ADDENDUM TO FINAL SUPPLEMENTAL ENVIRONMENTAL IMPACT REPORT COUNTY EIR No. 18EIR-00000-00001 AND STATE CLEARINGHOUSE No. 2018071002

REVISION TO PERMIT CONDITION NO. 38, MM BIO-16 (GOLDEN EAGLE TAKE PERMIT) FOR THE STRAUSS WIND ENERGY PROJECT

County Case Nos: 23RVP-00031 & 16CUP-00000-00031

- TO: Decision-Makers
- **FROM:** John Zorovich, Deputy Director, Energy, Minerals and Compliance Division Staff Contact: Jacquelynn Ybarra
- DATE: September 20, 2023
- RE: Addendum to Final Supplemental Environmental Impact Report 18EIR-00000-00001 Revision to Permit Condition No. 38, MM BIO-16 (*Golden Eagle Take Permit*) for the Strauss Wind Energy Project Case No: 23RVP-00031

CEQA DETERMINATION:

Because a Final Supplemental Environmental Impact Report (FSEIR) No. 18EIR-00000-00001 was adopted for the Strauss Wind Energy Project (SWEP), California Environmental Quality Act (CEQA) Guidelines § 15162 states that no subsequent EIR or Negative Declaration shall be prepared unless one or more of the following have occurred: 1) substantial changes are proposed in the project which will require major revisions to the Supplemental EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; 2) substantial changes will occur with respect to the circumstances under which the project is undertaken which will require major revisions to the Supplemental EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or 3) new information of substantial importance which was not known and could not have been known at the time the previous Supplemental EIR was certified as complete has become available.

The proposed project to revise SWEP Conditional Use Permit (CUP) No. 16CUP-00000-00031 Condition No. 38 will not result in any physical changes to the SWEP, and there are no changed circumstances that would trigger the above occurrences. No new significant environmental effects, or a substantial increase in the severity of previously identified significant effects under 18EIR-00000-00001 have been found with the proposed revision to CUP Condition No. 38. Instead, the project would revise the timing of the requirement that the applicant obtain an Incidental Take Permit (ITP) for golden eagles from the U.S. Fish and Wildlife Service (USFWS) and bolster related CUP Conditions of Approval imposed to minimize and mitigate potential impacts to golden eagles, upon a determination that under present circumstances, the existing timing requirement to obtain and ITP prior to SWEP operation is infeasible, impracticable, and/or unworkable. None of these changes would cause any new environmental effect or increase the severity of the project's potential impact to golden eagles, which has already been determined to be potentially Significant and Unavoidable. Because none of the conditions in State CEQA Guidelines § 15162 have occurred, no subsequent EIR is required.

State CEQA Guidelines § 15164 allow an addendum to be prepared when only minor technical changes or changes which do not create new significant impacts would result. As discussed above, the project consists of minor changes to existing CUP Conditions of Approval that would revise the timing of the requirement that the applicant obtain an ITP for golden eagles and bolster related conditions imposed to minimize and mitigate potential impacts to golden eagles. Because the proposed project to revise CUP Condition No. 38 meets the requirements of Public Resources Code Section 21166 and State CEQA Guidelines §15164, preparation of a new subsequent EIR or EIR is not required, and this Addendum to 18EIR-00000-00001 may be used to fulfill the environmental review requirements for the proposed project, Case No. 23RVP-00031.

LOCATION:

The proposed project to revise CUP Condition No. 38 would have no physical effects on the SWEP. The SWEP wind turbines are located approximately 4.2 miles southwest of the City of Lompoc within Santa Barbara County, California, Third and Fourth Supervisorial Districts. APNs: 083-100-008, 083-250-011, 083-250-016, 083-250-019, 083-090-001, 083-090-002, 083-090-003, 083-080-004, 083-100-007, 083-100-004, and 083-090-004.

BACKGROUND:

On January 28, 2020, the County Board of Supervisors certified 18EIR-00000-00001 (SCH# 2018071002) and granted *de novo* approval of the SWEP for the installation, operation, and maintenance of up to 29 wind turbines and associated facilities and infrastructure. To date, the Owner/Applicant, Strauss Wind, LLC (Strauss), and affiliate of BayWa r.e. Wind, LLC has completed substantial construction of the SWEP, and is planning for the upcoming start of operations.

FSEIR No. 18EIR-00000-00001 determined that an unknown but potentially substantial number of protected birds and bats are at risk of dying through collisions with wind turbines over the duration of SWEP operations. Specific mitigation measures were developed as part of the FSEIR to substantially lessen the severity of these impacts; however, residual impacts were determined to be Significant and Unavoidable under CEQA. As part of the 2020 Board of Supervisor's Findings for Approval, the Board found that the SWEP's Significant and Unavoidable impacts are acceptable when weighed against specific overriding social, technical, economic, legal, and other considerations.

Mitigation measures identified in the FSEIR were carried forward as Conditions of Approval under 16CUP-00000-00031. Condition 38 requires in part that Strauss obtain golden eagle (*Aquila chrysaetos*) take authorization from the USFWS prior to start of operations, or provide a letter from USFWS stating that authorization is expected to be issued or not needed. Other Conditions of Approval related to eagle minimization and mitigation measures include: Condition No. 9, MM BIO-1 that requires ongoing worker education and awareness programs; Condition No. 37, MM BIO15b that requires bird surveillance technology be installed; Condition No. 39, MM BIO-16a that requires bird use and behavior studies be conducted; Condition No. 40, MM BIO-16b that requires bird and bat mortality studies be conducted; Condition No. 41, MM BIO-16c that requires the removal of carrion; and Condition No. 42, MM BIO-16d that requires the implementation of a Bird and Bat Adaptive Management Plan.

