RESOLUTION OF THE BOARD OF SUPERVISORS OF THE COUNTY OF HUMBOLDT Resolution Number 19-

Case Number CUP-18-002 Assessor's Parcel Numbers: 102-132-004 et al.

Resolution by the Board of Supervisors of the County of Humboldt conditionally approving the Conditional Use Permit and Special Permit for the Humboldt Wind Energy project.

i. The project proposed by Humboldt Wind, LLC (PLN-13999-CUP) came on for public hearing before the Humboldt County Board of Supervisors on December 16, and 17, 2019. Having considered all the written and documentary evidence, the action of the Planning Commission, the administrative record, the staff report, oral testimony, and other evidence presented, the Board of Supervisors makes the following findings:

FINDINGS

FINDINGS FOR APPROVAL OF THE CONDITIONAL USE PERMIT AND SPECIAL PERMIT

1. FINDING: PROJECT DESCRIPTION

Conditional Use Permit to allow electrical transmission lines and electrical power generation in the Timber Production and Agricultural Exclusive Zones and a Special Permit to allow work within a streamside management area (stream crossings) and work within other wet areas for a project consisting of the following:

Up to 47 wind turbine generators (WTGs) and associated infrastructure with a nameplate generating capacity (theoretical maximum energy generation) of up to 155 MW. The wind turbines would be placed along Monument and Bear River ridges. Turbine heights could reach up to 600 feet tall, with a rotor diameter of 492 feet.

In addition to the wind turbines and transformers, the project includes ancillary facilities such as temporary staging areas, access roads, 34.5kilovolt (kV) collection lines (the "collection system"), operations and maintenance (O&M) facility, a substation, a modified utility switchyard, and an approximately 25 mile long 115 kV gen-tie along Shively Ridge. The project's point of interconnection with the Pacific Gas and Electric Company (PG&E) transmission grid would be PG&E's Bridgeville Substation.

The project would include the following components:

- up to 47 WTGs (capable of generating 2–5 MW of electricity each) erected on tubular steel towers set on concrete foundations, as well as the associated WTG pads, temporary staging areas, and transformers;
- temporary construction access roads and permanent service roads, as well as temporary improvements to public roads at two locations along U.S. 101 to facilitate the delivery of WTGs from the Fields Landing Drive delivery site to the staging yard at Jordan Creek;
- an up to 22-mile, 115 kV gen-tie that extends north from Monument Ridge, crosses Eel River via the Richard Fleisch Memorial Bridge, and ultimately connects to the existing PG&E transmission system at the Bridgeville substation;
- Bridgeville substation expansion of up to 3 acres for switchyard modifications;
- ► a project substation located on-site (approximately 2.5 acres);
- an underground electrical collection system linking WTGs 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 WTG 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 operations and maintenance 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 operations and maintenance 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 concrete batch plant on Monument Ridge; and
- ▶ up to 17 miles of new 24-foot wide access roads.

EVIDENCE: a) **Evidence in File**

Evidence that has been received and considered includes: the application, technical studies/reports, public comment, staff reports that reflect the County's independent judgment, and information and testimony presented during public hearings before the Planning Commission and the Board of Supervisors. These documents are on file in the Planning Department (PLN-13999-CUP) and are hereby incorporated herein by reference.

2 FINDING: CONFORMANCE WITH 2017 HUMBOLDT COUNTY . GENERAL PLAN, OPEN SPACE PLAN, AND THE OPEN SPACE ACTION PROGRAM (CO-IM5)

The project, as conditioned, is in conformance with the Humboldt County General Plan, Open Space Plan, and the Open Space Action Program based on consistency with the policies itemized below:

EVIDENCE: a) CHAPTER 4 – LAND USE ELEMENT

1. **Timberland (T) Land Use Designation.** The Timberland designation is utilized to classify land that is primarily suitable for the growing, harvesting, and production of timber. Prairie and grazing land may be intermixed. Density range is 40-160 acres/unit. The project will place both wind generation components and the gen-tie line within the timberland land use designation. These project components are consistent with this land use designation.

- i Table 4-G of the General Plan Land Use Element, identifies Utilities and Energy Facilities, including wind energy generation facilities and electric transmission lines an allowable use type within the T land use designation.
- ii The components of the project will not interfere with the harvesting of timber as the project will affect an imperceptibly small percentage of timberland and the utility use is compatible with timber harvesting practices. A small amount of timberland will not be replanted along roads, around turbines and in the gen tie corridor.
- iii The project will not result in fragmentation of timberland or parcellation which may induce development pressure, in fact the lease will provide income to the property owner will in the long term will encourage retention of the timberland in large holdings.
- 2. Agricultural Grazing (AG) Land Use Designation The Agricultural Grazing designation applies to dry-land grazing areas in relatively small land holdings that support cattle ranching or other grazing supplemented by timber harvest activities that are part of the ranching operation, and other nonprime agricultural lands. Residential uses must support agricultural operation. Density is 20-160 acres/unit.
 - i Table 4-G of the General Plan Land Use Element identifies Utilities and Energy Facilities, including wind energy generation facilities and electric transmission lines an allowable use type within the AG land use designation.
 - ii The components of the project will not interfere with grazing, cattle ranching or the harvesting of timber as the project will affect an imperceptibly small percentage of grazing land and the utility use is compatible with grazing activities. The turbine pad areas will be regraded and revegetated allowing continued grazing and will be available for grazing land.
 - iii The project will not result in fragmentation of grazing land or parcellation which may induce development pressure, in fact the lease will provide income to the property owner and will in the long term encourage retention of the grazing land in large holdings.
- 3. **Residential Agricultural (40) (RA 40) Land Use Designation** *The Residential Agricultural Grazing designation applies to large lot residential uses with varying densities.*

- i Table 4-G of the General Plan Land Use Element identifies Essential Services which includes electric transmission and a substation, as an allowable use type within the RA40 land use designation.
- ii The components of the project will not interfere with residential agriculture 40 acres lot size as the project will expand an existing substation and extend transmission lines, which will not interfere with the intended use of the property.
- 4. Policy AG-P3: Support the Williamson Act Property Tax Incentive Program. Requires the County to support the continuation, enhancement and growth of the County Williamson Act program. This project will not interfere with the existing Williamson Act contract on the subject property.
 - i Portions of the project are located within Agricultural Grazing Preserves [Russ (Forest Home), Gabrych and Barnwell] and subject to Williamson Act contracts.
 - ii The Williamson Act Advisory Committee reviewed the project on February 14, 2019 and determined that the proposed use was compatible with the Williamson Act contracts.
 - iii The proposed use will allow continued grazing of the property while providing additional income from the property which will encourage the property to remain in a large holding which is most conducive to cattle grazing.
- 5. Policy AG-P6: Agricultural Land Conversion No Net Loss. This policy prohibits *Lands planned for agriculture (AE, AG) to be converted to non-agricultural uses.* Approximately 27 acres of land within the Agricultural Grazing (AG) land use designation will be permanently impacted by the project. This does not consist of a conversion of agricultural land to a non-agricultural use.
 - *i* The impacts are comprised primarily of roads and turbine pads. Roads and utility installations are commonly found in grazing lands.
 - *ii* The surrounding lands will continue to be used for grazing and qualify for enrollment in the Williamson Act program.
 - *iii* Allowing for a diversification of income sources on working ranches supports the continued agricultural use of the site.

- 6. Policy FR-P8: Protection of High Quality Timberlands This policy calls for land planned and zoned for timber production to be retained for timber production, harvesting and compatible uses, and reclassification of the Timberland Production Zones (TPZ) shall be done in accordance with the statutory requirements. The project will place both wind generation components and the gentie line within land planned and zoned for timber production. These project components are consistent with this land use designation.
 - i The majority of the project site is managed timberland and will continue to be used as such with the project.
 - ii Construction of the turbines, meteorological towers, gen-tie, substation, and access roads would permanently convert approximately 230.39 acres of forestland, which equates to a reduction of approximately 0.00007 percent of the total private timberlands in the County.
 - iii The nature of the project as a utility is compatible with the production and harvesting of timber.
 - iv Although a small portion of timberland would be permanently converted, the overall project is compatible with continued timber production. Roads used for the project will also serve a benefit during timber harvest and other project infrastructure will be developed in such a way that it will not impede continued timber production.
- 7. Policy FR-P20: Fire Safety Hazards. This policy requires the County to implement the State Responsibility Area Fire Safe Standards and Wildland-Urban Interface Building Codes for new development and support voluntary programs for fuels reduction, dwelling fire protection and creation of defensible space for existing development. This project has been designed to comply with State Fire Safe Standards.
 - i The project site is located on land containing a High or Very High Fire Hazard Designation. The project site is within the jurisdiction of the Carlotta Community Services District, Bridgeville Fire Protection District, Fortuna Fire Protection District, and a majority of the project lies within State Responsibility Areas (SRA), which are served by CAL FIRE.
 - ii The project EIR examined the hazards of constructing and operating a wind energy generation and transmission facility in areas of wildland fire risk. Potential impacts were mitigated

through requiring the applicant to prepare and implement plans related to fire safety and emergency response (3.13-2a and b), fall management (3.13-1b), and financing (3.13-1a) to ensure local fire responders are equipped to respond to fire and accident conditions.

- iii The project will be required to comply with the applicable building codes and fire codes to ensure that Fire Safe Standards are maintained.
- iv The project does not have components that will interfere with the implementation the County's Fire Safe Regulations.

b) CHAPTER 10-CONSERVATION AND OPEN SPACE ELEMENT

- 1. Goal CO-G1: Conservation of Open Space. This goal desires retention of *Open spaces that distinguish and showcase the county's natural environment, including working resource lands while not impacting the ability to provide livelihoods, profitable economic returns and ecological values. The project is consistent with this goal.*
 - a. The lands within the project site will continue to operate as working resource lands under the project both for timber production and agricultural use and will continue to contribute to open space within the County.
 - b. The project will allow for profitable economic returns that support the resource lands and diversified income.
- 2. Policy CO-P4: Support for Working Lands. This policy calls for the County to support policies that maintain profitable resource production on timber and agricultural lands as a means to secure long-term protection and sustainability of open space lands through programs such as the Williamson Act and Timber Production Zone programs. Allowing secondary income producing uses on these properties which retain the primary use as working lands yet enhancing the income potential of the property is consistent with this policy.
 - a. A portion of the project, including the majority of the project area on Bear River Ridge, will be located on Russ Ranch (Forest Home), which is enrolled in a Williamson Act contract. The Russ Ranch is a Class B agricultural preserve (grazing) and is approximately 6,064.5 acres in size. Class B

requires that the majority of land area under contract be devoted to grazing. The project would permanently impact up to 27 acres of Williamson Act contract lands within the project site that are used for livestock grazing. Twenty-seven (27) acres is a small portion of the overall enrolled lands and would not disqualify or interfere with the Williamson Act contract terms.

- b. The Humboldt County Williamson Act Advisory Committee on February 14, 219 recommended approval and found the use compatible with continuing the lands in the contract.
- c. The gen-tie transmission line will cross two other Class B agricultural preserves (Gabrych and Barnwell) in the eastern area of the project near Bridgeville. Government Code Section 51238(a)(2) designates electrical transmission facilities as a compatible use on land under a Williamson Act contract.
- 3. Goal BR-G1: Threatened and Endangered Species Support sufficient recovery of threatened and endangered species to support de-listing. This project does not conduct any activity or construct improvements which interfere with this objective.
 - a. Section 3.5 (Biological Resources) of the DEIR analyzed potential impacts on special-status plant and wildlife species and sensitive habitats that are afforded consideration or protection under, the California Fish and Game Code, the California Endangered Species Act (CESA), the federal Endangered Species Act (ESA), the Clean Water Act (CWA), the Migratory Bird Treaty Act (MBTA), the Porter-Cologne Water Quality Control Act (Porter-Cologne Act), and the Bald and Golden Eagle Protection Act. Species currently listed as threatened or endangered within the project area include the marbled murrelet, northern spotted owl, and the bald eagle.
 - *Marbled Murrelet* -- The project site is located within the range of the marbled murrelet, which is federally listed as threatened and state listed as endangered. Designated critical habitat for the marbled murrelet is located near the site, immediately east of Highway 101 in Humboldt Redwoods State Park along the northern end of Avenue of the Giants.
 - a. The project has avoided placement of WTGs in high passage rates areas of marbled murrelets.

