

Appendix 8N -- Applicant Proposed Measures, Biological Resources

APMs include environmental measures that are already required by existing regulations and/or requirements, or are SDG&E’s standard practices designed to address temporary and/or permanent impacts, as well as impacts anticipated during operations and maintenance of the completed project. The applicable parts of these measures would be implemented regardless of any regulatory oversight by the CPUC and BLM and are not measures added to the project based on the EIR/EIS analysis. Rather, they are integrated as part of the project description. The full text of the APMs related to biological resources is included in Table D.2-5 in Section D.2.4.2 of the EIR/EIS. However, it should be noted that some APMs were based on SDG&E’s NCCP, which is not applicable to this project (see discussion in Section D.2.3.3). As a result, in some cases, portions of the APMs are not appropriate or are not adequate to provide mitigation for the project’s impacts. In these cases, the portions of the APMs which are not appropriate or adequate are shown in struck text below, and the mitigation measures that are proposed in addition to the applicable portions of the APMs to avoid, minimize, or mitigate the relevant impacts of the project are shown in the second column. This appendix clarifies applicable requirements for the Mitigation Monitoring Reporting Program (Section D.2.27).

No.	APM	Description
BIO-APM-1	SDG&E would perform any detailed on-the-ground protocol surveys with regard to specific sensitive plant or wildlife species whose habitat would be impacted by the project based on final design in accordance with federal or State regulations or statutes. SDG&E would submit results of these surveys to the USFWS and CDFG and consult on reasonable and feasible mitigation measures for potential impacts, prior to any ground disturbing activities in a particular area. Mitigation would prioritize avoidance as the primary means to address impacts. If avoidance is not feasible, then relocation/restoration would be implemented. Where relocation/restoration is not feasible or deemed not to fully address impacts, then mitigation through SDG&E’s NCCP mitigation credits or if necessary compensation via another on- or offsite purchase or dedication of habitat at a ratio of 2:1 for impacts inside preserves and 1:1 for impacts outside of preserves would be identified and implemented.	Implement BIO-APM-1, as shown in this appendix, with Mitigation Measures B-1a, B-1b, B-2a, B-5a, B-7d, B-7e, B-7g, B-7i, B-7j, B-k, B-7l, B-7m, and B-7o.
BIO-APM-2	Prior to construction, all SDG&E, contractor, and subcontractor Project personnel would receive training regarding the appropriate work practices necessary to effectively implement the biological APMs and to comply with the applicable environmental laws and regulations including appropriate wildlife avoidance and impact minimization procedures, the importance of these resources and the purpose and necessity of protecting them, and methods for protecting sensitive ecological resources.	Implement BIO-APM-2, as is, with the following clarification. Project personnel shall receive training regarding appropriate work practices necessary to effectively implement the biological APMs and mitigation measures...