Strauss submitted an application to the Planning and Development Department on May 11, 2023 to revise Condition No. 38 to propose that prior to operation, Strauss must demonstrate that an ITP application be determined complete by the USFWS, rather than an ITP be issued, or intended to be issued or not needed. Strauss also proposes the following additional requirements prior to operation, which are intended to bolster the existing Conditions of Approval: 1) provide a "Letter of Commitment" to maintain an active ITP application and comply with federal compensatory mitigation requirements; 2) provide a signed contract between Strauss and a contractor to implement a required Adaptive Management Plan; and 3) complete the installation of required bird surveillance technology. The purpose of modifying Condition 38 is to allow Strauss to commence SWEP operations in the fall of 2023, prior to ITP issuance which is expected to take a year or more.

The Planning Commission approved the proposed project on August 9, 2023, with additional revisions to Condition No. 38 for Strauss to report on their ITP status to the County via written reports every six months and public hearings at the Planning Commission every two years, to also provide the County with a copy of the ITP once issued, and to add a requirement for Strauss to also obtain an ITP from the California Department of Fish and Wildlife under the new California Senate Bill 147. The Planning Commission also approved revisions to Condition No. 1 (*Project Description*) for Strauss to make a payment of \$30,000 to a County-approved raptor protection/rehabilitation center for each documented golden eagle take that occurs prior to ITP issuance, if any, and Condition No. 40 (*Bird/Bat Mortality Study*) to increase the frequency of eagle carcass searches to weekly from every two weeks.

PROPOSED PROJECT:

Revisions to 16CUP-00000-00001 as proposed by Strauss and modified by the Planning Commission on August 9, 2023, are presented below. Text proposed to be removed is shown in strikeout, and text proposed to be added is shown in double <u>underline</u>. All other Conditions of Approval would remain as previously approved.

Proj Des-01 Project Description. This Conditional Use Permit (Case Nos. 16CUP-00000-00031 and 18VAR-00000-00002) and subsequent revision No. 23RVP-00031 is based upon and limited to compliance with the project description, the hearing Exhibits A and B dated November 20, 2019, <u>the hearing Exhibits A and B dated August 9, 2023</u>, and all conditions of approval set forth below, including mitigation measures and specified plans and agreements included by reference, as well as all applicable County rules and regulations. The project description is as follows:

Project Components

<u>Wind Turbine Generators (WTGs)</u>: Up to 29 wind turbine generators (WTGs) will be installed. Six WTGs will have a capacity of 1.79 megawatts (MW) and will be up to 427 feet tall. Twenty-three WTGs will have a capacity of 3.8 MW and will be up to 492 feet tall. The WTGs will be installed consistent with the Modified Project Layout (Planning Commission Exhibit A) evaluated in the certified Final SEIR. The WTGs will have achieved design certification by a reputable and experienced third-party verification institute, such as DNV GL, TÜV, or other comparable certification bodies for wind turbines, and demonstrate a design life of at least 20 years. The Owner/Operator shall employ an Independent Engineering (IE) firm to review construction supervision procedures, including materials testing, compliance with the design certificate, quality assurance reports and procedures, corrosion protection, and others. The IE also reviews standards and documentation for supervision during the transportation, erection, and commissioning of the WTGs.

WTG spacing will be no less than 1.5 rotor diameters (675 to 492 feet). The precise location of each WTG may be subject to minor adjustment (micro-siting) until the time of its construction. Micro-siting adjustments shall be limited to shifting a WTG up to 100 feet within its footprint identified in the preliminary grading plan.

The WTGs blades will be a three-bladed, horizontal axis design approximately 224.7 feet (3.8-MW WTG) to 160 feet (1.79-MW WTG) long and constructed in one piece of laminated fiberglass. A rotor hub, to which the blades will be bolted, will be covered by a composite nose-cone structure to streamline the airflow and protect the equipment. The nacelle will include the drive train (main shaft, bearing and gearbox), generator, and other electrical and hydraulic components. A transformer will be located either at the base of each tower, or inside the tower to increase the generation voltage up to the 34.5 kV of the collector system.

WTG towers will be epoxy-coated steel tubes, tapering from 14 feet diameter at the base to 10 feet at the nacelle, with access to the nacelle from within the tower. No guy wires shall be used. Each exposed concrete pad will be up to 16 feet in diameter and extend less than one foot above grade. A 20-foot-wide graded ring consisting of gravel or crushed rock will be placed around each foundation for positive drainage and access.

The WTGs will be equipped with obstruction lighting subject to an FAA-approved lighting plan and will consist of synchronized red flashing beacons on every WTGs unless the FAA approves otherwise.

The WTGs will be equipped with sensors and yaw and pitch controls to adapt to different wind speeds and directions to maximize power output. Safety features designed into the WTGs shall include a fail-safe rotor braking system, vibration, temperature, and fire detection systems in the nacelle and tower, and a lightning protection system. The safety systems of all WTGs will comply with the codes set forth by the Occupational Health and Safety Administration (OSHA), the American National Standards Institute (ANSI), and European Union (EU) health and safety standards. The WTGs will be equipped with a lightning protection system that connects the blades, nacelle, and tower to the earthing (grounding) system at the base of the tower. The nacelle shall be accessed using a ladder located inside the WTG tower. Internal ladders and maintenance areas inside the tower and nacelle will be equipped with safety provisions for securing lifelines and safety belts and conform to or exceed ANSI 14.3-1974 (Safety Requirements for Ladders).

The power from the WTGs will be transmitted to a pad mount step-up transformer adjacent to the tower (1.79-MW WTGs) or tower-based transformer (3.8-MW WTGs) that will step-up the voltage from 690 V to 34.5 kV. Each WTG controller will communicate via fiber-optic cables to the operations and maintenance (O&M) facility. Operational parameters will be transmitted to the central computer through a Supervisory Control and Data Acquisition (SCADA) system. The SCADA system will be monitored from the O&M control room and/or remote locations.

