

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 # 2018072076

Project Title: Humboldt Wind Energy Project

Lead Agency: County of Humboldt Planning Division

Contact Person: Steve Werner

Mailing Address: 3015 H Street

Phone: 707-445-7541

City: Eureka

Zip: 95501

County: Humboldt

Project Location: County: Humboldt

City/Nearest Community: Scotia

Cross Streets:

Zip Code: 95565

Longitude/Latitude (degrees, minutes and seconds): ... Total Acres: 2,218

Assessor's Parcel No.: Multiple

Section: Twp.: Range: Base:

Within 2 Miles: State Hwy #: U.S. Hwy 101

Waterways: Eel River, Van Duzen River

Airports: n/a

Railways: n/a

Schools: n/a

Document Type:

- CEQA: [ ] NOP [x] Draft EIR [ ] Supplement/Subsequent EIR [ ] Neg Dec [ ] Mit Neg Dec [ ] Joint Document [ ] Final Document [ ] Other:
NEPA: [ ] NOI [ ] EA [ ] Draft EIS [ ] FONSI

Governor's Office of Planning & Research

APR 15 2019

STATE CLEARINGHOUSE

Local Action Type:

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

Development Type:

- [ ] Residential: Units Acres
[ ] Office: Sq.ft. Acres Employees
[ ] Commercial: Sq.ft. Acres Employees
[ ] Industrial: Sq.ft. Acres Employees [x] Power: Type Wind Energy MW 155
[ ] Educational:
[ ] Recreational:
[ ] Water Facilities: Type MGD
[ ] Transportation: Type
[ ] Mining: Mineral
[ ] Waste Treatment: Type MGD
[ ] Hazardous Waste: Type
[ ] Other:

Project Issues Discussed in Document:

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

Present Land Use/Zoning/General Plan Designation:

Land use: Timberland with Industrial, Agricultural Grazing Zoning: Agricultural Exclusive and Timber Production Zone

Project Description: (please use a separate page if necessary)

See Attached

State Clearinghouse Contact:

(916) 445-0613

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Project Sent to the following State Agencies

State Review Began:

4-15-2019

SCH COMPLIANCE

6-5-2019

Review Per Lead

- X Resources
Boating & Waterways
Central Valley Flood Prot.
Coastal Comm
Colorado Rvr Bd
Conservation
CDFW # IE
Cal Fire
Historic Preservation
Parks & Rec
Bay Cons & Dev Comm.
DWR
Cal EPA
ARB: Airport & Freight
ARB: Transportation Projects
ARB: Major Industrial/Energy Resources, Recycl. & Recovery
SWRCB: Div. of Drinking Water
SWRCB: Div. Drinking Wtr #
SWRCB: Div. Financial Assist.
SWRCB: Wtr Quality
SWRCB: Wtr Rights
Reg. WQCB # 1
Toxic Sub Ctrl-CTC
Yth/Adlt Corrections
Corrections
Independent Comm
Delta Protection Comm
Delta Stewardship Council
Energy Commission
NAHC
Public Utilities Comm
Santa Monica Bay Restoration
State Lands Comm
Tahoe Rgl Plan Agency
Conservancy
Other:
CalSTA
Aeronautics
CHP
Caltrans# 1
Trans Planning
Other
Education
Food & Agriculture
HCD
OES
State/Consumer Svcs
General Services

Please note State Clearinghouse Number (SCH#) on all Comments

SCH#: 2018072076

Please forward late comments directly to the Lead Agency

AQMD/APCD 22

(Resources: 4/20)

