

7. Alternative 3 (West Lancaster): Impacts and Mitigation Measures

The following section describes the impacts of Alternative 3 (West Lancaster Alternative) on Biological Resources, as determined by the significance criteria listed in Section 4. Mitigation measures are introduced where necessary in order to reduce significant impacts to less-than-significant levels. As described in Section 1.2.3, this alternative would deviate from the proposed route along Segment 4, at approximately S4 MP 14.9, where the new 500-kV transmission line would turn south down 115th Street West for approximately 2.9 miles and turn east for approximately 0.5 mile, rejoining the proposed route at S4 MP 17.9. This re-route would increase the overall distance of Segment 4 by approximately 0.4 mile; however, the number of overall structures would decrease by one due to greater spacing between structures compared to the proposed Project.

The portion of Segment 4 that would be re-routed for Alternative 3 is situated in an area that has previously been used for agriculture. Land use on either side of the re-routed segment is characterized primarily as California annual grassland, with several areas of native wildflower fields and desert wash. Compared to the proposed Project, with the exception of several additional desert washes, and additional areas of California annual grassland and wildflower fields that may be impacted, no new impacts to biological resources would be introduced under Alternative 3. The Affected Environment along the rest of the Alternative 3 route in the North Region is identical to the proposed Project. Furthermore, temporary and permanent ground disturbance as it relates to the re-routed portion of the alternative would amount to only incremental increases in impacts to these additional areas.

7.1 Direct and Indirect Effects Analysis

The significance criteria used to identify impacts to Biological Resources are introduced in Section 4.1 (Criteria for Determining Impact Significance). Impacts associated with this alternative are presented below under the applicable significance criterion.

Impacts to Riparian or Natural Communities (Criterion BIO1)

Impacts associated with Criterion BIO1 for Alternative 3 would be the same as impacts associated with this criterion for the proposed Project. Although this alternative introduces a re-route of part of the proposed transmission line in the Northern Region, resulting in an additional total distance of approximately 0.4 mile, the number of towers constructed would be one fewer than the proposed Project and the re-route would cross identical habitat types as the proposed Project (California annual grassland, wildflower fields, and desert wash). Furthermore, temporary and permanent ground disturbance as it relates to the re-routed portion of the alternative would be primarily due to the new access and spur roads and would amount to impacts of approximately the same size and magnitude as the proposed Project in these additional areas. The impacts and their associated mitigation measures that fall under Criterion BIO1 are summarized in the following paragraphs. Please see Section 6.1 (Direct and Indirect Effects Analysis) for a detailed description of these impacts, as they are the same as the proposed Project.

Impact B-1: Construction activities would result in temporary and permanent losses of native vegetation.

With the exception of several additional desert washes, small areas of California annual grassland, and wildflower fields that would be subject to disturbance, no new impacts to native vegetation would be introduced under Alternative 3. Furthermore, temporary and permanent ground disturbance would be approximately the same size and magnitude, or less than the proposed Project. As described in detail in Section 6.1, with the exception of agricultural or barren/developed land, construction activities that result in the disturbance to the plant communities identified above would be considered a significant impact without mitigation. Therefore, Mitigation Measures B-1a (Provide restoration/compensation for impacts to native vegetation communities), B-1b (Implement a Worker Environmental Awareness Program), B-1c (Treat cut tree stumps with Sporax), H-1a (Implement an Erosion Control Plan and demonstrate compliance with water quality permits), and AQ-1a (Implement Construction Fugitive Dust Control Plan) would be implemented to reduce impacts to native vegetation to less than significant (Class II) and no additional mitigation is required.

Impact B-2: The Project would result in the loss of desert wash or riparian habitat.

Because of the presence of several additional desert washes within the Alternative 3 alignment and overall loss of desert wash and riparian habitat within California, along with the role of these habitats in providing functional hydrological connectivity and suitability to support several special-status species, the loss of desert wash habitat associated with Alternative 3 would be significant without mitigation. SCE intends to avoid these areas to the maximum extent practicable, as they provide important foraging and nesting resources to wildlife and have the potential to support habitat for special-status plant species. However, as described in Section 6.1, some desert wash habitat would be impacted in the re-routed portion of this alternative. Implementation of Mitigation Measures B-1a (Provide restoration/compensation for impacts to native vegetation communities), B-1b (Implement a Worker Environmental Awareness Program), B-2 (Implement RCA Treatment Plan), H-1a (Implement an Erosion Control Plan and demonstrate compliance with water quality permits), and AQ-1a (Implement Construction Fugitive Dust Control Plan) would reduce these impacts to less than significant (Class II) and no additional mitigation is required.

Impact B-3: The Project would result in the establishment and spread of noxious weeds.

Impacts associated with noxious weeds would be the same as described for the proposed Project in the Central and Southern Regions. Compared to the proposed Project, with the exception of several additional desert washes and additional areas of California annual grassland and wildflower fields that may be impacted, no new impacts to biological resources would be introduced under Alternative 3. However, these additional impacted areas would marginally increase the potential for the establishment and spread of noxious weeds in the Northern Region. Implementation of Mitigation Measures B-1a (Provide restoration/compensation for impacts to native vegetation communities), B-2 (Implement RCA Treatment Plan), B-3a (Prepare and implement a Weed Control Plan), B-3b (Remove weed seed sources from construction routes), and B-3c (Remove weed seed sources from assembly yards, staging areas, tower pads, pull sites, landing zones, and spur roads) would reduce impacts to less than significant (Class II). Therefore, no additional mitigation measures are required to minimize impacts due to noxious weeds.

Impact B-4: Construction activities, including the use of access roads and helicopter construction, would result in disturbance to wildlife and may result in wildlife mortality.

Compared to the proposed Project, with the exception of several additional desert washes and additional areas of California annual grassland and wildflower fields that may be impacted, no new types of impacts to biological resources would be introduced under Alternative 3. However, because implementation of Alternative 3 would increase the length of the Segment 4 alignment by 0.4 mile but decrease the number of transmission towers, construction disturbance would be slightly smaller in size and magnitude for some terrestrial wildlife species. Impacts would be identical to the proposed Project in all other areas of this alternative. Therefore, Mitigation Measures B-1a (Provide restoration/compensation for impacts to native vegetation communities), B-1b (Implement a Worker Environmental Awareness Program), B-2 (Implement RCA Treatment Plan), B-3a (Prepare and implement a Weed Control Plan), H-1a (Implement an Erosion Control Plan and demonstrate compliance with water quality permits), and AQ-1a (Dust Control) would be implemented to reduce impacts to less than significant (Class II) and no additional mitigation measures are required.

Impact B-5: Construction activities conducted during the breeding season would result in the loss of nesting birds and raptors.

