

11. Alternative 7: (66-kV Subtransmission): Impacts and Mitigation Measures

The following section describes the impacts of Alternative 7 (66-kV Subtransmission Alternative) on Biological Resources, as determined by the significance criteria listed in Section 4.1. Mitigation measures are introduced where necessary in order to reduce significant impacts to less-than-significant levels. As described in Section 1.2.7, this alternative would deviate from the proposed Project along Segment 7, through the Duck Farm Project, where the 66-kV subtransmission line would be routed underground beginning at approximately S7 MP 8.9. The underground segment would extend approximately 6,000 feet, transitioning back to overhead construction at approximately S7 MP 9.9. The underground portion would follow the same route as the proposed Project (Alternative 2). Additionally, Alternative 7 includes a 66-kV underground re-route around the Whittier Narrows Recreation Area in Segment 7 that would exit the ROW at Peck Road and be placed underground. The underground re-route would follow Peck Road to Durfee Road, where it would turn west and continue along Durfee Road for approximately 3,000 feet before rejoining the proposed alignment (Alternative 2) at approximately S7 MP 12.025. A re-route of the overhead 66-kV lines along Segment 7 in Whittier Narrows is also proposed as part of this alternative. This element of Alternative 7 would consist of relocating the existing 66-kV subtransmission line to the north side of the existing 220-kV ROW, requiring a 20-foot expansion of the existing ROW, beginning at Durfee Avenue through Legg Lake Park and the Whittier Narrows Recreation Area to the San Gabriel Junction. Under this re-route, fewer, but taller, 66-kV structures would be required along this portion of the Segment 7 alignment compared to the proposed Project. Alternative 7 also includes two options for a 66-kV re-route of overhead construction along Segment 8A, around Whittier Narrows Recreation Area. The re-route Option 1 would occur from the San Gabriel Junction, extend along San Gabriel Boulevard to Durfee Avenue, to Siphon Road. This re-route would follow Siphon Road for approximately 2,100 feet before rejoining the ROW just east of the San Gabriel River. A new approximately 1,200-foot ROW would be required to cross from the existing 66-kV ROW on the west side of the San Gabriel River to the 220-kV ROW on the east side of the San Gabriel River, where the re-route would tie back into the Project ROW. Under re-route Option 2, the 66-kV lines would continue west along the north side of Durfee Avenue utilizing new LWSPs, re-entering the existing 220-kV ROW at approximately Segment 8A MP 3.2. The 66-kV lines would continue southeast along the south side of the existing 220-kV ROW up to the east side of the San Gabriel River utilizing new TSPs. A 20-foot expansion of the existing ROW between Segment 8A MP 3.2 and 3.8 would be required to provide adequate clearance for conductor sway between the 66-kV lines and the new double-circuit 500-kV structures within the ROW and allow for one-for-one placement of the 66-kV TSPs alongside the new double-circuit 500-kV structures.

The portion of Segment 7 that would be re-routed underground through the Duck Farm Project for Alternative 7 is situated in an area that is primarily barren/developed, with pockets of ruderal habitat and disturbed annual grassland. The portion of Segment 7 that would be re-routed around the Whittier Narrows Recreation Area traverses barren/developed land and nonnative woodland. The portion of Segment 8A that would be re-routed around the Whittier Narrows Recreation Area consists of coastal sage scrub, barren/developed land, grassland, and several types of riparian vegetation. All the communities in this section support high concentrations of weeds. The Affected Environment along the rest of the Alternative 7 route in the Southern Region is identical to the proposed Project. Furthermore, temporary and permanent ground disturbance as it relates to the re-routed portions of the alternative would amount to only incremental increases in impacts to these additional areas. However, less ground disturbance in Whittier Narrows would occur as a result of this alternative

because there would be fewer 66-kV structures constructed in Segment 7, and some of the 66-kV lines would be re-routed around the recreation area.