**Reviewing Agencies Checklist**

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

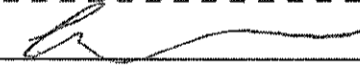
- |   |  |
|---|--|
| <input checked="" type="checkbox"/> Air Resources Board                         | <input checked="" type="checkbox"/> Office of Historic Preservation          |
| <input type="checkbox"/> Boating & Waterways, Department of                     | <input type="checkbox"/> Office of Public School Construction                |
| <input type="checkbox"/> California Emergency Management Agency                 | <input type="checkbox"/> Parks & Recreation, Department of                   |
| <input type="checkbox"/> California Highway Patrol                              | <input type="checkbox"/> Pesticide Regulation, Department of                 |
| <input checked="" type="checkbox"/> Caltrans District #1                        | <input type="checkbox"/> Public Utilities Commission                         |
| <input type="checkbox"/> Caltrans Division of Aeronautics                       | <input checked="" type="checkbox"/> Regional WQCB #1                         |
| <input type="checkbox"/> Caltrans Planning                                      | <input type="checkbox"/> Resources Agency                                    |
| <input type="checkbox"/> Central Valley Flood Protection Board                  | <input type="checkbox"/> Resources Recycling and Recovery, Department of     |
| <input type="checkbox"/> Coachella Valley Mtns. Conservancy                     | <input type="checkbox"/> S.F. Bay Conservation & Development Comm.           |
| <input checked="" type="checkbox"/> Coastal Commission                          | <input type="checkbox"/> San Gabriel & Lower L.A. Rivers & Mtns. Conservancy |
| <input type="checkbox"/> Colorado River Board                                   | <input type="checkbox"/> San Joaquin River Conservancy                       |
| <input type="checkbox"/> Conservation, Department of                            | <input type="checkbox"/> Santa Monica Mtns. Conservancy                      |
| <input type="checkbox"/> Corrections, Department of                             | <input checked="" 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 checked="" type="checkbox"/> SWRCB: Water Quality                     |
| <input type="checkbox"/> Energy Commission                                      | <input type="checkbox"/> SWRCB: Water Rights                                 |
| <input checked="" type="checkbox"/> Fish & Game Region #1                       | <input type="checkbox"/> Tahoe Regional Planning Agency                      |
| <input type="checkbox"/> Food & Agriculture, Department of                      | <input type="checkbox"/> Toxic Substances Control, Department of             |
| <input checked="" type="checkbox"/> Forestry and Fire Protection, Department of | <input type="checkbox"/> Water Resources, Department of                      |
| <input type="checkbox"/> General Services, Department of                        | Other: _____   |
| <input type="checkbox"/> Health Services, Department of                         | Other: _____   |
| <input type="checkbox"/> Housing & Community Development                        |  |
| <input type="checkbox"/> Native American Heritage Commission                    |  |

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

Starting Date April 15, 2019 Ending Date June 5, 2019

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**Lead Agency (Complete if applicable):**

Consulting Firm: _____	Applicant: <u>Humboldt Wind, LLC</u>
Address: _____	Address: <u>11455 El Camino Real, Suite 160</u>
City/State/Zip: _____	City/State/Zip: <u>San Diego, CA 92130</u>
Contact: _____	Phone: <u>210-831-5144</u>
Phone: _____	

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Signature of Lead Agency Representative:  Date: 4/11/19

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

# PROJECT OVERVIEW

## PROJECT LOCATION AND COMPONENTS

The project site is about 20 miles south of Eureka, roughly 12 miles southeast of the city of Fortuna, and 22 miles north of the community of Garberville, and is bisected by U.S. Highway 101 (U.S. 101). The town of Scotia is adjacent to the northern edge of the project site. (See Figures 2-1 and 2-2 in Chapter 2, “Project Description,” for the regional location and project site boundaries, respectively.)