<u>Power Collection System and Communication System.</u> Each string of WTGs will be interconnected via 34.5-kV electrically insulated cables. The collector cables will be underground and follow roads, except for 2.34 miles. Of those 2.34 miles, 1.84 miles of cables will be underground but outside of the road and 0.5 mile will be installed above ground. The aboveground collection line will be installed, supported by single poles or H-frame structures. Another collector section will utilize transmission line structures and be under-built on the transmission line structures to connect this string to the substation. The overhead collection system will be constructed in conformance with good utility practice, the National Electric Safety Code (NESC), ANSI, and Avian Power Line Interaction Committee (APLIC). These collector cables will transmit the generated power to the Project substation where the voltage will be increased from 34.5 kV to 115 kV to match the voltage of the PG&E grid at the point of interconnection.

All underground collection circuits will be buried in trenches three to four feet deep. The size of the buried cable will vary depending on the type of cable used and how many turbines are interconnected on the specific circuit. Collection cables will be buried with the communication fiber cable and the ground wire. Connections will be made in above-ground, locked junction boxes. Both underground and above-ground markers will be installed at multiple locations to support identification of the collector system's underground path. Operation of the Project will be controlled by the automated SCADA system, which shall be capable of monitoring all operational parameters and starting and stopping each WTG. The system will allow remote control and monitoring of individual WTGs and the entire Project site locally and remotely. Communication lines for the SCADA system will be buried in the same trenches used for the electrical collector lines and routed to the substation's control room.

<u>Meteorological Tower and SODAR Units</u>. Prior to the start of construction, meteorological data will be collected using mobile sonic detection and ranging (SODAR) units to record weather data necessary to determine the most efficient operational strategy for the WTGs. The data collected will include wind speed and direction, temperature, humidity, barometric pressure, and rainfall.

One permanent meteorological tower, one permanent SODAR device and one temporary SODAR device will be installed to measure the wind speed for forecasting purposes and the performance of the WTGs during operation. The meteorological tower will be an unguyed lattice structure, up to 295 feet in height and will be installed north of WTG W-11 and northwest of WTG W-8. The permanent SODAR device will be installed in the northern portion of the site. Both permanent structures will have foundations. The meteorological tower and SODAR devices will be accessed by driving four-wheel drive equipment, such as a crane and backhoe, across participating properties. A power and communication cable from the closest wind turbine will be installed underground and terminated at the meteorological tower or at a small H-frame structure at the base of the tower.

<u>Operations and Maintenance (O&M) Facility.</u> A 5,000-square foot O&M building will be located near the center of the site within the area that will be used as a laydown yard during construction. The building will be constructed with corrugated metal of a neutral color. The entire 16.5 laydown yard area will be used during construction for storage and processing of materials, temporary construction trailers and parking. The parking area at the laydown yard will accommodate up to 100 vehicles and workers will also use individual construction staging areas throughout the site for parking.

After construction is completed, the O&M facility will occupy approximately 0.39 acres and include the following:

- Main building with offices (50' x 100')
- Spare parts storage room
- Tool crib
- Restrooms

- Shop area
- Outdoor storage for large parts
- Outdoor parking facilities for approximately 5 7 staff and visitors
- Turnaround area for large vehicles
- Outdoor lighting
- Storage for oil and lubricants
- A 5,000-gallon fire water tank.

Water will be provided to the O&M facility via a new groundwater well and in-ground piping. Water usage will be for domestic purposes and potentially for blade cleaning once per year. An onsite leach line septic system will be installed to provide sewage disposal at the O&M facility.

Transmission Line. A new 115-kV transmission line approximately 7.3 miles in length will be constructed within approximate 100-foot wide easements to interconnect the Project with the PG&E transmission grid. The transmission line will be constructed of double steel H-frame structures and wood triple poles at angle points with guy wires along the route. The poles will be up to approximately 75 feet in height and placed up to 1,650 feet (570 feet average) apart based on the terrain and alignment. Approximately 44 new poles will be installed. Engineered structures with concrete foundations may be required to support the conductors in some locations. The exact number of poles and their sizes, types, and spacing will be determined as part of final design engineering. The transmission line will use new poles only and will run parallel to existing power lines for part of its length. The transmission line consistent with accepted industry standards, protective measures, and established industry guidelines. These include the recommended practices and procedures of the IEEE, standards for overhead line construction consistent with CPUC General Order 95 (GO95), avian protection measures consistent with the 2012 Avian Power Line Interaction Committee Guidelines, electric magnetic field design guidelines accepted for transmission design in California, and other applicable rules and standards.

The transmission line will be inspected regularly during operations to ensure the system is in good condition and will not create hazards. Fire management and safety procedures will include maintenance of a minimum 10-foot buffer zone cleared of flammable fuels (vegetation) around the base of each transmission pole structure. Under Public Resources Code, Section 4293, a minimum 10-foot clearance between vegetation and conductors is required for safety and to minimize tree-related outages. Maintenance of the buffer zone may include periodic trimming or removal of fast-growing trees to achieve at least three years of clearance before the next trim. The maintenance program shall include removing dead, rotten, or diseased trees or vegetation that hang over or lean toward the system to prevent a falling hazard.

<u>Substation</u>. All the power generated by the WTGs will be transmitted to the onsite Project substation via the power cable collection system. The Project substation will step up the

voltage from 34.5 kV to 115 kV and serve as the originating point of the 115-kV overhead transmission line connecting to the PG&E system at the Project switchyard.