- b. The project design does not result in removal of any nesting habitat (old growth redwood or mature coniferous forest).
- c. Indirect impacts would be avoided by providing buffers from marbled murrelet nesting habitat to the construction areas during the nesting season.
- d. Approximately 7.77 marbled murrelets are expected to collide with a turbine over the life of the project.
- e. Compensatory mitigation is required in the form of a corvid management plan at Van Duzen County Park. The corvid management program is projected to result in reproductive success for 48 to 97 marbled murrelets over the life of the project, resulting in a net benefit to the species.
- f. Once the project is operational, post construction mortality monitoring would occur along with monitoring for the success of the corvid management plan. In the unlikely event that mortality monitoring indicates higher mortality levels than anticipated or the corvid management plan is not as successful as anticipated, additional mitigations such as relocation of recreational facilities out of marbled murrelet habitat, habitat enhancement on buffer forests, and removal of derelict fishing gear would be implemented.

These mitigation measures will have a net positive effect on the marbled murrelet population and thus this goal is being achieved.

- *Northern Spotted Owl* The northern spotted owl is federally listed as endangered and state listed as threatened.
 - a. The biological study area is located within the range of the northern spotted owl, but not within critical habitat designated for this species in 1992 and revised in 2008. Designated critical habitat for the northern spotted owl is located near the project site to the north and east of the gentie corridor.
 - b. The northern spotted owl habitat assessment survey determined that 404.6 acres of northern spotted owl suitable habitat occurs in the project area, including 27.6 acres of functional nesting habitat.

- c. Auditory and visual disturbance analyses conducted by Stantec Consulting Services Inc. (Stantec) also found that if construction activities were to occur during the northern spotted owl nesting season (February to mid-July), then auditory and/or visual harassment could occur if northern spotted owls were nesting within 100 meters of the disturbance.
- d. The project has been designed to avoid impacts to northern spotted owls. Surveys have been conducted to identify all activity centers within 0.7 miles of the proposed project including the gen tie. A 1,000 foot will be maintained for all but two of the activity centers. Where the 1,000 foot buffer cannot be maintained construction activities will not occur during nesting season.
- e. Adequate nesting, roosting, and foraging habitat is maintained around all activity centers.
- f. Impacts to nesting, roosting, and foraging habitats will be mitigated through habitat acquisition and/or barred owl management.
- g. It is not anticipated that there will be operational impacts to northern spotted owl.

The project has been designed and mitigated to preserve northern spotted owl habitat consistent with this goal.

- **Bald and Golden Eagle** The bald eagle is federally protected under the Bald and Golden Eagle Protection Act and is state listed as endangered.
 - a. No active bald eagle nests were detected in the survey area during the aerial eagle and raptor nest survey. Four bald eagle observations were documented during the eagle use count surveys conducted by Stantec. No bald eagle nesting locations were found in the survey area.
 - b. The applicant will be undergrounding 6 miles of existing ridgeline overhead transmission lines within the project site.
 - c. To off set a single instance of take, pole retrofits at a rate of 32 poles per take or pole reframing at a rate of 14 poles per take would be required. All reframed or retrofitted poles

would be located within the Pacific flyway.

The impacts to Bald and Golden eagle is projected to be very small and in the event impacts to occur, mitigation will be required to offset those impacts. This is consistent with this General Plan goal.

- 4. Goal BR-G2: Sensitive and Critical Habitat This goal calls for a mapped inventory of sensitive and critical habitat where biological resource protection policies apply. The environmental analysis for this project provided an inventory of all sensitive and critical habitat.
 - a. Stantec prepared biological resource surveys of all sensitive and critical habitat to support the environmental analysis.
 - b. A thorough inventory of sensitive and critical habitat within the project site has been mapped and is shown in the exhibits of the EIR.
- 5. Goal BR-G3: Benefits of Biological Resources. A goal for Fish and wildlife habitats to be protected on a sustainable basis to generate long-term public, economic, and environmental benefits.
 - a. The project analysis has included mapping and identification of all habitat important for identified species native to the area. Part of the impact assessment is whether or not there is loss in habitat area. Where there has been impacts to habitat area as a result of construction activities, mitigation is required to compensate for the habitat loss.

The work of the EIR achieves this goal.

- 6. Policy BR-P1: Compatible Land Uses This policy requires areas containing sensitive habitats shall be planned and zoned for uses compatible with the long-term sustainability of the habitat. Discretionary land uses and building activity in proximity to sensitive habitats shall be conditioned or otherwise permitted to prevent significant degradation of sensitive habitat, to the extent feasible consistent with California Department of Fish and Wildlife guidelines or recovery strategies.
 - a. The project site is predominantly zoned either for agricultural production or timber production.

- b. The proposed use is compatible with the long term management of these resource lands.
- c. Sensitive habitats have been identified and where impacts have occurred, these impacts have been mitigated.
- 7. **Policy BR-P2: Critical Habitat.** This policy calls for discretionary projects which use federal permits or federal funds on private lands that have the potential to impact critical habitat shall be conditioned to avoid significant habitat modification or destruction consistent with federally adopted Habitat Recovery Plans or interim recovery strategies.
 - a. The project is anticipated to require federal permits. A Clean Water Act Section 404 Nationwide Permit for wetland fill and work within riparian areas and an Incidental Take Permit for the potential take of the marbled murrelet.
 - b. No critical habitat for the marbled murrelet is going to be removed or modified.
 - c. As discussed throughout the EIR and identified in the findings above, potential impacts to habitat have been identified and mitigated including habitat related to bats, northern spotted owl, and riparian areas. Mitigation for these habitats is described above under Policy BR-P1.
 - d. The project as conditioned and mitigated will not be inconsistent with adopted habitat recovery plans or interim recovery strategies.

Policy BR-P4: Development within Stream Channels This policy calls for *Development within stream channels to be permitted only* when there is no lesser environmentally damaging feasible alternative, and where the best feasible mitigation measures have been provided to minimize adverse environmental effects. Development shall be limited to essential, non-disruptive projects which include road crossings where erosion control measures are implemented.

- a. Development within stream channels will be limited to road crossings, a permitted development activity with incorporation of the standards for erosion control in BR-S9.
- b. A storm water pollution prevention plan (SWPPP) is required to be developed and implemented for the project and will address and specify erosion control measures to be utilized.

c. A mitigation measure (Mitigation Measure 3.5-28: Implement Wet-Weather BMPs Consistent with the Humboldt Redwood Company Habitat Conservation Plan or Equivalent BMPs) related specifically to controlling erosion during the wet weather season.

With the SWPPP and the mitigation measure, erosion will be controlled consistent with this policy.

- 9. Policy BR-P5 Streamside Management Areas This policy requires protection of sensitive fish and wildlife habitats and to minimize erosion, runoff, and interference with surface water flows, the County shall maintain Streamside Management Areas, along streams including intermittent streams that exhibit inchannel wetland characteristics and off-channel riparian vegetation.
 - a. Project construction activities occurring within riparian habitat would include clearing and grading for access roads and the gen-tie alignment.
 - b. The project will adhere to the prescribed Streamside Management Areas (SMAs) buffers of 100 and 50-feet from the edge of riparian vegetation or top of bank for perennial and intermittent streams, whichever is greater.
 - c. The EIR has identified 1.78 acres of riparian habitat that would be affected by construction activities. To protect sensitive fish and wildlife habitats and to minimize erosion, runoff, and interference with surface water flows, development within SMAs shall only be permitted where mitigation measures (Standards BR-S8 – Required Mitigation Measures, BR-S9 – Erosion Control, and BR-S10 – Development Standards for Wetlands) have been provided to minimize any adverse environmental effects, and shall be limited to uses as described in Standard BR-S7 – Development within Streamside Management Areas.
 - d. Various project components have the potential to affect SMAs, primarily access roads and the gen-tie. However, where potentially significant impacts may occur, mitigation measures have been identified in the DEIR and refined in the FEIR to reduce potential impacts on SMAs (see Mitigation Measures 3.5-25a and 3.5-25b).

This policy is being complied with.

10. Policy BR-P6: Development within Streamside Management

Areas. This policy requires Development within Streamside Management Areas to only be permitted where mitigation measures (Standards BR-S8 – Required Mitigation Measures, BR-S9 – Erosion Control, and BR-S10 – Development Standards for Wetlands) have been provided to minimize any adverse environmental effects, and shall be limited to uses as described in Standard BR-S7 – Development within Streamside Management Areas.

- a. Various project components have the potential to affect Streamside Management Areas (SMAs), primarily access roads and the gen-tie. However, where potentially significant impacts may occur, mitigation measures have been identified in the DEIR and refined in the FEIR to reduce potential impacts on SMAs (see Mitigation Measures 3.5-25a and 3.5-25b).
- 11. Policy BR-P7: Wetland Identification This policy call for the presence of wetlands in the vicinity of a proposed project to be determined during the review process for discretionary projects and for ministerial building and grading permit applications, when the proposed building development activity involves new construction or expansion of existing structures or grading activities. Wetland delineation by a qualified professional shall be required when wetland characterization and limits cannot be easily inventoried and identified by site inspection.
 - a. A wetland delineation has been conducted by qualified individuals for the entire project area [*Humboldt Wind Energy Project Aquatic Resources Survey Report (Stantec 2018) and Wetland Delineation for Activities in the Coastal Zone* (Stantec 2018)].
 - b. As identified in Table 3.5-17 of the DEIR and as refined in the FEIR, a total of 6.25 acres of wetlands would be impacted by the project. The project has been mitigated to achieve a no net loss of wetland threshold. W where impacts may occur, mitigation measures have been identified in the DEIR and refined in the FEIR to reduce potential impacts on wetlands to a less-than-significant level (see Mitigation Measures 3.5-25a and 3.5-25b).
 - 12. Policy BR-P10: Invasive Plant Species This policy requires the County to cooperate with public and private efforts to manage and control noxious and exotic invasive plant species.

The County shall recommend measures to minimize the introduction of noxious and exotic invasive plant species in landscaping, grading and major vegetation clearing activities.

- a. In order to control invasive/noxious weeds, Mitigation Measure 3.5-23c of the DEIR requires the project applicant to develop and submit a Reclamation, Revegetation, and Weed Control Plan before construction begins.
- 13. Policy BR-P11: Biological Resources Maps This policy requires biological resource maps to be consulted during the ministerial and discretionary permit review process in order to identify habitat concerns and to guide mitigation for discretionary projects that will reduce biological resource impacts to below levels of significance, consistent with CEQA.
- a. The applicant prepared numerous biological resource surveys designed to support project design and environmental review. Resource maps were consulted, including but not limited to the National Wetlands Inventory (NWI), California Natural Diversity Database (CNDDB), and Humboldt County General Plan Resource Maps (publicly available on the County's GIS website).
- b. Based on the literature and database review and field surveys, a thorough inventory of sensitive and critical habitat within the project site has been mapped. This inventory is found in the Draft EIR and refined in the Final EIR. This information was used to refine the project and develop mitigation measures that reduce biological impacts to a level that is less than significant.
- c. Consistent with CEQA, all feasible mitigation to reduce impacts have been required. Even so, the EIR conservatively concluded that there will still be significant and unavoidable impacts to marbled murrelets and raptors.
- d. See the resolution for CEQA compliance prepared for this project for a complete identification of how the project complies with CEQA.
- 14. Policy BR-P12: Agency Review This policy calls for the County to request the California Department of Fish and Wildlife, as well as other appropriate trustee agencies and organizations, to review plans for development within Sensitive Habitat, including Streamside Management Areas. The County shall request NOAA Fisheries or U.S. Fish and Wildlife Service to review plans for development within critical habitat if the project includes federal

permits or federal funding. Recommended mitigation measures to reduce impacts below levels of significance shall be considered during project approval, consistent with CEQA. The County has complied with this policy in coordinating review with other state and federal agencies.