The proposed project consists of a maximum of 60 wind turbine generators (WTGs) and associated infrastructure with a nameplate generating capacity (theoretical maximum energy generation) of up to 155 MW. Figure 2-2 depicts the project site boundaries. The project site represents an approximately 2,218-acre area study corridor within which the WTGs and associated infrastructure would be placed. The project boundaries have been defined based on a 1,000-foot-wide corridor centered on the representative locations of WTGs; a 200-foot-wide corridor centered on project roadways, the electrical collection line, and the generation transmission line (gen-tie); and a 500-foot-wide buffer around proposed staging areas, temporary impact areas, and the project substation. The exact footprint of individual WTGs within the project site would be determined during final engineering design, but would generally be placed along Monument and Bear River ridges. Turbine heights could reach up to 600 feet tall, with a rotor diameter of 492 feet. The environmental impact analysis in this DEIR is based on a maximum number of WTGs that may be placed within the boundaries of the project site. The assumptions developed for this analysis support a conservative approach to project planning and environmental review, as they represent a maximum level of potential development.

In addition to the wind turbines and transformers, the project includes ancillary facilities such as temporary staging areas, access roads, 34.5-kilovolt (kV) collection lines (referred to in this EIR as the “collection system”), operations and maintenance (O&M) facility, a substation, a modified utility switchyard, and a 115 kV gen-tie along Shively Ridge.

A portion of the gen-tie would cross the Eel River; this portion would be constructed underground. The project’s point of interconnection with the Pacific Gas and Electric Company (PG&E) transmission grid would be PG&E’s Bridgeville Substation (Figure 2-2). PG&E is a public utility that sells energy in the California utility market, which is operated by the California Independent System Operator.

The project would include the following components, which are discussed in detail in Chapter 2, “Project Description”:

- ▶ up to 60 turbines (capable of generating 2–5 MW of electricity each) erected on tubular steel towers set on concrete foundations, as well as the associated turbine pads, temporary staging areas, and transformers;
- ▶ construction of access roads;
- ▶ an up to 25-mile, 115 kV gen-tie, including an underground crossing of the Eel River, following Shively Ridge and ultimately connecting to the existing PG&E transmission system;
- ▶ a project substation located on-site;
- ▶ an underground electrical collection system linking turbines to each other and to the project substation;

- ▶ an underground communication system (fiber optic cable) adjacent to the collection system;
- ▶ a Supervisory Control and Data Acquisition (SCADA) system between each turbine and the substation and between the project substation and the Bridgeville Substation to monitor and control project output and the transmission of energy into the system;
- ▶ an up to 5-acre O&M facility, including an operations building, a parking area, and an outdoor storage area with perimeter fencing;
- ▶ a 10-acre temporary staging area and a construction trailer and parking area located within the O&M facility;
- ▶ a component offloading location at Fields Landing;
- ▶ two temporary bypasses off U.S. 101 (Hookton Overpass and 12th Street Bypass) for transporting oversize loads;
- ▶ up to six permanent meteorological towers;
- ▶ three 5-acre, temporary staging areas distributed throughout the project site, one of which would include one temporary cement batch plant on Monument Ridge; and
- ▶ up to 17 miles of new 24-foot access roads.

## **WIND TURBINE GENERATORS, PADS, AND SCADA SYSTEM**

A wind turbine consists of the tower, nacelle, hub, blades/rotor, controller, central SCADA system for communication, transformer, Federal Aviation Administration (FAA) lighting where required, and lightning protection system. Maximum turbine height, as measured at the highest point of the rotor blade rotation, would be up to 182 meters (600 feet) from the base of the turbine. Ground clearance for the rotor blades at their lowest point of rotation would be 23 meters (76 feet). The turbines would have a horizontal-axis design in a light grey color with a nonreflective finish, consistent with FAA requirements.

Each turbine would be supported by a rectangular turbine pad measuring about 350 feet by 350 feet, leveled to a 2 percent slope or less. A portion of the turbine pad would remain graded as a permanent soil-compacted crane pad to provide a stable foundation for the crane during placement of the WTG components. The turbine foundations would be buried to a depth of 10 feet below grade with a pedestal extending approximately 1 foot above the ground. The foundation would be 60–70 feet in diameter, depending on the turbine model selected.

