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**TABLE G-1
 APPLICANT PROPOSED MEASURES AND PROJECT MITIGATION MEASURES
 MITIGATION MONITORING AND REPORTING PROGRAM**

| Environmental Impact | Mitigation Measure/APM | Monitoring / Reporting Action | Implementation Schedule | Effectiveness Criteria | Verification Approval Party |
|--|--|--|---|---|-----------------------------|
| Aesthetics | | | | | |
| Impact 3.2-1: The Project would, unless mitigated, have a substantial adverse effect on a scenic vista or substantially degrade the character or visual quality of views from publicly accessible vantage points. | <p>Mitigation Measure 3.2-1: Project Design to Reduce Aesthetic Impacts at KOP 1</p> <p>When finalizing the design for the Project, the Applicant shall site turbines to avoid placing turbines within the viewshed of KOP 1, or to reduce the visibility of turbines from KOP 1. For example, if the turbines were to be moved further downslope they would be less visible, from KOP 1. When submitting site plans to the County of Shasta to be approved, the Applicant shall demonstrate to the County that the impacts from KOP 1 have been avoided or reduced. The turbines shall be painted in accordance with manufacturer's and Federal Aviation Administration marking requirements. Commercial messages and symbols shall not be used on turbine structures. When the site plans are presented to the County for approval, the Applicant also shall present the type of turbine selected to the County so that the County may ensure that no commercial messages are used on the turbines.</p> | <p>Applicant to submit site and building plans that demonstrate compliance to the Shasta County Department of Resource Management (County) and to provide written verification that no commercial messaging is shown on the turbines.</p> <p>County to review site and building plans for compliance prior to construction and conduct on-site monitoring during construction to ensure measures are properly implemented.</p> | <p>Submit plans at least 60 days prior to construction at that site.</p> <p>Note: Construction may not commence prior to Shasta County approval and issuance of a building permit(s).</p> <p>Implement approved plans during construction</p> | <p>Final site design reduces or avoids impacts at KOP 1, that the selected turbine is painted in accordance with FAA requirement, and that no commercial messages are used.</p> | Shasta County |
| Air Quality | | | | | |
| Impact 3.3-1: Construction, decommissioning, and site reclamation activities would generate pollutant emissions that could conflict or obstruct implementation of the applicable air quality plan. | <p>Mitigation Measure 3.3-1a: Tier 4 Final Emission Standards for Off-road Construction Equipment.</p> <p>The Applicant (and/or its construction contractor[s]) shall require that all diesel-fueled off-road construction equipment of more than 50 horsepower used at the Project Site during construction, decommissioning, and/or reclamation activities meet USEPA Tier 4 Final emission standards. A compliance log shall be maintained by the Applicant and made available to the Shasta County Department of Resource Management upon request.</p> | <p>Applicant to prepare and submit initial log prior to construction or first building permit field inspection and thereafter to maintain compliance log and make it available to the County upon request.</p> <p>County to review compliance log and perform on-site monitoring to ensure compliance.</p> | <p>Compliance log to be maintained and Tier 4 Final emissions standards enforced throughout construction, decommissioning, and/or reclamation activities</p> | <p>All diesel fuel off-road construction equipment of more than 50 horsepower used at the Project Site during construction, decommissioning, and/or reclamation activities meets USEPA Tier 4 final emission standards.</p> | Shasta County |
| | <p>Mitigation Measure 3.3-1b: Idling Restrictions and Fuel Use.</p> <p>To ensure that idling time for on road vehicles with a gross vehicular weight rating of 10,000 pounds or greater does not exceed the five-minute limit established in Section 2485 of Title 13 California Code of Regulations, and that idling time for off-road engines does not exceed the five-minute limit established in Title 13 California Code of Regulations Section 2449(d)(3), the Applicant and/or its construction contractor(s) shall prepare and implement a written idling policy and distribute it to all equipment operators. Clear signage of these requirements shall be provided for construction workers at all access points to construction areas.</p> <p>The Applicant shall use CARB-certified alternative fueled (compressed natural gas [CNG], liquid propane gas [LPG], electric motors, or other CARB certified off-road technologies) engines in construction equipment where feasible.</p> | <p>Applicant to provide County with written idling policy, and documentation (date) that policy has been distributed to all equipment operators.</p> <p>Applicant to provide documentation demonstrating use of alternative fuels, or that use of alternative fuels are infeasible.</p> <p>County to conduct on-site monitoring to ensure compliance</p> | <p>Preparation and distribution of idling policy at least 30 days prior to construction.</p> <p>Implement policy and mitigation measure as defined throughout construction, decommissioning, and/or reclamation activities</p> | <p>Compliance with all components of the required idling policy and mitigation measure as defined.</p> | Shasta County |
| Impact 3.3-2b: Construction, decommissioning, and site reclamation activities would generate NO _x emissions that could result in a cumulatively considerable net increase of ozone, for which the Project region is non-attainment of State ambient air quality standards. | <p>Mitigation Measure 3.3-2b: Implement Mitigation Measures 3.3-1a (Tier 4 Final Emission Standards for Off-road Construction Equipment) and 3.3-1b (Idling Restrictions and Fuel Use).</p> | See above | See above | See above | See above |
| Impact 3.3-2c: Construction, decommissioning, and site reclamation activities would generate PM ₁₀ emissions that would result in a cumulatively considerable net increase of PM ₁₀ , which the Project region is non-attainment of State ambient air quality standards. | <p>Mitigation Measure 3.3-2c: Fugitive Dust Controls.</p> <p>The following AQMD Standard Mitigation Measures for fugitive dust shall be implemented during the construction, decommissioning, and reclamation phases by the Applicant and/or its contractor(s):</p> <ul style="list-style-type: none"> Options to open burning of vegetative material on the Project Site shall be used by the Applicant unless otherwise deemed infeasible by the AQMD. Examples of suitable options are chipping, mulching, and conversion to biomass fuel. | <p>County to conduct on-site monitoring during construction, decommissioning, and reclamation phases to ensure the AQMD Standard Mitigation Measures are properly implemented.</p> | <p>Implement the AQMD Standard Mitigation Measures during the construction, decommissioning, and reclamation phases.</p> | <p>Compliance with all components of the identified AQMD Standard Mitigation Measures to reduce emissions of fugitive dust.</p> | Shasta County |

**TABLE G-1 (CONTINUED)
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| | <ul style="list-style-type: none"> • The Applicant shall be responsible for ensuring that all adequate dust control measures are implemented in a timely and effective manner during all phases of Project development and construction. • All material excavated, stockpiled, or graded should be sufficiently watered to prevent fugitive dust from leaving property boundaries and causing a public nuisance or a violation of an ambient air standard. Watering should occur at least twice daily with complete site coverage, preferably in the mid-morning and after work is completed each day. • All areas (including unpaved roads) with vehicle traffic should be watered periodically or have dust palliatives applied for stabilization of dust emissions. Use of dust palliatives (e.g., dust suppressant or dust control binder) shall not occur in any location where transmission to a waterway or sensitive habitat could occur, such as within 100 feet of a wetland or body of water. • All onsite vehicles should be limited to a speed of 15 miles per hour on unpaved roads. • All land clearing, grading, earth moving, and excavation activities on the Project Site shall be suspended when winds are expected to exceed 20 miles per hour. • All inactive portions of the development site should be seeded and watered until suitable grass cover is established. • The Applicant shall be responsible for applying (according to manufacturer 's specifications) nontoxic soil stabilizers to all inactive construction areas (previously graded areas that remain inactive for 96 hours) in accordance with the Shasta County Grading Ordinance. • All trucks hauling dirt, sand, soil, or other loose material should be covered or should maintain at least 2 feet of freeboard (i.e., minimum vertical distance between top of the load and top of the trailer) in accordance with the requirements of California Vehicle Code Section 23114. This provision shall be enforced by local law enforcement agencies. • All material transported off site shall be either sufficiently watered or securely covered to prevent a public nuisance. • During initial grading, earth moving, or site preparation, the Applicant shall be required to construct a paved (or dust palliative-treated) apron, at least 100 feet in length, onto the Project Site from the adjacent paved Highway 299. • Paved streets adjacent to the development site should be swept or washed at the end of each day to remove excessive accumulations of silt and/or mud that may have accumulated as a result of activities on the development site. • Adjacent paved streets shall be swept at the end of each day if substantial volumes of soil materials have been carried onto adjacent public paved roads from the Project Site. • Wheel washers shall be installed where project vehicles and/or equipment enter and/or exit onto paved streets from unpaved roads. Vehicles and/or equipment shall be washed prior to each trip. • Prior to final occupancy, the applicant shall reestablish ground cover on the construction site through seeding and watering in accordance with the Shasta County Grading Ordinance. | | | | |
| Biological Resources | | | | | |
| Impact 3.4-1: Construction of the Project could, unless mitigated, cause a significant impact to special- status plant species. | <p>Mitigation Measure 3.4-1: Avoid and Minimize Construction Impacts on Special-Status Plants</p> <p>To prevent adverse impacts to special- status plants, the Project Applicant shall implement the following measures if construction activities are to occur in the area not yet surveyed, or if vegetation removal and ground disturbing construction activities have not been completed within 5 years of the completion of rare plant surveys:</p> <p>a) A qualified biologist shall conduct a pre-construction survey for special-status plant species with the potential to occur within the unsurveyed area, or other areas if 5 years have passed since completion of rare plant surveys; or as otherwise approved by CDFW. The survey shall follow the procedures outlined in the CDFW (2018) rare plant survey protocol.</p> <p>b) If special-status plants are found to be present, plant populations shall be avoided using an appropriate (e.g., 20-foot or greater) buffer for the subject population during construction. The</p> | <p>County to review and approve Applicant biologist and ecologist qualifications.</p> <p>Applicant to provide County with pre-construction survey results and restoration and mitigation plan if applicable.</p> <p>County to conduct on-site monitoring during construction to ensure avoidance measures and/or the restoration and</p> | <p>Survey results and the restoration and mitigation plan (if applicable) shall be provided to the County and CDFW at least 14 days in advance of the initiation of construction activities within the area(s) surveyed.</p> <p>Avoidance measures and/or restoration and mitigation plan shall be implemented during construction.</p> | <p>Avoidance measures and/or the restoration and mitigation plan are properly implemented so that permanent and temporary impacts on special-status plants and their required constituent habitat elements are avoided and minimized.</p> <p>Compensation, by restoration or credits, is provided as approved by all required resource and local agencies if avoidance is not possible.</p> | Shasta County |