The substation will be located entirely on the privately held land of a participating Project landowner within the Project boundary and will be approximately 150 feet by 220 feet, plus 10 feet for the berm on either side. Structural and electrical equipment will be installed on top of structural concrete forms, which will be roughly 18 inches above rough grade. The substation perimeter will be entirely secured by an 8-foot chain-link fence topped with three-strand barbed wire, raked outward at a 45-degree angle. A locked, double-swing gate will be installed in the fencing to provide access to the substation. The entire footprint of the substation will be finished with a graveled layer of clean, washed rock free of sands or organic material to act as a fire barrier and step protection. Spatial separation of transformers and other design considerations will be incorporated in the design for fire prevention. Detection and extinguishing equipment will be installed pursuant to applicable code requirements.

The substation will be fitted with 60-foot high static poles to create a shield to protect equipment inside the substation from lightning. Where needed, overhead shield wires will be attached to the static poles to enhance lightning protection. The 15' x 30' control building will house switchboard panels, batteries, battery chargers, supervisory control, meters, and relays, and provide all-weather protection and security for the control equipment. The control building will be ventilated to prevent the accumulation of hydrogen gases from battery operation.

The substation will include standard low-illumination lighting. Exterior light fixtures at the Project substation lighting will be hooded, with lights directed downward or toward the area to be illuminated. No shrubbery, hedges, or other landscaping around the perimeter of the substation will be installed.

<u>Switchyard</u>. The 100' x 100' switchyard will connect the Project to the PG&E electrical system. Structures will not exceed 55 feet in height. Components located at the switchyard will include a 115-kV high-voltage breaker, energy metering devices, disconnect switches, surge arrestors and a 15' x 20' pre-manufactured concrete control building to house protection relays and real-time automation control and communication devices. No voltage transformers shall be located at the switchyard. The switchyard will be surrounded by an 8-foot high chain link fence topped with three-strand barbed wire. A double-swing gate will be installed in the fencing to provide access to the switchyard and shall be kept locked. The entire footprint of the switchyard will be finished with a layer of gravel which will function as a fire barrier. The switchyard will include standard low-illumination lighting with exterior light fixtures hooded and directed downward or toward the area to be illuminated. No voltage transformers will be installed.

<u>Access Roads.</u> There are 11.58 miles of existing roads that will be modified and widened. Of those 11.58 miles, 0.78 miles will be to San Miguelito Road (34 road modifications), 1.8 miles will be to roads on the wind farm site (widened to 22 to 40 feet and will be compacted and/or surfaced with gravel), and 9.0 miles are along the transmission line route. Therr are 8.2 miles of new roads that will be constructed and will be unpaved (compacted and/or surfaced with gravel), except in steep areas where they may be paved with asphalt. Of these 8.2 miles, 7.1 new roads would be on the wind site and 1.1 would be along the transmission line. New and improved roads will remain after constructed and areas of temporary disturbance shall be revegetated as roadwork is completed. Property owners shall have access to their properties via existing roads during all phases of the Project.

Watercourse crossings will be improved or upgraded as part of turbine access road modifications. Seven of eight crossings will be accomplished with culverts. One existing atgrade crossing of San Miguelito Creek will remain at-grade. All grading shall be subject to a final, approved grading and erosion control plan to minimize erosion and ensure adequate slope stabilization.

<u>WTG Blade Transportation Routes.</u> Large project components (WTG blades, etc.) shall be transported to the site. Turbine blades for GE 3.8 blades will be delivered using Interstate 5 (I-5) and will exit I-5 at Old River Road and proceed south to CA-166 (Maricopa Highway) where the route will turn west. Just prior to Highway CA-1 the route will turn north on Thompson Avenue, then west on Los Berros Road, before turning south on CA-101. The route then turns onto E. Union Valley Parkway, then CA-135 (Orcut Expressway) to CA-1 South, then turn south onto Santa Lucia Canyon Road and Floradale Avenue, before turning east onto Ocean Avenue, then South I Street and San Miguelito Road (see Figure 2-5, Turbine Blade Transportation Route).

The remaining GE 3.8 components will be delivered from the Port of Stockton via I-5, CA-132W, CA-140E, CA-165S, CA-152E, CA-33S, and exit at Fairfax Avenue. From Belmont Avenue, CA-33S, exit at Manning Avenue. From Colorado Road, turn to CA-145S, CA-269S, CA-33S, CA-166W, CA-101S, CA135S to Donovan Road, turn to Blosser Road, CA-116W, CA-1S to Santa Lucia Canyon Road, Floradale Avenue, and turn to Ocean Avenue, then South I Street to San Miguelito Road.

The GE 1.79 components will be delivered via I-5, I-210W, I-118W, I-23, CA-101, CA-135, CA135S to Donovan Road, turn to Blosser Road, CA-116W, CA-1S and use Santa Lucia Canyon Road, Floradale Avenue, and turn to Ocean Avenue, then South I Street to San Miguelito Road.

The local routes shall be consistent with the Alternative Surface Transport Route (Planning Commission Attachment F, Exhibit B).

<u>Setbacks</u>. The approved Variance for setbacks allows the Project Owner to: (1) reduce the setback to 230 feet along the Vandenberg AFB property line, and (2) remove the requirement for setbacks between Project-participant properties. All other required setbacks will be met.

<u>PG&E Facilities Upgrades</u>. Pursuant to an interconnection agreement between the Project owner and PG&E, PG&E will make certain equipment upgrades to its system to facilitate the interconnection with the Project. These upgrades will be carried out by PG&E under the authority of the California Public Utilities Commission. These upgrades are evaluated in the certified Final SEIR, but the California Public Utilities Commission is responsible for approving, monitoring and enforcing requirements related to them.

