed project does



not propose the extension of roads or the development of other infrastructures, such as utilities, beyond the Project site that would indirectly induce population growth.

- (b) A small number of residential structures are located within the Project boundaries and no housing is expected to be displaced; however, this potential impact will be further evaluated in the EIR.
- (c) The Project is not expected to displace any people; however, this potential impact will be further evaluated in the EIR.



	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
--	--------------------------------	---	------------------------------	-----------

PUBLIC SERVICES.

a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or to other performance objectives for any of the public services:

i) Fire protection?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii) Police protection?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii) Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
iv) Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
v) Other public facilities?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion:

(a) The Kern County Fire Department provides fire suppression and emergency medical services to the Project area. The Tehachapi Station, located seven miles northwest of the Project site, would be the primary fire station to service the Project. The majority of the Project site is located within a State Responsibility Area (SRA), and California Department of Forestry and Fire Protection implements wildfire planning and protection for the SRA. Construction and operation activities may result in increased risk of wildfire, which could impact firefighting capacity in the area. The potential impact on fire services from construction in a SRA and operation of the wind turbine generators is therefore potentially significant and will be evaluated in the EIR.

The Kern County Sheriff's Department provides police protection services to the Project area. The Mojave Substation, located nine miles northwest of the Project site, would be the primary substation to service the Project area. During construction, on-site security would be provided. In addition, temporary construction fencing with gated site access would be installed in accordance with County regulations to assure security and personnel safety during construction. Where appropriate, construction fencing may be retained for permanent fencing and would be constructed to meet standards for permanent installations. While security and fencing would minimize the need for police surveillance and response, the Project's impacts on sheriff services and existing capacities is potentially significant and will be evaluated in the EIR.

Construction of the Project is expected to require a total of 262 workers, which would be a minimal increase in employment over the 12 month construction period given the Project area's existing population. Construction workers are expected to travel to the site from various locations



throughout southern California, and the number of workers expected to relocate to the surrounding area is not expected to be substantial. Operation of the Project would also require minimal full-time or part-time staff. However, further analysis is required to determine the Project's potential for directly or indirectly inducing new population growth. The EIR will analyze any population increase that would be experienced during the construction phase and operation of the Project that could result in additional demand for school facilities.

The Project is expected to result in less than significant impacts on public services, such as post office and library services. Nevertheless, all impacts on public services will be evaluated in the EIR.



	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
--	--------------------------------	---	------------------------------	-----------

RECREATION.

- | | | | | |
|--|-------------------------------------|--------------------------|--------------------------|-------------------------------------|
| a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b. Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Discussion:

- (a) The temporary increase of population during construction that might be caused by an influx of workers would be minimal. As a result, there would not be a detectable increase in the use of parks. Therefore, no further analysis of this topic will be conducted in the EIR.
- (b) The Project does not include new recreational facilities or require construction or expansion of recreational facilities. However, portions of the Project site are traversed by the PCT which is an international hiking trail that extends from Mexico to Canada through California, Oregon and Washington. As such, portions of the trail may need to be relocated a couple of hundred feet from its existing locations in order to maintain proper setbacks from the wind turbine generators. Impacts to this trail and other recreational facilities as well as wilderness areas, including potential preclusion of access and degradation of value, will be further evaluated in the EIR.



	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
TRANSPORTATION/TRAFFIC. <i>Would the project:</i>				
a. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Exceed, either individually or cumulatively, a Level of Service standard established by the county congestion management agency or adopted County threshold for designated roads or highways? Specifically, would implementation of the project cause the Level of Service (LOS) for roadways and/or intersections to decline below the following thresholds or further degrade already degraded segment(s):				
i. Metropolitan Bakersfield General Plan LOS "C"	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
ii. Kern County General Plan LOS "D"	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e. Result in inadequate emergency access?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



Discussion:

- (a) Both State Route (SR)-14 and SR-58 provide regional access to the Project area. Project-related traffic would use access roads entering the Project from the east via Oak Creek Road. Construction of the Project may occur simultaneously or sequentially, lasting up to 12 months. In addition to vehicle trips generated by construction workers traveling to the site, construction of the Project would add vehicle trips to the area roadway system through delivery of construction equipment and materials. Delivery of construction materials would require a number of oversize vehicle trips that may travel at slower speeds than existing traffic and, due to their size, may intrude into adjacent travel lanes. These oversize trips may decrease the existing level of service (LOS) on area freeways, roadways and intersections. Additionally, the total number of vehicle trips associated with all construction-related traffic (including construction workers) could temporarily increase daily traffic volumes traveling on local roadways and intersections.