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| | <p>buffer shall be staked, roped, and/or fenced off so as to be readily identifiable by construction workers as a buffer area to be avoided.</p> <p>c) Where special-status plant avoidance is not feasible, the applicant shall mitigate for the loss of plants through the implementation of the following: A qualified ecologist shall develop and implement a restoration and mitigation plan according to CDFW guidelines and in coordination with CDFW. At a minimum, the plan shall include collection of reproductive structures or plant salvage from affected plants, a full description of microhabitat conditions necessary for each affected species, seed germination requirements, restoration techniques for temporarily disturbed occurrences, assessments of potential transplant and enhancement sites, success and performance criteria (e.g., greater than 1:1 replacement of individual plants or the population area), include a minimum 3-year monitoring program, as well as measures to ensure long-term sustainability such as weeding or supplemental water.</p> <p>d) Survey results shall be provided to the Shasta County Department of Resource Management, Planning Division and CDFW at least 14 days in advance of the initiation of construction activities within the area(s) surveyed. The Shasta County Department of Resource Management, Planning Division shall, in coordination with CDFW, determine whether or not the survey(s) were conducted in accordance with CDFW plant survey protocol and measures b) and/or c) are to be implemented. Construction shall not begin in the surveyed area until the Shasta County Department of Resource Management, Planning Division has confirmed that the survey(s) were conducted in accordance with the protocol and, if necessary, that measures 3.4-1b and/or 3.4-1c have been implemented.</p> | <p>mitigation plan are properly implemented.</p> | | | |
| <p>Impact 3.4-2: Construction of the Project could, unless mitigated, cause a significant impact on nesting bald and golden eagles.</p> | <p>Mitigation Measure 3.4-2: Avoid and minimize construction-related impacts to nesting eagles (January 1 to August 31).</p> <p>To prevent adverse impacts to nesting eagles, the Project Applicant shall implement the following measures if construction activities are to occur during the nesting season:</p> <p>a) Conduct terrestrial preconstruction eagle nesting surveys to determine whether eagles are actively nesting or maintaining territories within 2 miles of the Project construction boundary. Surveys will be designed and carried out by a qualified biologist with experience in the natural history and nesting behavior of eagles, following USFWS and CDFW guidelines and protocols. Terrestrial surveys will include all suitable eagle nesting habitat within a 2-mile buffer surrounding the Project construction boundary, as accessible, and subsequent observations at known nests to assess territory occupancy and nesting activity by adult eagles.</p> <p>b) Results of preconstruction eagle nesting surveys will be reported to the Shasta County Department of Resource Management, Planning Division, USFWS, and CDFW by August 31 of the year in which the survey was conducted. The Shasta County Department of Resource Management, Planning Division shall, in coordination with resource agencies, determine whether or not the survey(s) were conducted in accordance with USFWS and CDFW guidelines and protocols. Construction shall not begin in the surveyed area until the Shasta County Department of Resource Management, Planning Division has confirmed that the survey(s) were conducted in accordance with appropriate protocols and, if necessary, that measure 3.4-2c has been implemented.</p> <p>c) If surveys document active eagle nests within the 2-mile survey buffer, the Project Applicant will coordinate with the County, USFWS and CDFW to define and implement recommended protective measures. Typical measures for working within 2 miles of eagle nests are to establish construction buffers (e.g., with flagging, rope, signage, or other similar barriers) in accordance with USFWS recommendations (National Bald Eagle Management Guidelines, 2007; Golden Eagle, 2013) for specific activities (e.g., vehicular traffic, construction work, etc.); and may be adjusted downward based on site-specific conditions following coordination with the USFWS Migratory Bird Program and CDFW.</p> | <p>County to review and approve Applicant biologist qualifications.</p> <p>Applicant to provide survey results to the County, USFWS, and CDFW.</p> <p>County to confirm the survey(s) were conducted in accordance with appropriate protocols and measures.</p> <p>County to conduct on-site monitoring during construction to ensure any recommended measures and buffer areas are properly implemented.</p> | <p>Applicant to provide survey results to the County, USFWS, and CDFW prior to construction by August 31 of the year in which the survey was conducted.</p> <p>Any avoidance measures shall be implemented by the Applicant during construction.</p> | <p>Preconstruction surveys demonstrate absence of active nests or all recommended measures and buffer areas are properly implemented in coordination with County, USFWS, and CDFW and construction-related impacts to nesting eagles are avoided and minimized.</p> | <p>Shasta County</p> |
| <p>Impact 3.4-3: Operation of the Project could, unless mitigated, result in significant adverse impacts to or direct mortality of bald and golden eagles.</p> | <p>Mitigation Measure 3.4-3a: Avoid and minimize operational impacts on avian and bat species.</p> <p>The Project Applicant will avoid and minimize operational impacts on eagles, other raptors, other birds and bats by enacting the following mitigation measures:</p> <p>a) Discourage raptor use of immediate vicinity of wind turbine generators by taking steps to reduce prey species' numbers, such as minimizing creation of prey habitat such as rock piles.</p> | <p>Applicant to provide County with evidence it has coordinated with USFWS, its staff responsible for operations have been trained in reporting avian and bat wildlife fatalities, and a protocol for staff has been developed.</p> | <p>Documentation of evidence to be provided to County prior to the start of operations.</p> <p>Measure to be implemented as defined throughout operations.</p> | <p>APLIC and Land Based Wind Energy Guidelines and Applicant's protocol for reporting fatalities are followed operational impacts on avian and bat species are minimized.</p> | <p>Shasta County</p> |

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| | b) Follow APLIC (2006, 2012) guidance for all energized Project components to minimize electrocution or collision with transmission lines. c) Follow Land-Based Wind Energy Guidelines (USFWS, 2012) for turbine design and best management practices that help to minimize eagle mortality and eliminate potential raptor perches; avoid guy wires on meteorological towers where possible. d) Prior to Project construction, the Applicant will coordinate with USFWS regarding potential impacts to eagles and demonstrate the Projects' compliance with the Bald and Golden Eagle Protection Act and the USFWS Eagle Conservation Plan Guidance (2013). e) All Project staff responsible for operations will be trained in reporting avian and bat wildlife fatalities, including those of bald and golden eagles, other raptors, and bats encountered during turbine maintenance and other regular activities on site. A protocol for project staff will be developed in coordination with CDFW and the County for appropriate handling and reporting fatalities. | | | | |
| | <p>Mitigation Measure 3.4-3b: Monitor avian and bat mortality rates during project operations.</p> <p>To accurately assess operational Project impacts on all avian species, including bald eagle, golden eagle, other raptors, and bats, and ensure the effectiveness of avian protection measures, the applicant will design and implement a post-construction mortality monitoring (PCMM) study. The PCMM will include the following elements:</p> <p>a) The duration of PCMM monitoring to assess ongoing impacts of operation will include post-construction monitoring for all avian species, with particular attention to eagles, other raptors, and bats. The PCMM monitoring will commence immediately following the beginning of commercial operation and continue for three years following the incorporation of all planned turbines and power generation.</p> <p>b) PCMM studies will be designed to meet a minimum overall detection probability for bald and golden eagles of 30 percent during the first three years of full operation. Additionally, the PCMM will include a mandatory incidental monitoring and reporting program for other raptors and bats for the life of the Project.</p> <p>c) Searcher efficiency trials and carcass persistence trials using large raptor carcasses or an appropriate, commercially available proxy will be implemented and used to calculate overall detection probabilities of eagle carcasses. Carcasses of other birds and bats will also be collected and reported.</p> <p>d) Monitoring will occur over all seasons of occupancy for the species being monitored.</p> <p>e) Applicant will provide an annual report of PCMM findings to the Shasta County Department of Resource Management, Planning Division, CDFW, and the USFWS. If a bald or golden eagle, other raptors or bats are detected during PCMM, and detections indicate <u>exceedance</u> of the following thresholds, the Applicant and relevant agencies will develop a plan to mitigate the impacts per the <i>Land-Based Wind Energy Guidelines</i> (USFWS, 2012).¹</p> <ul style="list-style-type: none"> • Bald eagle – injury or mortality to one or more bald eagles in any given year. • Golden eagle – injury or mortality to one or more golden eagles in any given year. • Other raptors – injury or mortality to six or more individuals of any sensitive raptor species in any given year, except northern goshawk. For northern goshawk, injury or mortality to two or more individuals in any given year. • Other special-status birds – documented injury or mortality that suggests a population-level impact to other special status bird species. • Bats – injury or mortality to three or more bats of a single species identified as Western Bat Working Group (WBWG) high priority (red) species (i.e., pallid bat, Townsend's bat, spotted bat, western red bat, or western mastiff bat) in any given year; or injury or mortality to six or | Applicant to monitor avian and bat mortality and provide annual reports of PCMM findings to the County, CDFW, and the USFWS. | Applicant will conduct monitoring and develop associated annual reports during operations for three years following the incorporation of all planned turbines and power generation. | Operational project impacts on all avian species are accurately assessed. County and resource agency recommended minimization measures are implemented. | Shasta County |

¹ Injury and mortality thresholds for bald eagle, golden eagle, and California spotted owl stated above were developed based on the low expectation for species mortality during project operations. For northern goshawk, this species is not listed and no California wind farm mortality has been identified in California. Because this species is unlikely to be encountered, a threshold of two individuals was adopted. For other raptors, the adopted threshold was based on the regional populations of Coopers hawk, sharp-shinned hawk, and northern harrier, which are fairly healthy. For most raptor species, mortality to migrating individuals is not anticipated. This assessment was based on focused baseline surveys of the Project area, monitoring findings from the Hatchet Ridge Wind Project, and coordination with raptor experts. For uncommon bat species with low population numbers, four WBWG high priority species are considered to have a low to moderate potential to occur and a threshold of three individuals per species was adopted based their rarity and low encounter numbers at the Hatchet Ridge Wind Project. For two WBWG medium species, a threshold of six bats was adopted based on the absence of habitat in the Project area (western mastiff bat) or the greater abundance of the species (hoary bat).