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No.	APM	Description
BIO-APM-3	<p>Except when not feasible due to physical or safety constraints, all Project vehicle movement would be restricted to existing and constructed roads as a part of the project and determined and marked by SDG&E in advance for the contractor, contractor-acquired accesses, or public roads. New access road construction for the project would be allowed year-round. However, when feasible, every effort would be made to avoid constructing roads during the nesting season. When it is not feasible to keep vehicles on existing access roads or to avoid constructing new access roads during the nesting, breeding, or flight season, SDG&E would perform a site survey, or more as appropriate, in the area where the work is to occur. This survey would be performed to determine presence or absence of endangered nesting birds, or other endangered species in the work area. SDG&E would submit results of this survey to the USFWS and CDFG and consult on reasonable mitigation measures to avoid or minimize for potential impacts, prior to vehicle use off existing access roads or the construction of new access roads. However, this survey would not replace the need for SDG&E to perform detailed on-the-ground surveys otherwise required by BIO-APM-1. Parking or driving underneath oak trees is not allowed in order to protect root structures. In addition to regular watering to control fugitive dust created during clearing, grading, earth-moving, excavation, and other construction activities which could interfere with plant photosynthesis, a 15-mile-per-hour speed limit shall be observed on dirt access roads to reduce dust and allow reptiles and small mammals to disperse.</p>	<p>Implement BIO-APM-3, as shown in this appendix, with Mitigation Measures B-5a, B-7a, B-8a, B-9a, B-12a, B-12b, and B-12c.</p> <p>Additionally, no new access roads, other than those analyzed in the EIR/EIS, are considered part of the project. Any other new roads would need separate environmental analysis/permitting.</p>
BIO-APM-4	<p>The area limits of Project construction and survey activities would be predetermined based on temporary and permanent disturbance areas noted on final design engineering drawings with activity restricted to and confined within those limits. Survey personnel shall keep survey vehicles on existing roads. During Project surveying activities, brush clearing for footpaths, line-of-sight cutting, and land surveying panel point placement in sensitive habitat would require prior approval from the project biological resource monitor in conformance with the APMs. Hiking off roads or paths for survey data collection is allowed year-round as long as other APMs are met. Stringing of new wire and reconductoring for the project would be allowed year-round in sensitive habitats if the conductor is not allowed to drag on the ground or in brush and all vehicles used during stringing remain on Project access roads. Where stringing requires that conductor drag on the brush or ground or vehicles leave Project access roads, SDG&E would perform a site survey (or more as appropriate) to determine presence/absence of endangered nesting birds or other endangered species in the work area. SDG&E would submit results of this survey to the USFWS and CDFG and consult on reasonable and feasible mitigation measures for potential impacts prior to dragging wire on the ground or through brush or taking vehicles off Project access roads. However, this survey would not replace the need for SDG&E to perform detailed on-the-ground surveys as otherwise required by BIO-APM-1. No paint or permanent discoloring agents would be applied to rocks or vegetation to indicate limits of survey or construction activity where any sensitive biological resources or wildlife habitats are encountered in the field.</p>	<p>Implement BIO-APM-4, as shown in this appendix, with the following clarifications.</p> <p>During Project surveying activities, brush clearing for footpaths, line-of-sight cutting, and land surveying panel point placement in sensitive habitat would require prior approval from the project biological resource monitor in conformance with the APMs <u>and mitigation measures.</u></p> <p>Hiking off roads or paths for survey data collection is allowed year-round as long as other APMs <u>and mitigation measures</u> are met.</p> <p>Stringing and reconductoring for the project shall be done in conformance with the APMs, as shown in this table, and the mitigation measures.</p>

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No.	APM	Description
BIO-APM-5	<p>To the extent feasible, access roads would be built at right angles to the streambeds and washes; where not feasible for access roads to cross at right angles, SDG&E would limit roads constructed parallel to streambeds or washes to a maximum length of 500 feet at any one transmission line crossing location. Such parallel roads would be constructed in a manner that minimizes potential adverse impacts on "waters of the U.S." or waters of the State. Streambed crossings and roads constructed parallel to streambeds would require review and approval of necessary permits from the ACOE, CDFG, and RWQCB. Culverts would be installed where needed for right angle crossings, but rock crossings would be utilized across most right angle drainage crossings. All construction and maintenance activities would be conducted in a manner that would minimize disturbance to vegetation, drainage channels and stream banks (e.g., structures would not be located within a stream channel, construction activities would avoid sensitive features). Prior to construction in streambeds and washes, SDG&E would perform a pre-activity survey, or more as appropriate, to determine the presence/absence of endangered riparian species. However, this survey would not replace the need for SDG&E to perform detailed on-the-ground surveys as otherwise required by the BIO-APM 1.</p>	<p>Implement BIO-APM-5, as shown in this appendix, with Mitigation Measures B-1a, B-2a, B-5a, and B-8a.</p>
BIO-APM-6	<p>In the construction, operation, and maintenance of the project, SDG&E would comply with all applicable environmental laws and regulations, including, without limitation, those regulating and protecting wildlife and its habitat.</p>	<p>Implement BIO-APM-6, as is, with Mitigation Measures B-1a, B-5a, B-8a, and B-12a.</p>
BIO-APM-7	<p>Littering is not allowed. Project personnel would not deposit or leave any food or waste in the project area, and no biodegradable or nonbiodegradable debris would remain in the right-of-way following completion of construction.</p>	<p>Implement BIO-APM-7, as is, with Mitigation Measures B-6a, B-8a, and B-12a.</p>
BIO-APM-8	<p>Prior to construction, plant population boundaries designated as sensitive by USFWS or CDFG and other resources designated sensitive by SDG&E and resource agencies would be clearly delineated, with clearly visible flagging or fencing, which shall remain in place for the duration of construction. Flagged areas would be avoided to the extent practicable during construction activities in that area. Where these areas cannot be avoided, focused surveys for covered plant species shall be performed in conformance with BIO-APM 1, and the responsible resource agency(s) would be consulted for appropriate mitigation and/or revegetation measures prior to disturbance. Notification of presence of any covered plant species to be removed in the work area would occur within ten (10) working days prior to Project activity, during which time the USFWS or CDFG may remove such plant(s) or recommend measures to minimize or reduce the take. If neither USFWS nor CDFG has removed such plant(s) within ten (10) working days following written notice, SDG&E may proceed with work and cause a take of such plant(s), if minimization measures are not implemented.</p>	<p>Implement BIO-APM-8, as is, with Mitigation Measure B-5a.</p>
BIO-APM-9	<p>Brush clearing around any Project facilities (e.g., structures, substations) for fire protection, visual inspection or Project surveying, in areas which have been previously cleared or maintained within a two-year or shorter period shall not require a pre-activity survey. In areas not cleared or maintained within a two-year period, brush clearing shall not be conducted during the breeding season (March through August) without a pre-activity survey for vegetation containing active nests, burrows, or dens. The pre-activity survey performed by the onsite biological resource monitor would make sure that the vegetation to be cleared contains no active migratory bird nests, burrows, or active dens prior to clearing. If occupied migratory bird nests are present, fire protection or visual inspection brush clearing work would be avoided until after the nesting season, or until the nest becomes inactive. If no nests are observed, clearing may proceed. Where burrows or dens are identified in the reconnaissance level survey, soil in the brush clearing area would be sufficiently dry before clearing activities occur to prevent mechanical damage to burrows that may be present.</p>	<p>Implement BIO-APM-9, as shown in this appendix, with Mitigation Measures B-8a and B-12a, with the following clarification. The breeding season shall be February 15 through September 15.</p>