Project Construction

The Project will be constructed in one phase. There will be an average of 1,619 truck trips per month during the 10-month construction period. At peak, construction at the WTG site would require from 50 to 100 workers. Eighty percent of this workforce is expected to live or stay in the Lompoc area during construction. Construction will typically proceed as follows:

- Grading of field construction office, laydown area, and Project substation.
- Construction of site roads, turnaround areas, and crane pads at each WTG location.
- Construction of the WTG tower foundations, transformer pads, and meteorological tower.
- Installation of the electrical collection system (underground and overhead lines) and transmission line.
- Assembly and erection of the WTGs.
- Construction and installation of the substation and O&M building.
- Commissioning and energizing the Project.

Construction of roads, WTG foundations, and other facilities will require approximately 948,179 cubic yards of cut and 950,811 cubic yards of fill, to be balanced onsite. All grading would be done in accordance with a formal Stormwater Pollution Prevention Plan (SWPPP) required by the Regional Water Quality Control Board. Temporary earth disturbance will involve approximately 5 acres and permanent disturbance will be about 149 acres. Total disturbance will be approximately 154 acres. One or two portable concrete batch plants will be set up on site. All concrete washouts will occur using washout pits or containers. All hardened concrete contained in the pits and/or containers will be hauled off site and disposed of accordingly.

Heavy equipment, including excavators, bulldozers, graders, and trucks, will be used to clear sites, build access roads and foundations and transport and set large turbine components in place. Water for construction, including dust control, will be obtained from up to three proposed onsite water wells and/or trucked in from the Lompoc Regional Wastewater Reclamation Plant (LRWRP). If water is trucked in from LRWRP to the work site, approximately seven water trucks will make four trips per each work day.

San Miguelito Road will be modified at 34 locations outside of the boundaries of the primary wind site to accommodate transport of the 224.7-foot blades. Modifications will

include road widening and shoulder compaction to allow for a straighter path or cut and fill at unnavigable curves. Approximately 3.2 acres will be permanently disturbed and 158 oak trees removed. Public access will be maintained during component transport and other construction activities, with some traffic interruptions expected. Flaggers or traffic control devices shall be used to temporarily stop traffic as needed during modifications to San Miguelito Road and for component transport when construction road widths do not accommodate traffic flow in both directions simultaneously. During the construction phase of the Project, the Applicant may request P&D to allow them to limit travel on San Miguelito Road beyond the intersection of Sudden Road on a temporary basis for public safety and security issues.

<u>WTG Construction.</u> Foundation construction will include the following stages: drilling, blasting (if required) and hole excavation; outer form setting; rebar and bolt cage assembly; concrete casting and finishing; removal of the forms; backfilling and compaction; construction of the pad transformer foundation; and foundation site area restoration. Excavation and foundation construction will be conducted in a manner that will minimize the size and duration of excavated areas required to install foundations. Portions of the work might require over excavation or shoring.

The foundation type shall be a Patrick and Henderson Inc. (P&H) patented post-tensioned foundation. The final grading plan, including micro-siting adjustments shall be reviewed and approved by County staff prior to construction. The P&H foundation will be drilled or dug to approximately 25 to 35 feet deep, depending on geotechnical conditions and loadings, and will be approximately 18 to 20 feet in diameter. The foundation will be in the configuration of an annulus—two concentric steel cylinders. The central core of the smaller, inner cylinder will be filled with soil removed during excavation. In the cavity between the rings, bolts will be used to anchor the tower to the foundation and the cavity will be filled with concrete. Bolting the tower to the foundation will provide post-tensioning to the concrete.

<u>WTG Assembly.</u> The WTG components will be delivered to the site via transport trucks in multiple sections; the main components will be off-loaded at the individual WTG sites or staged at the laydown area before transport to the final location. After setting the WTG electrical bus cabinet and ground control panels on the foundation, the tower will be erected by crane in sections. Tower construction will be followed by hoisting and installation of the nacelle; assembly, hoisting, and installation of the rotor; connection and termination of internal cables; and inspection and testing of the electrical system.

The rotors for the 1.79-MW WTGs will be constructed on the ground at the WTG location, connecting the three blades to a hub. The hub rests on a stand, which is removed prior to erection of the assembled rotor. Each blade will be attached to the hub utilizing a crane, which can lift each blade with a spreader bar attachment thereby avoiding the need for a tandem pick of the blade. The assembled rotor will sit approximately 4 feet above the ground on the hub stand, allowing the blades to remain suspended above the ground

within the construction staging area, and in any areas immediately surrounding the staging area. Therefore, there is no grubbing or grading required beyond the designated limits of the construction stating area designated for the assembly of the WTG. In cases where the blades overhang, either down-slope or upslope areas, the assembled rotor orientation can change to accommodate the contours. For example, blade number 1 can move from the 12 o'clock position to another position to accommodate the contours. As a result, grubbing and grading will be limited to the designated areas of permanent and temporary disturbance for each WTG. Turbine locations for those turbines have been selected that allow the rotor assembly without the need of additional grading.

The rotors for the 3.8-MW WTGs will be constructed with a single blade lift while suspended from the crane. When the rotor is ready to be attached to the nacelle, the main crane attaches to the hub while a support crane (typically a rough-terrain "RT" style hydraulic crane) attaches to one of the blades. The RT tailing crane does not require a crane pad to be built and is mobilized within the disturbed area where the other turbine equipment (towers, blades, etc.) had been staged around the foundation prior to erection. The two cranes work in tandem until the rotor is rotated 90-degrees. The tailing crane then detaches, and the main crane completes the installation of the rotor to the nacelle main shaft, again, from its location on the crane pad. All grading or grubbing will occur within designated areas of permanent and temporary disturbance for each WTG.