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| | <p>more bats of a single species identified as WBWG medium priority (yellow) species (i.e., hoary bat or silver-haired bat), in any given year.</p> <p>If thresholds are exceeded, the Applicant will implement minimization measures recommended by the County, CDFW, and/or USFWS to limit mortality. Precise measures that are applicable will depend upon the type and magnitude of the identified impact based on the behavior of the impacted species and Project-specific attributes that may be leading to increased mortality, and may include one or more of the following operational modifications, or other identified adaptive actions:</p> <ul style="list-style-type: none"> • "Informed curtailment" of turbine speed (rapid shutdown of turbines when raptors are seen approaching. • Curtailment of operations during high risk periods for bats (low wind nights) or birds. • The use of low-intensity ultraviolet light and ultrasonic deterrence systems to deter birds and bats from approaching (AWWI, 2018). • The use of bird-specific visual cues, such as marking/painting, UV coating, reflectors, minimal turbine lighting, visual deterrence or lasers. • Habitat alterations that affect habitat quality or food availability on- or off-site, or alter availability of breeding habitat or roosts. • Removing select turbines that are problematic for target species. • Altering turbine speed to reduce mortality. • Temporary shutdown of select turbines during sensitive periods. • Operating select turbines only during daylight hours. • Acoustic cues such as acoustic harassment or an audible deterrence. • Other sensory cues, such as electromagnetism or olfactory cues. | | | | |
| <p>Impact 3.4-3: Operation of the Project could, unless mitigated, result in significant adverse impacts to or direct mortality of bald and golden eagles.</p> | <p>Mitigation Measure 3.4-3c: Offset operational impacts on eagles through compensatory mitigation, if necessary.</p> <p>a) If bald or golden eagle mortality occurs as a result of the Project, the Project Applicant will fund the retrofitting of electrical utility poles that pose a high risk of electrocution to eagles. Applicant will coordinate with the USFWS and follow the most current USFWS Eagle Conservation Plan Guidance (USFWS, 2013). If in coordination with USFWS an alternative compensatory mitigation measure is preferred to pole retrofitting, such alternative compensation measure (e.g., pole reframing or funding carcass removal from roadways) may be implemented.</p> <p>b) Any compensatory mitigation must occur within the same Eagle Management Unit as the Project, and must be completed within one year of any instance of documented take.</p> <p>c) Applicant will provide a report to the Shasta County Planning Department and USFWS documenting implementation of measures taken within one year of detection of the eagle take.</p> <p>d) Annually and after collection of 3 years of post-construction monitoring data, the Shasta County Department of Resource Management's will review the data and, in coordination with the Project Applicant, USFWS and CDFW, will determine which, if any, specific wind turbines generate disproportionately high levels of avian (including eagle) mortalities (based on evidence of statistically significant higher levels of mortality relative to other Project wind turbines). If specific wind turbines are found to result in disproportionately high avian mortalities based on collected data, the Project Applicant shall coordinate with the County to evaluate any feasible measures that can be implemented to reduce or avoid mortalities at those specific wind turbines. Furthermore, if mortalities involve eagles, the County will consider additional measures, including but not limited to carcass removal from roadways or funding for the acquisition of conservation easements on habitat that would provide nesting, foraging, or roosting bald and/or golden eagle habitat.</p> <p>e) If unauthorized take of a federal or state listed raptor occurs during project operation, the Project Applicant shall immediately notify the appropriate agency (CDFW and/or USFWS) by phone.</p> | <p>Applicant to provide County with documentation of coordination with USFWS and CDFW for implementation of any compensatory mitigation.</p> <p>Applicant to provide report to County and USFWS documenting implementation of measures.</p> <p>County to monitor and verify compensatory mitigation is implemented during construction as defined.</p> <p>In coordination with the Project Applicant, USFWS and CDFW, the County will determine which, if any, specific wind turbines generate disproportionately high levels of avian (including eagle) mortalities and evaluate any feasible measures to reduce or avoid mortalities.</p> | <p>Any compensatory mitigation and associated report must be completed within one year of any instance of a documented take.</p> <p>The County to annually review data, after collection of 3 years post-construction monitoring, to determine if any specific wind turbines generate disproportionately high levels of avian mortalities.</p> | <p>Implementation of appropriate compensatory mitigation measures to offset impacts if eagle mortality occurs.</p> | <p>Shasta County</p> |

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| | <p>The Applicant shall submit a written finding to the appropriate agency and the County within two calendar days that describes the date, time, location, species and, if possible, cause of unauthorized take. The Applicant shall notify the County within three calendar days of the receipt of any USFWS and/or CDFW required or recommended actions resulting from the unauthorized take, including whether an incidental take permit and/or additional requirements is deemed necessary by either agency.</p> | | | | |
| <p>Impact 3.4-4: Decommissioning of the Project could result in adverse impacts to nesting bald and golden eagles.</p> | <p>Mitigation Measure 3.4-4: Implement Mitigation Measure 3.4-2; Avoid and minimize construction-related impacts to nesting eagles (January 1 to August 31).</p> | <p>See Mitigation Measure 3.4-2</p> | | | |
| <p>Impact 3.4-6: Construction and decommissioning of the Project could result in adverse impacts on nesting raptors (other than goshawks).</p> | <p>Mitigation Measure 3.4-6: Avoid and minimize construction-related impacts on nesting raptors (February 1 to September 15)</p> <p>a) Where feasible, tree and vegetation removal activities shall be avoided in potential raptor nesting habitat during the avian nesting season (February 1 to September 15) during each year of construction.</p> <p>b) If construction is planned to occur during the avian nesting season from February 1 to September 15, pre-construction raptor nesting surveys shall be conducted by a qualified biologist to identify raptor nests within 500 feet of proposed work areas. A qualified biologist is defined as a person who is knowledgeable in the distribution, habitat, life history, and identification of Northern California birds, is familiar with the survey methods to locate and survey for active nests within the Project Site and can acquire any permits needed to survey for federally listed or state-listed birds, if such permits become necessary.</p> <p>c) Results of preconstruction raptor surveys will be reported to the Shasta County Department of Resource Management, Planning Division, USFWS, and CDFW by August 31 of the year in which the survey was conducted. The Shasta County Department of Resource Management, Planning Division shall, in coordination with resource agencies, determine whether or not the survey(s) were conducted in accordance with appropriate protocols and measure 3.4-6d is to be implemented. Construction shall not begin in the surveyed area until the Shasta County Department of Resource Management, Planning Division has confirmed that the survey(s) were conducted in accordance with appropriate protocols and, if necessary, that measure 3.4-6d has been implemented.</p> <p>d) If active raptor nests are found during pre-construction surveys, a 500-foot exclusion zone shall be established around the nest in which no work would be allowed until the young have successfully fledged or nesting activity has ceased. The determination of fledging or cessation of nesting shall be made by a qualified biologist with experience in monitoring raptor nests. Any sign of nest disturbances shall be reported to the Shasta County Department of Resource Management, CDFW and USFWS. In coordination with CDFW and/or USFWS, the County may modify the size of the exclusion zone depending on the raptor species and type of construction activity occurring near the nest.</p> <p>e) Specific to any proposed blasting activities, a qualified biologist will evaluate areas within 1,320 feet (1/4-mile) of blasting sites to identify nesting raptors. If active raptor nests are found during pre-construction surveys nest buffer distance that is applied during blasting activities may range from approximately 500 feet to 1,320 feet, depending upon the time of year, sensitivity of any identified nesting species, and site-specific conditions such as topography or dense vegetation. The determination of fledging or cessation of nesting shall be made by a qualified biologist with experience in monitoring raptor nests. Any sign of nest disturbances shall be reported to the Shasta County Department of Resource Management, CDFW and USFWS. In coordination with CDFW and/or USFWS, the County may modify the size of the exclusion zone depending on the raptor species and type of construction activity occurring near the nest.</p> | <p>County to review and approve Applicant biologist qualifications.</p> <p>Applicant to provide survey results to the County, USFWS, and CDFW.</p> <p>County to confirm the survey(s) were conducted in accordance with appropriate protocols and measures.</p> <p>County to conduct on-site monitoring during construction and decommissioning to ensure any recommended measures and buffer areas are properly implemented.</p> | <p>Applicant to provide survey results to the County, USFWS, and CDFW prior to construction by August 31 of the year in which the survey was conducted.</p> <p>Any avoidance measures shall be implemented by the Applicant during construction.</p> | <p>Preconstruction surveys demonstrate absence of active nests; or all recommended measures and buffer areas are properly implemented in coordination with County; USFWS, and CDFW and construction-related impacts to goshawks are avoided and minimized.</p> | <p>Shasta County</p> |
| <p>Impact 3.4-7: Construction and decommissioning of the Project could result in adverse impacts to nesting goshawks.</p> | <p>Mitigation Measure 3.4-7a: Implement Mitigation Measure 3.4-6 (Avoid and minimize construction-related impacts on nesting raptors (February 1 to September 15))</p> | <p>See Mitigation Measure 3.4-6</p> | | | |
| | <p>Mitigation Measure 3.4-7b: Avoid and minimize construction-related impacts to nesting goshawks (March 1 to August 15)</p> <p>a) Prior to any disturbance of forest habitats that fit the nesting criteria of northern goshawks, the Applicant will conduct acoustic surveys for northern goshawk during their nesting season (March 1–August 31) following methods outlined by Woodbridge and Hargis (2006) to assure species is not nesting or using the territory for nesting. If nesting goshawks are found, the nests would be avoided with a suitable buffer distance (minimum 500 feet) in coordination with CDFW.</p> | <p>Applicant to provide survey results to the County, USFWS, and CDFW.</p> <p>County to confirm the survey(s) were conducted in accordance with appropriate protocols.</p> | <p>Applicant to provide survey results to the County, USFWS, and CDFW at least 30 days prior to any disturbance of forest habitats that fit the nesting criteria of northern goshawks.</p> | <p>Preconstruction surveys demonstrate absence of active nests; or buffer areas are properly implemented in coordination with County, USFWS, and CDFW; and construction-related impacts to nesting raptors (other than goshawks) are avoided and minimized.</p> | <p>Shasta County</p> |