11.1 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 7 would be the same as impacts associated with this criterion for the proposed Project. Although this alternative introduces four re-routes of part of the 66-kV subtransmission line in the Southern Region, the re-routes would cross identical types of habitats as the proposed Project (coastal sage scrub, barren/developed land, mulefat scrub, nonnative woodland, southern sycamore alder riparian woodland, ruderal grassland, southern arroyo willow riparian forest, southern cottonwood willow riparian forest, southern willow scrub). Temporary and permanent ground disturbance as it relates to the re-routed portion of the alternative would be primarily due to the undergrounding of two of the re-routed portions and the construction of overhead subtransmission line in the vicinity of the Whittier Narrows Recreation Area. New access and spur roads may also be required for the new approximately 1,200 foot ROW for the San Gabriel River crossing within Segment 8A associated with the Whittier Narrows 66-kV overhead re-route Option 1. 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, and just vary in magnitude.

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

The Alternative 7 re-routes would impact primarily barren/developed areas. However, approximately 83 acres of mulefat scrub, 81 acres of ruderal grassland, and 37 acres of southern sycamore alder riparian woodland occur within the re-routed portions of this alternative, with additional natural communities present as well (see Table 2-19). It is unknown at this time what acreage of these and other natural communities present would be affected as final engineering has not been conducted on this alternative. Compared to the proposed Project, there would be additional native vegetation crossed and impacted by the re-routes. However, there would be fewer structures within Whittier Narrows Recreation Area, equating to less ground disturbance, and the additional areas impacted outside of the ROW under this alternative largely consist of barren/developed areas, ruderal grassland, and non-native woodland. Additionally, the Segment 8A overhead re-route Option 2 would be sited along city streets before entering the existing 200-kV ROW in the Whittier Narrows Recreation Area. Most of Option 1 would be routed along streets and a paved access road that runs along the southern boundary of the Whittier Narrows Recreation Area. Option 1 would traverse coastal sage scrub, barren/developed lands, ruderal grassland, and various riparian habitats. While these communities generally have a large weed component in the project area; they still provide habitat for wildlife, including several special-status species. As described in detail in Section 6.1, with the exception of agricultural or barren/developed land, construction activities that result in 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 would be required.

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

Riparian habitat (approximately 14 acres of freshwater marsh, 83 acres of mulefat scrub, 1 acre of ruderal wetland, 3 acres of southern coast live oak riparian forest, 37 acres of southern sycamore alder riparian woodland, 14 acres of southern arroyo willow riparian forest, 21 acres of southern cottonwood willow riparian forest, 4 acres of sparsely vegetated streambed, and 17 acres of southern willow scrub) is present within the Alternative 7 overhead re-route Option 1. Option 2 follows the same route as Option 1 until the intersection of Siphon Road and Durfee Avenue, where Option 2 continues along Durfee Avenue before entering the existing 220-kV ROW at the border to the Whittier Narrows Recreation Area. Impacts to riparian vegetation would be similar to the proposed Project, but would be slightly less in magnitude in the Southern Region because of the decrease in ground disturbance associated with fewer 66-kV subtransmission structures in the existing ROW in Segment 7 and Segment 8A (Option 2). Option 1 would cross additional riparian areas outside of the existing ROW, but the acreage and location of disturbance is unknown at this time. The underground portions of this alternative would not impact desert wash or riparian habitats.

Because of the overall loss of desert wash and riparian habitat within California, along with the role these habitats play in providing suitable habitat for several special-status species, the loss of riparian habitat associated with Alternative 7 would be significant without mitigation. 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 would be 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 Northern and Central Regions. Alternative 7 includes one underground 66-kV subtransmission line segment along the proposed Project route in Segment 7, one underground 66-kV subtransmission line re-route along Segment 7, one overhead 66-kV re-route within the existing 220-kV ROW in Segment 7, and two 66-kV subtransmission line re-route options along Segment 8A that would be overhead construction. These re-routes would generally be within existing ROWs, except for the approximately 1,600-foot section of new ROW that would be required for the Segment 8A re-route Option 1 and the underground section of Segment 7 around the Whittier Narrows Recreation Area. The new ROW required for the Segment 8A re-route Option 1 would traverse an established population of giant reed (*Arundo donax*). In addition, all four re-routes would traverse areas supporting populations of various weed species. Because these re-routed segments would occur in areas that currently support weed populations, the potential for the spread of weeds into other less disturbed areas along the re-routes would be high. However, compared to the proposed Project as a whole, these impacted areas would marginally decrease the potential for the establishment and spread of noxious weeds in the Southern Region as a result of slightly decreased ground disturbance under this alternative. 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 would be 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.