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No.	APM	Description
BIO-APM-10	No wildlife, including rattlesnakes, may be harmed except to protect life and limb. Firearms shall be prohibited in all Project areas except for those used by security personnel.	Implement BIO-APM-10, as is, with Mitigation Measure B-12a.
BIO-APM-11	Feeding of wildlife is not allowed.	Implement BIO-APM-11, as is, with Mitigation Measure B-12a.
BIO-APM-12	Project personnel are not allowed to bring pets to any Project area in order to minimize harassment or killing of wildlife and to prevent the introduction of destructive animal diseases to native wildlife populations.	Implement BIO-APM-12, as is, with Mitigation Measure B-12a.
BIO-APM-13	Plant or wildlife species may not be collected for pets or any other reason.	Implement BIO-APM-13, with the following clarification and with Mitigation Measures B-5a and B-12a. An exception to the prohibition on collection of plants is for identification purposes.
BIO-APM-14	All steep walled trenches or excavations used during construction shall be inspected twice daily (early morning and evening) to protect against wildlife entrapment. If wildlife is located in the trench or excavation, the onsite biological resource monitor shall be called immediately to remove them if they cannot escape unimpeded. The onsite biological resource monitor would make required contacts with the USFWS and CDFG resource personnel and obtain verbal approval prior to removing any entrapped wildlife. If the biological resource monitor is not qualified to remove the entrapped wildlife, a recognized wildlife rescue agency (such as Project Wildlife) may be employed to remove the wildlife and transport them safely to other suitable habitats.	Implement BIO-APM-14, as shown in this appendix, with Mitigation Measure B-7a.
BIO-APM-15	Emergency repairs may be required during the construction and maintenance of the project to address situations (e.g., downed lines, slides, slumps, major subsidence, etc.) that potentially or immediately threaten the integrity of the project facilities. During emergency repairs, the APMs shall be followed to the fullest extent practicable. Once the emergency has been abated, any unavoidable environmental damage would be reported to the project biological construction monitor, who would promptly submit a written report of such impacts to the USFWS and CDFG and any other government agencies having jurisdiction over the emergency actions. If required by government agencies, the biological construction monitor would develop a reasonable and feasible mitigation plan consistent with the APMs and any permits previously issued for the project by the governmental agencies.	Implement BIO-APM-15, as shown in this appendix, with Mitigation Measures B-1a and B-2a, with the following clarifications. During emergency repairs, the APMs and <u>mitigation measures</u> shall be followed to the fullest extent practicable. If required by government agencies, the biological construction monitor would develop a reasonable and feasible mitigation plan consistent with the APMs and <u>mitigation measures</u> and any permits previously issued for the project by the governmental agencies.