- a. The development of the project has included active consultation with the United States Fish and Wildlife Service (USFWS) and the California Department of Fish and Wildlife (CDFW).
- b. The National Oceanic and Atmospheric Administration (NOAA) also received notice regarding the project.
- c. CDFW has provided recommendations regarding project design and project mitigation measures and these recommendations have been considered and, where feasible, incorporated into the project.
- 15. Goal CU-G1: Protection and Enhancement of Significant Cultural Resources This policy calls for Protected and enhanced significant cultural resources, providing heritage, historic, scientific, educational, social and economic values to benefit present and future generations. Measures have been taken to achieve compliance with this policy.
- a. The County consulted with tribes located in proximity to the project. The applicant provided an archaeological study of all cultural resources located on the property and the project will avoid all significant archaeological resources. The project design either has relocated project improvements to avoid resources, or will cap resources so as to not disturb the resources.
- b. Project refinements reduced the number of turbines placed on Bear River Ridge, an identified Tribal Cultural Resource and ethnobotanical/cultural landscape, and have reduced the project's disturbance area on the ridge.
- 16. Policy CU-P1: Identification and Protection This policy requires potential for impacts to significant cultural resources shall be identified during ministerial permit and discretionary project review, impacts assessed as to significance, and if found to be significant, protected from substantial adverse change per California Public Resources Code (PRC) Section 5020.1. This policy has been complied with.

- a. A complete archaeological reconnaissance was prepared for the project and all identified significant resources will be protected in place.
- b. The project's potential impacts on both cultural and tribal cultural resources were analyzed and addressed in Section 3.6 (Cultural Resources, Including Tribal Cultural Resources) of the DEIR, with appropriate and feasible mitigation identified (and refined as necessary in the FEIR) in order to mitigate potential impacts.
- 17. Policy CU-P2: Native American Tribal Consultation This policy calls for Native American Tribes to be consulted during discretionary project review for the identification, protection and mitigation of adverse impacts to significant cultural resources. At their request, Tribes shall be afforded the opportunity to review and provide comments to the County early in project review and planning (screening) about known or potential Tribal cultural resources located in project areas within their respective tribal geographical area of concern.
- a. The following Tribes were contacted regarding the project:
 - Wiyot Tribe
 - Big Lagoon Rancheria
 - Hoopa Valley Tribe
 - Bear River Band of the Rohnerville Rancheria
 - Cher-Ae Heights Indian Community of the Trinidad Rancheria
- b. Each of these Tribes were consulted early in the process as part of the referral as soon as the project was submitted to the County.
- c. Formal tribal consultation took place with the Wiyot Tribe and the Bear River Band of the Rohnerville Rancheria. This consultation allowed information sharing related to cultural resources at the site. The concerns raised during the consultation process have been considered in the design of the project and in the preparation of the EIR.
- 19 Policy CU-P3: Consultation with Other Historic Preservation Agencies and Organizations This policy requires consultation with historic preservation agencies and organizations during discretionary project review for the identification, protection and

mitigation of adverse impacts to significant cultural resources. These include, but may not be limited to, the County's Cultural Resources Advisory Committee, Humboldt County Public Works Department and the Planning and Building Divisions, the Northwest Information Center of the California Historical Resources Information System (NWIC), the California Office of Preservation, the Native American Historic Heritage Commission, local historical societies, museums, colleges and universities, and incorporated cities historic preservation commissions or committees for their respective LAFCO sphere of influence, and local historians, cultural resources consultants and historic preservation staff affiliated with various state and federal agencies.

- a. As discussed in DEIR Section 3.6 (Cultural Resources, Including Tribal Cultural Resources), cultural resource investigations for the project consisted of pre-field research, field surveys, resource documentation, and Native American consultation. A records search was conducted by the Northwest Information Center (NWIC) of the California Historical Resources Information System (CHRIS) on June 20, 2018 (NWIC File No. 17-2847), to obtain and review previous cultural resource records, cultural resource studies, and any additional documentation pertaining to properties within 0.25 miles of the project site. The County initiated Assembly Bill (AB) 52 consultation via letter on July 13, 2018, with five (5) local Tribes. Government-to-government tribal consultation was held between the County and the Bear River Band of the Rohnerville Rancheria Tribal Council on March 26, 2019.
- b. A sacred lands search was requested by Stantec from the Native American Heritage Commission (NAHC) on September 6, 2018, which yielded negative results.

• Policy CU-P4: Avoid Loss or Degradation

Projects located in areas known, or suspected to be archeological sites or Native American burial sites shall be conditioned and designed to avoid significant impacts to significant sites, or disturbance or destruction to Indian burial grounds. Preserving Native American remains undisturbed and in place shall be selected as the preferred alternative unless substantial factual evidence is presented demonstrating that no alternative(s) are feasible. Conditions of approval shall include standard provisions for post-review inadvertent archaeological discoveries and discovery and respectful treatment and disposition of Native American remains with or without funerary objects in accordance with state law (Health and Safety Code (HSC) Section 7050.5 and PRC Section 5097.98).

In accordance with this policy, the DEIR includes measures to avoid potential impacts, have an archaeologist and Native American Tribal monitor during ground-disturbing activities, and protocol in the event cultural materials or human remains are inadvertently discovered, including preserving resources in place (Mitigation Measures 3.6-1a through 1d and 3.6-2).

Policy CU-P5: Findings Necessary for Loss or Destruction *This policy discourages substantial adverse changes to significant cultural resources through a ministerial or discretionary action.*

- a. According to the recently completed archaeological study for Bridgeville, there will not be substantial adverse changes to significant cultural resources as the study determined that these were not present in the expansion area and the identified resources eligible for listing will be protected. Consultation was performed and NWIC was contacted.
- 20. Policy CU-P6: Mitigation This policy requires mitigation measures be required for any permitted project or County action that would adversely impact significant cultural resources.
 - a. Mitigation Measures have been incorporated into the project requiring avoidance of resources and where they cannot be completely avoided, improvements shall be constructed such that no excavation is undertaken. The intact resources shall be preserved in place by capping.
 - b. The Bridgeville substation. Expansion has been subject to surface and subsurface investigations to determine whether significant cultural resources are present in the area of expansion. These studies revealed that while significant cultural resources are present at Bridgeville, the expansion area lacks integrity in the resource and is not eligible for inclusion in the California Register of Historic

Resources/National Register of Historic Places. Under the FEIR, Mitigation Measure 3.6-1b has been revised to strike the reference to the Bridgeville substation expansion area because with the additional study that has been undertaken, it is determined conclusively that eligible resources are not present at this location.

- 21. Standard CU-S4: Conditioning, Designing, or Mitigating Projects to Avoid Loss or Reduce Impacts to Archaeological Resources. This standard requires impacts to archaeological resources, significant for their cultural value to descendent communities and/or scientific value to be preserved.
 - a. All surveyed resources are being avoided through project design to avoid resources or by capping the resource to protect it in place.

These mitigation measures implement the provision of this General Plan Standard.

- 22. Goal SR-G1: Conservation of Scenic Resources This goal calls for protection of high-value scenic forest, agriculture, river, and coastal areas that contribute to the enjoyment of Humboldt County's beauty and abundant natural resources.
 - a. The project will protect scenic forest, grasslands, and rivers without impact to their scenic value. Large tracts of forest and grassland will be retained in their current condition in compliance with this goal.
 - b. The placement of 600-foot-tall Wind Turbine Generators on Bear River Ridge and Monument Ridge will have an impact on the scenic value of these prominent ridgelines. As a result this project will not achieve this goal of preserving these scenic ridgelines; however this is a goal not a policy and must be balanced with the General Plan Policies that call for development of wind energy.
- 23. Policy SR-P1: Working Landscapes Recognize the scenic value of resource production lands.
 - a. The project will occur within lands used for resource production (timberlands and grazing lands). The wind project represents a diversification and another form of

resource production on these lands.

- 24. Policy SR-P3: Scenic Highway Protection This policy calls for protection the scenic quality of designated Scenic Highways for the enjoyment of natural and scenic resources, coastal views, landmarks, or points of historic and cultural interest.
 - a. There are no highways in the County officially designated as California State Scenic Highways; however, the entire segments of State Route 36 and Highway 101 in the project vicinity are eligible for State Scenic Highway designation (Caltrans 2018).
 - b. Humboldt County General Plan Policy SR-S6 establishes that Humboldt County highways eligible for listing should be considered to be Scenic Highways. Scenic highway standards are described in General Plan Standard SR-S2, described and addressed below.
- 25. Standard SR-S2. Scenic Highway Standards This standard requires a visual buffer width not to exceed 200 feet be applied to mapped Scenic Highways. Within the visual buffer permitted uses shall be allowed except for billboards. Within the visual buffer considerations must be given for site development and grading to create a harmonious visual relationship with surrounding development and the natural terrain, retaining scenic views, screening unsightly features, developing access roads that don't detract from scenic quality, and undergrounding or co-locating utilities where feasible.
 - a. The turbines will not be within the 200-foot scenic buffer. The portion of the project that will be within the buffer is a portion of the staging area and O&M facility at Jordan Creek, the access road to these facilities, and the gen-tie crossing the Eel River at the Richard Fleisch Memorial Bridge near Stafford. The Jordan Creek staging area (and location of the permanent O&M facility) is accessed from the southbound Avenue of the Giants/Pepperwood exit. The area is currently a gravel yard used for staging of timber activities. The yard is screened by mature vegetation and is only briefly visible to those traveling southbound or exiting. The mature vegetation would remain intact and would continue to provide visual screening. The gen-tie will cross above ground at the same height as the deck of the Richard Fleisch Memorial Bridge. The crossing will be

similar to the Pacific Gas and Electric Company's (PG&E's) existing three transmission lines located on the east side of the bridge. The conductors will be placed within the profile of and near the existing Richard Fleisch Memorial Bridge. This location is equivalent to collocating the utilities and meets the intent of the scenic highway standards.

- 26. Standard SR-S4: Light and Glare This standard requires New outdoor lighting be compatible with the existing setting. Exterior lighting fixtures and street standards (both for residential and commercial areas) shall be fully shielded, and designed and installed to minimize off-site lighting and direct light within the property boundaries.
 - a. FAA Advisory Circular AC 70/7460-1K, safety lighting would be required on WTGs 200 feet or taller, to reduce potential hazards to aircraft traveling to nearby airports. General FAA guidance indicates that unless an exception is granted, two red lights would be installed on each turbine nacelle and they would flash simultaneously. Because the lighting is for safety purposes and under the direction of the FAA, the County does not have the ability to approve different lighting.
 - b. The other permanent lighting associated with the project would be at the operations and maintenance facility. This facility will have lights that are fully shielded and designed and installed to minimize off-site lighting and direct light within the property boundaries.

Based on these factors the project complies with this Standard.

d) CHAPTER 11- WATER RESOURCES ELEMENT

- 1. Goal WR-G1: Water Supply, Quality, and Beneficial Uses. This goal desires high quality and abundant surface and groundwater water resources that satisfy the water quality objectives and beneficial uses identified in the Water Quality Control Basin Plan for the North Coast Region. The project components achieve this goal.
 - a. The quantity of construction water for dust suppression, backfill compaction, and cement mixing is estimated at 62 acrefeet over the duration of construction (Stantec 2019). This

water will be provided from discharge water from the cogeneration plant operated by Humboldt Redwoods Company. Prior to use of this water a permit much be obtained from the Regional Water Quality Control Board to regulate the constituents of the water and thus use of this water will not have an impact on surface or groundwater quality or availability.

- b. The project is in the Pepperwood Town Area Groundwater Basin, which is designated as very low priority under the Sustainable Groundwater Management Act (SGMA) and this basin is not subject to a groundwater plan or adjudication of resources.
- c. The amount of water necessary to supply potable water for 15 employees at the O&M facility and meet standards for fire flow pressure is 1.74 acre-feet per year (afy) (Stantec 2019). The project's demand for water during operation can be considered a de minimis use and sufficient supply is available to meet existing and future demands with the project on the Pepperwood Area Groundwater Basin, including municipal and industrial uses.

Erosion control measures, which will be implemented and are discussed further below, will prevent the project from interfering with water quality objectives.