**TABLE G-1 (CONTINUED)
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|---|---|--|---|--|-----------------------------|
| | b) Results of preconstruction goshawk surveys will be reported to the Shasta County Department of Resource Management, Planning Division and CDFW. The Shasta County Department of Resource Management, Planning Division shall, in coordination with resource agencies, determine whether or not the survey(s) were conducted in accordance with appropriate protocols. Construction shall not begin in the surveyed area until the Shasta County Department of Resource Management, Planning Division has confirmed that the survey(s) were conducted in accordance with appropriate protocols. | County to conduct on-site monitoring during construction and decommissioning to ensure any buffer areas are properly implemented. | Any buffer areas shall be implemented by the Applicant throughout construction. | | |
| Impact 3.4-8: Operation of the Project could result in mortality and injury to raptors (including goshawk), as a result of collisions with wind turbines and electrical transmission lines. | Mitigation Measure 3.4-8: Implement Mitigation Measure 3.4-3b (Monitor avian and bat mortality rates during project operations). | See Mitigation Measure 3.4-3b | | | |
| Impact 3.4-12: Site preparation and construction, operations and maintenance, and decommissioning and site restoration of the Project could result in habitat loss and water quality impacts on Pit roach, special-status amphibians and western pond turtle. | Mitigation Measure 3.4-12: Implement Mitigation Measure 3.12-1 (Water Quality Best Management Practices during Activities in and near Water) and Mitigation Measure 3.4-16b (Avoid or Minimize Impacts to Wetlands and Other Waters). | See Mitigation Measures 3.12-1 and 3.4-16b | | | |
| Impact 3.4-13: Operation and maintenance of the Project could result in direct mortality and injury to bats, including special-status species. | Mitigation Measure 3.4-13: Implement Mitigation Measure 3.4-3b (Monitor Avian and Bat Mortality Rates During Project Operations). | See Mitigation Measure 3.4-3b | | | |
| Impact 3.4-15: Site preparation and construction, operations and maintenance, and decommissioning and site restoration of the Project would result in adverse impacts to riparian habitat or other sensitive vegetation communities. | Mitigation Measure 3.4-15a: Implement Mitigation Measure 3.4-16b (Avoid and Minimize Impacts to Wetland and Other Waters). | See Mitigation Measure 3.4-16b | | | |
| | <p>Mitigation Measure 3.4-15b: Compensate for Impacts to Rocky Mountain Maple Riparian Scrub Habitat.</p> <p>The Applicant shall implement a Reclamation and Revegetation Plan that includes detailed measures for the compensation, restoration, and/or enhancement of Rocky Mountain Maple Riparian Scrub Habitat on a per-acre basis. The standard for mitigation shall be no net loss. If restoration is selected as a method of compensatory mitigation, the Applicant shall prepare a riparian mitigation and monitoring plan as part of the Project's reclamation and revegetation plan and shall submit it to the County for review, determination of adequacy, and approval. Mitigation ratios shall be at a1:1 level.</p> <p>The Rocky Mountain Maple Riparian Scrub Habitat mitigation and monitoring plan shall be written by a qualified biologist and shall include the following elements, at minimum:</p> <ul style="list-style-type: none"> a) goals of the plan and permitting requirements satisfied; b) planned riparian habitat restoration activities and locations, including the restoration of temporarily affected riparian habitat to preconstruction conditions; c) monitoring and reporting requirements (including monitoring period), and criteria to measure mitigation success; d) the plant species to be used, container sizes, and/or seeding rates, and a planting/seeding schedule; e) a schematic drawing depicting the location of plantings within mitigation areas; f) a description of the irrigation methodology, if needed; g) invasive weed control measures within Rocky Mountain Maple Riparian Scrub Habitat mitigation areas; h) a detailed monitoring program, to initially include quarterly or more frequent visits tapering to annual maintenance; d) remedial measures, should mitigation efforts fall short of established targets. j) identification of the party responsible for meeting the success criteria and providing for long-term conservation of the mitigation site. <p>The Applicant shall consult with CDFW about the adequacy of the plan and may consult with other agencies, if the plan aims to fulfill multiple permitting and mitigation requirements.</p> | <p>County to review and approve Applicant biologist qualifications.</p> <p>Applicant to provide County with documentation of coordination with CDFW regarding the adequacy of the Reclamation and Revegetation Plan.</p> <p>County to review, determine adequacy, approve the Reclamation and Revegetation plan, and monitor implementation as defined during construction, operations and maintenance, and decommissioning.</p> | <p>Applicant to develop Reclamation and Revegetation Plan at least 30 days prior to construction activities; and implement the Plan during construction as defined.</p> | <p>Implementation of appropriate compensatory mitigation measures to offset impacts Rocky Mountain Maple Riparian Scrub Habit.</p> | <p>Shasta County</p> |

**TABLE G-1 (CONTINUED)
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| <p>Impact 3.4-16: Site preparation and construction, operations and maintenance, and decommissioning and site restoration of the Project could result in adverse impacts to wetlands and other waters.</p> | <p>Mitigation Measure 3.4-16a: Implement Mitigation Measure 3.12-1 (Water Quality Best Management Practices during Activities in and near Water)</p> <p>Mitigation Measure 3.4-16b: Avoid and Minimize Impacts to Wetlands and Other Waters. The Applicant will avoid and minimize impacts on wetlands and other waters by implementing the following mitigation measures:</p> <ul style="list-style-type: none"> a) Avoid direct and indirect impacts to wetlands and streams in final siting and design to the maximum extent feasible. b) Design stream crossings, including culverts, to pass a 100-year event without increasing average flow velocity or bed/bank scour potential. c) Monitor stream crossings in burn areas seasonally and maintain culverts and drains, since burned areas may experience sediment and debris loads that could result in clogged or blocked culverts. d) The Applicant shall also submit a site plan showing all aquatic resources and appropriate regulatory buffers or setbacks to Shasta County. e) The Applicant shall assign a qualified wetland scientist to mark all aquatic resources associated with the final project site plan. Temporary high visibility fencing, and signage may be used to help protect these areas. The qualified wetland scientist would also identify corresponding setbacks to aquatic resources, as required by Project permits. f) On a continuous basis, a qualified wetland scientist or biological monitor shall be assigned to visually inspect aquatic resources, and surrounding areas, for evidence of hydrologic loss in aquatic areas. g) Develop a Spill Prevention, Control, and Countermeasures (SPCC) Plan to minimize adverse impacts to wetlands. | <p>See Mitigation Measure 3.12-1</p> <p>County to review and approve Applicant wetland scientist qualifications.</p> <p>Applicant to submittal site plan showing aquatic resources and regulatory buffers or setbacks to Shasta County.</p> <p>Applicant to develop SPCC Plan and provide to County.</p> <p>County to monitor implementation as defined during construction.</p> | <p>Applicant to development plan at least 30 days prior to the start of construction and implement plan during construction, operations and maintenance, and decommissioning.</p> | <p>Documented avoidance and minimization of impacts to wetlands. Submission of site plan showing aquatic resources and regulatory buffers to County, and evidence of monitoring of wetland impacts by qualified biologist.</p> <p>Successful implementation of SPCC plan.</p> | <p>Shasta County</p> |
| <p>Impact 3.16 cont.</p> | <p>Mitigation Measure 3.4-16c: Compensate for Impacts to Wetlands and other Waters. The Applicant shall implement a Reclamation and Revegetation Plan that includes detailed measures for the compensation, restoration, and/or enhancement of wetlands and other waters on a wetland type per-acre basis. The standard for mitigation shall be no net loss. If restoration is selected as a method of compensatory mitigation, the Applicant shall prepare a wetland mitigation and monitoring plan as part of the Project's reclamation and revegetation plan and shall submit it to the County for review, determination of adequacy, and approval. Mitigation ratios shall be calculated following USACE wetland mitigation procedures and shall be based on the actual impact acreage of final design per as-built construction drawings and the results of the preconstruction surveys. After review and approval by the County and pertinent regulatory agencies, mitigation shall be carried out at a ratio no less than 1:1, or another ratio approved by the appropriate jurisdictional agency, whichever is higher.</p> <p>The wetland mitigation and monitoring plan shall be written by a qualified biologist and shall include the following elements, at minimum:</p> <ul style="list-style-type: none"> a) goals of the plan and permitting requirements satisfied; b) wetland restoration activities and locations, including the restoration of temporarily affected wetlands and other waters to preconstruction conditions; c) monitoring and reporting requirements (including monitoring period), and criteria to measure mitigation success; and d) remedial measures, should mitigation efforts fall short of established targets. e) Restored wetland and riparian habitat shall achieve at least 85 percent survival of individual plants and show progress toward achieving 100 percent of the required mitigation acreage following 5 years of site monitoring and maintenance. <p>The Applicant shall consult with USACE and CDFW about the adequacy of the plan and may consult with other agencies, if the plan aims to fulfill multiple permitting and mitigation requirements.</p> | <p>Applicant to provide County with documentation of consultation with USACE and CDFW.</p> <p>Applicant to provide Reclamation and Revegetation Plan and wetland mitigation and monitoring plan (if applicable) to County for review of adequacy and approval.</p> <p>If a wetland mitigation and monitoring plan will be prepared, County to review and approve biologist author qualifications.</p> <p>County to monitor implementation of plans as defined during construction.</p> | <p>Applicant to provide Reclamation and Revegetation Plan and wetland mitigation and monitoring plan (if applicable) to County for review and approval at least 30 days prior to the commencement of construction activities.</p> <p>Applicant to implement plan(s) during construction, operations and maintenance, and decommissioning.</p> | <p>Implementation of appropriate compensatory mitigation measures to offset impacts to wetlands and other waters.</p> | <p>Shasta County</p> |