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No.	APM	Description
BIO-APM-16	<p>Environmentally sensitive tree trimming locations for the project would be identified in SDG&E's existing vegetation management tree trim database utilized by tree trim contractors. The biological field construction monitor shall be contacted prior to trimming in environmentally sensitive areas. Whenever feasible, trees in environmentally sensitive areas, such as areas of riparian or native scrub vegetation, would be scheduled for trimming during non-sensitive (i.e., outside breeding or nesting) times. Where trees cannot be trimmed during non-sensitive times, SDG&E would perform a site survey, or more as appropriate, to determine presence or absence of endangered nesting bird species in riparian or native scrub vegetation. SDG&E would submit results of this survey to the USFWS and CDFG and consult on mitigation measures for potential impacts, prior to tree trimming in environmentally sensitive areas. However, this survey would not replace the need for SDG&E to perform detailed on the ground surveys as otherwise required by BIO-APM 1. Where riparian areas with overstory vegetation are crossed, tree removal (i.e., clear-cut) widths would be varied where feasible to minimize visual landscape contrast and to maintain habitat diversity at established wildlife corridor edges. Where tree removal widths cannot be varied, SDG&E would consult with the USFWS and CDFG to develop alternative tree removal options that could reasonably maintain edge diversity.</p>	<p>Implement BIO-APM-16, as shown in this appendix, with Mitigation Measures B-1a, B-2a, B-8a, and B-12a, with the following clarification.</p> <p>Environmentally sensitive tree and shrub trimming locations for the project would be identified...</p>
BIO-APM-17	<p>All new access roads or spur roads constructed as part of the project that are not required as permanent access for future Project maintenance and operation would be permanently closed. Where required, roads would be permanently closed using the most effective feasible and least environmentally damaging methods appropriate to that area with the concurrence of the underlying landowner and the governmental agency having jurisdiction (e.g., stockpiling and replacing topsoil or rock replacement). This would limit new or improved accessibility into the area. Mowing of vegetation can be an effective method for protecting the vegetative understory while at the same time creating access to the work area. Mowing should be used when permanent access is not required since, with time, total revegetation is expected. If mowing is in response to a permanent access need, but the alternative of grading is undesirable because of downstream siltation potential, it should be recognized that periodic mowing would be necessary to maintain permanent access. The project biological construction monitor shall conduct checks on mowing procedures to ensure that mowing for temporary or permanent access roads is limited to a 14-foot-wide area on straight portions of the road and a 16- to 20-foot-wide area at turns, and that the mowing height is no less than 4 inches from finished grade.</p>	<p>Implement BIO-APM-17, as shown in this appendix, with Mitigation Measure B-1a.</p>
BIO-APM-18	<p>In areas designated as sensitive by SDG&E or the resource agencies, to the extent feasible structures and access roads would be designed to minimize impacts to sensitive features. These areas of sensitive features include but are not limited to high-value wildlife habitats, sensitive vegetation communities, and high value plant habitats, and/or to allow conductors to clearly span the features, within limits of standard structure design. If the sensitive features cannot be completely avoided, structures and access roads would be placed to minimize the disturbance to the extent feasible. Where it is not feasible for access roads to avoid sensitive water resource features, such as streambed crossings, such crossings would be built at right angles to the streambeds. Where such crossings cannot be made at right angles, roads constructed parallel to streambeds would be limited to a maximum length of 500 feet at any one transmission line crossing location. Such parallel roads would be constructed in a manner that minimizes potential adverse impacts on "waters of the U.S." Streambed crossings or roads constructed parallel to streambeds would require review and approval of necessary permits from the ACOE, CDFG, and RWQCB.</p>	<p>Implement BIO-APM-18, as is, with Mitigation Measures B-2a and B-5a, B-8a, and B-9a.</p>