- 2. Goal WR-G2: Water Resource Habitat. This goal desires maintaining river and stream habitat supporting the recovery and continued viability of wild, native salmonid and other abundant cold-water fish populations supporting a thriving commercial, sport and tribal fishery. The project has been conditioned to achieve this goal.
- a. Perennial aquatic habitats within the project site, such as Humboldt Bay near Fields Landing and the Eel River and its tributaries, are known to support several species of fish, including listed salmonids.
- b. Grading, clearing, and other activities associated with project construction could result in indirect impacts on special-status fish species and their habitat from project runoff and sedimentation, Mitigation Measures 3.5-22a through 3.5-22c included in the project's EIR, in addition to the project's required SWPPP, would ensure potential impacts on special-status fish and river and stream habitats would be reduced to a less-than-significant level.
- 3. Goal WR-G9: Restored Water Quality and Watersheds. This

goal desires that all water bodies be de-listed and watersheds restored, providing high quality habitat and a full range of beneficial uses and ecosystem services. The project has been conditioned to achieve this goal.

- a. The Eel River and associated tributaries including the Van Duzen River are on the 303(d) list for sedimentation/siltation and temperature.
- b. In the Lower Eel River Hydrologic Area, the subwatershed in the Eel River Hydrologic Unit encompassing the portion of the project area is included in that hydrologic unit.
- c. Sediment and temperature of the surface water in the Lower Eel River are associated with salmonid decline and impairment of beneficial uses (North Coast RWQCB 2018).
- d. Mitigation Measures 3.5-22a (Avoid and Minimize Impacts on Aquatic Resources), 3.5-23e (Develop and Submit a Reclamation, Revegetation and Weed Control Plan), and 3.10-1 (Implement Wet-Weather BMPs consistent with the Humboldt Redwood Company Habitat Conservation Plan), along with the required SWPPP and grading permit requirements, will ensure that the project does not further impair the Eel River and associated tributaries.
- 4. Goal WR-G10: Storm Drainage. This goal desires to have storm drainage utilizing onsite infiltration and natural drainage channels and watercourses, while minimizing erosion, peak runoff, and interference with surface and groundwater flows and storm water pollution. This project achieves this goal.
 - a. No municipal storm drain systems exist within the project area (with the exception of some areas of the haul route). The project runoff will be handled on site and will use natural features to minimize erosion.
 - b. The project does not contain elements that would lead to concentrated runoff once operational. Storm drainage for the O&M building will be infiltrated on-site. Similarly, runoff from WTGs will be infiltrated on-site.
 - 5. Policy WR-P1: Sustainable Management. This policy calls for assurance that land use decisions conserve, enhance, and manage water resources on a sustainable basis to assure sufficient clean water for beneficial uses and future generations. Policy WR-P35: Implementation of NPDES

Permit. Implement and comply with the National Pollutant Discharge Elimination Systems (NPDES) Permit issued by the State Water Resources Control Board to the designated portions of the County.

- a. The project does not require a substantial amount of water for construction and operation of the project.
- b. The project would be required to prepare a SWPPP, which requires identification and implementation of BMPs to prevent soil erosion and discharge of other constructionrelated pollutants, such as petroleum products, solvents, paints, and cement, that could contaminate nearby water resources.
- 6. Policy WR-P2: Protection for Surface and Groundwater Uses The policy requires impacts on Basin Plan beneficial water uses shall be considered and mitigated during discretionary review of land use permits that are not served by municipal water supplies. This policy is being met through project design which uses wastewater for construction water.
 - a. Construction-related water demands would be met by treated wastewater discharged from the Scotia Community Services District's wastewater treatment facility to Humboldt Redwood Company's log pond in the town of Scotia and would be delivered to the project site via water truck. As a result, construction-related water use would not constitute a groundwater extraction or a surface water diversion.
 - b. One new potable groundwater well would be constructed to meet the potable water supply demands of the proposed project. As shown in Table 3.1-1 (Projected Water Supply and Demands) in Section 3 (Environmental Setting, Impacts, and Mitigation Measures) of the DEIR, adequate supplies are available to serve the proposed project as well as existing and planned future uses, including agricultural and manufacturing uses, under all water year conditions.
- 7. Policy WR-P10: Erosion and Sediment Discharge This policy requires ministerial and discretionary projects requiring a grading permit shall comply with performance standards adopted by ordinance and/or conditioned to minimize erosion and discharge of sediments into surface runoff, drainage

systems, and water bodies consistent with best management practices, adopted Total Maximum Daily Loads (TMDLs), and non-point source regulatory standards. This project includes specific mitigation requirements fulfilling this policy.

- a. The EIR includes specific mitigation measures to protect water quality. Mitigation Measure 3.10-1 is required in the DEIR to implement wet-weather BMPs consistent with the Humboldt Redwood Company Habitat Conservation Plan (HCP) to protect water quality during wet-weather construction and protect anadromous fish by avoiding the potential for downstream sedimentation.
- b. As the project would disturb more than one acre of land, the project would require preparation of a SWPPP that identifies specific actions, specifications, and BMPs for pollution prevention and control. The project applicant must prepare and submit the appropriate notices of intent and prepare the SWPPP at the time final grading and engineering plans are completed and submitted to the County for review.
- 8. **Policy WR-P12: Project Design.** This policy states development should be designed to complement and not detract from the function of rivers, streams, ponds, wetlands, and their setback areas.
 - a. The project as mitigated and conditioned will not interfere with the functions of rivers, streams, ponds, or wetlands.
 - b. Construction occurring within these areas and their buffer areas, is limited primarily to road construction activities, and the design of these improvements will be required by existing ordinance requirements to allow passage of flood waters, and to detain or retain floodwaters as appropriate.
- 9. Policy WR-P14: Groundwater Quality Protection This policy requires commercial and industrial discretionary uses to be evaluated for their potential to contaminate groundwater resources, and mitigated as necessary. This project we be constructed in such a manner as to protect groundwater resources.
 - a. The project's potential to contaminate groundwater

resources was analyzed in Section 3.10 (Hydrology and Water Quality) of the DEIR.

- b. Construction-related activities have the potential to degrade surface water primarily related to grading activities. In addition, project implementation would be anticipated to alter the permeability of some surfaces (turbine pads, roads, and lay down yard for O&M facility) that could increase runoff from these locations. Mitigation is included to prevent runoff from these areas flowing directing into surface waters.
- c. The project would not generate pollutants that could be pollute surface waters. Accidental spills of oils, grease, or other pollutants during project operations would be contained within the turbine structures.
- d. A spill prevention, containment, and countermeasure plan and a hazardous materials management plan would be developed before hazardous materials are transported, used, or disposed of and before construction.
- e. Only one mitigation measure (Mitigation Measure 3.10-1) is required under Section 3.10, which requires implementation of wet-weather BMPs consistent with the Humboldt Redwood Company HCP to minimize the project's potential temporary, short-term constructionrelated drainage and water quality effects.
- 10. Policy WR-P35: Implementation of NPDES Permit. It is the policy of the county to implement and comply with the National Pollutant Discharge Elimination Systems (NPDES) Permit issued by the State Water Resources Control Board to the designated portions of the County. This policy will be complied with as part of the permitting of this project.
 - a. The SWRCB and the North Coast RWQCB have adopted specific NPDES permits for a variety of activities that have the potential to discharge wastes to waters of the state. The project would be subject to the NPDES General Permit for construction activity, as the project would disturb more than one acre of land.
 - b. The project is subject to North Coast RWQCB requirements, as the site is located within this agency's jurisdictional area. The project will require preparation of a SWPPP, which must implement the mitigation measures from the project and identify the BMPs that will be

employed to prevent soil erosion and discharge of other construction-related pollutants, such as petroleum products, solvents, paints, and cement, that could contaminate nearby water resources.

- c. The project applicant must prepare and submit the appropriate notices of intent and prepare the SWPPP at the time final grading and engineering plans are completed and submitted to the County for review.
- d. The Conditions of Approval for the project require that prior to issuance of any permits or initiating construction activities the applicant shall submit evidence that reuse of process water is regulated under Waste Discharge Requirements or a waiver issued by the Regional Water Quality Control Board.
- 11. Policy WR-P36: Natural Stormwater Drainage Courses. This policy requires natural drainage courses, including ephemeral streams, to be retained and protected from development impacts which would alter the natural drainage courses, increase erosion or sedimentation, or have a significant adverse effect on flow rates or water quality. Natural vegetation within riparian and wetland protection zones shall be maintained to preserve natural drainage.
 - a. The only work within natural drainage courses will be road crossings. These crossings will be designed in accordance with the County's Streamside Management Area (SMA) policies and the Department of Fish and Wildlife's (CDFW) Streambed Alteration (1602) Permits. Any stream crossings will include properly sized culverts as required and vegetation replacement at a 3:1 ratio. Natural drainage will be preserved.
- 12. Policy WR-P37: Downstream Stormwater Peak Flows. This policy requires peak downstream stormwater discharge to not exceed the capacity limits of off-site drainage systems or cause downstream impacts. New development shall demonstrate that post development peak flow discharges will mimic natural flows to watercourses and avoid impacts to Beneficial Uses of Water. This policy is being complied with through implementation of improvement plan review.
 - a. The project does not involve permanent elements that will

create excessive concentrated runoff that would exceed the capacity of off-site drainage systems. Drainage will be infiltrated on-site. This will be confirmed as part of the review of the improvement plans for issuance of grading permits.

- 13. Policy WR-P38: New Drainage Facilities. This policy requires where it is necessary to develop additional drainage facilities, they shall be designed to be as natural in appearance and function as is feasible. All drainage facilities shall be designed to maintain maximum natural habitat of streams and their streamside management areas and buffers. Detention/retention facilities shall be managed in such a manner as to avoid reducing streamflows during critical lowflow periods. New facilities and modified drainage facilities will be designed in compliance with this policy.
 - 1. New stormwater drainage facilities would be constructed at the project site. These stormwater drainage facilities include upgrades to existing drainage crossings to reduce erosion and increase drainage capacity, introduction of swales along newly constructed access roads, and other stormwater controls where cuts and fills are of a certain volume. These facilities will be designed to protect habitat values in compliance with this policy.
- 14. Policy WR-P42: Erosion and Sediment Control Measures. The policy calls for incorporating appropriate erosion and sediment control measures into development design and improvements. This policy will be complied with through compliance with the county grading ordinance and implementing mitigation measures in the EIR.
 - a. The project will be required to implement erosion and sediment control measures contained in the county grading ordinance and a mitigation measure (Mitigation Measure 3.5-28: Implement Wet-Weather BMPs Consistent with the Humboldt Redwood Company Habitat Conservation Plan or Equivalent BMPs) related specifically to controlling erosion during the wet weather season.
- 15. Standard WR-S6: Total Maximum Daily Loads (TMDLs) Implementation. This policy requires discretionary development

within watersheds containing impaired water bodies as defined under Section 303(d) of the federal Clean Water Act and governed by TMDL implementation plans to be conditioned to reduce or prevent further impairment consistent with applicable TMDLs. This policy will be complied with the implementation of permitting requirements at the state and local level.

The Eel River Watershed Elevated Temperature Action Plan establishes actions to achieve the Eel River watershed temperature TMDLs and are consistent with the Policy for the Implementation of the Water Quality Objectives for Temperature.

- b. The project will be required to obtain a NPDES permit which will insure compliance with the water quality objectives
- *c*. The grading ordinance requirements, mitigation measures and conditions of approval will also all serve to insure protection of water quality.
- 16. Standard WR-S7: Erosion and Sediment Discharge. This standard requires ministerial and discretionary projects to conform to grading ordinance standards for erosion and sediment control. The project will comply with the grading ordinance requirements for erosion and sediment control.
 - a. The project will comply with the grading ordinance through the issuance of grading permits for the road construction and building and grading permits for the WTGs.
- 17. Standard WR-S9: Projects in Proximity to Wild and Scenic Rivers. This standard requires projects located within state designated wild, scenic, or recreational river basins to be consistent with the guidelines in the State Wild and Scenic Rivers Act as amended. This project poses no inconsistencies with this standard.
 - a. The main stem of the Eel River, from 100 yards below Van Arsdale Dam to the Pacific Ocean, is designated as a State wild, scenic, and recreational river. This designation prohibits the construction of dams or diversions on the river. No such facilities are proposed with the project.