**TABLE G-1 (CONTINUED)
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| Communications Interference | | | | | |
| Impact 3.5-1: The Project could cause intermittent interference to or freezing of television reception at some residences in the service area of the stations that broadcast over the Project Site. | <p>Mitigation Measure 3.5-1: Correct or mitigate conflicts with television signals.</p> <p>Prior to issuance of a construction permit from the County, the Applicant shall send notifications, via certified mail or other means that documents receipt, to all property owners of residences within the service area of the stations that broadcast over the Project site notifying them of the potential for interference with “over-the-air” television signals received by antenna. The notification shall provide contact information and instructions so that recipients may file a complaint with the Shasta County Department of Resource Management, Planning Division if interference occurs.</p> <p>In the event that the County receives a verified complaint regarding television broadcast interference that is attributable to this Project, the Applicant will resolve receiver interference through coordination with property owners. Verification shall include a letter or report from a qualified third party supporting the conclusion that interference is attributable to the Project. The Applicant shall not be required to provide qualifying residents with better reception than they had before the construction and operation of the Project.</p> | <p>Applicant to provide County with notice to property owners and documentation of property owner receipt.</p> <p>In the event of a verified complaint, Applicant to provide County with evidence of resolution coordination with property owners including verification from third party.</p> | <p>Notifications to be mailed prior to issuance of a construction permit from the County.</p> <p>Applicant to resolve issues with property owners during operation.</p> | <p>Property owners are made aware of the potential for interference with “over-the-air” television signals received by antenna.</p> <p>Verified property owner complaints are resolved by Applicant.</p> | Shasta County |
| Impact 3.5-3: None of the Project turbines would obstruct or prevent known point-to-point microwave relay station transmissions; however, interference could occur due to turbine location adjustments or currently unknown transmissions. | <p>Mitigation Measure 3.5-3: Correct or mitigate conflicts with microwave signals.</p> <p>Prior to issuance of a construction permit from the County, the Applicant shall notify, via certified mail or other means that documents receipt, all owners of frequency-based communication stations and towers within 2 miles of the Project Site. The notification shall provide the locations of all turbines and shall provide contact information and instructions so that recipients may file a complaint with the Shasta County Department of Resource Management, Planning Division if interference occurs.</p> <p>In the event that the County receives a verified complaint regarding microwave transmission interference that is attributable to this Project, the Applicant will resolve receiver interference through coordination with owners of frequency-based communication stations and towers. Verification shall include a letter or report from a qualified third party supporting the conclusion that interference is attributable to the Project. Possible actions include the Applicant being responsible for installation of high-performance antennas at nearby microwave sites, if required. The Applicant shall not be required to provide qualifying owners with better signals than they had before the construction and operation of the Project.</p> | <p>Applicant to provide County notification to property owners and documentation of receipt.</p> <p>In the event of a verified complaint, Applicant to provide County with evidence of coordination with owners of frequency-based communication stations and towers including verification from third party.</p> | <p>Notifications to be mailed prior to issuance of a construction permit from the County.</p> <p>Applicant to resolve issues with property owners during operation.</p> | <p>Owners of frequency-based communication stations and towers within 2 miles of the Project Site are notified of the project.</p> <p>Verified owner complaints are resolved by Applicant.</p> | Shasta County |
| Cultural and Tribal Cultural Resources | | | | | |
| Impact 3.6-1: The Project could cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5. | <p>Mitigation Measure 3.6-1a: Archaeological Monitoring Plan.</p> <p>Prior to receiving a County grading permit for the Project, the Applicant shall retain a qualified archaeologist, defined as an archaeologist meeting the U.S. Secretary of the Interior’s Professional Qualification Standards for Archeology, to prepare an archaeological resources monitoring plan. Monitoring shall be required for all subsurface excavation work within 500 feet of the recorded boundaries of known archaeological resources. The plan shall include the following:</p> <ol style="list-style-type: none"> 1. Training program for all construction personnel involved in ground disturbance; 2. Person responsible for conducting monitoring activities, including Native American monitors; 3. Person responsible for overseeing and directing the monitors; 4. How the monitoring shall be conducted and the required format and content of monitoring reports; 5. Physical monitoring boundaries (e.g., 500-foot radius of a known archaeological resource) and maps; 6. Schedule for submittal of monitoring reports and person responsible for review and approval of monitoring reports; 7. Protocol for notifications in case of encountering of archaeological resources, as well as methods of evaluating the encountered resources (e.g., identification, evaluation, arrangements); 8. Methods to ensure security of archaeological resources; | <p>County to review and approve Applicant archaeologist qualifications.</p> <p>Applicant to provide County with archaeological resources monitoring plan.</p> <p>County to monitor implementation of plan as defined during construction.</p> | <p>Archaeological resources monitoring plan to be prepared prior to receiving a County grading permit for the project.</p> <p>Plan to be implemented during construction.</p> | <p>Compliance with all components of the approved plan and protection of archaeologically sensitive areas.</p> | Shasta County |

**TABLE G-1 (CONTINUED)
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| | <p>9. Protocol for notifying local authorities (i.e. Sheriff, Police) should site looting and other illegal activities occur during construction.</p> <p>If archaeological materials are encountered, all soil disturbing activities within 100 feet shall cease until the materials are evaluated. The archaeological monitor shall immediately notify the County of the encountered archaeological materials. The monitor shall, after making a reasonable effort to assess the identity, integrity, and significance of the encountered archaeological materials, present the findings of this assessment to the County. During the course of the monitoring, the archaeologist may adjust the frequency—from continuous to intermittent—of the monitoring based on the conditions and professional judgment regarding the potential to impact resources.</p> | | | | |
| | <p>Mitigation Measure 3.6-1b: Inadvertent Discovery Protocol.</p> <p>If prehistoric or historic-era archaeological resources are encountered during Project implementation, either during monitoring or otherwise, all construction activities within 100 feet shall cease, and a qualified archaeologist, defined as an archaeologist meeting the U.S. Secretary of the Interior's Professional Qualification Standards for Archeology, shall inspect the find within 24 hours of discovery and notify the County of their initial assessment.</p> <p>If the County determines, based on recommendations from a qualified archaeologist and a Native American representative (if the resource is Native American related), that the resource may qualify as a historical resource or unique archaeological resource (as defined in CEQA Guidelines Section 15064.5) or a tribal cultural resource (as defined in PRC Section 21080.3), the resource shall be avoided if feasible. Consistent with Section 15126.4(b)(3), this may be accomplished through planning construction to avoid the resource; incorporating the resource within open space; capping and covering the resource; or deeding the site into a permanent conservation easement.</p> <p>If avoidance is not feasible, the County shall consult with appropriate Native American tribes (if the resource is Native American-related), and other appropriate interested parties to determine treatment measures to avoid, minimize, or mitigate any potential impacts to the resource pursuant to PRC Section 21083.2, and CEQA Guidelines Section 15126.4. This shall include documentation of the resource and may include data recovery (according to PRC Section 21083.2), if deemed appropriate, or other actions such as treating the resource with culturally appropriate dignity and protecting the cultural character and integrity of the resource (according to PRC Section 21084.3).</p> | <p>County to review and approve Applicant archaeologist qualifications.</p> <p>In the event of discovery, the Applicant shall engage in consultation with County and Native American tribes to determine treatment measures to avoid, minimize, or mitigate any potential impacts.</p> <p>County to conduct on-site monitoring to ensure proper implementation of protocol.</p> | <p>Implemented during construction.</p> | <p>Implementation of construction protocols avoid, minimize, or mitigate impacts to any inadvertently discovered potential prehistoric or historic-era archaeological resources.</p> | <p>Shasta County</p> |
| <p>Impact 3.6-2: The Project could disturb human remains, including those interred outside of formal cemeteries.</p> | <p>Mitigation Measure 3.6-2: Inadvertent Discovery of Human Remains.</p> <p>In the event human remains are uncovered during ground-disturbing activities (including construction, operations and maintenance, and decommissioning), the Project proponent or its contractor shall immediately halt work within a 100-foot radius, contact the Shasta County Coroner to evaluate the remains within 48 hours, and follow the procedures and protocols pursuant to Section 15064.5(e)(1) of the CEQA Guidelines. Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. If the remains are determined to be of Native American descent, the coroner has 24 hours to notify the Native American Heritage Commission (NAHC). The NAHC will then identify the person thought to be the most likely descendent of the deceased Native American. The most likely descendent will make recommendations for means of treating, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code Section 5097.98.</p> | <p>In the event of discovery, the Applicant shall contact the coroner and notify the County, and depending on the coroner's findings, shall provide the County with documentation that it consulted with the most likely descendent of the deceased Native American.</p> <p>County to conduct on-site monitoring during construction to ensure proper implementation of the mitigation measure and descendent recommendations.</p> | <p>In the event human remains are uncovered, the Applicant will immediately halt work and contact the Shasta County Coroner to evaluate the remains and contact the County.</p> | <p>Proper treatment of human remains and any associated grave goods, with appropriate dignity, in the event human remains are encountered.</p> | <p>Shasta County</p> |
| <p>Impact 3.6-3: The Project would cause a substantial adverse change in the significance of a tribal cultural resource.</p> | <p>Mitigation Measure 3.6-3a: Implement Mitigation Measure 3.6-1a: Archaeological Monitoring Plan and Mitigation Measure 3.6-1b: Inadvertent Discovery Protocol</p> | <p>See Mitigation Measure 3.6-1a and 3.6-1b</p> | | | |
| | <p>Mitigation Measure 3.6-3b: Coordination with the Pit River Tribe during Project Development.</p> <p>Shasta County and the Applicant will facilitate a preconstruction meeting and field visit with the Pit River Tribe through the Tribe's chairperson and the Pit River Environmental Office to discuss "tribal cultural resources" as defined in Public Resources Code Section 21074 in the Project Site and identify ways to minimize impacts on these locations during construction. The site visit will focus on viewing the location of the Project facilities, describing Project construction and operation activities, and identifying potential cultural significant features.</p> | <p>The County and Applicant will facilitate a pre-construction meeting and field visit with the Pit River Tribe and the Pit River Environmental Office as described in the measure.</p> | <p>Prior to construction.</p> | <p>Coordination with Pit River Tribe and the Pit River Environmental Office regarding project facilities, describing Project construction and operation activities, and identification of potential cultural significant features.</p> | <p>Shasta County</p> |
| | <p>Mitigation Measure 3.6-3c: Detailed Recordation of Features Considered Culturally Significant to the Pit River Tribe.</p> | <p>The Applicant to provide documentation to the County that it has undertaken an</p> | <p>Prior to construction.</p> | <p>Detailed recordation of any ethnographic location in this manner will create a photographic and written record of the cultural</p> | <p>Shasta County</p> |