With the exception of several additional desert washes and small areas of California annual grassland and wildflower fields that would be subject to disturbance, no new impacts to native vegetation would be introduced under Alternative 3. However, because implementation of Alternative 3 would increase the length of the Segment 4 alignment by 0.4 mile, the potential loss of nesting birds would be slightly greater due to the increased line length and potential for collision. See Impact B-21 for more information related to avian collisions with transmission lines. Impacts would be identical to the proposed Project in all other areas of this alternative. Therefore, Mitigation Measures B-1a (Provide restoration/compensation for impacts to native vegetation communities), B-1b (Implement a Worker Environmental Awareness Program), B-3a (Prepare and implement a Weed Control Plan), B-5 (Conduct pre-construction surveys and monitoring for breeding birds), and AQ-1a (Implement Construction Fugitive Dust Control Plan) would be implemented to reduce impacts to nesting birds. Implementation of these mitigation measures would reduce impacts to less than significant (Class II). No additional mitigation measures are required.

Impact B-6: The Project would cause the loss of foraging habitat for wildlife.

Compared to the proposed Project, implementation of Alternative 3 would increase the length of Segment 4 by 0.4 mile but decrease the number of transmission towers along Segment 4 by one. The impacted area would be smaller in size, and would result in an incremental decrease in the loss of foraging habitat for wildlife species. Impacts would be identical to the proposed Project in all other areas of this alternative. These impacts would require the implementation of Mitigation Measure B-1a (Provide restoration/compensation for impacts to native vegetation communities), Mitigation Measure B-1b (Implement a Worker Environmental Awareness Program), Mitigation Measure B-2 (Implement RCA Treatment Plan), Mitigation Measure B-3a (Prepare and implement a Weed Control Plan), Mitigation Measure AQ-1a (Implement Construction Fugitive Dust Control Plan), and Mitigation Measure H-1a (Implement an Erosion Control Plan and demonstrate compliance with water quality permits). Implementation of the specified mitigation measures would reduce impacts to less than significant (Class II) and no additional mitigation measures are required.

Impacts to Endangered or Threatened Species, or Proposed or Critical Habitat (Criterion BIO2)

Ground-disturbing activity, including tower pad preparation and construction, grading of new access roads, tower removal, and use or improvement of existing access roads has the potential to disturb listed plant and wildlife species. Impacts to these species are detailed below. Impacts to individual species would be the same as described for the proposed Project (Section 6.1).

Impact B-7: The Project could disturb endangered, threatened, or proposed plant species or their habitat.

Compared to the proposed Project, the Alternative 3 re-route would result in the substantially similar impacts related to the loss of habitat for, and potential disturbance to rare plants, if present. While Alternative 3 would increase the length of the transmission line by 0.4 mile, it would result in one fewer transmission structure as compared to the proposed Project, which would incrementally decrease the potential to disturb listed plants. However, this alternative would potentially require the construction of new access and/or spur roads, which could impact listed plants, if present. The implementation of Mitigation Measures AQ-1a (Implement Construction Fugitive Dust Control Plan), B-1a (Provide restoration/compensation for impacts to native vegetation communities), B-1b (Implement a Worker Environmental Awareness Program), B-3a (Prepare and implement a Weed Control Plan), H-1a (Implement an Erosion Control Plan and demonstrate compliance with water quality permits), and B-7 (Conduct preconstruction surveys for State and federally Threatened, Endangered, Proposed, Petitioned, and Candidate plants and avoid any located occurrences of listed plants) would reduce impacts to endangered, threatened, and proposed plant species, if present, to less-than-significant levels (Class II). No additional mitigation measures are required.

Impact B-8: The Project could result in the loss of California red-legged frog and Mountain yellow-legged frog.

Compared to the proposed Project, no new impacts to biological resources would be introduced under Alternative 3. Suitable habitat for the California red-legged frog and mountain yellow-legged frog would not be reduced under this alternative, as suitable habitat is not present for these species within the Alternative 3 re-route. Therefore, impacts to these species would be exactly the same as those described for the proposed Project (Section 6.1). The implementation of APMs BIO-1 through BIO-7, Mitigation Measure B-1a (Provide restoration/compensation for impacts to native vegetation communities), Mitigation Measure B-1b (Implement a Worker Environmental Awareness Program), Mitigation Measure B-2 (Implement RCA Treatment Plan), Mitigation Measure B-3a (Prepare and implement a Weed Control Plan), Mitigation Measure AQ-1a (Implement Construction Fugitive Dust Control Plan), Mitigation Measure H-1a (Implement an Erosion Control Plan and demonstrate compliance with water quality permits), Mitigation Measure H-1b (Dry weather construction), Mitigation Measure B-8a (Conduct protocol surveys for California red-legged frogs and implement avoidance measures), and Mitigation Measure B-8b (Conduct biological monitoring) would reduce potential impacts to these species a less-than-significant level (Class II). Therefore, no additional mitigation measures are required to minimize impacts to these amphibians.

Impact B-9: The Project would result in the loss of arroyo toad.

Compared to the proposed Project, Alternative 3 would increase the length of the Segment 4 alignment by 0.4 mile but decrease the number of transmission towers, thus impacts would be slightly less in size and magnitude for some wildlife species. However, impacts in the re-routed portion of this alternative would not affect arroyo toad, as suitable habitat is not present for this species within the Alternative 3 re-route. Therefore, impacts to arroyo toad would be exactly the same as those described for the proposed Project (Section 6.1). SCE would be required to implement APMs BIO-1 through BIO-7 and Mitigation Measure B-1a (Provide restoration/compensation for impacts to native vegetation communities), Mitigation Measure B-1b (Implement a Worker Environmental Awareness Program), Mitigation Measure B-2 (Implement RCA Treatment Plan), Mitigation Measure B-3a (Prepare and implement a Weed Control Plan), Mitigation Measure H-1a (Implement an Erosion Control Plan and demonstrate compliance with water quality permits), Mitigation Measure H-1b (Dry weather construction), Mitigation Measure AQ-1a (Implement Construction Fugitive Dust Control Plan), Mitigation Measure B-9 (Conduct protocol surveys for arroyo toads and implement avoidance measures in occupied areas), and Mitigation Measure B-8b (Conduct biological monitoring). These measures include, but are not limited to, avoiding the peak breeding period, the placement of exclusion fencing if animals are present, implementation of a capture and release program, and construction monitoring by authorized biologists. Implementation of these measures would avoid or mitigate take, including loss of habitat, if present, thereby reducing potential impacts to a less-than-significant level (Class II). Therefore, no additional mitigation measures are required to minimize impacts to the arroyo toad.