18. Standard WR-S13: Storm Water Management. This standard

requires all parking facilities whenever possible, to provide stormwater treatment for runoff using bio-retention areas, filter strips, and/or other practices that be integrated into required landscaping areas and traffic islands. During construction stormwater shall be controlled.

- a. The project includes the following measures in compliance with this standard:
 - Soil exposure will be minimized during the rainy season by implementing Mitigation Measure 3.10-1 (Implement Wet-Weather BMPs Consistent with the Humboldt Redwood Company Habitat Conservation Plan);
 - Natural vegetation will be retained where feasible;
 - Denuded areas will be re-vegetated and mulched to protect them from winter rains;
 - Runoff will be diverted from steep denuded slopes and critical areas with barriers or ditches;
 - The length and steepness of slopes will be minimized by benching, terracing, or constructing diversion structures;
 - Sediment-ladened runoff will be trapped in basins to allow soil particles to settle out before flows are released to receiving waters; and
 - G. Inspect sites prior to significant rain events to ensure control measures are working properly and correct problems as needed.

e) CHAPTER 12 – ENERGY ELEMENT

- 1. Goal E-G3: Supply of Energy from Local Renewable Sources. This goal desires an increased local energy supply from a distributed and diverse array of renewable energy sources and providers available for local purchase and export. This project directly contributes to achieving this goal.
 - a. The project directly contributes to the goal of increased local energy supply from a distributed and diverse array of renewable energy sources and providers available for local purchase and export.
 - b. The project will increase locally produced renewable energy for local consumption and export. The project will be privately owned and operated and, although it will feed into the PG&E grid, it will be a separate energy provider.

- 2. Policy E-P3: Local Renewable Energy Supply. This policy requires the County to support renewable energy development projects including biomass, wind, solar, "run of the river" hydroelectric, and ocean energy, consistent with the General Plan that increases local energy supply. Approval of this project is consistent with this policy objective.
 - a. The project is for a 155 MW wind facility that will increase the local energy supply.
 - b. Redwood Coast Energy Authority (RCEA) is Humboldt County's Community Choice Energy program. RCEA has approved an agreement with the project applicant to purchase 60 percent of the electricity purchased for use locally.

Policy E-P13: Incentives for Using Alternative Energy. *This policy encourages the use of renewable energy and environmentally preferable distributed energy generation systems in the county.* This project directly supports this General Plan policy to encourage the use of renewable energy and would provide 155 MW of renewable energy.

a. This would be the first commercial scale wind project in Humboldt County and provide an alternative to other energy source available locally.

5. Standard E-S3: Wind Generating Facilities.

- a. This standard requires that unless allowed by right pursuant to California Government Code, Section 65892.13(f) as amended, wind generating facilities shall be a conditionally permitted use in all land use designations except "resource dependent" (MR).
 - i. It has been determined that Wind Generating Facilities are permitted subject to approval of a Conditional Use Permit.
 - ii. The project application includes a request for a Conditional Use Permit, in addition to a Special Permit.
- b. The standard states the following shall be considered in reviewing proposed wind generating facilities: parcel size, relationship to other structures, effect on potential down-

wind sites, compliance with Uniform Building Code and national Electrical Code, rotor and tower safety, noise, electromagnetic interference, utility notification, height, liability insurance, and appearance and design.

- i. The Wind Turbine Generators are located on large parcels that have traditionally been used for grazing land under a Williamson Act contract and timberland under a Habitat Conservation Plan.
- ii. There are few structures in close proximity to the Wind Turbine Generators.
- iii. The project will be required to comply with all building code, electrical code and other appropriate code requirements.
- iv. The height of the turbines, appearance and design are a function of the technology used to capture the wind resource.
- v. CPUC's Opinion on Commission Policies Addressing Electromagnetic Fields Emanating from Regulated Utility Facilities (Rulemaking 04-08-020) was released in 2006 to update policies and procedures related to electromagnetic fields emanating from regulated utility facilities. This opinion included 22 findings of fact, among them the following:
- vi. A direct link between exposure to EMFs and human health effects has not been proven, low-cost/no-cost policies should be used as mitigation.
- vii. The proposed project would comply with CPUC policies, including those concerning EMF exposure reduction.
- viii. Noise impacts have been considered and a mitigation measure (Mitigation Measure 3.11-2: Implement Noise-Reducing Wind Turbine Generator Operators) to avoid a sensitive receptor is in place.
 - ix. The WTGs will be up to nearly 600 feet in height. Their appearance has been considered and feasible mitigation has been provided (Mitigation Measures 3.2-1a: Design the Project to Avoid Aesthetic Impacts, and 3.2-1b: Implement Operational Measures to Reduce Aesthetic Impacts) to reduce the project's potential visual impacts. This includes keeping the WTGs in good working order and limiting the color to an off-white or uniform light-grey color, per manufacturer's requirements. However,

the visual impacts are still found to be significant and unavoidable.

- c. The standard requires that findings necessary for project approval shall be:
 - The proposed use is not detrimental to the public health, convenience, safety, and welfare.
 - That the use of the property for such purposes will not result in material damage or prejudice to other property in the vicinity.
 - Within the Coastal Zone, the project will not have a significant adverse effect on coastal resources, including wildlife qualities."

Each of these findings can be made and the standard is achieved.

The project meets the above-listing findings, based on the following:

- a. No evidence has been submitted that the project as conditioned and mitigated will be detrimental to public health, convenience, safety, and welfare.
- b. No evidence has been submitted that the use of the property for such purposes will not result in material damage or prejudice to other property in the vicinity.
- c. Other than the offloading location at Fields Landing and portions of the haul route, the project is not within the Coastal Zone. The project will not have an adverse effect on coastal resources.

x. Standard E-S5: Electrical Transmission Lines.

This standard gives guidance that electrical transmission lines should be sited and routed to minimize visual impacts and avoid areas that are near habitat, recreational or archeological resources where feasible.

The project has been designed and mitigated to comply with this standard.

- a. The gen-tie would not be visible from an area that is designated as highly scenic in the coastal zone.
- b. The proposed gen-tie alignment is designed to

completely avoid all northern spotted owl (NSO) activity centers located in the vicinity of the gen-tie and to avoid NSO nesting and roosting habitat to the maximum extent possible.

- c. The gen-tie avoids recreational and archaeological resources by being co-located with existing access roads whenever feasible. This also minimizes ground disturbance and vegetation removal to the extent feasible.
- d. Underground placement is not feasible or preferable. Compared to placing the gen-tie overhead. undergrounding of the gen-tie would result in greater overall site disturbance and pose practical difficulties. A wider corridor would need to be cut and maintained to allow for the construction of new roads along the entire length of the gen-tie corridor in a fairly remote area of the County, and would result in additional impacts to biological and cultural resources. These roads would be necessary to provide access for various heavy machinery, including among other things an excavator, during construction and maintenance vehicles over the life of the project.
- e. A 115kV gen-tie line would need to be vaulted (i.e., contained in a concrete box underground), resulting in more intensive use of the roads, greater potential site disturbance, and placement of additional underground material. Undergrounding would also be financially prohibitive.
- f. The design of the support towers would be wooden Hframe structures, or metal monopole structures that will be compatible with the surroundings to the extent safety and economic considerations allow.
- g. The gen-tie is sited so as to minimize visual impacts by being co-located with existing access roads whenever feasible.
- h. The siting of transmission lines avoids the crests of roadways.
- i. There will not be new major steel tower electrical transmission facilities associated with the project.
- j. Existing rights-of-way are being used to the extent feasible by being co-located with existing access roads. This is not a PG&E transmission line and it is not feasible to locate the gen-tie in a consolidated corridor

with PG&E facilities.

k. Access and construction roads will be located to minimize landform alterations. Road grades and alignments will follow the contour of the land with smooth, gradual curves where possible.

f) CHAPTER 13 – NOISE ELEMENT

- 1. Policy N-P4: Protection from Excessive Noise. This policy requires protection of persons from existing or future excessive levels of noise which interfere with sleep, communication, relaxation, health or legally permitted use of property.
 - a. The use of heavy equipment and power tools during construction of permitted structures when conforming to the terms of an approved permit is not subject to General Plan noise standards.
 - b. After construction the primary noise source from project related activities will be the WTGs. Stationary noise sources and associated noise levels were evaluated based on information provided in the *Humboldt Wind Energy Project Noise Technical Report* (Illingworth & Rodkin 2018a) and supplemental *Humboldt Wind Energy Project—60 Turbine Layout Noise Assessment* technical memorandum (Illingworth & Rodkin 2018b), both prepared for the project.
 - c. Land use compatibility between conflicting land uses were determined based on proposed project land uses, adjacent parcels, and existing zoning. Based on the results of the noise studies it was determined that one sensitive receptor (a residence noted as "R-5") could potentially experience an increase in ambient noise levels in excess of 5 decibels. Therefore a mitigation measure has been imposed (Mitigation Measure 3.11-2: Implement Noise-Reducing Wind Turbine Generator Operations), which requires that the applicant relocate, eliminate, or impose operational modifications on WTGs within 1,200 feet of receptor R-5 to reduce the permanent increase in ambient noise levels from 24-hour-perday operation of WTGs to less than 5 dBA. No other receptors were found to be significantly impacted by the operation of the project.
 - d. With the mitigation incorporated, the project would not interfere with *sleep*, *communication*, *relaxation*, *health or legally permitted use of property*, and a less than significant impact would occur.

- 2. Standard N-S3: Environmental Review Process. This standard requires that for noise sensitive locations where noise contours do not exist, the environmental review process required by CEQA shall be utilized to generate the required analysis and determine the appropriate mitigation per Plan and state standards. Future noise levels shall be predicted for a period of at least 10 years from the time of building permit application.
 - a. Noise contours do exist for the project site. The DEIR fully analyzes potential noise impacts. As noted above, a mitigation measure (Mitigation Measure 3.11-2: Implement Noise-Reducing Wind Turbine Generator Operations) has been added to the project to avoid impacts to the only receptor that was found to be potentially affected by project related noise.
- 3. Standard N-S4: Noise Study Requirements. This standard requires that when a discretionary project has the potential to generate noise levels in excess of Plan standards, a noise study together with acceptable plans to assure compliance with the standards shall be required. This standard has been complied with.
 - a. The DEIR fully analyzes potential noise impacts. Project specific noise studies have been prepared.
 - b. Based on the studies and analysis, a noise impact would occur if the project would exceed 65 dBA Lmax during daytime hours (6:00 am to 10:00 pm), 60 dBA Lmax during nighttime hours (10:00 pm to 6:00 am), and/or 60 dBA CNEL at noise sensitive uses (residences).
 - c. As noted above, a mitigation measure (3.11-2: Implement Noise-Reducing Wind Turbine Generator Operations) has been added to the project to avoid impacts to the only receptor that was found to be potentially affected by project related noise.

g) CHAPTER 14 – SAFETY ELEMENT

1. **Goal S-G1: Minimize Loss.** *This goal calls for communities to be designed and built to minimize the potential for loss of life and property resulting from natural and manmade hazards. The project is consistent with this goal.*

a. The project is not proposed in close proximity to a community

and thus does not pose a hazard to a community.

- 2. Goal S-G2: Prevent Unnecessary Exposure. This goal calls for areas of geologic instability, floodplains, tsunami run-up areas, high risk wildland fire areas, and airport areas planned and conditioned to prevent unnecessary exposure of people and property to risks of damage or injury. The project has been designed and mitigated to comply with this goal.
 - a. The project will not place improvements in areas of geologic instability, floodplains, tsunami run-up areas.
 - b. The project is not within an Airport Land Use Compatibility Plan; however, given the height of the WTGs, FAA lighting will be required to reduce risk to aircraft.
 - c. The project will be located in areas of high and very high fire hazard. No residences are proposed and mitigation related to fire hazard reduction is required.
- 3. Goal S-G4: Fire Risk and Loss. The goal seeks development designed to reduce the risk of structural and wildland fires supported by fire protection services that minimize the potential for loss of life, property, and natural resources. The project has been designed and mitigated to achieve this goal.
 - a. The project is located within resource lands devoted to production of timber and grazing land. The design of the project will clear vegetation around the WTGs and create a clear space under the gen tie line. The clearance around facilities will minimize the potential for ignition of wildfires. The applicant will be required to maintain the gen tie corridor as part of project operation.
 - b. Mitigation measures have been included, which require the applicant to prepare and implement plans related to fire safety, fall management, and financing to ensure local fire responders are equipped to respond to fire and accident conditions. With mitigation in place, the project is designed to reduce the risk of structural and wildland fire.
- 4. Goal S-G5: Airport Safety. This goal seeks to provide land use and development in the vicinity of airports that minimize exposure to unsafe levels of noise and aircraft hazards consistent with the applicable Airport Land Use Compatibility Plan. The project design achieves this goal due to location and FAA requirements.