**TABLE G-1 (CONTINUED)
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| | <p>The Applicant shall retain a professional ethnographic consultant to undertake a detailed recordation of any locations considered important to the Pit River Tribe. The recordation will commence prior to construction and will include photographic documentation of pre- and post-construction conditions of any identified culturally sensitive location. The information gathered as a result of field, interview, and research tasks will be compiled into a report that will be transmitted to the Pit River Tribe. Detailed recordation of any ethnographic location in this manner will create a photographic and written record of the cultural resource prior to construction of the Project, resulting in partial compensation for Project impacts.</p> | <p>ethnographic recordation and provide it to Pit River Tribe.</p> | | <p>resource, resulting in partial compensation for project impacts.</p> | |
| | <p>Mitigation Measure 3.6-3d: Cultural Resources Monitoring Program with the Pit River Tribe during Construction.</p> <p>The Applicant shall offer and provide the opportunity for cultural resource monitors from the Pit River Tribe to monitor initial ground disturbing construction activities in areas identified by the Tribe as culturally sensitive. Monitors will have the authority to ensure that discrete sacred sites in the Project Site are avoided or that impacts on such localities are mitigated to the extent feasible, including but not limited to, avoidance or data recovery (as outlined in Mitigation Measure 3.6.1a. Inadvertent Discovery Protocol). The Pit River Environmental Office should coordinate with the appropriate Achumawi bands (Itsatawi and Madesi) to assign monitors.</p> <p>If the offer is accepted, the Applicant shall provide compensation commensurate with market rates based on the qualifications and experience of the cultural monitor(s). Prior to tendering an offer to the Tribe the Applicant shall provide a copy of the offer to the County for review, including but not limited to the proposed number of monitors to be employed, proposed construction schedule/hours during which monitors would be present on site, proposed level(s) of compensation, and other relevant details of the proposed cultural monitoring program.</p> | <p>The Applicant to provide documentation to the County that it has offered and provided the opportunity for cultural resource monitors from the Pit River Tribe, and if amenable to the tribe, has developed an associated Cultural Resources Monitoring Program in consultation with Pit River Tribe.</p> <p>County to conduct on-site monitoring during construction to ensure proper implementation of the Cultural Resources Monitoring Program.</p> | <p>Development of Cultural Resources Monitoring Program prior the commencement of construction.</p> <p>Implementation of the Cultural Resources Monitoring Program during construction.</p> | <p>Ensure that discrete sacred sites in the Project Site are avoided or that impacts on such localities are mitigated to the extent feasible</p> | <p>Shasta County</p> |
| Hazards and Hazardous Materials | | | | | |
| <p>Impact 3.11-3: During normal operation, equipment failure or an extreme event could lead to turbine failure, resulting in a potential hazard.</p> | <p>Mitigation Measure 3.11-3: Mandatory Setbacks.</p> <p>A minimum wind turbine setback of two times the total tip height shall be maintained from the exterior Project boundaries where the Project Site is adjacent to existing parcels of record that contain an off-site residence.</p> | <p>Applicant to provide County with final site plan.</p> <p>County to review final site plan and conduct on-site monitoring to ensure identified setbacks from adjacent existing parcels that contain a residence are maintained.</p> | <p>Submission of site plan at least 30 days prior to commencement of construction.</p> | <p>Potential hazards associated with equipment or turbine failure are reduced.</p> | <p>Shasta County</p> |
| <p>Impact 3.11-7: The Project could impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.</p> | <p>Mitigation Measure 3.11-7: Implement the Traffic Management Plan that would be required by Mitigation Measure 3.14-3.</p> | <p>See Mitigation Measure 3.14-3</p> | | | |
| Hydrology and Water Quality | | | | | |
| <p>Impact 3.12-1: The Project would, unless mitigated, violate water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality during construction and decommissioning.</p> | <p>Mitigation Measure 3.12-1: Water Quality Best Management Practices during Activities in and near Water.</p> <p>To avoid and/or minimize potential impacts on water quality (and jurisdictional waters) during construction- and decommissioning-related project activities that would be conducted near (i.e., within 50 feet), in, or over waterways, the project contractor shall implement the following standard construction BMPs to prevent releases of hazardous materials and to avoid other potential environmental impacts:</p> <ol style="list-style-type: none"> 1. In-stream construction shall be scheduled during the summer low-flow season to minimize impacts on aquatic resources. If instream construction takes place during higher flow seasons, the following measures shall be implemented: <ol style="list-style-type: none"> a. Minimize mechanized equipment use below top of bank of streams; b. Perform activities in accordance with all permit conditions and best practices; and c. Have environmental monitors on-site to monitor instream construction to ensure compliance with permit conditions and best practices. 2. All construction material, wastes, debris, sediment, rubbish, trash, etc., shall be removed from the Project Site daily during construction and decommissioning, and thoroughly at the | <p>County to conduct on-site monitoring during construction and decommissioning to ensure proper implementation of the BMPs as defined.</p> | <p>During construction and decommissioning.</p> | <p>Successful implementation of BMPs to prevent releases of hazardous materials and to avoid other potential environmental impacts.</p> | <p>Shasta County</p> |

**TABLE G-1 (CONTINUED)
 APPLICANT PROPOSED MEASURES AND PROJECT MITIGATION MEASURES
 MITIGATION MONITORING AND REPORTING PROGRAM**

| Environmental Impact | Mitigation Measure/APM | Monitoring / Reporting Action | Implementation Schedule | Effectiveness Criteria | Verification Approval Party |
|--|--|---|--|--|-----------------------------|
| | <p>completion of each of these phases. Debris shall be transported to an authorized upland disposal area.</p> <p>3. Consistent with the Project's Hazardous Materials Business Plan (HMBP) and Spill Prevention Control and Countermeasures Plan (SPCC), construction workers shall receive training prior to construction/decommissioning and protective measures shall be implemented to prevent accidental discharges of oils, gasoline, or other hazardous materials to jurisdictional waters during fueling, cleaning, and maintenance of equipment, as outlined in the Project's HMBP. Equipment used to perform construction work on the Project Site shall be maintained in accordance with manufacturers' protocols, and, except in the case of failure or breakdown, equipment maintenance shall be performed off-site. Crews shall check heavy equipment daily for leaks; if a leak is discovered, it shall be immediately contained and use of the equipment shall be suspended until repaired. The source of the leak shall be identified, material shall be cleaned up, and the cleaning materials shall be collected and properly disposed.</p> <p>4. Vehicles and equipment shall be serviced off-site, or, if on-site service is necessary, in a designated location a minimum distance of 100 feet from drainage channels and other waterways. Fueling locations shall be inspected after fueling to document that no spills have occurred. Any spills shall be cleaned up immediately.</p> | | | | |
| <p>Impact 3.12-2: Blasting, if it occurs, could substantially degrade groundwater quality.</p> | <p>Mitigation Measure 3.12-2: Best Management Practices for Blasting.</p> <p>All activities related to blasting shall follow Best Management Practices (BMPs) to prevent contamination of groundwater including preparing, reviewing and following an approved blasting plan; proper drilling, explosive handing and loading procedures; observing the entire blasting procedures; evaluating blasting performance; and handling and storage of blasted rock.</p> <p>1) Blasting Plan. Prior to conducting the first blast on the Project Site, the Applicant shall prepare and submit a detailed blasting plan to the Shasta County Department of Resource Management and the Shasta County Sheriff's Department. The blasting plan shall contain a complete description of how explosives will be safely transported and used at the site; evacuation, security and fire prevention procedures; blasting equipment list; and procedures for notification of nearby receptors. The blasting plan shall explain how the Applicant will comply with the requirements of 30 C.F.R. §§816.61 through 816.68 regarding the use of explosives to be consistent with the technical requirements of the statute. Procedures for notification shall include, but not be limited to, the following:</p> <ul style="list-style-type: none"> a. At least 30 days before initiation of blasting, the operator shall notify, in writing, all residents or owners of dwellings or other structures located within 0.5-mile of the permit area describing how to request and submit a pre-blasting survey. Notification shall include posting a written notice within the Project Site, and on the County's public website describing how to obtain and submit a pre-blasting survey. b. A resident or owner of a dwelling or structure within 0.5-mile of any part of the permit area may request a pre-blasting survey. This request shall be made, in writing, directly to the operator or to the regulatory authority, who shall promptly notify the operator. The operator shall promptly conduct a pre-blasting survey of the dwelling or structure and promptly prepare a written report of the survey detailing the results. c. The operator shall determine the condition of the dwelling or structure and shall document any pre-blasting damage and other physical factors that could reasonably be affected by the blasting. Structures such as pipelines, cables, transmission lines, and cisterns, wells, and other water systems warrant special attention; however, the assessment of these structures may be limited to surface conditions and other readily available data. d. Prior to finalizing the blasting plan, the Applicant or designated operator shall consult with jurisdictional authorities tasked with protecting waters of the state and implement avoidance and minimization measures, as required by CDFW, USACE, and regional water quality (Section 401) regulatory permits prepared for the Project. A record of consultation and such protective measures shall be included in the blasting plan and/or incorporated by reference. <p>2) Loading practices. The following blast hole loading practices to minimize environmental effects shall be followed:</p> <ul style="list-style-type: none"> a) Drilling logs shall be maintained by the driller and communicated directly to the blaster. The logs shall indicate depths and lengths of voids, cavities, and fault zones or other weak zones encountered as well as groundwater conditions. | <p>The Applicant shall prepare and submit a detailed blasting plan to the County and Shasta County Sheriff's Department.</p> <p>Prior to finalizing the blasting plan, the Applicant or designated operator shall consult with jurisdictional authorities tasked with protecting waters of the state and implement avoidance and minimization measures to protect regional water quality.</p> <p>Applicant shall provide County with documentation that it notified, in writing, all residents or owners of dwellings or other structures located within 0.5-mile of the permit area.</p> <p>County to conduct on-site monitoring during blasting to ensure proper implementation of the blasting plan.</p> | <p>The blasting plan to be submitted to County and Sheriff Department at least 45 days prior to planned commencement of blasting activities.</p> <p>Notification to residents or owners of dwellings or other structures at least 30 days before initiation of blasting.</p> <p>Implementation of blasting plan during construction.</p> | <p>Development and implementation of the blasting plan to reduce the potential to substantially degrade groundwater quality.</p> | <p>Shasta County</p> |