Impact B-10: The Project could result in the loss of desert tortoise.

Compared to the proposed Project, the implementation of Alternative 3 would increase the length of the Segment 4 alignment by 0.4 mile but decrease the number of transmission towers by one, and impacts would be slightly less in size and magnitude for some wildlife species. Impacts in the re-routed portion of this alternative will not affect suitable habitat for desert tortoise, as suitable habitat is not present for this species within the Alternative 3 re-route. Therefore, impacts to desert tortoise would be exactly the same as described for the proposed Project (Section 6.1). Implementation of Mitigation Measure B-1a (Provide restoration/compensation for impacts to native vegetation communities), Mitigation Measure B-1b (Implement a Worker Environmental Awareness Program), Mitigation Measure B-3a (Prepare and implement a Weed Control Plan), Mitigation Measure B-10 (Conduct presence or absence surveys for desert tortoise and implement avoidance measures), and Mitigation Measure AQ-1a (Implement Construction Fugitive Dust Control Plan) would avoid or mitigate effects to this species, including loss of habitat, if present, thereby reducing potential impacts to a less-than-significant level (Class II). Therefore, no additional mitigation measures are required.

Impact B-11: The Project could result in mortality of desert tortoises as a result of increased predation by common ravens.

Compared to the proposed Project, implementation of Alternative 3 would increase the length of the Segment 4 alignment by 0.4 mile but decrease the number of transmission towers by one. However, potential nest sites for common raven as a result of tower construction are not expected to change as a result of implementation of Alternative 3 and impacts would be the same as described for the proposed Project (Section 6.1). These impacts would not require mitigation because potential nest sites for common raven as a result of tower construction are not expected to increase appreciably. Therefore, additional

populations of common raven and their predation pressure on the desert tortoise are not expected to result from additional towers, and impacts are expected to be less than significant (Class III).

Impact B-12: The Project could result in the loss of special-status fish.

Compared to the proposed Project, with the exception of several additional desert washes, and additional areas of California annual grassland and wildflower fields that may be impacted, no new impacts to biological resources would be introduced under Alternative 3. Because implementation of Alternative 3 would increase the length of the Segment 4 alignment by 0.4 mile but decrease the number of transmission towers by one, impacts would be slightly smaller in size and magnitude for some species in the re-routed portion of this alternative. However, suitable habitat for special-status fish is not present within the Alternative 3 re-route. Therefore, impacts to special-status fish would be identical to those described for the proposed Project (Section 6.1). Implementation of Mitigation Measure B-1a (Provide restoration/compensation for impacts to native vegetation communities), Mitigation Measure B-1b (Implement a Worker Environmental Awareness Program), Mitigation Measure B-2 (Implement RCA Treatment Plan), Mitigation Measure B-3a (Prepare and implement a Weed Control Plan), Mitigation Measure H-1a (Implement an Erosion Control Plan and demonstrate compliance with water quality permits), Mitigation Measure H-1b (Dry weather construction), Mitigation Measure B-8b (Conduct biological monitoring), and B-12 (Implement avoidance and minimization measures for Santa Ana sucker and other aquatic organisms), would reduce these impacts to less than significant levels (Class II). Therefore, no additional mitigation measures are required.

Impact B-13: The Project could result in the loss of Critical Habitat for the Santa Ana sucker.

Compared to the proposed Project, the implementation of Alternative 3 would increase the length of the Segment 4 alignment by 0.4 mile but decrease the number of transmission towers by one, and impacts would be slightly less in size and magnitude for some wildlife species. Impacts in the re-routed portion of this alternative will not affect critical habitat for Santa Ana sucker, as critical habitat is not present for this species within the Alternative 3 re-route. Therefore, impacts to Santa Ana sucker critical habitat would be exactly the same as described for the proposed Project (Section 6.1). Implementation of Mitigation Measure B-1a (Provide restoration/compensation for impacts to native vegetation communities), Mitigation Measure B-1b (Implement a Worker Environmental Awareness Program), Mitigation Measure B-2 (Implement RCA Treatment Plan), Mitigation Measure B-3a (Prepare and implement a Weed Control Plan), Mitigation Measure H-1a (Implement an Erosion Control Plan and demonstrate compliance with water quality permits), Mitigation Measure H-1b (Dry weather construction), Mitigation Measure B-8b (Conduct biological monitoring), and B-12 (Implement avoidance and minimization measures for Santa Ana sucker and other aquatic organisms) would reduce this impact to less than significant (Class II). Therefore, no additional mitigation measures are required.

Impact B-14: The Project could result in the loss of California condor.

Implementation of Alternative 3 would increase the length of the Segment 4 alignment by 0.4 mile but decrease the number of transmission towers by one, and impacts would be slightly smaller in size and magnitude for some species. The Alternative 3 re-route will not substantially reduce suitable habitat for California condor or substantially increase impacts associated with micro-trash ingestion. Therefore, impacts to this species would be the same as those described for the proposed Project (Section 6.1). Implementation of Mitigation Measure B-1a (Provide restoration/compensation for impacts to native vegetation communities), Mitigation Measure B-1b (Implement a Worker Environmental Awareness

Program), Mitigation Measure B-2 (Implement RCA Treatment Plan), Mitigation Measure B-3a (Prepare and implement a Weed Control Plan), Mitigation Measure B-8b (Conduct biological monitoring), and Mitigation Measure B-14 (Monitor construction in condor habitat and remove trash and micro-trash from the work area daily) to avoid or mitigate take, including the loss of habitat and the potential for micro-trash ingestion, would reduce impacts to this species, if present, to less-than-significant levels (Class II). Therefore, no additional mitigation measures are required.

Electrocutions and/or line collisions as a result of Project implementation are discussed further under Impacts B-20 and B-21.

Impact B-15: The Project would disturb nesting southwestern willow flycatchers, least Bell's vireos, yellow-billed cuckoos, or their habitat.

Compared to the proposed Project, no new impacts to listed riparian birds would occur, as suitable habitat is not present for these species within the Alternative 3 re-route. Therefore, impacts would be exactly the same as those described for the proposed Project (Section 6.1) and would require implementation of APMs BIO-1 through BIO-7 and Mitigation Measure B-1a (Provide restoration/compensation for impacts to native vegetation communities), Mitigation Measure B-1b (Implement a Worker Environmental Awareness Program), Mitigation Measure B-2 (Implement RCA Treatment Plan), Mitigation Measure B-3a (Prepare and implement a Weed Control Plan), Mitigation Measure B-5 (Conduct pre-construction surveys and monitoring for breeding birds), Mitigation Measure B-15 (Conduct protocol or focused surveys for listed riparian birds and avoid occupied habitat), Mitigation Measure H-1a (Implement an Erosion Control Plan and demonstrate compliance with water quality permits), and Mitigation Measure AQ-1a (Implement Construction Fugitive Dust Control Plan). These measures would reduce impacts to listed riparian birds, if present, to less than significant (Class II). Therefore, no additional mitigation measures are required.