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No.	APM	Description
BIO-AP M-19	Restoration and habitat enhancement and mitigation measures developed during the consultation period with the BLM under Section 7 of the Endangered Species Act (ESA) would be implemented and complied with as specified in the Biological Opinion (BO) of the USFWS. The Section 7 process would be used to obtain an incidental take authorization.	Implement BIO-APM-19, as is.
BIO-AP M-20	In construction areas where recontouring is not required, vegetation shall be left in place wherever possible to avoid excessive root damage and allow for re-sprouting.	Implement BIO-APM-20, as is, with Mitigation Measure B-1a.
BIO-AP M-21	Structures shall be constructed to conform to "Suggested Practices for Raptor Protection on Power Lines" (Raptor Research Foundation, Inc., 1981) to minimize impacts to raptors.	Implement BIO-APM-21, as is, with Mitigation Measure B-10a.
BIO-AP M-22	Species identified as sensitive by the land managing agency shall be salvaged where avoidance is not feasible in accordance with State law. Generally, salvage may include removal and stockpiling for replanting on site, removal and transplanting out of surface disturbance area, removal and salvage by private individuals, and removal and salvage by commercial dealers, or any combination.	Implement BIO-APM-22, as shown in this appendix, with Mitigation Measure B-5a.
BIO-AP M-23	Only the minimum amount of vegetation necessary for the construction of structures and facilities will be removed. Topsoil located in areas containing sensitive habitat shall be conserved during excavation and reused as cover on disturbed areas to facilitate re-growth of vegetation. Topsoil located in developed or disturbed areas is excluded from this APM.	Implement BIO-APM-23, as is, with Mitigation Measures B-1a and B-3a.
BIO-AP M-24	Construction holes left open overnight shall be covered. Covers shall be secured in place nightly prior to workers leaving the site and shall be strong enough to prevent livestock or wildlife from falling through and into a hole. Holes and/or trenches shall be inspected prior to filling to ensure absence of mammals and reptiles.	Implement BIO-APM-24, as shown in this appendix, with Mitigation Measure B-7a.
BIO-AP M-25	Disturbed soils shall be revegetated with an appropriate seed mix that does not contain invasive non-native plant species.	Implement BIO-APM-25, as shown in this appendix, with Mitigation Measures B-1a and B-3a.
BIO-AP M-26	Excavations shall be sloped on one end to provide an escape route for small mammals and reptiles.	Implement BIO-APM-26, as is, with Mitigation Measure B-7a.
BIO-AP M-27	<ol style="list-style-type: none"> 1. Prior to construction, SDG&E shall remove all existing raptor nests from structures that would be affected by Project construction 2. Removal of nests shall occur outside the raptor breeding season (January 1 through September 15) 3. If it is necessary to remove an existing raptor nest during the breeding season, a qualified biologist shall survey the nest prior to removal to determine if the nest is active. A nest would be considered active if it contains eggs or nestlings. If the nest does not contain eggs or nestlings and is inactive, it shall be removed promptly. If a nest is determined to be active, the nest shall not be removed. 	Implement BIO-APM-27, as is, with Mitigation Measure B-8a.

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No.	APM	Description
BIO-AP M-28	<p>Potential roost trees that must be removed will be surveyed and identified in the field for application of the following procedures:</p> <p>Before felling the tree:</p> <ol style="list-style-type: none"> 1. Trees should be removed under the warmest possible conditions. 2. Peel any sections of the exfoliating bark off the tree gently and search for any roosting bats underneath. 3. Create noise and vibrations on the tree itself. Noise and vibrations include: <ol style="list-style-type: none"> a. Running chain saw and making shallow cuts in the trunk (where bark has been peeled off). b. Striking the tree base with fallen limbs or tools such as hammers. <p>Felling the tree:</p> <ol style="list-style-type: none"> 4. Disturbance should be near-continuous for ten minutes, and then another ten minutes should pass before the tree is felled. 5. When cutting sections of the bole, if any hollows or cavities (such as woodpecker holes) are discovered, be especially careful to check for the presence of bats in those areas. Cut slowly and carefully at all times. If possible, section bole near cavities to focus noise and vibrations, and open hollows by sectioning off a side. 	<p>Implement BIO-APM-28, as is.</p>
BIO-AP M-29	<p>Reduce construction night lighting on sensitive habitats. Exterior lighting within the project area adjacent to preserved habitat shall be the lowest illumination allowed for human safety, selectively placed, shielded, and directed away from preserved habitat to the maximum extent practicable. Vehicle traffic associated with project activities would be kept to a minimum volume and speed to prevent mortality of nocturnal wildlife species moving about.</p>	<p>Implement BIO-APM-29, as is, with Mitigation Measures B-7a and B-9a.</p>