Furthermore, stringing activities required for transmission line infrastructure may require temporary lane closures that may result in temporary traffic delays on affected roadways. These potential impacts on the local roadway system from construction related vehicle trips will be evaluated in the EIR. Once constructed, wind operations typically employ a relatively small number of staff, including wind turbine technicians, operations personnel, administrative personnel and managers, would be employed to operate and maintain the Project. The potential impact of Project operational traffic on the area roadway system will be evaluated in the EIR.

- (b) (i) The Project site is not located in or near the metropolitan Bakersfield area. However, additional analysis of this topic will be conducted in the EIR.
- (ii) Construction of the Project would generate construction trips and may require roadway lane closures, which could temporarily increase the daily traffic volumes on local roadways and intersections. Operation of the Project would also generate trips on local roadways. The potential impacts of these conditions on LOS of area roadways will be evaluated in the EIR.
- (c) The Project area is located five miles from the Mountain Valley Airport, eight miles from the Tehachapi Municipal Airport, nine miles from the Lloyd's Landing Airport, 13 miles from the Mojave Airport, and 13.8 miles from Edwards Air Force Base. The Project is subject to Section 19.08.160 (Height of Structures) of the Kern County Zoning Ordinance. Additionally, the Project must comply with Federal Aviation Administration (FAA) standards for determining physical obstructions to navigable airspace and lighting of the WTGs and Met towers. Due to the proximity of these airport facilities and the heights of Project components, the EIR will evaluate potential impacts related to aviation safety hazards and compliance with the Kern County Airport Land Use Compatibility Plan, FAA 7460, and military airspace requirements.
- (d) A number of existing dirt roads within the Project site would be graded, widened, and compacted to provide adequate construction and maintenance access to Project facilities. New access roads would be constructed where required. Because all site access roadways would be private and gated to restrict public use, all modifications to existing on-site access roads and any new access roads created are not expected to result in an increase to public transportation hazards due to design or incompatible use. However, because all Project access roads would require Access Road Design and Encroachment Permits from both Kern County and the California Department of Transportation, the Project's compliance with regulations pertaining to access road modifications and construction will be evaluated in the EIR.
- (e) Construction of the Project would generate construction trips and potential roadway lane closures that could temporarily increase the daily traffic volumes on local roadways and intersections,



thereby impeding emergency access. The potential for Project-related traffic to result in inadequate emergency access will be evaluated in the EIR.

- (f) Construction of the Project would generate construction trips and potential roadway lane closures that could temporarily disrupt any bicycle traffic on local roadways. However, due to the rural nature of the Project site area, no bus stops or designated bicycle lanes exist on the roadways to be used during construction and operation. There is sufficient space on the Project site to provide adequate parking. However, to ensure Project compliance to the General Plan policies supporting alternative transportation, the EIR will discuss how the Project's traffic impacts can be mitigated through ride sharing and limiting Project-generated trips.



	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
--	--------------------------------	---	------------------------------	-----------

UTILITIES AND SERVICE SYSTEMS. *Would the project:*

a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c. Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g. Comply with federal, state, and local statutes and regulations related to solid waste?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Discussion:

- (a) The Project would generate a minimal volume of wastewater. During construction and operation, wastewater from the concrete batch plant and that associated with other construction activities would be contained within portable facilities and disposed of at an approved site. During operation, the Project would not generate substantial volumes of wastewater due to the minimal number of full-time or part-time employees. Impacts exceeding wastewater treatment requirement are expected to be less than significant; however, the EIR will consider these issues more thoroughly.