Impact B-16: The Project would result in the loss of coastal California gnatcatchers.

Compared to the proposed Project, implementation of Alternative 3 would increase the length of the Segment 4 alignment by 0.4 mile but decrease the number of transmission towers by one. However, these impacts will not affect the likelihood of loss of coastal California gnatcatchers, as suitable habitat is not present for this species within the Alternative 3 re-route. Therefore, impacts to this species would be exactly the same as those described for the proposed Project (Section 6.1) and would require implementation of APMs BIO-4 through BIO-6 and Mitigation Measure B-1b (Implement a Worker Environmental Awareness Program), Mitigation Measure B-1b (Implement a Worker Environmental Awareness Program), Mitigation Measure B-16 (Conduct protocol or focused surveys for coastal California gnatcatcher and implement avoidance measures), and Mitigation Measure AQ-1a (Implement Construction Fugitive Dust Control Plan) to reduce impacts to less-than-significant levels (Class II). No additional mitigation measures are required.

Impact B-17: The Project would result in the loss of critical and/or occupied habitat of the coastal California gnatcatcher.

As described above, suitable habitat for this species does not occur in the Alternative 3 re-route and no additional impacts to this species are associated with the alternative. Therefore, impacts to coastal California gnatcatcher habitat would be the same as described for the proposed Project (Section 6.1) and would require implementation of APMs BIO-4 through BIO-8 and Mitigation Measure B-1a (Provide restoration/compensation for impacts to native vegetation communities), Mitigation Measure B-3a

(Prepare and implement a Weed Control Plan), Mitigation Measures B-16 and B-17 (Conduct protocol or focused surveys for coastal California gnatcatcher and implement avoidance measures, Preserve off-site habitat and/or habitat restoration for the coastal California gnatcatcher), and Mitigation Measure AQ-1a (Implement Construction Fugitive Dust Control Plan) to reduce impacts to less-than-significant levels (Class II). Therefore, no additional mitigation measures are required.

Impact B-18: The Project could disturb nesting Swainson's Hawks.

With the exception of several additional desert washes and small areas of California annual grassland and wildflower fields that would be subject to disturbance, no new impacts to native vegetation would be introduced under Alternative 3. Because implementation of Alternative 3 would increase the length of the Segment 4 alignment by 0.4 mile, potential disturbance to nesting Swainson's hawks would be slightly greater in magnitude if suitable nest structures are available adjacent to construction areas. However, these added impacts would be marginal and would not substantially increase impacts associated with nest disturbance as compared to the proposed Project. Implementation of APMs BIO-4 through BIO-6 and Mitigation Measures B-1b (Implement a Worker Environmental Awareness Program), B-18a and B-18b (Conduct pre-construction surveys for Swainson's hawks, Removal of nest trees for Swainson's hawks), and AQ-1a (Implement Construction Fugitive Dust Control Plan) would reduce impacts to less-than-significant levels (Class II). Therefore, no additional mitigation measures are required.

Impact B-19: The Project would result in the loss of foraging habitat for Swainson's hawks.

Under Alternative 3 impacts to Swainson's hawk foraging habitat would be marginally smaller than those described for the proposed Project (Section 6.1) due to the fact that there would be one fewer transmission tower. Incremental impacts to suitable Swainson's hawk foraging habitat associated with Alternative 3 would not substantially reduce the habitat available for the species, reduce the number, cause populations to drop below self-sustaining levels, restrict the range, or threaten to eliminate populations. Implementation of Mitigation Measures B-1a (Provide restoration/compensation for impacts to native vegetation communities), B-3a (Prepare and implement a Weed Control Plan), B-18a (Conduct pre-construction surveys for Swainson's hawks), B-19 (Compensate for loss of foraging habitat for Swainson's hawks), and AQ-1a (Implement Construction Fugitive Dust Control Plan) would reduce impacts to less-than-significant levels (Class II). Therefore, no additional mitigation measures are required.

Impact B-20: The Project could result in electrocution of State and/or federally protected birds.

Because implementation of Alternative 3 would increase the length of conductor lines along Segment 4 by 0.4 mile, the impacted area would be greater in size, and the potential for electrocution of State and/or federally protected birds would be slightly greater. However, the increase in the frequency of transmission line electrocutions due to this 0.4-mile addition of transmission lines is expected to be extremely low. Therefore, the number of electrocution events is still expected to be insufficient to substantially reduce the number of State and/or federally protected bird species. SCE would implement APMs BIO-4 and BIO-9 as part of the proposed Project in accordance with the guidance on raptor protection in *Suggested Practices for Raptor Protection on Power Lines: The State of the Art in 2006* (APLIC 2006). However, because of the long duration of the construction phase of the proposed Project, APLIC may update the guidelines during this time frame. Therefore, SCE shall use the most recent APLIC guidelines for protection of raptors on power lines. Impacts to State and/or federally protected

birds resulting from electrocution would be less than significant (Class III) and no additional mitigation is required.

Impact B-21: The Project could result in result in collision with overhead wires by State and/or federally protected birds.

Because implementation of Alternative 3 would increase the length of conductor lines along Segment 4 by 0.4 mile, the impacted area would be greater in size, and the potential for collisions with overhead wires by State and/or federally protected birds would be slightly greater. However, the increase in the frequency of transmission line strikes due to this 0.4-mile addition of transmission lines is expected to be extremely low. Therefore, the number of collision events with overhead wires is still expected to be quite low and insufficient to substantially reduce the number of State and/or federally protected bird species. This impact would require implementation of APM BIO-9 and the incorporation of raptor safety protection into the project design (i.e. tower/conductor [lines] on NFS lands). Line collisions as a result of Alternative 3 implementation will not substantially reduce the number of State and/or federally protected birds, cause populations to drop below self-sustaining levels, restrict the range, or threaten to eliminate populations. Therefore, impacts to State and/or federally protected birds resulting from transmission line collisions would be considered less than significant (Class III) and no additional mitigation is required.

Impact B-22: The Project could result in disturbance to Mohave ground squirrel.