Impacts to wildlife under Alternative 7 in the Northern and Central Regions would be identical to the proposed Project. In the Southern region, Alternative 7 includes one underground 66-kV subtransmission line segment along the proposed Project route in Segment 7, one underground 66-kV subtransmission line re-route along Segment 7, one overhead 66-kV re-route within the existing 220-kV ROW in Segment 7, and two 66-kV subtransmission line re-route options along Segment 8A that would be overhead construction. Three of the re-routes are in the vicinity of the Whittier Narrows Recreation Area. This area is contiguous with the San Gabriel River, which could provide a movement corridor from the San Gabriel Mountains and the Montebello and Puente Hills, which also constitute an east-west movement corridor across the southern San Gabriel Valley and into the Chino Hills and Cleveland National Forest to the southeast. Many species of wildlife utilize the Whittier Narrows Recreation Area as it is a pocket of open space within an otherwise urbanized environment. New access and spur roads could be required for the approximately 1,600-foot section of new ROW required for the Segment 8A re-route Option 1 under this alternative. As discussed for the proposed Project, wildlife, including reptiles and small mammals, may be subject to mortality by vehicles on new and existing access roads both during construction and during maintenance activities for the duration of operation of this alternative. Compared to the proposed Project, this alternative would result in similar, but marginally greater, impacts to wildlife under the Segment 8A overhead re-route Option 1. Option 2 follows city streets before entering the existing 220-kV ROW, but would require less ground disturbance as a result of fewer 66-kV structures in the existing ROW. 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 (Implement Construction Fugitive Dust Control Plan) would be implemented to reduce impacts to less than significant (Class II) and no additional mitigation measures would be required.

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

Impacts to birds and raptors under Alternative 7 in the Northern and Central Regions would be identical to the proposed Project. In the Southern region, Alternative 7 includes one underground 66-kV subtransmission line segment along the proposed Project route in Segment 7, one underground 66-kV subtransmission line re-route along Segment 7, one overhead 66-kV re-route within the existing 220-kV ROW in Segment 7, and two 66-kV subtransmission line re-route options along Segment 8A that would be overhead construction. Three of the re-routes are in the vicinity of the Whittier Narrows Recreation Area. The Whittier Narrows Recreation Area is a pocket of open space in an urbanized environment and includes riparian habitats, nonnative woodland, and coastal sage scrub. These communities commonly support breeding birds, including raptors. The proposed transmission line would occur along the same route as the proposed Project, and would impact the same habitats. The subtransmission line re-routes associated with Alternative 7 would constitute marginally greater impacts to habitats that could support breeding birds under the Segment 8A overhead re-route Option 1. However, under Option 2, less disturbance to areas that could support breeding birds would occur. If construction occurs during the breeding season for birds (generally February 1 through August 31 for raptors and March 15 through September 15 for other birds), impacts could include nest abandonment, failure to nest, and direct mortality of eggs and/or nestlings. With the exception of a few species, nesting birds are protected

under the Migratory Bird Treaty Act. Nesting birds are also offered protection by the CDFG and raptors (e.g., eagles, hawks, and owls) and their nests are protected under both federal and State law. 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 required to reduce impacts to nesting birds. Implementation of these mitigation measures would reduce impacts to less than significant (Class II). No additional mitigation measures would be required.

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

Impacts to wildlife foraging habitat under Alternative 7 would be the same as the proposed Project for the Northern and Central Regions. In the Southern Region, impacts would be marginally greater than the proposed Project due to the underground portion of Segment 7 that would go through the Duck Farm Project and the overhead Segment 8A re-route Option 1. Both of these components would impact potential foraging habitat for wildlife that would be in addition to the foraging habitat impacted by the proposed transmission line, which would follow the same route as the proposed Project. The underground portion of Segment 7 that would be placed outside of the Whittier Narrows Recreation Area would follow Durfee Avenue along primarily barren/developed lands. Impacts to foraging habitat for wildlife would be similar but marginally greater in magnitude than the proposed Project under the Segment 8A overhead re-route Option 1 and similar to the proposed Project under Option 2, with the exception of the small increase in ground disturbance at the underground segment in the Duck Farm. 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 would be 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) and would vary only in magnitude, as described below.