- a. Humboldt County has nine public-use airports., Rohnerville and Dinsmore Airports are the closest airports to the project site. The project is consistent with the respective Airport Land Use Compatibility Plans and does not fall within the airport compatibility zones.
- b. The project proposes the wind turbines to be a maximum height of 591 feet from base to highest point of blade rotation, set on concrete foundations. Federal law requires that the FAA determine whether a structure that is proposed to be built or altered, 200 feet above ground level or higher, or near an airport, does not pose a hazard to the airspace. Under the requirements of FAR Part 77, the project is required to notify the FAA by completing FAA Form 7460-1, Notice of Proposed Construction of Alteration.
- 5. Policy S-P11: Site Suitability. The policy requires new development to be approved only if it can be demonstrated that the proposed development will neither create nor significantly contribute to, or be impacted by, geologic instability or geologic hazards. The project complies with this provision.
 - a. Geologic instability and geologic hazards were analyzed in Section 3.7 (Geology and Soils) of the DEIR. The project area is not characterized by significant geologic instability or hazards.
- 6. Policy S-P19: Conformance with State Responsibility Areas (SRA) Fire Safe Regulations. This policy requires development to conform to Humboldt County SRA Fire Safe Regulations. The project is required to comply with these provisions.
 - a. The project will be designed in accordance to the Humboldt County SRA Fire Safe Regulations. These standards primarily apply to residential development but also apply to all structures developed within the State Responsibility Area (SRA), such as the proposed project. The O&M building shall have proper access, turnaround areas, and vegetation clearance.
- 7. Standard S-S9: Fire Safe Regulations. This standard requires development within SRA to conform to SRA Fire Safe Regulations (Humboldt County Code, Division 11 of Title III as amended). The project will be required to comply with these regulations in

compliance with this standard.

- a. As discussed above, the project is compliant with Fire Safe Standards. These standards primarily apply to residential development but also apply to all structures developed within the State Responsibility Area (SRA). The O&M building shall have proper access, turnaround areas, and vegetation clearance.
- 8. **Standard S-S11: California Fire Code.** This standard requires "The California Fire Code shall be applied to all applicable development."
 - a. As required, the project will be designed in accordance to the California Fire Code (CFC).

h) CHAPTER 15 – AIR QUALITY ELEMENT

- 1. Goal AQ-G1: Improved Air Quality. Air quality that meets state and federal ambient air quality standards. This goal is met for all criteria pollutants except NO_X on a daily basis, but on an annual basis this criteria pollutant is in compliance achieving this goal.
 - a. The impacts to air quality modeled and emissions associated with construction of the proposed project would exceed the NCUAQMD maximum daily thresholds of significance for NO_x during construction only.
 - b. Implementing Mitigation Measure 3.4-1 (Use Current-Phase Equipment for All Construction Off-Road Vehicles and Equipment) to use Air Resources Board Current-Phase Equipment for all construction off-road vehicles and equipment would reduce construction-related emissions and NO_x, but would still exceed the NCUAQMD daily threshold of significance. This threshold would not be exceeded on an annual basis.
 - c. All other pollutants would remain within daily thresholds. Annual thresholds are not exceeded for any pollutant. The impact to air quality would be temporary during construction.
- 2. Goal AQ-G2: Particulate Emissions. This goal seeks successful attainment of California Ambient Air Quality Standards for particulate matter. The project achieves this goal.

- a. The impacts to air quality have been analyzed in the EIR. Based on modeling, California Ambient Air Quality particulate matter thresholds will not be exceeded on the daily or annual basis. This is true for both construction and operations phases of the project.
- 3. Goal AQ-G3: Other Criteria Pollutants. This goal seeks to maintain attainment of Ambient Air Quality Standards for ozone and other criteria pollutants which may be subject to tightening standards. The project achieves this goal.
 - a. The impacts to air quality have been analyzed in the EIR. Based on modeling, the VOC and NO_X emissions (which are precursors to ozone) associated with project operation could make a minimal contribution to regional ozone concentrations and the associated health impacts.
 - b. Because the project's emissions contribution during operation would be minimal, the project would not exceed state or national thresholds, and would not result in significant health impacts.
- 4. **Policy AQ-P4: Construction and Grading Dust Control.** *This policy requires dust control practices on construction and grading sites shall achieve compliance with NCAQMD fugitive dust emission standards. The project complies with this policy.*
 - a. The project will comply with NCUAQMD's Rule 104 for fugitive dust control measures. Activities associated with decreased air quality from project activities are temporary.
 - b. Construction activities are expected to last between 16- and 18-months total. The sequence of construction activities would generally be as follows: site preparation/grading, tree clearing, access road construction, turbine foundation construction, collection system installation, substation construction, gen-tie installation, switchyard installation, turbine installation, final testing and turbine commissioning, O&M facilities installation, and cleanup and restoration.
- 5. Policy AQ-P5: Air Quality Impacts from New Development. This policy requires during environmental review of discretionary permits, reduce emissions of air pollutants from new commercial and industrial development by requiring feasible mitigation

measures to achieve the standards of the NCAQMD. This project is in compliance with this policy through design and mitigation.

- a. The impacts to air quality have been analyzed in the EIR. Mitigation (Mitigation Measure 3.4-1: Use Current-Phase Equipment for All Construction Off-Road Vehicles and Equipment) is proposed to control emissions during construction to the extent feasible.
- b. Operation of the wind energy facility will have minimal emissions.
- 6. Policy AQ-P6: Buffering Land Uses. This policy requires that During environmental review of discretionary commercial and industrial projects, the use of buffers between new sources of emissions and adjacent land uses to minimize exposure to air pollution should be considered. The project design and mitigation result in compliance with this policy.
 - a. The primary air quality impact is during the construction period which is a temporary impact.
 - b. The project location is largely vacant land with very little development except a few residences. The temporary decline in air quality will not significantly affect any sensitive receptors.
- 7. Policy AQ-P11: Review of Projects for Greenhouse Gas Emission Reductions. This policy requires that the County evaluate the GHG emissions of new large scale residential, commercial and industrial projects for compliance with state regulations and require feasible mitigation measures to minimize GHG emissions. This policy has been complied with.
 - a. Greenhouse gas emissions have been evaluated in the EIR. The generation of electricity from wind energy is consistent with the state GHG reduction goals. The GHG emissions associated with the project will be primarily created during construction. The project represents an overall benefit and provides reduced GHG emission over the life of the project.
- 8. Policy AQ-P17: Preservation and Replacement of On-site Trees. This policy requires projects requiring discretionary review to preserve large trees, where possible, and mitigate for carbon storage losses attributable to significant removal of trees.

- a. No old growth redwood habitat or mature coniferous forest will be removed for the project. Although there will be tree removal, the tree removal is within a location devoted to harvesting of timber. Tree removal is largely off-set by replanting of areas temporarily disturbed, including riparian areas at a 3:1 ratio.
- b. Carbon storage losses are further mitigated by the operation of a non-carbon-based renewable energy source, which will be operational for the life of the project.
- 9. Standard AQ-S1: Construction and Grading Dust Control. This standard calls for ground disturbing construction and grading to employ fugitive dust control strategies to prevent visible emissions from exceeding NCAQMD regulations and prevent public nuisance. This standard is being complied with.
 - a. Fugitive dust control strategies to prevent visible emissions from exceeding NCAQMD regulations, per Rule 104, will be implemented throughout project construction and would reduce construction-related emissions of PM₁₀ and PM_{2.5} to levels that are below adopted thresholds.
- 10. Standard AQ-S2: Evaluate Greenhouse Gas Emission Impacts. This standard required that during environmental review of large scale residential, commercial and industrial projects, include an assessment of the project's GHG emissions and require feasible mitigation. This standard has been achieved primarily through project design.
 - a. Short-term construction activities and long-term operations for the proposed project would emit GHGs. These GHG emissions were modeled using the California Emissions Estimator Model (CalEEMod).
 - b. The project represents a net benefit in reducing GHG emissions over the life of the project, assuming that the project will offset energy currently created by carbon-based sources.
- 11. Standard AQ-S3: Evaluate Air Quality Impacts This standard requires during environmental review of discretionary projects, evaluate new commercial and industrial sources of emissions using analytical methods and significance criteria used, or

recommended by, the NCAQMD. The project is in compliance with this standard

- a. Emissions from short-term construction activities and longterm operations of the proposed project were modeled using the California Emissions Estimator Model (CalEEMod) and then compared to the NCUAQMD daily and annual standards. As discussed above, construction and operation of the project would not exceed NCUAQMD thresholds of significance and no mitigation measures are required.
- 12. Standard AQ-S6: Preservation and Replacement of On-Site Trees. This standard requires large scale residential, commercial and industrial projects which remove a significant number of large trees (for example, more than 50 trees of greater than 12 inches DBH) shall plant replacement trees on-site or provide offsetting carbon mitigations." The project is in compliance with this standard
 - a. No old growth redwood habitat or mature coniferous forest will be removed for the project. Although there will be tree removal, this is largely off-set by replanting of any areas temporarily disturbed, including riparian areas, at a 3:1 ratio.
 - b. Carbon storage losses are further mitigated by the operation of a non-carbon-based renewable energy source, which will be operational for the life of the project.

3. FINDING: CONSISTENCY WITH THE PURPOSE OF THE EXISTING ZONE

The proposed development is consistent with the purposes of the existing zone in which the site is located.

- **EVIDENCE:** a) The project is primarily located in the Timber Production Zone and the Agriculture Exclusive Zone.
 - b) The purpose of the Timber Production Zone is to provide standards and restrictions for the preservation of timberlands for growing and harvesting timber. The project is compatible with this purpose because it does not detract from the ability of the forest lands to grow and harvest timber. Road infrastructure will be shared to the extent feasible with the ongoing harvest operations of Humboldt Redwood Company.

c) The purpose of the Agricultural Exclusive Zone is to be applied to fertile areas in which agriculture is and should be the desirable predominate use and in which the protection of this use from encroachment from incompatible uses is essential to the general welfare. Agriculture will continue to be the predominate use within the lands zoned AE. Permanent impacts are limited to no more than 27 acres and the use is not incompatible with continued agricultural use on the AE lands.

4. FINDING: CONSISTENCY – HUMBOLDT COUNTY ZONING REGULATIONS

The project conforms with all applicable standards and requirements of the Humboldt County Zoning Regulations.

- **EVIDENCE:** a) The project has been determined to be consistent with the following requirements contained in the Zoning Code:
 - b) Section 312-18.1: Conditionally Permitted Uses in an AE Zone "The proposed use will not impair the continued agricultural use on the subject property or on adjacent lands or the economic viability of agricultural operations on the site."
 - i. This requirement allows conditionally permitted uses in an AE zone, including wind electrical generating facilities provided they do not impair the ongoing agricultural use.
 - ii. The project applicant filed for a Conditional Use Permit (CUP) and Special Permit (SP) on May 29, 2018.
 - iii. The project will occupy a very small amount of AE zoned land and will not adversely affect ongoing grazing activities and is not adversely affect by grazing activities.
 - c) Section 312-21.1: Uses Permitted with a Conditional or Special Permit in TC and TPZ Zones. The proposed use will not significantly detract from, or inhibit the growing and harvesting of timber on the site or on adjacent properties."
 - i. This requirement allows conditionally permitted uses in an TC and TPZ zones, including wind electrical generating facilities provided they do not impair the ongoing growing and harvesting of timber.
 - ii. The project applicant filed for a Conditional Use Permit (CUP) and Special Permit (SP) on May 29, 2018.
 - iii. The project will occupy a very small amount of TC and TPZ zoned

land and will not adversely affect ongoing timber growing or harvesting activities and is not adversely affect by timber growing or harvesting activities.