With the exception of several additional desert washes and small areas of California annual grassland and wildflower fields that would be subject to disturbance, no new impacts to native vegetation would be introduced under Alternative 3. Because implementation of Alternative 3 would increase the length of the Segment 4 alignment by 0.4 mile but decrease the number of transmission towers by one, impacts would be slightly smaller in size and magnitude for some species. Impacts related to the implementation of Alternative 3 would not increase the likelihood of disturbance to Mohave ground squirrel, as suitable habitat was not identified for this species within the Alternative 3 re-route. Therefore, impacts to this species would be exactly the same as those described for the proposed Project (Section 6.1). Implementation of APMs BIO-4 through BIO-7 and Mitigation Measure AQ-1a (Implement Construction Fugitive Dust Control Plan), Mitigation Measure B-1a (Provide restoration/compensation for impacts to native vegetation communities), Mitigation Measure B-1b (Implement a Worker Environmental Awareness Program), Mitigation Measure B-3a (Prepare and implement a Weed Control Plan), and Mitigation Measures B-22a (Conduct focused surveys for Mohave ground squirrels), B-22b (Implement construction monitoring for Mohave ground squirrels), and B-22c (Preserve off-site habitat for the Mohave ground squirrel) would reduce impacts to less-than-significant levels (Class II). Therefore, no additional mitigation measures are required.

Have a substantial adverse effect on a candidate, Forest Service Sensitive, or special-status species (Criterion BIO3)

Impact B-23: The Project would result in loss of candidate, Forest Service Sensitive, or special-status plant species.

Compared to the proposed Project, implementation of Alternative 3 would increase the length of the Segment 4 alignment by 0.4 mile but decrease the number of transmission towers by one. Impacts would be slightly smaller in size and magnitude for several special-status plant species, such as California androsace and Peirson's morning-glory, if present. Impacts to these species would require avoidance

(Mitigation Measure B-7, Conduct preconstruction surveys for State and federally Threatened, Endangered, Proposed, Petitioned, and Candidate plants and avoid any located occurrences of listed plants), and, if avoidance is infeasible, off-site acquisition and preservation of occupied habitat (Mitigation Measure 23, Preserve offsite habitat/management of existing populations of special-status plants). Temporarily impacted habitat would be restored upon completion of construction (Mitigation Measure B-1a (Provide restoration/compensation for impacts to native vegetation communities). As discussed above, indirect effects to these species that could occur due to the proliferation of noxious weeds resulting from ground-disturbing Project activities shall be reduced by the implementation of Mitigation Measure B-3a (Prepare and implement a Weed Control Plan). In addition, a Worker Environmental Awareness Program will be implemented (Mitigation Measure B-1b, Implement a Worker Environmental Awareness Program), erosion control would be implemented (H-1a Implement an Erosion Control Plan and demonstrate compliance with water quality permits), and dust control measures would be implemented (Mitigation Measure AQ-1a, Implement Construction Fugitive Dust Control Plan). Implementation of these mitigation measures would reduce impacts to less than significant (Class II). No additional mitigation measures are required.

Impact B-24: The Project could result in mortality or injury of, and loss of nesting habitat for, southwestern pond turtles.

Alternative 3 would not increase the likelihood of mortality, injury, or loss of habitat for southwestern pond turtle as suitable habitat was not identified for this species within the Alternative 3 re-route. Therefore, impacts to this species would be exactly the same as those described for the proposed Project (Section 6.1). Implementation of APMs BIO-1 through BIO-3 and BIO-5 through BIO-7, and Mitigation Measure B-1a (Provide restoration/compensation for impacts to native vegetation communities), Mitigation Measure B-1b (Implement a Worker Environmental Awareness Program), Mitigation Measure B-3a (Prepare and implement a Weed Control Plan), Mitigation Measure B-12 (Implement avoidance and minimization measures for Santa Ana sucker and other aquatic organisms), Mitigation Measure B-24 (Conduct focused presence/absence surveys for southwestern pond turtle and implement monitoring, avoidance, and minimization measures), Mitigation Measure H-1a (Implement an Erosion Control Plan and demonstrate compliance with water quality permits), Mitigation Measure H-1b (Dry weather construction), and Mitigation Measure AQ-1a (Implement Construction Fugitive Dust Control Plan) would prevent mortality or injury of pond turtles, avoid damage or destruction of nesting areas or mitigate the loss of nesting habitat, thereby reducing potential impacts to a less-than-significant level (Class II). Therefore, no additional mitigation measures are required.

Impact B-25: The Project could result in injury or mortality of, and loss of habitat for, two-striped garter snakes and south coast garter snakes.

Compared to the proposed Project, Alternative 3 would not increase the likelihood of mortality, injury, or loss of habitat for two-striped garter snakes and south coast garter snakes as suitable habitat was not identified for these species within the Alternative 3 re-route. Therefore, impacts to these species would be exactly the same as those described for the proposed Project and would require implementation of APMs BIO-1 through BIO-7, Mitigation Measure B-1a (Provide restoration/compensation for impacts to native vegetation communities), Mitigation Measure B-1b (Implement a Worker Environmental Awareness Program), Mitigation Measure B-3a (Prepare and implement a Weed Control Plan), Mitigation Measure B-12 (Implement avoidance and minimization measures for Santa Ana sucker and other aquatic organisms), Mitigation Measure B-25 (Conduct focused surveys for the two-striped garter snake and south

coast garter snake and implement monitoring, avoidance, and minimization measures), Mitigation Measure H-1a (Implement an Erosion Control Plan and demonstrate compliance with water quality permits), Mitigation Measure H-1b (Dry weather construction), and Mitigation Measure AQ-1a (Implement Construction Fugitive Dust Control Plan) to avoid injury or mortality to these species, thereby reducing potential impacts to a less-than-significant level (Class II). Therefore, no additional mitigation measures are required.

Impact B-26: The Project could result in injury or mortality of, and loss of habitat for, Coast Range newts.

Alternative 3 would not increase the likelihood of mortality, injury, or loss of habitat for Coast Range newts as suitable habitat was not identified for this species within the Alternative 3 re-route. Therefore, impacts to this species would be exactly the same as described for the proposed Project (Section 6.1) and would require implementation of APMs BIO-1 through BIO-7, Mitigation Measure B-1a (Provide restoration/compensation for impacts to native vegetation communities), Mitigation Measure B-1b (Implement a Worker Environmental Awareness Program), Mitigation Measure B-3a (Prepare and implement a Weed Control Plan), Mitigation Measure B-26 (Conduct focused surveys for coast range newt and implement monitoring, avoidance, and minimization measures), Mitigation Measure H-1a (Implement an Erosion Control Plan and demonstrate compliance with water quality permits), Mitigation Measure H-1b (Dry weather construction), and Mitigation Measure AQ-1a (Implement Construction Fugitive Dust Control Plan) to avoid injury or mortality to this species, thereby reducing impacts to a less-than-significant level (Class II). Therefore, no additional mitigation measures are required.