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

Potential habitat for Brand's phacelia and thread-leaved brodiaea may occur within the Alternative 7 overhead re-route options and this alternative would result in the incremental increase in the loss of habitat for, and potential disturbance to, these species. 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 Brand's phacelia and thread-leaved brodiaea and other endangered, threatened, and

proposed plant species, if present, to less-than-significant levels (Class II). No additional mitigation measures would be required.

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

The Alternative 7 re-routes would not occur in any areas that would support California red-legged frog or mountain yellow-legged frog populations. In the Alternative 7 project area, habitat for these species occurs only in the Central Region, where Alternative 7 is identical to the proposed Project. 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 and CHSP), 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 would be required to minimize impacts to these amphibians.

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

Suitable habitat for the arroyo toad does not occur in the re-routed portions of Alternative 7. In the Alternative 7 project area, habitat for this species occurs primarily in the Central Region where Alternative 7 is identical to the proposed Project. Therefore, impacts to arroyo toads 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 and CHSP), 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). 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 would be required to minimize impacts to arroyo toads.

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

Suitable habitat for the desert tortoise does not occur in the re-routed portions of Alternative 7. In the Alternative 7 project area, habitat for this species occurs only in the Northern Region where Alternative 7 is identical to the proposed Project. 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 would be required.

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

Suitable habitat for the desert tortoise does not occur in the re-routed portions of Alternative 7. In the Alternative 7 project area, habitat for this species occurs only in the Northern Region where Alternative 7 is identical to the proposed Project. Therefore, potential nest sites for common raven as a result of tower construction are not expected to change as a result of implementation of Alternative 7 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 would be less than significant (Class III).

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

Suitable habitat for special-status fish is very limited in the re-routed portions of Alternative 7, and this area is not within the known distribution of the Santa Ana sucker, Santa Ana speckled dace, or unarmored threespine stickleback. While historically these species were likely present in the watershed they are no longer expected to occur. The arroyo chub has some potential to occur as this species is widely distributed in the region. While there is some potential increase in indirect effects to waterways, the effects of this alternative would be largely the same as the proposed Project. With the exception of the arroyo chub, habitat for these species occurs only in the Central Region where Alternative 7 is identical to the proposed Project. 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), B-12 (Implement avoidance and minimization measures for Santa Ana sucker and other aquatic organisms) 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 B-8b (Conduct biological monitoring) would reduce these impacts to less than significant levels (Class II). Therefore, no additional mitigation measures would be required.

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

Critical habitat for the Santa Ana sucker does not occur in the re-routed portions of Alternative 7. In the Alternative 7 project area, critical habitat for the Santa Ana sucker occurs only in the Central Region where Alternative 7 is identical to the proposed Project. Therefore, impacts to critical habitat for the Santa Ana sucker 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), B-12 (Implement avoidance and minimization measures for Santa Ana sucker and other aquatic organisms) 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 B-8b (Conduct biological monitoring) would reduce these impacts to less than significant levels (Class II). Therefore, no additional mitigation measures would be required.

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

The California condor is not known to utilize the Alternative 7 project area in the vicinity of the three re-routes. However, flight paths are changing and there is the potential for this species to forage in this area in the future, although suitable nesting habitat is lacking. The Alternative 7 re-routes will not substantially reduce suitable habitat for the 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) would reduce impacts to this species, if present, to less-than-significant levels (Class II). Therefore, no additional mitigation measures would be 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.