- d) Section 314-7.1: AE: Agriculture Exclusive Zone. "Uses Permitted with a Use Permit: Utilities & Energy Facilities: The erection, construction, alteration, or maintenance of gas, electric, water or communications transmission facilities, and wind or hydroelectric solar or biomass generation, and other fuel or energy production facilities. Any use not specifically enumerated in this Division, if it is similar and compatible with the uses permitted in the AE zone."
 - i. The applicant has applied for a Conditional Use Permit and Special Permit and the required findings for the permits have been made.
 - ii. Development Standards:
 - Minimum Lot Area: 60 acres -Project Complies
 - Minimum Lot Width: 100 feet –Project Complies
 - Minimum Lot Depth: None specified -Project Complies
 - Lot Coverage: None specified -Project Complies
 - Setbacks: Front:20 feet;
 - Rear: 30 feet;

Side: 30 feet- Project Complies

- Maximum Building Height: None specified Complies
- e) Section 314-7.4: TPZ: Timberland Production Zone. "Principal Permitted Uses: The erection, construction, alteration, or maintenance of gas, electric, water, or communication transmission lines."

"Uses Permitted with a Use Permit: Utilities and Energy Facilities: The erection, construction, alteration, or maintenance of wind or hydroelectric, solar or biomass generation, and other fuel or energy production facilities."

- i. The WTGs, which will generate electricity, and the gen-tie, which will transmit electricity, will be located in TPZ-zoned areas.
- ii. General Plan Standard E-S3 specifies that unless allowed by right, pursuant to California Government Code Section 65892.13(f), as amended, wind generating facilities shall be a conditionally permitted use in all land use designations except "resource

dependent" (MR).

iii. The applicant has applied for a Conditional Use Permit and Special Permit and the required findings for the permits have been made.

iv. Development Standards:

• Minimum Parcel Size: 160 acres or 40 acres with a Joint Timber M

Management Plan -Complies – (per definition of Building Site section 314-137)

- Lot Coverage: None specified -Complies
- Building Height: None specified -Complies
- Setbacks: Front:20 feet; Rear: 30 feet; Side: 30 feet- -Complies – (per definition of Building Site section 314-137)
- f) Section 314-61.1: Streamside Management Areas and Wetlands Ordinance. "All developed as defined in the General Plan within or affecting SMAs, wetlands or other wet areas not exempted under Section 314-61.1.4 shall require a permit pursuant to an application for development within SMAs, wetlands and other wet areas and processed as a special permit pursuant to the Humboldt County Zoning Regulations (Section 312-3.1.1 et seq.)."
 - i. Work within the Streamside Management Area (SMA) is proposed. This is limited to stream crossing for road improvements, which is an allowed use in the SMA.
 - ii. A Special Permit has been added to the application.
 - iii. Work within riparian areas will require a Lake or Streambed Alteration Agreement (LSAA) from CDFW and replanting of impacted areas at a 3:1 ratio.
- g) Section 312-1: General Provisions. "Legal Lot Requirement. Development permits shall be issued only for a lot that was created in compliance with all applicable state and local subdivision regulations."
 - i. A Determination of Parcel Legal Status was performed for the parcels that comprise the project.
 - ii. All parcels were determined to be in compliance with the State Subdivision Map Act and local subdivision regulations.

5. FINDING: HEALTH, SAFETY, or WELFARE – The proposed development

and conditions under which it may be operated or maintained will not be detrimental to the public health, safety, or welfare or materially injurious to properties or improvements in the vicinity.

- **EVIDENCE:** The project was reviewed by the Humboldt County Planning a) Division, County Building Inspection Division, County Department of Public Works, County Division of Environmental Health (DEH), County Department of Health and Human Services, U.S. Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW), California Department of Forestry and Fire Protection (CalFire), California Department of Transportation (Caltrans), California Highway Patrol (CHP), City of Eureka, Department of Navy, Department of Defense, North Coast Unified Air Quality Management District (NCUAQMD), Pacific Gas and Electric Company (PG&E), California Coastal Commission (CCC), Bear River Band of the Rohnerville Rancheria, InterTribal Sinkyone Wilderness Council, Wiyot Tribe, City of Eureka, City of Fortuna, City of Rio Dell, Regional Water Quality Control Board (RWQCB), Agricultural Commissioner, California State Parks, and Humboldt Redwoods State Parks. The respective departments/agencies have recommended conditions, where appropriate, to ensure that the project will not have an adverse effect on the health, safety, and welfare of persons either residing or working in the neighborhood. No evidence has been submitted that the project as conditioned and mitigated will be detrimental to public health, convenience, safety, and welfare. Furthermore, no evidence has been submitted that indicates that properties within the vicinity will be physically damaged by the proposed development.
 - b) It has been referenced that the project would result in Increased fire danger, biological impacts, sediment discharge and visual impacts which are all detrimental to the public health, safety and welfare of communities, residents and the environment. The FEIR identifies the potential impacts associated with each of these topics. An impact on the environment is not a part of this finding and no information has been submitted to support that any of these areas would have an adverse impact on the public health, safety, or welfare or materially injurious to properties or improvements in the vicinity.
 - c) Some commented that the health impacts from living in proximity to wind turbines have not been evaluated. The DEIR does include analysis related to electric and magnetic fields (EMF), noise, and vibrations. No significant impacts related EMF or vibrations were

identified. Mitigation Measure 3.11-2 (Implement Noise-Reducing Wind Turbine Generator Operations) was applied to turbine operations within 1,200 feet of a sensitive receptor to reduce noise impacts to a less-than-significant level.

There is debate with respect to the relationship between audible and inaudible features of wind turbines and reported health concerns. The prevailing research on concerns regarding the adverse health effects of wind turbines focus on the impact of overall noise, low-frequency noise and infrasound, electromagnetic fields (EMFs) interference, and shadow flicker associated with wind turbines. A number of studies also have been published examining "annoyance" and the "psychological" aspect of perceiving and/or reporting of symptoms from "Wind Turbine Syndrome" or WTS. This syndrome is defined as sleep disturbance, headache, tinnitus, ear pressure, dizziness, vertigo, nausea, visual blurring, tachycardia, irritability, problems with concentration and memory, and panic episodes associated with sensations of internal pulsation or quivering when awake or asleep. This research has been consistently rejected as biased and not based on facts or science. Several physicians associated with anti-wind groups have recorded these symptoms from community members living near wind turbines. Instead, fear, annoyance, rumors, and the spread of unscientific, poorly documented "studies" can be responsible for the symptoms reported by some individuals. Based on existing field studies, there is insufficient evidence that living near a wind turbine is the direct cause of health effects such as mental health problems, headaches, pain, stiffness, or diseases such as diabetes, cardiovascular disease, tinnitus and hearing damage.

- 6. **FINDING: NO REDUCTION IN THE RESIDENTIAL DENSITY FOR ANY PROJECT PARCEL** - The proposed project will not reduce the residential density for any parcel below that utilized by the Department of Housing and Community Development in determining compliance with housing element law (the mid-point of the density range specified in the plan designation).
 - **EVIDENCE:** a) None of the 88 individual parcels comprising the project site are included in the County's Housing Inventory, and, as a result, no reduction in residential density will occur.
- 7. **FINDING: COASTAL RESOURCES** The project will not have a significant adverse effect on coastal resource, including wildlife qualities.

EVIDENCE: a) Other than the offloading location at Fields Landing and portions of the haul route, the project is not within the Coastal Zone. The project will not have an adverse effect on coastal resources. The applicant will apply for a consolidated CDP through the California Coastal Commission.

DECISION

NOW, THEREFORE, based on the above findings and evidence, the Humboldt Board of Supervisors does hereby:

- Adopt the findings set forth in this resolution; and
- Grant Applicant's appeal of the Planning Commission's denial of the Conditional Use Permit and Special Permit; and
- Approve the Conditional Use Permit and Special Permit for development of the Humboldt Wind Energy Project, subject to the conditions of approval attached hereto as Attachment 1.

Adopted after review and consideration of all the evidence on DATE.

The motion was made by Supervisor ______ and second by Supervisor ______ and the following ROLL CALL vote:

AYES:Supervisors:NOES:Supervisors:ABSENT:Supervisors:ABSTAIN:SupervisorsDECISION:Supervisors

Rex Bohn, Chair

I, Ryan Sharp, Clerk to the Board of Supervisors of the County of Humboldt, do hereby certify the foregoing to be a true and correct record of the action taken on the above entitled matter by said Board of Supervisors at a meeting held on the date noted above.

Ryan Sharp, Clerk Attachment 1 CONDITIONS OF APPROVAL

Development Requirements:

- 1. The project shall be developed and conducted in accordance with the Project Description in the FEIR and the Mitigation Monitoring and Reporting Plan adopted by the Board of Supervisors.
- 2. The applicant shall enter into an Agreement to Implement a Mitigation Monitoring and/or Reporting Plan with the County to compensate the Planning and Building Department for all costs associated with the implementation of the approved Mitigation Monitoring and Reporting Program (MMRP), to include on-site construction and mitigation monitors. The Planning Director may retain the services of qualified professional engineers, biologists or other specializations, as needed, to ensure that the measures are fully carried out. A deposit for the estimated cost of services under this agreement shall be on deposit with the Planning and Building Department.
- 3. The applicant agrees as a condition and in consideration of approval of this discretionary development permit that it will defend, indemnify and hold harmless the County of Humboldt or its agents, officers and employees from any claim, action or proceeding against the County or its agents, officers or employees to attack, set aside, void or annul this approval, which action is brought within the time period provided for under law. The applicant will reimburse the County for any court costs and attorney's fees which the County may be required by a court to pay as a result of such action. The County may, at its sole discretion, participate in the defense of such action; but such participation shall not relieve applicant of her/his obligations under this condition. An agreement to this effect shall be entered between applicant and county within 30 days of project approval. The County shall promptly notify the property owner of any such claim, action or proceeding.
- 4. Prior to clearing or grubbing or other vegetation removal, the applicant shall secure approval of all required building permits from the Building Inspection Division. As part of the building permit application(s), the applicant shall provide engineered plans for all grading, pad foundations, turbines, O&M facility, and access roads to the Building Division for review and approval.
- 5. Prior to occupancy the O&M building, the applicant shall install an on-site wastewater treatment system to the satisfaction of the Division of Environmental Health (DEH). A letter or similar communication from DEH stating that they have approved installation of the on-site wastewater treatment system shall satisfy this requirement.
- 6. During construction and operation of the project, the O&M building wastewater disposal field and reserve area shall remain undisturbed and must not be paved, driven over, or otherwise developed.
- 7. Prior to initiating transport of oversized project components, the applicant shall secure and

encroachment permit and transportation permit from the California Department of Transportation (Caltrans) These permits would be used to determine the final trailer configuration, clearance requirements, temporary off-ramps, emergency service access, lane closures (if required), California Highway Patrol (CHP) escort (as required), and transportation times.