<u>Collection System Construction.</u> Typical installation of the collection system involves the following:

- The exact location of the collection system trench is surveyed and staked using a registered surveyor.
- A grader is deployed to make two passes along the trench running line to move the topsoil away to the side, if topsoil is to be preserved.
- Trenching is typically performed using a mechanized trencher or excavator.
- The trenching spoil is typically deposited adjacent to the open trench.
- The conductor cables, neutral cable and fiber optic cable get installed. Usually a truck pulls the cable reels adjacent to the trench to lay the cables simultaneously. In some cases, the cable reels are pulled by the trencher itself and immediately installed in the trench behind the trencher.
- A paddling machine usually follows the trencher to screen the spoil and deposit clean spoil on the collection system cables.
- This screened spoil that was deposited in the trench on top of the cables is then compacted, usually using a small compactor.
- The remaining spoil is then deposited into the trench, and compaction is usually specified as 95 percent of natural compaction.

The topsoil is then bladed back over the trench using a grader.

<u>Transmission Line Construction</u>. Approximately 38,544 feet (7.3 miles) of transmission line will be installed. Construction steps for transmission line installation are summarized as follows:

- 1. *Install support structure foundations*. For steel structures, a foundation hole will be excavated; forms, rebar, and anchor bolts installed; concrete poured; forms removed; soil or gravel replaced around the base; and a pole installed at each of the new pole sites. Installation of wood poles will involve excavating, installing the pole, and backfilling the excavation; no foundation would be required for poles placed in straight spans.
- 2. Install structures/poles. The poles will be installed by conventional methods, or by helicopter as needed. The steel pole shafts will be delivered to the pole site in two or more sections depending on pole design. The steel poles will be assembled on the ground in the pole laydown area. The sections will be pulled together with a winch and the cross arms bolted to the pole. Insulators will be attached to the cross arms and secured. A crane will be used as necessary used to erect the poles and set them in the excavation or on the anchor bolts embedded in the concrete foundation for certain steel poles. The final step will be to tighten the securing nuts on the foundation.
- 3. Stringing the conductors. Temporary clearance structures will be installed at road crossings and other locations to prevent the conductor from being lowered or falling onto the traffic below before tensioning. Insulators and sheaves for the conductors will be installed. The conductors will be pulled through each pole under controlled tension to keep the conductors elevated above crossing guard structures, roads, and other facilities. Once the conductors are in place, vibration dampers and other accessories will be installed.

<u>Site Restoration</u>: Areas subject to temporary disturbance, including shoulders of access roads, will be reseeded once heavy construction activities have been completed and in accordance with the approved Sire Restoration and Revegetation plan.

Project Operation

<u>Start-up</u>: Each WTG will be inspected and checked for mechanical, electrical, and control functions in accordance with the manufacturer's specifications before being released for startup testing. A series of startup procedures will then be performed by the manufacturer's technicians; this process will require approximately 8 to 16 hours per WTG. Final testing will include mechanical, electrical, control, and communications inspections and tests to ensure that all systems are working properly.

After the WTGs have been commissioned and are producing power, a period of acceptance testing will begin to ensure that the WTGs are performing according to the agreed-upon parameters. During this time, the power produced will be fed into the utility

grid. Electrical tests on the transformers, power lines, and Project substation will be performed by qualified engineers, electricians, and test personnel to ensure that electrical equipment is operating within tolerances and that the equipment has been installed in accordance with design specifications, standards and requirements by PG&E and the California Independent System Operator.

<u>Operation</u>: During the operational phase of the project, a staff of five to seven personnel will be employed onsite to monitor WTG and system operation, perform routine maintenance, troubleshoot malfunctions, shut down and restart WTGs when necessary, and provide security. They will be headquartered at the O&M facility and travel around the site as needed. Normal operations could involve deployment of up to three crews of two technicians each around the site and two to three personnel in the office. Staff may not be present at the site 24 hours per day; however, operations will be continuously monitored through the SCADA system from remote locations. Standard operating procedures dictate that WTGs will not be operated at high wind speeds because of the high loads exerted on the equipment. The maximum operating wind speed will be in the range 25 meters per second or 60 miles per hour, depending on the specific model chosen. In higher wind speeds, for equipment protection, the blades will feather and the rotor will free-spin with very low rotational speed.

In the event that severe storms result in a downed overhead line, procedures outlined in the emergency response plan will be applied. Tensioning sites will be located within the overhead distribution line rights-of-way to facilitate line replacements. In the event of a high-voltage grid outage, the WTGs will have internal protective control mechanisms to safely shut them down. The WTGs will require the grid to be energized to generate power when the wind is blowing. A separate low-voltage distribution service feed may be connected to the low-voltage side of the Project substation as a backup system to provide auxiliary power to Project facilities in case of outages. If low-voltage service is not available, back-up power will be provided by PG&E's existing 12kv line at the substation in case of an unscheduled outage.

Firefighting equipment will be stored at the on-site substation, in the O&M Building and in work vehicles. A 20-pound CO2 fire extinguisher will be stored at the substation and at the O&M Building for small fires. In addition, service pick-up trucks will be equipped with a 5-pound standard fire extinguisher. The design of the substation will take into account local permitting and may be adjusted accordingly. Further, a safety and emergency response plan will be developed in conjunction with the local Fire Marshall. A dedicated repeater will be installed for emergency response in accordance with the specifications of the Santa Barbara County Fire Department.

The substation and switchyard will meet or exceed Institute of Electrical and Electronics Engineers (IEEE)-979 Substation Fire Protection. Detection and extinguishing equipment shall be installed in accordance with all applicable national and local codes.

Safety signage will be posted where necessary around WTGs, transformers, and other high-voltage facilities, and along roads, in conformance with applicable State and federal regulations. A safety policy plan will be developed and included as part of the mitigation

requirements. Electronic access to any SCADA access point is protected by at least two layers of security using high industry standard VPN technology and secure passwords and 24/7 remote monitoring. Surveillance cameras shall be installed to provide monitoring of the wind farm and its SCADA system.