Once construction is completed, a permanent gravel ring 25 feet in diameter would be established around the base of the foundation to form the permanent turbine pad. The gravel would provide a stable surface for maintenance vehicles and would minimize erosion and runoff.

Each WTG contains electronic devices that continuously monitor turbine performance. A SCADA system installed in the generation area would collect operational and performance data from each wind turbine and the project as a whole and would allow for remote turbine operation.

## **ELECTRICAL INTERCONNECTION**

The collection system would consist of 34.5 kV lines located underground on dedicated paths or within project roads. Collection lines would be buried in trenches and would terminate at individual turbines, where they would connect to junction boxes, or at the project substation. Each trench would contain power cables, a ground wire, a fiber optic communication cable for the SCADA system to transmit data from the turbine controllers to the substation and O&M facility, and markers to alert anyone digging in the area.

The main power transformer within the project substation would increase the voltage of the electricity from the 34.5 kV collection system to 115 kV for transmission to the Bridgeville Substation. The final permanent footprint of the substation and switching station site would be approximately 5 acres.

The project would connect to the transmission system at the PG&E Bridgeville Substation via an approximately 25-mile overhead transmission line or gen-tie. The overhead, 115 kV transmission interconnect lines would be constructed on wooden H-frames, wood poles, or metal monopole structures placed within a 100-foot-wide transmission corridor. All energized project components, including the entire gen-tie line and all power lines, would be constructed in accordance with the current suggested practices of the Avian Power Line Interaction Committee.

## **BRIDGEVILLE SUBSTATION UPGRADES**

The gen-tie would terminate at PG&E's Bridgeville Substation, located between the Cottonwood Substation and the Humboldt Substation. Bridgeville is currently configured as a 115/12 kV substation that connects local distribution lines to PG&E's 115 kV transmission system.

As part of the project, PG&E would expand the Bridgeville Substation to allow the project to connect to the 115 kV side of the substation. Two new intermediate transmission structures may be needed to connect the gen-tie to the 115 kV bus. In addition, the lines entering and exiting the Bridgeville Substation may require modifications to interconnect the project with the PG&E transmission grid. During construction, PG&E may need to construct a temporary transmission line, known as a "shoefly," to maintain electrical service while project-related work is conducted at Bridgeville.

## **OPERATIONS AND MAINTENANCE FACILITY AND METEOROLOGICAL TOWERS**

An O&M facility is proposed for placement on up to 5 acres of land with a building footprint of 5,000–6,000 square feet. The O&M facility would include a water storage tank, which would be supplied with potable water obtained from a new well drilled within the footprint of the O&M facility. Wastewater generated at the O&M facility would be treated by an appropriately sized septic system that would be installed.

Meteorological towers (METs) and/or Light Detection and Ranging units would be installed on-site to allow project planners to assess the project's viability and determine the optimum turbine layout, and to ensure optimal operation of the installed turbines. METs would be 80–120 meters (262–394 feet) tall and would comply with FAA lighting regulations. Up to 12 METs would be constructed within the project footprint. Up to six of these METs would remain on-site permanently after the completion of turbine optimization testing.

## **CONSTRUCTION AND PHASING**

Construction would begin in winter 2019 and would last 12–18 months. The sequence of construction activities would generally be as follows: tree clearing, site preparation/grading, access road construction, construction of turbine foundations, turbine installation, installation of the collection system, substation construction, gen-tie installation, switchyard installation, final testing and turbine commissioning, installation of O&M facilities, and cleanup and restoration. Some additional details of construction, excerpted from Chapter 2, “Project Description,” are presented below.