- 8. The applicant shall secure an encroachment permit from the Department of Public Works for any work done on (or under) county-maintained roads.
- 9. Prior to issuance of Building Permits the improvement plans for the project shall demonstrate an optimal relationship between the public portion of Monument Road and Bear River Ridge Road and the proposed turbine locations to the satisfaction of Public Works. This may require the applicant to change proposed turbine locations or relocate the public portion of Monument Road or Bear River Ridge Road.
- 10. Applicant shall provide liability insurance to the County to protect the County from any incidents arising from the windmills in an amount established by the County Risk Manager. Insurance policies shall remain in effect for the life of the project without any gaps in coverage. The County shall be named as additionally insured. The amount of insurance shall be indexed for inflation on an annual basis. The County Risk Manager shall provide the applicant with the adjusted insurance amount 90 calendar days prior to expiration of the current policy. Prior to obtaining or renewing an insurance policy, Applicant shall provide the County Risk Manager with the name of the insurance company being proposed. Insurance companies proposed by the Applicant shall be approved by the County Risk Manager regarding their financial strength.
- 11. The applicant shall secure a Transportation Permit for oversized and/or overweight loads using county maintained roads from the Department of Public Works. Damage to any County maintained road from overweight vehicles shall be repaired by the applicant to the satisfaction of the County.
- 12. Once construction of the project is complete, the applicant shall reconstruct that portion of Bear River Ridge Road, South Bay Depot Road and Fields Landing Road used for construction the project. Until such time as the roads are reconstructed, the applicant shall be responsible for maintaining the roads in working order.
- 13. Prior to transporting oversized components, the applicant shall secure an encroachment permit from the City of Fortuna for the temporary off ramp to be constructed between the northern terminus of Dinsmore Drive and US 101 to create a temporary detour for the 12 Street overpass. The applicant shall also secure as necessary encroachment permits from the City of Fortuna to transport oversized loads within the City limits.
- 14. Prior to transporting oversized components, the applicant shall secure a Special Permit from the Humboldt Bay Wildlife Refuge for the temporary off ramp to be constructed between and Visitor Center Access Road and US 101 to create a temporary detour for the Hookton

Road overpass.

- 15. The applicant shall submit from FAA 7460-1 to the FAA for comments. Comments from the FAA shall be incorporated into the project's conditions of approval.
- 16. Only the proposed access route from Jordan Creek shall be used for the construction of the project. Construction related traffic shall not use Monument Road (from Rio Dell city Limits to Bear River Ridge Road) or Mattole Road to access the project site. Once construction of the project is completed, light weight maintenance vehicles may access the site from US 101 via Monument Road to Bear River Ridge Road; all other vehicles shall use the Jordan Creek access.
- 17. Within five (5) days of the effective date of this permit, the applicant shall submit a check to the Planning Division payable to the Humboldt County Recorder in the amount of \$3,321.00. Pursuant to Section 711.4 of the Fish and Game Code, the amount includes the Department of Fish and Game (DFG) fee plus a \$50 document handling fee. This fee is effective through December 31, 2017 at such time the fee will be adjusted pursuant to Section 713 of the Fish and Game Code. Alternatively, the applicant may contact DFG by phone at (916) 651-0603 or through the DFG website at www.dfg.ca.gov for a determination stating the project will have *no effect* on fish and wildlife. If DFG concurs, a form will be provided exempting the project from the fee payment requirement. In this instance, only a copy of the DFG form and the \$50.00 handling fee is required.
- 18. The Applicant shall obtain a consolidated Coastal Development Permit from the California Coastal Commission. A copy of the approved and executed permit or CDP waiver shall be submitted to the Planning Division to satisfy this condition.
- 19. Prior to the commencement of offloading and staging of wind turbine generators and component parts at Fields Landing, the applicant shall provide 48-hour advance written notification of planned night time operations (10PM to 6AM) to owners/occupants located within 500 feet of the Fields landing complex and the compacted gravel storage yard area.
- 20. Prior to the issuance of construction permits, the applicant shall provide to the County a decommissioning plan and financial assurance in a form and amount the County deems sufficient to guarantee the faithful performance of the decommissioning and restoration of the facility at the conclusion of the 30 year permit term, or in the event of facility abandonment, considered to be the discontinuance of operations for a period of one year. If operations cease for a one year period, an application for remediation and removal must be submitted within 6 months of abandonment. Decommissioning of the site must be complete within 3 years of cessation of operations. The Financial Assurance Cost Estimate shall be prepared by California Licensed Professional Engineer and shall cover the work as described in the Draft EIR Section 2.5, Project Decommissioning and Restoration, to include the following elements: removal of all above grade structures and facilities from the project site(excepting the addition to the Bridgeville substation); the decompaction and recontouring

to return the site to preconstruction and operational condition; and revegetation commensurate with the vegetative cover, composition and diversity of the ecological setting, pre-development.

The Financial Assurances shall:

- a. take the form of surety bonds, irrevocable letter of credit, trust funds, certificates of deposit, or other mechanisms determined acceptable by the Planning Director;
- b. remain in effect for the duration of the permit term and any additional period until decommissioning and restoration is completed;
- c. be sufficient to account for inflation over the 30-year life of the project;
- d. based on standard time and material current construction costs adjusted to reflect state prevailing wages, be adequate for the purposes of performing all decommissioning and restoration in accordance with the approved decommissioning and restoration plans; and
- e. be made payable to the County of Humboldt.
- 21. New development shall demonstrate that post development peak flow discharges will mimic natural flows to watercourses and avoid impacts to Beneficial Uses of Water. An engineer's statement to this effect submitted to the Planning Division prior to issuance of building or grading permits shall satisfied this requirement.
- 22. The applicant shall obtain a permit from the North Coast Unified Air Quality Management District (NCUAQMD) for of the use of internal combustion engines (for emergency generators).
- 23. To operate the cement batch plant during construction, the applicant must ether obtain a local operating permit from the NCUAQMD or a portable equipment registration from the California Air Resources Board.
- 24. Development within Streamside Management Areas shall, at a minimum, include:
 - a. Retaining snags unless felling is required by CAL-OSHA, by CAL FIRE forest and fire protection regulations or for public health and safety reasons. The felling must be approved by the Planning Director. Felled snags shall be left on the ground if consistent with fire protection regulations and the required treatment of slash or fuels.
 - b. Retain live trees with visible evidence of current or historical use as nesting sites by hawks, owls, eagles, osprey, herons, kites or egrets.
 - c. Erosion control measures (as per Standard BR-S9- Erosion Control).
 - d. Maximum feasible retention of overstory canopy in riparian corridors.
- 25. Erosion control measures for development within Streamside Management Areas shall include the following:

- a. During construction, land clearing and vegetation removal will be minimized, following the provisions of the Water Resources Element and the standards listed here.
- b. Consistent with BR-S8, construction sites with at least 100 square feet of exposed soil will be planted or seeded as appropriate per mitigations as recommended in writing by the lead agency with native or non-invasive vegetation and mulched with natural or chemical stabilizers to aid in erosion control and ensure revegetation.
- c. Long slopes will be minimized to increase infiltration and reduce water velocities down cut slopes by such techniques as soil roughing, serrated cuts, selective grading, shaping, benching, and berm construction.
- d. Concentrated runoff will be controlled by the construction and continued maintenance of culverts, conduits, non-erodible channels, diversion dikes, interceptor ditches, slope drains, or appropriate mechanisms. Concentrated runoff will be carried to the nearest drainage course. Energy dissipaters may be installed to prevent erosion at the point of discharge, where discharge is to natural ground or channels.
- e. Runoff shall be controlled to prevent erosion by on-site or off- site methods. On-site methods include, but are not limited to, the use of infiltration basins, percolation pits, or trenches. On-site methods are not suitable where high groundwater or slope stability problems would inhibit or be aggravated by on-site retention or where retention will provide no benefits for groundwater recharge or erosion control. Off-site methods include detention or dispersal of runoff over non-erodible vegetated surfaces where it would not contribute to downstream erosion or flooding.
- f. Disposal of silt, organic, and earthen material from sediment basins and excess material from construction will be disposed of out of the Streamside Management Area to comply with California Department of Fish and Wildlife and the North Coast Regional Water Quality Control Board requirements.
- 26. Prior to issuance of any permits or initiating construction activities the applicant shall submit evidence that reuse of process water is regulated under Waste Discharge Requirements (WDRs) or a waiver of WDRs issued by the Regional Water Quality Control Board.
- 27. Within 60 days of project approval, the applicant shall establish a point of sale destination within Humboldt County such as a street address within Humboldt County for acquisition, billing and purchasing purposes, registering this address with the State Board of Equalization and using this address for acquisition, billing and purchasing purposes associated with the proposed project. The applicant shall allow the County to use this sales tax information publicly for reporting purposes.
- 28. Prior to construction of turbines the applicant shall provide evidence to the County Panning Director that no microwave beam paths will be interrupted by project component placement.

On-Going Requirements to be satisfied for the life of the project

- 29. The project shall be developed, operated and maintained in accordance with the Project Description contained in the Final EIR, the mitigation monitoring and reporting program, and these conditions of approval. Changes shall require modification of this permit except where consistent with Humboldt County Code Section 312-11.1, Minor Deviations to Approved Plot Plan.
- 30. This permit expires thirty (30) years from the date of issuance. No later than two (2) years prior to expiration of the permit the applicant must apply for project decommissioning or repowering.
- 31. The applicant shall adhere to all of the mitigation measures in the certified Final EIR and incorporated hereby reference. The applicant and successor's in interest are required to pay for mitigation monitoring on a time and material basis as set forth in the schedule of fees and charges as adopted by ordinance of the Humboldt County Board of Supervisors. The Department will provide a bill to the applicant. Any and all outstanding Planning fees to cover the mitigation monitoring shall be paid to the Humboldt County Planning Division, 3015 "H" Street, Eureka.
- 32. The use of chemical pesticides, rodenticides, and herbicides to is prohibited for the life of the project.

Informational Notes:

- 1. To reduce costs the applicant is encouraged to bring in written evidence of compliance with all of the items listed as conditions of approval in this Attachment that are administered by the Planning Division. The applicant should submit the listed item(s) for review as a package as soon as possible before the expiration date. Post application assistance by the Planner on Duty, or by the Assigned Planner, with prior appointment, will be subject to a review fee for Conformance with Conditions billed at the County's current burdened hourly rate with an initial deposit as set forth in the Planning Division's schedule of fees and charges (currently \$95.00). Please contact the Planning Division for copies of all required forms and instructions.
- 2. Under state planning and zoning law (CGC §66000 *et seq.*), a development project applicant who believes that a fee or other exaction imposed as a condition of project approval is excessive or inappropriately assessed may, within 90 days of the applicable date of the project's approval, file a written statement with the local agency stating the factual basis of their payment dispute. The applicant may then, within 180 days of the effective date of the fee's imposition, file an action against the local agency to set aside or adjust the challenged fee or exaction.
- 3. If buried archaeological or historical resources are encountered during construction activities, the contractor on-site shall call all work in the immediate area to halt temporarily,

and a qualified archaeologist is to be contacted to evaluate the materials. Prehistoric materials may include obsidian or chert flakes, tools, locally darkened midden soils, groundstone artifacts, dietary bone, and human burials. If human burial is found during construction, state law requires that the County Coroner be contacted immediately. If the remains are found to be those of a Native American, the California Native American Heritage Commission will then be contacted by the Coroner to determine appropriate treatment of the remains. The applicant is ultimately responsible for ensuring compliance with this condition.

- 4. The applicant is responsible for receiving all necessary permits and/or approvals from other federal, state and local agencies.
- 5. The applicant is required to pay for permit processing on a time and material basis as set forth in the schedule of fees and charges as adopted by ordinance of the Humboldt County Board of Supervisors. The Department will provide a bill to the applicant after the decision. Any and all outstanding Planning fees to cover the processing of the application to decision by the Hearing Officer shall be paid to the Humboldt County Planning Division, 3015 "H" Street, Eureka
- 6. This permit approval (CUP/SP) shall expire and become null and void at the expiration of one (1) year from the date of the approval of the associated Use Permit and Special Permit ("Effective Date"); except where construction under a valid building permit or use in reliance on the permit has commenced prior to such anniversary date. The period within which construction or use must be commenced may be extended as provided by Section 312-11.3 of the Humboldt County Code.
- 7. If any trees located within the right of way of a County maintained road require removal or trimming, the trees must be made available to the underlying property owner. It is the responsibility of the applicant to coordinate all tree removal and trimming with underlying property owners.
- 8. Underground utility lines crossing a County maintained road laterally can be permitted through and Encroachment Permit from the Department of Public works when the lines are installed in sleeves that extend the entire width of the right of way. The applicant must be the property owner on both sides of the road where the crossing is proposed, or the applicant must have an easement. Underground utilities lines that run along the road longitudinally can only be permitted through an Encroachment Permit if the applicant is a public utility. If the applicant is not a public utility the applicant may wish to explore acquiring a private utility easement adjacent to the public right of way and installing the proposed lines there.