Equipment, supplies, and spare parts will be stored inside the O&M facility, with the exception of Project vehicles, which will be stored outside the building within the secured yard. The substation will also be fenced and the gate kept locked; the control houses shall be locked. All WTGs shall be locked. Access roads will be periodically graded and compacted to maintain the design, safety, and environmental requirements during the life of the Project. Stored chemicals, oils and biodegradable cleaning chemicals and detergents will be held in onsite tanks or drums equipped with secondary containment areas to prevent runoff at the O&M facility. Maintenance on cut-and-fill slopes, culverts, grade separations, and drainage areas will be performed as necessary to minimize erosion problems and maintain functional drainage structures.

<u>Golden Eagle Take: If golden eagles are taken prior to the USFWS and the CDFW Incidental</u> <u>Take Permits being issued, the Owner/Applicant agrees to make a payment of \$30,000 per</u> <u>taken eagle to a raptor protection center that's approved by the County. Confirmation of</u> <u>the payment shall be submitted to the County within 90 days of eagle take.</u>

Project Decommissioning

The anticipated life of the Project is 30 years. Future repowering or decommissioning of the project will require a discretionary permit from the County and will be subject to environmental review. Decommissioning will require that the Owner prepare a decommissioning plan for County review and approval, as well as a financial assurance acceptable to the County to ensure timely and proper decommissioning.

Any deviations from the project description, exhibits or conditions must be reviewed and approved by the County for conformity with this approval. Deviations may require approved changes to the permit and/or further environmental review. Deviations without the above-described approval will constitute a violation of permit approval.

38. MM BIO-16 Monitoring and Adaptive Management Plan – Bird and Bat Conservation Strategy. A Monitoring and Adaptive Management Plan is required, due to the uncertainty of the Project's operational impacts on protected and special-status bird and bat species. The Plan shall be developed and implemented in an effort to provide maximum feasible mitigation for those impacts. Monitoring studies of bird activity and fatalities at the site shall be required to collect information on bird activity and fatalities caused by wind farm operations. In addition, an Adaptive Management Plan (AMP) shall be implemented if the bird or bat mortalities trigger specified thresholds. The Owner/Applicant will incorporate the Monitoring and Adaptive Management Plan into a Bird and Bat Conservation Strategy to be submitted to USFWS and CDFW for review and approval. Additionally, prior to beginning operation, the Owner/Applicant will <u>submit</u> <u>an application to</u> obtain golden eagle take authorization from USFWS under the federal Bald and Golden Eagle Protection Act <u>or and</u> will provide P&D with a letter from USFWS stating that <u>either</u> such <u>application is deemed complete</u> <u>authorization is under review</u> and expected to be issued or is not necessary for the Project. The application for take authorization will incorporate all components of the Monitoring and Adaptive Management Plan that pertain to golden eagles and will specify hazard removal measures such as powerline retrofitting to offset potential take of golden eagles. Note that take of golden eagles is prohibited under California law as this species is fully protected. <u>The</u> <u>Owner/Applicant shall also commit to obtaining golden eagle take authorization from the</u> <u>CDFW under the California Endangered Species Act (CESA)</u>. Note that this species is fully protected under California law; however CDFW may issue an incidental take permit under CESA under SB 147.

P&D will enforce the following measures unless CDFW either adopts them as part of a Sec. 2081 incidental take permit or Sec. 1602 streambed alteration agreement or if CDFW, as a Responsible Agency, enforces Condition 38/MM Bio-16.6 In reviewing and approving the final plan and applying the required measures, P&D will consult with CDFW and USFWS, as appropriate.

The Plan shall be prepared by a County-approved biologist and be subject to P&D approval. The Plan shall include the sections outlined in subsections 16.a to 16.d below, which comprise the following components:

- a. **Before-after/Control-impact (BACI) Study.** Required study to compare pre- and post-construction bird use on the site.
- b. **Bird/Bat Mortality Study.** Required study to estimate bird and bat mortality rates during wind farm operations and to identify WTGs causing unanticipated levels of mortalities.
- c. **Remove Carrion Near Turbines.** Program to promptly remove carrion from livestock grazing areas in the Project site for the purpose of reducing the attraction of raptors, vultures, and condors.
- d. **Adaptive Management Program.** Additional mitigation measures to be required if specific thresholds of bird or bat mortality are reached.

Plan Requirements. The Owner/Operator shall prepare the Adoaptive Management Plan as described in Conditions 38-42 (MMs BIO-16, 16a, 16b, 16c, and 16.d) below, in consultation with CDFW and USFWS.

Timing. The Adeaptive Management Plan shall be submitted to P&D for review and approval prior to issuance of the Zoning Clearance. In reviewing and approving the final plan and applying the required measures, P&D will consult with CDFW and USFWS, as appropriate.

Prior to beginning operation, the Owner/Operator shall:

(1) submit an Eagle Conservation Plan (ECP) and application to obtain golden eagle take authorization from to the USFWS under the federal Bald and Golden Eagle Protection Act or and shall provide P&D with a letter from USFWS stating that either such an ECP has been submitted and application is deemed complete authorization is under review and expected to be issued or is not necessary for the Project.

(2) provide the County with a signed contract with the contractor responsible for implementing the Adaptive Management Plan described in both the ECP and below in Condition 42/MM BIO-16d, the Before-After/Control-Impact Study (described below in Condition 39/MM BIO-16a), Bird/Bat Mortality Study (described below in Condition 40/MM BIO-16b), and prey base reduction measures are implemented (described below in Condition 41/MM BIO-16c);

(3) provide documentation demonstrating the complete installation of active surveillance technology (such as Identiflight units) described in Condition 37/MM BIO-15b; and

(4) provide a letter of commitment to P&D stating the Owner/Operator shall maintain an active eagle take permit application with the USFWS, and shall commit to obtaining an incidental take permit with CDFW under CESA, as applicable, and will ensure compliance with all compensatory mitigation requirements that may result from the permits.