Impact B-27: The Project could result in injury or mortality of, and loss of habitat for, terrestrial California Species of Special Concern and Forest Service Sensitive amphibian and reptile species.

Implementation of Alternative 3 would increase the length of the Segment 4 alignment by 0.4 mile but decrease the number of transmission towers by one, and impacts would be slightly smaller in size and magnitude for the following three special-status terrestrial herpetofauna species, if present: 1) San Diego horned lizard, 2) California horned lizard, and 3) silvery legless lizard. Implementation of APMs BIO-1 through BIO-7 and Mitigation Measure B-1a (Provide restoration/compensation for impacts to native vegetation communities), Mitigation Measure B-1b (Implement a Worker Environmental Awareness Program), Mitigation Measure B-3a (Prepare and implement a Weed Control Plan), Mitigation Measure B-27 (Monitoring, avoidance, and minimization measures for special-status terrestrial herpetofauna), and Mitigation Measure AQ-1a (Implement Construction Fugitive Dust Control Plan) would reduce impacts to less than significant (Class II). The other eight special-status terrestrial herpetofauna species identified in Section 6.1 do not occur within the area of potential impacts of the Alternative 3 re-route, and for those species impacts are identical to the proposed Project.

Impact B-28: The Project could disturb wintering mountain plovers.

With the exception of several additional desert washes and small areas of California annual grassland and wildflower fields that would be subject to disturbance, no new impacts to native vegetation would be introduced under Alternative 3. Because implementation of Alternative 3 would increase the length of the Segment 4 alignment by 0.4 mile but decrease the number of transmission towers by one, impacts would be slightly smaller in size and magnitude for some species. These impacts will not increase the likelihood of disturbance to wintering mountain plovers as the total acreage of impacted habitat is small relative to

regional availability, and implementation of Alternative 3 would not restrict the range of the species. Therefore, these impacts would not require mitigation. Impacts to wintering mountain plovers resulting from construction disturbance are considered less than significant (Class III). No additional mitigation measures are required.

Impact B-29: The Project would result in the loss of occupied burrowing owl habitat.

Compared to the proposed Project, the implementation of Alternative 3 would increase the length of Segment 4 by 0.4 mile but decrease the number of transmission towers along Segment 4 by one. The impacted area affected by this alternative would be smaller in size, and the loss of occupied burrowing owl habitat would potentially be slightly smaller in magnitude than that described for the proposed Project. Impacts would be identical to the proposed Project in all other areas of this alternative. These impacts would require the implementation of APMs BIO-2 and BIO-4 through BIO-8 and Mitigation Measure B-1a (Provide restoration/compensation for impacts to native vegetation communities), Mitigation Measure B-1b (Implement a Worker Environmental Awareness Program), Mitigation Measure B-3a (Prepare and implement a Weed Control Plan), Mitigation Measure B-29 (Implement CDFG protocol for burrowing owls), and Mitigation Measure AQ-1a (Implement Construction Fugitive Dust Control Plan). Implementation of the specified mitigation measures for the proposed Project would reduce impacts to less than significant (Class II).

Impact B-30: The Project would result in the loss of occupied California spotted owl habitat.

Alternative 3 would not increase the likelihood of loss of occupied California spotted owl habitat as suitable habitat was not identified for this species within the Alternative 3 re-route. Therefore, impacts to California spotted owl would be exactly the same as the proposed Project (Section 6.1) and would require implementation of Mitigation Measure B-1a (Provide restoration/compensation for impacts to native vegetation communities), Mitigation Measure B-3a (Prepare and implement a Weed Control Plan), Mitigation Measure B-30 (Conduct pre- and during construction nest surveys for spotted owl), and Mitigation Measure AQ-1a (Implement Construction Fugitive Dust Control Plan). Impacts to the California spotted owl resulting from loss of occupied habitat are considered less than significant with mitigation incorporated (Class II). Therefore, no additional mitigation measures are required.

Impact B-31: The Project could disturb nesting California spotted owls.

Alternative 3 would not increase the likelihood of disturbance to nesting California spotted owls as suitable habitat was not identified for this species within the Alternative 3 re-route. Therefore, impacts would be exactly the same as those described for the proposed Project (Section 6.1) and would require implementation of APMs BIO-2 and BIO-4 through BIO-6 and Mitigation Measure B-1b (Implement a Worker Environmental Awareness Program), Mitigation Measure B-30 (Conduct pre- and during-construction nest surveys for spotted owl), and Mitigation Measure AQ-1a (Implement Construction Fugitive Dust Control Plan) to reduce impacts to less-than-significant levels (Class II). Therefore, no additional mitigation measures are required.

Impact B-32: The Project could disturb nesting avian "species of special concern."

Construction-related disturbance that causes nest abandonment and/or loss of reproductive effort would constitute a significant impact and violate the MBTA. With the exception of several additional desert washes and small areas of California annual grassland and wildflower fields that would be subject to disturbance, no new impacts to native vegetation would be introduced under Alternative 3. Because

implementation of Alternative 3 would increase the length of Segment 4 by 0.4 mile, the impacted area would be slightly greater in size, and disturbance to nesting avian species of special concern would potentially be slightly greater in magnitude than that described for the proposed Project (Section 6.1). However, implementation of APMs BIO-4 through BIO-6 and Mitigation Measures B-1a (Provide restoration/compensation for impacts to native vegetation communities), B-1b (Implement a Worker Environmental Awareness Program), B-2 (Implement RCA Treatment Plan), B-3a (Prepare and implement a Weed Control Plan), B-5 (Conduct pre-construction surveys and monitoring for breeding birds), and AQ-1a (Implement Construction Fugitive Dust Control Plan) would reduce impacts to less than significant (Class II). No additional mitigation measures are required.

Impact B-33: The Project could result in mortality of, and loss of habitat for, special-status bat species.

Because implementation of Alternative 3 would increase the length of Segment 4 by 0.4 mile, the impacted area would be slightly greater in size. Potential for mortality of and loss of habitat for special-status bat species would be slightly greater in magnitude over the proposed Project if suitable trees, particularly trees ≥ 12 inches in diameter at 4.5 feet above grade with loose bark or other cavities are present prior to construction activities. In all areas other than the re-route, impacts to special-status bat species would be exactly the same as described for the proposed Project. If active hibernacula and maternity roosts are present and cannot be avoided, impacts would be significant. However, implementation of APMs BIO-1, BIO-4, BIO-6, and Mitigation Measures B-1a (Provide restoration/compensation for impacts to native vegetation communities), B-1b (Implement a Worker Environmental Awareness Program), B-2 (Implement RCA Treatment Plan), B-3a (Prepare and implement a Weed Control Plan), AQ-1a (Implement Construction Fugitive Dust Control Plan), B-33a (Maternity colony or hibernaculum surveys for roosting bats), B-33b (Provision of substitute roosting bat habitat), and B-33c (Exclude bats prior to demolition of roosts) would reduce impacts to a less-than-significant level (Class II).