There are no known southwestern willow flycatcher occurrences in the Alternative 7 alignment, and the Alternative 7 re-routes do not fall within critical habitat for willow flycatchers (USFWS, 2005d). However, the Alternative 7 re-routes, as well as portions of the proposed transmission line, are within the historical range of the species. Potentially suitable nesting habitat is present within the Whittier Narrows Recreation Area and the Alternative 7 re-route options to the Segment 8A 66-kV subtransmission line. The least Bell's vireo is known to nest along portions of Segment 8 and directly adjacent to Segment 7. Nesting least Bell's vireos have been confirmed at the Whittier Narrows Recreation Area and the Santa Fe Flood Control Basin. Marginally suitable habitat for the least Bell's vireo occurs along the Alternative 7 above-ground re-route Option 1 in Segment 8A. However, Alternative 7 would incrementally reduce impacts to the least Bell's vireo as a result of decreased ground disturbance in areas that could support this species. Both Segment 8A re-route options would constitute marginally less impact to least Bell's vireo, although route Option 1 would place the subtransmission line in marginal habitat and would therefore further reduce potential impacts to this species over route Option 2. The yellow-billed cuckoo is not known to currently nest along any portions of Alternative 7. However, Alternative 7 is within the historical range of the yellow-billed cuckoo, and marginally suitable nesting habitat is present in the Whittier Narrows Recreation Area, including the above-ground Segment 8A re-route; Whittier Narrows Nature Center; and the Rio Hondo. Therefore, impacts to special-status riparian birds would be marginally greater than those described for 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-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 would be required.

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

The coastal California gnatcatcher is known to nest within the Southern Region along Segments 7 and 8 in the Montebello Hills, Coyote Hills near Fullerton, and the Puente-Chino Hills. During focused surveys conducted in August 2007 through January 2008 for the proposed Project, gnatcatchers were detected in the Montebello Hills along Segment 8, at the Puente Hills Landfill near Segment 8, and just south of Turnbull Canyon Road along Segment 8. Approximately 14.9 acres of coastal sage scrub habitat occurs within the western portion of the above-ground Segment 8A 66-kV subtransmission line re-route options, which is suitable for coastal California gnatcatchers. Therefore, impacts to this species would be the same but marginally greater in magnitude than 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-16 (Conduct 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 would be 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 occurs in the Alternative 7 Segment 8A 66-kV subtransmission line re-route options, and marginally greater impacts to this species are associated with the alternative. Designated critical habitat occurs in the vicinity of the Whittier Narrows Recreation Area. An additional 1.15 miles of subtransmission line would be constructed within designated critical habitat under this alternative (Segment 8A overhead re-route Option 1). Under the Segment 8A overhead re-route Option 2, the subtransmission line would be in the existing 220-kV ROW where it traverses critical habitat in this area, but would have less ground disturbance in critical habitat than Alternative 2 as a result of a decrease in the number of 66-kV subtransmission line structures. Additionally, the coastal California gnatcatcher is known to nest within the Southern Region along Segments 7 and 8 in the Montebello Hills, Coyote Hills near Fullerton, and the Puente-Chino Hills. Suitable Coastal Sage Scrub habitat within the proposed Project also exists along the San Gabriel River within the Whittier Narrows Recreation Area and within the Segment 8A 66-kV re-route options of Alternative 7. Impacts to the coastal California gnatcatcher habitat would be marginally greater than those described for the proposed Project (Section 6.1) under this alternative with the Segment 8A overhead re-route Option 1, and would be marginally less under re-route Option 2. Impacts 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 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 would be required.

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

Suitable habitat for nesting Swainson's hawks does not occur in the re-routed portions of Alternative 7. In the Alternative 7 project area, this species is likely to nest only in the Northern Region where Alternative 7 is identical to the proposed Project. Therefore, impacts to nesting Swainson's hawks would be identical 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). No additional mitigation measures would be required.

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

As described under Impact B-18 above, suitable habitat for nesting Swainson's hawks does not occur in the re-routed portions of Alternative 7. In the Alternative 7 project area, this species is likely to occur only in the Northern Region where Alternative 7 is identical to the proposed Project. 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 would be required.