**TABLE G-1 (CONTINUED)
 APPLICANT PROPOSED MEASURES AND PROJECT MITIGATION MEASURES
 MITIGATION MONITORING AND REPORTING PROGRAM**

| Environmental Impact | Mitigation Measure/APM | Monitoring / Reporting Action | Implementation Schedule | Effectiveness Criteria | Verification Approval Party |
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| | b) Explosive products shall be managed on-site so that they are either used in the borehole, returned to the delivery vehicle, or placed in secure containers for off-site disposal. c) Spillage around the borehole shall either be placed in the borehole or cleaned up and returned to an appropriate vehicle for handling or placement in secured containers for off-site disposal. d) Loaded explosives shall be detonated as soon as possible and shall not be left in the blast holes overnight, unless weather or other documented safety concerns reasonably dictate that detonation should be postponed. e) Loading equipment shall be cleaned in an area where wastewater can be properly contained and handled in a manner that prevents release of contaminants to the environment. f) Explosives shall be loaded to maintain good continuity in the column load to promote complete detonation. Industry accepted loading practices for priming, stemming, decking and column rise shall be attended to. 3) Explosive Selection. To reduce the potential for groundwater contamination when explosives are used, explosive products shall be selected that (a) are appropriate for site conditions and safe blast execution, and (b) have the appropriate water resistance for the site conditions present to minimize the potential for hazardous effect of the product upon groundwater. 4) Prevention of Misfires. Appropriate practices shall be developed and implemented to prevent misfires. 5) Blast Rock Pile Management. To reduce the potential for contamination, the interaction of blasted rock piles and stormwater shall be managed to prevent contamination of water supply wells or surface water. | | | | |
| Impact 3.12-4: The Project would, unless mitigated, substantially increase siltation of waterways or provide substantial additional sources of polluted runoff during construction and decommissioning. | Mitigation Measure 3.12-4: Implement the water quality best management practices during activities in and near water that would be required by Mitigation Measure 3.12-1. | See Mitigation Measure 3.12-1 | | | |
| Impact 3.12-5: The Project would, unless mitigated, conflict with implementation of the Central Valley Basin Plan. | Mitigation Measure 3.12-5a. Implement the water quality best management practices during activities in and near water that would be required by Mitigation Measure 3.12-1. Mitigation Measure 3.12-5b: Implement the best management practices for blasting that would be required by Mitigation Measure 3.12-2. | See Mitigation Measure 3.12-1 See Mitigation Measure 3.12-2 | | | |
| Noise and Vibration | | | | | |
| Impact 3.13-2: Construction, decommissioning, and site reclamation of the Project could result in the generation of a substantial temporary increase in ambient noise levels on and near the Project Site in excess of standards established in the Shasta County General Plan or the applicable standards of other agencies. | Mitigation Measure 3.13-2: Noise-Reducing Construction Practices. The Project Applicant shall ensure that the following measures are implemented during construction, decommissioning, and site reclamation activities to avoid and minimize construction noise effects on sensitive receptors: a) Construction vehicle routes shall be located at the most distant point feasible from noise-sensitive receptors. b) All heavy trucks shall be properly maintained and equipped with noise-control (e.g., muffler) devices, in accordance with manufacturers' specifications, at each work site during Project construction, decommissioning, and site reclamation to minimize heavy truck traffic noise effects on sensitive receptors. c) Haul trucks and delivery trucks shall prioritize use of the east access road, if available, over the west access road, and shall avoid use of the west access road during nighttime hours. d) Helicopter use shall be limited to a period of 2 weeks or less such that receptors are not impacted for a substantial period of time. e) Limit construction operations located within 2,500 feet of residences to daytime hours only. f) Residences within 2,000 feet of helicopter activity shall be notified of the timeline of proposed operations at least 2 weeks prior to line stringing operations. g) Nighttime (10 p.m. to 7 a.m.) helicopter use and blasting shall be prohibited. | County to conduct on-site monitoring during construction, decommissioning, and site reclamation to ensure implementation of noise-reducing construction practices as defined. | During construction, decommissioning, and site reclamation. | Implementation of defined noise-reducing practices to reduce noise levels on and near the Project Site. | Shasta County |

**TABLE G-1 (CONTINUED)
 APPLICANT PROPOSED MEASURES AND PROJECT MITIGATION MEASURES
 MITIGATION MONITORING AND REPORTING PROGRAM**

| Environmental Impact | Mitigation Measure/APM | Monitoring / Reporting Action | Implementation Schedule | Effectiveness Criteria | Verification Approval Party |
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| Impact 3.13-3: Construction, decommissioning, and site reclamation of the Project could generate groundborne vibration. | <p>Mitigation Measure 3.13-3: Charge Weight Limits on Blasting Activities.</p> <p>The Project Applicant shall ensure that blasting contractors restrict charge weight per delay such that a performance standard of less than 0.3 in/sec PPV would result at any structures in the vicinity of the blasting area. This performance standard shall be established as a condition of contract and implemented by a licensed blasting contractor in possession of a Federal Explosives License/Permit, issued by the Bureau of Alcohol, Tobacco, and Firearms.</p> | Applicant to provide documentation to County that performance standard has been established as a condition of contract to be implemented by the licensed blasting contractor. | Documentation provided at least 14 days prior to planned blasting activities. Blasting activities to occur during construction. | Implementation of charge weight limits to reduce the extent of groundborne vibration. | Shasta County |
| Transportation | | | | | |
| Impact 3.14-3: The Project would, unless mitigated, substantially increase safety hazards. | <p>Mitigation Measure 3.14-3: Traffic Management Plan.</p> <p>Prior to the issuance of construction or building permits and prior to the removal of materials from the Project Site during decommissioning, the Applicant shall:</p> <ol style="list-style-type: none"> 1. Prepare and submit a Traffic Control Plan to Shasta County Public Works Department and the Caltrans offices for District 2, as appropriate, for approval. The Traffic Control Plan must be prepared in accordance with both the Caltrans Manual on Uniform Traffic Control Devices and Work Area Traffic Control Handbook and must include, but not be limited to, the following: <ol style="list-style-type: none"> a. A plan for communicating construction/decommissioning plans with Caltrans, emergency service providers, and residents located in the vicinity of the Project Site. b. An access and circulation plan for use by emergency vehicles when lane closures and/or detours are in effect. If lane closures occur, provide advance notice to local fire departments and sheriff's department to ensure that alternative evacuation and emergency routes are designed to maintain response times. c. Timing of deliveries to/removals from the Project Site of heavy equipment and building materials; d. Directing vehicles, pedestrians, and bicyclists on SR 299 through the construction zone with a flag person; e. Providing detours to route vehicular traffic, bicyclists, and pedestrians around lane or shoulder closures, if they occur; f. Providing adequate parking for construction trucks, equipment, and workers in the designated staging areas within the Project Site; g. Placing temporary signage, lighting, and traffic control devices if required, including, but not limited to, appropriate signage along access routes to indicate the presence of heavy vehicles and construction/decommissioning traffic, and the placement of traffic cones to provide temporary left-turn lanes into Project driveways as needed;² h. Preserving access to existing ingress/egress points for all adjacent property at all times; and, i. Specifying both construction/decommissioning-related vehicle travel and oversize/overweight vehicle haul routes. 2. Obtain all necessary encroachment permits for the work within the road right-of-way or use of oversized/overweight vehicles that will utilize County-maintained roads, which may require California Highway Patrol or a pilot car escort. Copies of the approved traffic plan and issued permits shall be submitted to the Shasta County Public Works Department and Caltrans. 3. Consult with the Shasta County Public Works Department and Caltrans to identify any substantial construction activities on SR 299 that may overlap with construction of the Project (e.g., Caltrans SR 299 resurfacing project from Milepost 60.0 to 67.8). Coordinate with the contractor(s) of any identified project(s) to ensure that overlapping construction activities do not cause unnecessary delays on SR 299 or preclude the ability of large vehicles to access the Project Site. | <p>The Applicant to submit the Traffic Management Plan to Shasta County Public Works and Caltrans for review and approval.</p> <p>County to conduct on-site monitoring during construction to ensure measures are properly implemented.</p> | <p>Development of Traffic Management Plan prior to issuance of construction permits.</p> <p>Implementation of Traffic Management Plan during construction.</p> | Development and implementation of Traffic Management plan that reduces traffic safety hazards. | Shasta County |
| Impact 3.14-4: The Project would, unless mitigated, result in inadequate emergency access. | Mitigation Measure 3.14-4: Implement the Traffic Management Plan that would be required by Mitigation Measure 3.14-3 (Traffic Management Plan). | See Mitigation Measure 3.14-3 | | | |

² A left-turn lane warrant analysis was conducted for the three Project driveways, which is provided in Appendix H. The analysis found that left-turn lanes would be warranted during Project construction at all three Project driveways during the a.m. peak hour.