Monitoring. P&D compliance monitoring staff will ensure that <u>the eagle take permit</u> <u>application remains active with the USFWS, that the Owner/Applicant commits to</u> <u>obtaining an incidental take permit from the CDFW, and that</u> the Adø<u>a</u>ptive Management Plan (described below in Condition 39/MM BIO-16a and Condition 42/MM BIO-16d), the Before-After/Control-Impact Study (described below in Condition 39/MM BIO-16a), Bird/Bat Mortality Study (described below in Condition 40/MM BIO-16b), and prey base reduction measures are implemented (described below in Condition 41/MM BIO-16c). P&D compliance monitoring staff will review all monthly, quarterly, and annual reports provided pursuant to the Avian and Bat Mitigation Plan and ensure that appropriate

adaptive management measures are undertaken if AMP thresholds are reached (see Monitoring under Condition 42/MM BIO-16d).

After the commencement of operations, P&D planning staff will file a report to the Planning Commission every six months regarding the status of the Eagle Take Permit applications, and the Owner/Operator shall present the status of the applications to the Planning Commission via a public hearing every two years until the Eagle Take Permits are issued. The Owner/Operator shall provide P&D planning staff a copy of the approved Eagle Take Permits upon issuance.

40. MM BIO-16b Bird/Bat Mortality Study. Conduct a bird and bat mortality study under direction of a County-approved biologist. The purpose of mortality surveys is to estimate mortality rates for different species on the site attributable to collisions with WTGs and to identify individual WTGs or groups/strings of WTGs that cause unanticipated levels of mortality. The information will be used to determine whether the mortality thresholds of the Adaptive Management Plan (see AMP, below) have been reached. In addition, the collected data will add to the body of knowledge to provide regulatory agencies with data for future Projects. Brief quarterly reports including tabulated search data and annual reports including analysis of the year's data shall be prepared. The study data and reports shall be provided to the P&D for review. Monitoring shall be conducted for life of the Project.

The general design of the study should follow recommendations of the CEC Guidelines (2007) and USFWS Land-Based Wind Energy Guidelines (2012), or improved methodologies if appropriate, including methods for carcass search surveys, scavenger studies, evaluation of researcher efficiency, data analysis and reporting methodology. Specifically, carcass searches shall occur once every two weeks at 30 percent one third of the WTGs, or more if needed, as recommended in the CEC Guidelines. Reports shall include mean estimated fatalities and 90 percent confidence intervals for species or appropriate bird and bat groups. The plan shall include training of Project operations staff in handling and reporting avian and bat fatalities encountered in the course of their regular activities. The selection of which WTGs to monitor may be adjusted from year to year (or as appropriate).

Sampling methodology (including but not limited to search methods, areas, and techniques) and sample locations to be approved by P&D with outside technical support if needed. If the AMP is triggered by excess fatalities, the frequency or design of carcass searches should be modified, as provided in the AMP.

Plan Requirements, Timing and Monitoring. See Plan Requirements, Timing and Monitoring under Condition 38 (MM BIO-16).

CHANGES IN PROJECT IMPACTS:

The proposed revision to CUP Condition No. 38 would result in no changes to the project's potential impacts to golden eagles when compared to the originally approved FSEIR for the SWEP. The FSEIR (18EIR-00000-00001) determined that residual impacts to golden eagles were Significant and Unavoidable. Mitigation measures identified in 18EIR-00000-00001 were carried over as Conditions of Approval for 16CUP-00000-00031 to reduce the Significant and Unavoidable to the maximum extent feasible.

All avoidance and minimization measures required through Conditions 9, 37, 39, 40, 41, and 42, especially the comprehensive Bird and Bat Adaptive Management Plan and the installation of bird surveillance technology, would be in place prior to SWEP operation. Strauss would also remain obligated to complete the ITP process with both the USFWS and the CDFW, and is committed to implementing any additionally required state and federal mitigation measures imposed on the SWEP through those processes. With the additional modifications imposed by the Planning Commission to Conditions 1, 38, and 40 described above, the proposed project would provide no less protection to golden eagles, and potential impacts would remain mitigated to the maximum extent feasible.

Further, there are various economic, environmental, social, and technological factors to support findings that the extensive delay the applicant now faces in obtaining an ITP, as well as the unavailability of alternatives, such as obtaining a letter from USFWS indicating that the ITP is expected to be issued or is not needed, now render the original mitigation measure infeasible and unworkable. These factors include: providing proof of concept for future similar wind farms; having the ability to deliver on Strauss' contract with Marin Clean Energy to provide electricity to the California Bay Area; avoiding degradation of equipment; providing for immediately available renewable energy; having the capacity to replace other power sources including fossil fuels and nuclear power; supporting California's climate goals; and supporting the County of Santa Barbara's Energy and Climate Action Plan.

FINDINGS:

The environmental document, as herein amended, may be used to fulfill the environmental review requirements of the proposed project to revise CUP Condition No. 38. Because the proposed project consists of minor changes to existing CUP Conditions of Approval, thereby meeting the conditions for the application of State CEQA Guidelines § 15164, and none of the conditions in State CEQA Guidelines § 15162 have occurred, preparation of a new or subsequent/supplemental EIR is not required.

Discretionary processing of the project, Case No. 23RVP-00031 may proceed with the understanding that any substantial changes in the proposal may be subject to further environmental review.