Impact B-34: The Project could result in transmission line strikes by special-status bat species.

The Project would potentially impact these species through the direct take of individuals from fatal strikes with transmission lines. Because implementation of Alternative 3 would increase the length of Segment 4 by 0.4 mile, the impacted area would be greater in size, and the potential for transmission line strikes would be slightly greater in magnitude. However, given that most bat species can use echolocation to discriminate objects as small as 0.4 to 0.004 inches in size (Vaughan 1986), and the size of guard lines and 500-kV or 220-kV transmission lines are typically equal to or greater than 0.5 inches in diameter (SCE 2007), the frequency of transmission line strikes is expected to be extremely low. Therefore, the number of fatal strikes is still expected to be quite low and insufficient to substantially reduce the number of these species (Class III).

Impact B-35: The Project could result in mortality of and loss of habitat for, special-status mammals.

Compared to the proposed Project, no new impacts to biological resources would be introduced under Alternative 3. The area of suitable habitat for the Los Angeles pocket mouse, Tehachapi pocket mouse, San Joaquin pocket mouse, and Northwestern San Diego pocket mouse impacted by the Alternative 3 re-route would be slightly smaller in size than the proposed Project. Although the habitat impacted by implementation of Alternative 3 would not substantially reduce available habitat there remains the

possibility of mortality to these species during construction and maintenance activities. Implementation of APM BIO-1 and APM BIO-5 and Mitigation Measure B-1a (Provide restoration/compensation for impacts to native vegetation communities), Mitigation Measure B-1b (Implement a Worker Environmental Awareness Program), Mitigation Measure B-2 (Implement RCA Treatment Plan), Mitigation Measure B-3a (Prepare and implement a Weed Control Plan), and Mitigation Measure AQ-1a (Implement Construction Fugitive Dust Control Plan) would minimize impacts to special-status mammal species. Therefore, impacts to these species as a result of implementation of Alternative 3 would be less than significant with mitigation incorporated (Class II). Southern grasshopper mouse, Tulare grasshopper mouse, and San Diego black-tailed jackrabbit do not occur within the Alternative 3 re-route alignment and therefore, impacts would be identical to the proposed Project.

Impact B-36: The Project could result in mortality of San Diego desert woodrat.

Alternative 3 would not increase the likelihood of mortality to San Diego desert woodrat as the species does not occur within the Alternative 3 re-route. Therefore, impacts to this species would be identical to those described for the proposed Project (Section 6.1). Construction activities would substantially reduce regional populations of this species in the Chino and Puente Hills without mitigation. Impacts to this species as a result of Alternative 3 implementation would be reduced to a less-than-significant level (Class II) with the implementation of APMs BIO-1 and BIO-4 through BIO-6 and Mitigation Measure B-1a (Provide restoration/compensation for impacts to native vegetation communities), Mitigation Measure B-1b (Implement a Worker Environmental Awareness Program), Mitigation Measure B-3a (Prepare and implement a Weed Control Plan), Mitigation Measure B-36 (Conduct focused surveys for San Diego desert woodrats and passively relocate), and Mitigation Measure AQ-1a (Implement Construction Fugitive Dust Control Plan). Therefore, no additional mitigation measures are required.

Impact B-37: The Project could result in mortality of and loss of habitat for, the ringtail.

Implementation of Alternative 3 would not increase the likelihood of mortality to the ringtail as the species does not occur within the Alternative 3 re-route. In all other areas, impacts to ringtail would be identical to those described for the proposed Project (Section 6.1) and would require the implementation of APMs BIO-1, BIO-4, and BIO-6 and Mitigation Measures B-1a (Provide restoration/compensation for impacts to native vegetation communities), B-1b (Implement a Worker Environmental Awareness Program), B-3a (Prepare and implement a Weed Control Plan), B-37 (Conduct focused surveys for ringtail and passively relocate during the non-breeding season), H-1a (Implement an Erosion Control Plan and demonstrate compliance with water quality permits), and AQ-1a (Implement Construction Fugitive Dust Control Plan), which would reduce project impacts to ringtail to a less-than-significant level (Class II). No additional mitigation measures are required.

Impact B-38: The Project could result in mortality of American badgers.

Because implementation of Alternative 3 would increase the length of Segment 4 by 0.4 miles but decrease the number of transmission towers along Segment 4, the impacted area would be slightly smaller in size, and potential mortality of American badgers would be slightly smaller in magnitude. However, any potential mortality would be quite small relative to the overall population size and implementation of APMs BIO-1, BIO-4, BIO-5, BIO-6, and Mitigation Measures B-1a (Provide restoration/compensation for impacts to native vegetation communities), B-1b (Implement a Worker Environmental Awareness Program), B-3a (Prepare and implement a Weed Control Plan), B-38 (Conduct focused surveys for American badger and passively relocate during the non-breeding season), and AQ-1a (Implement

Construction Fugitive Dust Control Plan) would reduce impacts to less than significant (Class II). No additional mitigation measures are required.

Have a substantial adverse effect on federally protected wetlands (Criterion BIO4)

Impact B-39: The Project could result in the loss of wetland habitats.

With the exception of several additional desert washes and small areas of California annual grassland and wildflower fields that would be subject to disturbance, no new impacts to native vegetation would be introduced under Alternative 3. Implementation of Alternative 3 would increase the length of the Segment 4 alignment by 0.4 mile but decrease the number of transmission towers by one. However, these impacts would not increase the likelihood of adverse effects on federally protected wetlands as federally protected wetlands do not occur within the Antelope Valley and the Alternative 3 re-route. Therefore, impacts would be identical to those described for the proposed Project (Section 6.1). Any loss of these habitats associated with the proposed Project is significant. If avoidance of jurisdictional waters and wetlands is not possible, implementation of APMs BIO-1 through BIO-7, and Mitigation Measures B-1a (Provide restoration/compensation for impacts to native vegetation communities), B-1b (Implement a Worker Environmental Awareness Program), B-2 (Implement RCA Treatment Plan), B-3a (Prepare and implement a Weed Control Plan), B-12 (Implement avoidance and minimization measures for Santa Ana sucker and other aquatic organisms), H-1a (Implement an Erosion Control Plan and demonstrate compliance with water quality permits), and AQ-1a (Implement Construction Fugitive Dust Control Plan) will reduce the impacts to federally protected wetlands to less-than-significant levels (Class II). Therefore, no additional mitigation measures are required.