- (b) The Project may require the construction of septic systems or leach lines; however, wastewater generation during construction and operation is expected to be limited due to the minimal employment associated with Project operation. Water for potable needs would be provided by bottled drinking water. During Project operations and maintenance, a new on-site groundwater well would be used to pump up to 0.224 acre-feet per year (afy). Since the Project would provide its own water source, it would not impact existing water supply systems. However, the Project would still require construction of the facilities listed above. The EIR will evaluate the Project's compliance with all applicable local, State, and federal water and wastewater requirements and best management practices incorporated into construction of these project features.
- (c) Although the Project would create a small amount of additional impervious surface and may require a small amount of imported water for dust suppression during construction, these changes are not expected to substantially increase the amount of stormwater runoff. The Project area is drained by natural stream channels and does not rely on constructed stormwater drainage systems. As any new impervious surface and grading of access roads have the potential to alter the pattern and concentration of runoff; the EIR will provide further analysis to determine the need for any appropriate stormwater mitigation/design measures.
- (d) During construction of the Project, water would be obtained from local water purveyors in the Mojave area (e.g., Mojave Public Utility District) and/or in the Tehachapi area (e.g., the Tehachapi-Cummings County Water District); local (on-site) groundwater would not be used to meet construction water requirements. During Project operations and maintenance, a new on-site groundwater well would be used to pump up to 0.224 afy. The Project site is not located within a groundwater basin that has been defined and evaluated by the California Department of Water Resources (DWR), and pumping of local groundwater is not subject to permitting requirements, such as would occur in an adjudicated basin. If hydrogeologic conditions are prohibitive to obtaining operational water from the proposed new well, an alternate water supply such as those used during Project construction would be used. Sufficient water supplies are assumed to be available to serve the Project from existing entitlements and resources. However, the issue of new or expanded entitlements will be evaluated in the EIR.
- (e) The Project, as proposed, may include construction of limited septic systems or leach lines to accommodate on-site operations facilities if required by the Kern County Public Health Services Department, Environmental Health Services Division. There would be no substantial wastewater flows to treatment providers and no impacts to existing wastewater treatment facilities. Therefore, this issue will not be further evaluated in the EIR.
- (f) The Project is not expected to generate a significant amount of waste that would exceed the capacity of local landfills. Materials brought to the Project site would be used to construct facilities and few residual materials are expected. Non-hazardous construction refuse and solid waste would be disposed of at a local landfill, while any hazardous waste generated during Project construction would be disposed of at an approved location. It is not anticipated that the amount of solid waste generated by the Project site would exceed the capacity of local landfills needed to accommodate the waste. However, this issue will be further evaluated in the EIR.
- (g) The Project would generate solid waste during construction and operation of the Project, thus requiring the consideration of waste reduction and recycling measures. The 1989 California Integrated Waste Management Act (AB 939) requires Kern County to attain specific waste diversion goals. In addition, the California Solid Waste Reuse and Recycling Access Act of 1991, as amended, requires expanded or new development projects to incorporate storage areas for recycling bins into the Project design. The need for mitigation measures to confirm that the Project would comply with the 1989 California Integrated Waste Management Act and the 1991 California Solid Waste Reuse and Recycling Access Act of 1991, as amended will be evaluated in the EIR.



	Potentially Significant Impact	Potentially Significant Impact Unless Mitigated	Less Than Significant Impact	No Impact
--	--------------------------------	---	------------------------------	-----------

MANDATORY FINDINGS OF SIGNIFICANCE

- | | | | | |
|---|-------------------------------------|--------------------------|--------------------------|--------------------------|
| <p>a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?</p> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <p>b. Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?</p> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| <p>c. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?</p> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Discussion:

- (a) Impacts to biological and cultural resources are currently unknown. Biota and Cultural Resource studies for the Project are currently being conducted. The EIR’s biological and cultural resources section will discuss specific Project impacts on plants and wildlife including avian species, as well as the major periods of California history and prehistory. The EIR will also evaluate the Project’s contribution to cumulative biological resources impacts and propose mitigation that will reduce the impacts.
- (b) The Project has the potential to contribute to cumulative impacts to aesthetics, agriculture and forestry resources, air quality, biological resources, greenhouse gas emission, hydrology, land use and planning, noise, public services, and transportation and traffic. The EIR will evaluate the Project’s contribution to cumulative impacts in these and other areas as further impacts are identified.
- (c) Although there may be significant air quality impacts during construction, the long term air quality impacts could be beneficial if fossil fuel use is reduced. However, the health impacts from Project-related and cumulative contribution to air quality impacts will be evaluated in the EIR.