**TABLE G-1 (CONTINUED)
 APPLICANT PROPOSED MEASURES AND PROJECT MITIGATION MEASURES
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| Environmental Impact | Mitigation Measure/APM | Monitoring / Reporting Action | Implementation Schedule | Effectiveness Criteria | Verification Approval Party |
|--|--|---|---|--|-----------------------------|
| Wildfire | | | | | |
| Impact 3.16-1: The Project would, unless mitigated, substantially impair an adopted emergency response plan or emergency evacuation plan | <p>Mitigation Measure 3.16-1a: Implement Mitigation Measure 3.14-3 (Traffic Management Plan)</p> <p>Mitigation Measure 3.16-1b: Pre-Construction Coordination with CAL FIRE Prior to construction, the Applicant shall provide GIS files or other maps of the Project layout to CAL FIRE to facilitate aerial fire-fighting planning. The Applicant shall notify CAL FIRE of any changes to the Project layout or any maintenance that would require the use of helicopters or the use of equipment not previously identified on maps provided to CAL FIRE that could present a new, previously unidentified vertical obstacle to aerial firefighting. <u>The Applicant will identify a Project operations point of contact for CAL FIRE to coordinate with in the event aerial fire-fighting operations occur in the vicinity of the Project.</u></p> | See Mitigation Measure 3.14-3 | Prior to construction. | Provision of GIS files and of project layout, and notice of any project changes, to CAL FIRE for identification of any new, previously unidentified vertical obstacle(s) to aerial firefighting. | Shasta County |
| Impact 3.16-2: The Project would, unless mitigated, exacerbate wildfire risks and expose people to pollutant concentrations or a significant risk of loss, injury or death from a wildfire or the uncontrolled spread of a wildfire. | <p>Mitigation Measure 3.16-2a: Fire Safety. The Applicant and/or its contractors shall prepare and implement a Project-specific Fire Prevention Plan (FPP) to prevent an exacerbation of wildfire risk during both the Project construction and operation and maintenance phases. Prior to construction, the Applicant shall contact and consult with the Shasta Trinity Unit of CAL FIRE and the Shasta County Fire Department to determine the appropriate amounts of fire equipment to be carried on the vehicles and appropriate prevention measures to be taken. The Applicant shall submit verification of its consultation with the appropriate fire departments to Shasta County. The Applicant shall submit a draft FPP to the Shasta County Project Manager for approval when the building permit application is submitted. The County shall have an opportunity to make comments on and revisions to the FPP, which the Applicant shall incorporate into a revised FPP for approval. The Applicant shall make the approved FPP available to all construction crew members prior to construction of the Project. The FPP shall list fire safety measures including fire prevention and extinguishment procedures, as well as specific emergency response and evacuation measures that would be followed during emergency situations; examples are listed below. The FPP also shall provide fire-related rules for smoking, storage and parking areas, usage of spark arrestors on construction equipment, and fire-suppression tools and equipment. The FPP shall include or require, but not be limited to, the following:</p> <ul style="list-style-type: none"> • Prior to construction, the Project applicant shall designate primary and alternate Fire Coordinators such that a Fire Coordinator is present at all times during Project construction. The Fire Coordinator shall be responsible for ensuring that crews have sufficient fire suppression equipment, communication equipment, shall lead and coordinate fire patrols, ensure that the required clearances are followed onsite, and ensure that all crew members receive training on the FPP and its components. • For vehicles within control of the contractor, the contractor shall require vehicle drivers to conduct a visual inspection of the vehicle for potential sparking risks prior to operation of the vehicle. This inspection should include, but not be limited to a check of tire pressure and an inspection for chains or other vehicle components that could drag while driving. For subcontractors or vendors where vehicles are not within the control of the contractor, the contractor or Applicant shall develop a standard brochure to send to vendors that shall provide educational materials about fire risks associated with vehicles and shall provide an inspection checklist. • The Applicant and/or its contractors shall have water tanks, water trucks, or portable water backpacks (where space or access for a water truck or water tank is limited) sited/available in the study area for fire protection. • During construction of the Project the Applicant and/or its contractors shall implement ongoing fire patrols during construction hours and for 1 hour after the end of daily construction and hotwork. • All construction crews and inspectors shall be provided with radio and/or cellular telephone access that is operational within the Project Site to allow communications with other vehicles and construction crews. All fires shall be reported immediately upon detection. • Require that all internal combustion engines, stationary and mobile, be equipped with spark arresters in good working order. • Require that light trucks and cars with factory-installed mufflers be used only on roads where the roadway is cleared of vegetation. | <p>Applicant to submit to the County verification that it has contacted and consulted with the Shasta Trinity Unit of CAL FIRE and the Shasta County Fire Department.</p> <p>Applicant to submit Fire Prevention Plan to County for review, comment, and approval.</p> <p>County to review submittals and conduct on-site monitoring during construction to ensure measures are properly implemented.</p> | <p>Development of the Fire Prevention Plan prior to construction.</p> <p>Submission of the draft Fire Prevention Plan to the Shasta County Project Manager for approval when the building permit application is submitted.</p> <p>Implementation of the Fire Prevention Plan during construction and operation.</p> | Effective implementation would be demonstrated through compliance with all components of the Fire Prevention Plan; if ignition from Project construction activities is promptly reported to the fire department(s) with jurisdiction; and when it is safe to do so, any Project-caused ignition is suppressed immediately. | Shasta County |

**TABLE G-1 (CONTINUED)
 APPLICANT PROPOSED MEASURES AND PROJECT MITIGATION MEASURES
 MITIGATION MONITORING AND REPORTING PROGRAM**

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| | <ul style="list-style-type: none"> • Require that equipment parking areas and small stationary engine sites are cleared of all extraneous flammable material. • Include a fire conditions monitoring program to monitor meteorological data during construction and operation. • Include a monitoring and inspection protocol for turbines and electrical infrastructure. • Include protocol for disabling re-closers and de-energizing portions of the electrical collection and transmission systems • Prohibit smoking in wildland areas, with smoking limited to paved areas or areas cleared of all vegetation. • All construction vehicles shall have fire suppression equipment. • The Applicant shall ensure that all construction workers receive training on the implementation of the FPP including how to conduct a fire patrol, proper use of fire-fighting equipment and procedures to be followed in the event of a fire, vegetation clearance and equipment usage requirements, turbine, and electrical equipment inspections. • As construction may occur simultaneously at several locations, each construction site shall be equipped with fire extinguishers and fire-fighting equipment sufficient to extinguish small fires. • The Applicant shall enforce a requirement that construction personnel park any vehicles within roads, road shoulders, graveled areas, and/or cleared areas (i.e., away from dry vegetation) wherever such surfaces are present at the construction site. • The Applicant and its contractor shall cease all non-emergency work during Red Flag Warning events. • The Applicant shall coordinate the finalization of road improvements (i.e. frequency of grading and vegetation clearance) with CAL FIRE and other emergency responders to ensure that sufficient ingress and egress exists onsite. • Prior to the initiation of construction, a designated inspector from the County shall inspect the Project Site to ensure that sufficient fire suppression equipment is present onsite, that the required vegetation clearances have been cleared, that a crew member training program has been created, that construction vehicles are equipped with fire suppression equipment, that spark arrestors are installed on construction equipment, that a fire conditions monitoring program has been developed, that a monitoring and inspection protocol has been developed, that a disabling and re-closing protocol has been developed, and that CAL FIRE was appropriately consulted regarding road improvements and ingress and egress. • During construction, the Applicant shall submit a weekly FPP compliance report that demonstrates the following: fire patrols have been conducted following construction, any new construction workers have received training on the implementation of the FPP, that non-emergency work is being halted appropriately during Red Flag Warnings, and that sufficient fire suppression equipment is present onsite. <p>Successful implementation of Mitigation Measure 3.16-2a (Fire Safety) would be demonstrated by the development of an FPP in consultation with local fire authorities which is documented and submitted to Shasta County for review, any revisions, and final approval. Additionally, successful implementation of Mitigation Measure 3.16-2a would require that the Applicant and its contractor comply with all components of the FPP, that ignition from Project construction activities is promptly reported to the fire department(s) with jurisdiction, and that when it is safe to do so, any Project-caused ignition is suppressed immediately.</p> | | | | |
| Impact 3.16 cont. | <p>Mitigation Measure 3.16-2b: Nacelle Fire Risk Reduction.</p> <p>Turbines shall be equipped with fire detection and prevention technology compatible with the manufacturer’s operating requirements and will be maintained in good working order throughout the life of the Project. Turbines with electrical equipment in the nacelle shall have safety devices to detect electrical arc and smoke that use the best available technology for fire detection and suppression within turbines. The turbine design shall include the following components:</p> <ol style="list-style-type: none"> 1. Early fire detection and warning systems; 2. Automatic switch-off and complete disconnection from the power supply system; and | <p>Applicant to provide County with verification that turbine design includes fire detection and protection technology.</p> <p>County to conduct on-site monitoring to ensure measures are properly implemented.</p> | <p>Verification of turbine design prior to construction.</p> <p>Implementation of turbine design during construction and operation.</p> | <p>Inclusion of fire detection and prevention technology in turbines to be maintained in good working order throughout the life of the Project</p> | Shasta County |

**TABLE G-1 (CONTINUED)
 APPLICANT PROPOSED MEASURES AND PROJECT MITIGATION MEASURES
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| | <p>3. Automatic fire extinguishing systems in the nacelle of each wind turbine.</p> <p>4. Additionally, turbines shall include lightning protection equipment such as grounding equipment, and a lightning measurement system. Lightning grounding systems shall consider site-specific conditions such as soil type and conductivity.</p> <p>Should any of these devices report an out-of-range condition, the device shall command a shutdown of the turbine and disengage it from the electrical collection system, and send a notice through the SCADA. The entire turbine shall be protected by current-limiting switchgear installed at the base of the tower.</p> <p>In the event of a lightning strike, an electrical inspection shall be conducted on the affected turbine to identify and address any damage to the turbine or electrical system that could result in subsequent fire risk.</p> | | | | |
| <p>Impact 3.16 cont.</p> | <p>Mitigation Measure 3.16-2c: Emergency Response Plan.</p> <p>Prior to the submission of the building permit application, the Applicant shall prepare an emergency response plan to be reviewed and approved by Shasta County Planning, CAL FIRE, and the Shasta County Fire Department. Following approval of the plan, the Applicant and/or its contractors shall implement the requirements in the plan during all phases of construction and operation, as applicable. The emergency response plan shall describe the likely types of potential accidents or emergencies involving fire that could occur during both construction and operation, and shall include response protocols for each scenario. The plan shall include key contact information and a description of key processes, in the event of an emergency in order to alert relevant responders of the emergency, and how to control the emergency. The plan shall include crew member training in response, suppression, and evacuation. The training shall be coordinated by the designated Fire Coordinators. Prior to construction, the Applicant shall submit to the County a compliance report demonstrating that all crew members have been trained. As new construction crews or operation workers are brought onsite, the Applicant shall submit additional compliance reports demonstrating that they have been received training on the emergency response plan.</p> | <p>Applicant to develop and submit Emergency Response Plan for review and approval to the County, Shasta County Fire Department, and CALFIRE.</p> <p>Applicant to submit to the County a compliance report demonstrating that all crew members have been trained regarding the Emergency Response Plan.</p> <p>County to review submittals and conduct on-site monitoring to ensure measures are properly implemented.</p> | <p>Development and submittal of plan prior to the submission of the building permit application.</p> <p>Implementation during construction</p> | <p>Development and implementation of Emergency Response Plan</p> | <p>Shasta County</p> |
| <p>Impact 3.16-4: The Project would, unless mitigated, expose people or structures to significant risks, including adverse water quality effects or downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes.</p> | <p>Mitigation Measure 3.16-4: Implement the Fire Safety measures that would be required by Mitigation Measure 3.16-2a (Fire Safety); implement the Nacelle Fire Risk Reduction measures that would be required by Mitigation Measure 3.16-2b; and implement the Emergency Response Plan that would be required by Mitigation Measure 3.16-2c.</p> | <p>See Mitigation Measures 3.16-21, 3.16-2b, and 3.16-2c</p> | | | |