Interfere substantially with native fish or wildlife movements, corridors, or nursery sites (Criterion BIO5)

Impact B-40: The Project could interfere with established bird and bat migratory corridors.

The Project would potentially impact migrating bird and bat species through interference with established migratory corridors as a result of fatal collisions with transmission lines. Because implementation of Alternative 3 would increase the length of Segment 4 by 0.4 mile, the impacted area would be greater in size, and interference with bird and bat migratory corridors would be slightly greater in magnitude. However, the frequency of transmission line strikes is still expected to be extremely low. Therefore, implementation of Alternative 3 would not substantially interfere with established bird or bat migratory corridors, and impacts to migrating bird and bat species would be less than significant (Class III).

Impact B-41: Corona noise could result in disturbance to wildlife.

Corona generates audible noise during operation of transmission lines. The noise is generally characterized as a crackling, hissing, or humming sound and is most noticeable during wet conductor conditions such as rain or fog. Because implementation of Alternative 3 would increase the length of Segment 4 by 0.4 mile, the impacted area would be greater in size, and corona noise would be slightly greater in magnitude compared to the proposed Project. However, as the effects of corona noise on wildlife are poorly understood, it is difficult to predict the degree to which the increase in corona noise will impact local wildlife. Corona noise is already present along most of Alternative 3, and while Alternative 3 would result in louder corona noise for most segments and a new sources of corona noise

for the new segments, wildlife can be expected to have already been exposed and likely habituated to this disturbance. Therefore, implementation of Alternative 3 would not result in substantial impacts due to corona noise. This impact would be less than significant (Class III).

Impact B-42: The Project would result in effects to Management Indicator Species.

The ANF LRMP (USDA 2005) requires forest scale monitoring of habitat status and trend for select Management Indicator Species (MIS) on the ANF. The Alternative 3 re-route does not occur on NFS lands, and therefore impacts to MIS would be exactly the same as described for the proposed Project. Impacts to these species as a result of Project implementation would be reduced to a less-than-significant level (Class II) with the implementation of APMs BIO-1 and BIO-4 through BIO-6 and Mitigation Measures B-1a (Provide restoration/compensation for impacts to native vegetation communities), B-1b (Implement a Worker Environmental Awareness Program), B-1c (Treat cut tree stumps with Sporax), B-2 (Implement RCA Treatment Plan), B-3a (Prepare and implement a Weed Control Plan), B-3b (Remove weed seed sources from construction routes), B-3c (Remove weed seed sources from assembly yards, staging areas, tower pads, pull sites, landing zones, and spur roads), B-5 (Conduct pre- and during construction surveys and monitoring for breeding birds), B-8b (Conduct biological monitoring), B-9 (Conduct protocol surveys for arroyo toads and implement avoidance measures in occupied areas), B-30 (Conduct pre- and during construction nest surveys for spotted owl), H-1a (Implement an Erosion Control Plan and demonstrate compliance with water quality permits), and AQ-1a (Implement Construction Fugitive Dust Control Plan). Therefore, no additional mitigation measures are required.

Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinances (Criterion BIO6)

Because of the extensive planning involved in project design, including implementation of APMs BIO-1 through BIO-7, and the mitigation measures described above in Criteria BIO1 through BIO5, Alternative 3 is consistent with the local and regional policies and ordinances protecting biological resources including the Los Angeles County Tree Removal requirements, the Palmdale Municipal Code, and the California Desert Native Plants Act. Compared to the proposed Project, with the exception of several additional desert washes and additional areas of California annual grassland and wildflower fields that may be impacted, no new impacts to biological resources would be introduced under Alternative 3. Likewise, no additional policies or ordinances apply to the Alternative 3 re-route. Therefore, no impact would occur.

Conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Communities Conservation Plan (NCCP), or other approved local, regional, or state HCP (Criterion BIO7)

Through Project design and implementation of APMs BIO-1 through BIO-7 and the mitigation measures described in Criteria BIO1 through BIO5, SCE shall ensure consistency with the conservation goals of the WMPHCP. Compared to the proposed Project, with the exception of several additional desert washes, and additional areas of California annual grassland and wildflower fields that may be impacted, no new impacts to biological resources would be introduced under Alternative 3. Implementation of Alternative 3 will not affect the conservation goals of the WMPHCP. Therefore, no impact would occur.

7.2 Cumulative Effects Analysis

This section addresses potential cumulative effects that would occur as a result of implementation of Alternative 3 (West Lancaster Alternative). This alternative consists of a brief re-route of the proposed transmission line just north of Antelope Substation, which would add approximately 0.4 mile to the length of the route. The remainder of this alternative route (south of Antelope Substation) would be identical to that of the proposed Project and would, therefore, result in identical impacts as the proposed Project. The re-routed portion of the Alternative 3 route generally parallels the proposed Project route to the west. As a result, this alternative traverses the same or similar habitat types as the portion of the proposed Project route it is proposed to replace, would require the same types of construction activities to build, and would result in the same operational capacity as the proposed Project. Based on the substantial similarity of Alternative 3 to the proposed Project, this alternative's contribution to cumulative impacts would be identical to that of the proposed Project.

7.2.1 Geographic Extent

Alternative 3 only differs from the proposed Project for a very small portion of the proposed route in the City of Lancaster, near Antelope Substation. This area is still encompassed by the geographic extent of the cumulative analysis defined for Alternative 2 in Section 6.2.1. Therefore, the geographic extent of the cumulative analysis for Alternative 3 is exactly the same as that for Alternative 2 and would include all of the Northern, Central, and Southern Regions.

7.2.2 Existing Cumulative Conditions

The existing cumulative conditions for Alternative 3 are exactly the same as for Alternative 2, as described in Section 6.2.2.

7.2.3 Reasonably Foreseeable Future Projects and Changes

Reasonably foreseeable future projects and changes to the cumulative scenario for Alternative 3 would be exactly the same as Alternative 2, described in Section 6.2.3.

7.2.4 Cumulative Impact Analysis

As described in Section 6.2.4, impacts associated with Alternative 3 would be cumulatively considerable if they would have the potential to combine with similar impacts of other past, present, or reasonably foreseeable projects. The minor re-route of the proposed Project transmission line associated with Alternative 3 would not differ from the proposed Project's contribution to cumulative impacts and therefore, cumulative impacts of Alternative 3 would be exactly the same as cumulative impacts for Alternative 2.

7.2.5 Mitigation to Reduce the Project's Contribution to Significant Cumulative Effects

Mitigation measures introduced for Alternative 3 in Section 7.1 (Direct and Indirect Effects Analysis) would help to reduce this alternative's incremental contribution to cumulative impacts. However, no additional mitigation measures have been identified that would reduce cumulative impacts to a less-than-significant level.