### **COMPONENT SHIPPING AND STAGING**

Turbine components would be stacked on shipping frames and barged to Humboldt Bay for offloading at Fields Landing. Barges would enter Humboldt Bay connected to a tugboat by a 2,200-foot-plus towline, which would be spooled and shortened before entering the approach jetty. Transportation by sea would take place when weather conditions and the sea state are acceptable, based on predetermined conditions established by the port captain. A crane would be placed on the shore at Fields Landing. The crane would be capable of lifting 160,000 pounds (slightly heavier than the largest piece) 65 feet high at 115 feet of reach. Once offloaded from the barge, components would be either directly loaded onto transport vehicles or temporarily stored at existing storage yards within the Fields Landing complex. Barges would be offloaded over a 30-day period, between 7:00 a.m. and 10:00 p.m. Access to and egress from Fields Landing for trucks with turbine components would be via South Bay Depot Road.

### **COMPONENT TRANSPORT TO THE PROJECT SITE**

Components would be transported overland to the project site on heavy trucks, which would use U.S. 101 before reaching the temporary staging area at the Jordan Creek off-ramp. Truck trailers may be larger than average to carry oversized loads. If required, pilot vehicles would accompany the trucks. Upon reaching the temporary staging area, the equipment would be either offloaded and temporarily stored or hauled directly to the worksite and assembled or installed. For each turbine, up to 15 separate loads of equipment and materials would be delivered. Nine to 12 of these loads would be oversized permitted loads.

Most project components could be transported directly to the project laydown yard at Jordan Creek. However, depending on final turbine selection and the transportation plan, the base tower section may exceed the allowable height of two overpasses: Hookton Road and 12th Street. Temporary detours are proposed for these locations. All transportation activities would be timed to minimize traffic disruptions consistent with applicable permits.

### **ACCESS ROADS**

Access to the proposed WTG pads and ancillary project components would be provided by the existing network of logging roads except where the existing road cannot accommodate trucks hauling oversize loads. Some segments of currently paved roads (e.g., Shively Road) may require realignment to provide access for the gen-tie line. Realigned segments would be improved with gravel during construction. Paved portions would be repaved once construction activities are completed. All newly constructed roads would remain in place for the life of the project.

## ASSESSOR PARCEL NUMBERS

The following table includes the Assessor Parcel Numbers (APNs) within the project corridor.

The APN No.s			
102-132-002-000	205-311-004-000	207-181-019-000	207-221-001-000
102-132-004-000	205-321-006-000	207-182-009-000	207-311-001-000
106-191-010-000	205-321-032-000	207-182-010-000	207-311-002-000
106-191-011-000	205-321-033-000	207-182-011-000	207-311-006-000
106-191-012-000	205-321-034-000	207-183-003-000	209-191-001-000
205-021-005-000	205-331-006-000	207-183-004-000	209-191-002-000
205-021-014-000	205-331-007-000	207-184-004-000	209-191-003-000
205-021-017-000	205-341-006-000	207-184-005-000	209-191-012-000
205-021-019-000	205-341-008-000	207-184-006-000	209-191-013-000
205-021-021-000	205-341-011-000	207-184-007-000	209-201-002-000
205-021-022-000	205-341-013-000	207-184-008-000	209-201-003-000
205-021-023-000	205-341-018-000	207-185-002-000	209-201-007-000
205-021-024-000	205-341-019-000	207-185-003-000	209-201-010-000
205-051-001-000	205-351-012-000	207-186-005-000	209-211-008-000
205-051-003-000	205-351-026-000	207-186-007-000	209-211-009-000
205-051-008-000	205-351-030-000	207-186-009-000	209-211-010-000
205-051-009-000	207-074-016-000	207-202-009-000	211-013-001-000
205-051-010-000	207-074-025-000	207-211-001-000	211-023-002-000
205-051-011-000	207-074-027-000	207-211-002-000	211-461-001-000
205-061-004-000	207-074-028-000	207-212-002-000	211-461-002-000
205-061-007-000	207-124-005-000	207-213-001-000	211-462-004-000
205-061-011-000	207-181-005-000	207-213-002-000	211-471-001-000
205-061-012-000	207-181-016-000	207-213-003-000	211-472-001-000