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

Among birds, raptors are the most susceptible to electrocution on transmission lines because of their larger size and tendency to perch on transmission poles and towers. The majority of raptor electrocutions are caused by lines that are energized at voltage levels between 1 kV and 69 kV, and "the likelihood of electrocutions occurring at voltages greater than 69 kV is extremely low" (APLIC 2006). Because implementation of Alternative 7 (Segment 8A Option 1) would introduce overhead 66-kV subtransmission lines in Segment 8A in an area that currently does not have active subtransmission lines, 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 two underground re-routes associated with this alternative would eliminate the potential for electrocution along the undergrounded portions of the line. Therefore, the number of electrocution events would still be insufficient to substantially reduce the number of State and/or federally protected bird species under Alternative 7. SCE would implement APMs BIO-4 and BIO-9 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 (Mitigation Measure B-19a, Construct to most current APLIC Guidelines). In addition, to comply with the ANF Forest Plan standards, Mitigation Measure B-19b (Raptor safety protection will be required on tower/conductor (lines) on NFS lands) would be implemented. Impacts to State and/or federally protected birds resulting from electrocution would be less than significant with implementation of APMs BIO-4 and BIO-9 (Class III) and no 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 7 would decrease the length of subtransmission lines along Segments 7 and 8 by a total of approximately 1.76 miles, the impacted area would be slightly smaller in size, and the potential for collisions with overhead wires by State and/or federally protected birds would be slightly lower. However, the overhead re-route Option 1 along Segment 8A would introduce subtransmission line conductors in a primarily riparian area that currently includes subtransmission towers but no conductors. This would marginally increase the potential for line strikes in this area. However, the number of collisions along this approximately 1.63-mile portion of subtransmission line is expected to be low. Therefore, the overall number of collision events with overhead wires would still 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) to reduce impacts to State and/or federally protected birds resulting from transmission line collisions. Line collisions as a result of Project 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 and subtransmission line collisions would be less than significant (Class II) and no additional mitigation is required.

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

Suitable habitat for the Mohave ground squirrel does not occur in the re-routed portions of Alternative 7. In the Alternative 7 project area, this species is likely to occur only in the Northern Region where Alternative 7 is identical to the proposed Project. 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 squirrel), and B-22c (Preserve off-site habitat for Mohave ground squirrel) would reduce impacts to less-than-significant levels (Class II). Therefore, no additional mitigation measures would be 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.

The re-routed portions of Alternative 7 contain habitat that could potentially support several special-status plant species, such as California androsace, Davidson's saltscale, and Parry's spineflower. Impacts to these and any other special-status plant species found to be present 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 B-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 would be implemented (Mitigation Measure B-1b, Implement a Worker Environmental Awareness Program) and dust control measures would also 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 would be required.

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

If pond turtles are present, damage or destruction of southwestern pond turtle nesting areas would constitute a significant impact under CEQA without mitigation. Nesting areas are frequently used by multiple individuals, and suitable nesting habitat can be limited in many areas. Destruction of southwestern pond turtle nesting areas would result in a substantial reduction in numbers of this rare species. Compared to the proposed Project, Alternative 7 (Segment 8A route Option 1) crosses near additional habitats that could potentially support pond turtles. Therefore, impacts to this species would be of the same type but of slightly greater magnitude 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 CHSP), 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 would be 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 7 (Segment 8A route Option 1) crosses near additional habitats that could potentially support two-striped garter snakes and south coast garter snakes. Therefore, impacts to these species would be of the same type but slightly greater in magnitude 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 CHSP), 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 would be required.

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

Suitable habitat for Coast Range newts does not occur in the re-routed portions of Alternative 7. In the Alternative 7 project area this species is likely to occur only in the Central Region and portions of the Southern Region where Alternative 7 is identical to the proposed Project. 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 would be 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 (special-status terrestrial herpetofauna).

Compared to the proposed Project, slightly more ground disturbance would occur under Alternative 7. Ground disturbance would occur along Durfee Avenue and within the Duck Farm Project as the 66-kV line would be placed underground in these locations. Additionally, new towers are required for the Segment 8A overhead re-route Options 1 and 2, and the construction of those towers would also create additional land disturbance. Several special-status terrestrial herpetofauna could be present within the Duck Farm Project underground and Segment 8A overhead re-routes, including silvery legless lizard, coast patch-nosed snake, San Bernardino ringneck snake, and San Diego horned lizard. The re-route along Durfee Avenue is in a primarily developed area and consequently would not be expected to support special-status terrestrial herpetofauna. Because implementation of Alternative 7 would slightly increase ground disturbance, impacts would be slightly larger in size and magnitude for several of the special-status terrestrial herpetofauna species, if present. 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).

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

Suitable habitat for wintering mountain plovers does not occur in the re-routed portions of Alternative 7. In the Alternative 7 project area, this species is likely to occur only in the Northern Region where Alternative 7 is identical to the proposed Project. Under the proposed Project, these impacts were found to be less than significant. Therefore, these impacts would not require mitigation. Impacts to wintering mountain plovers resulting from construction disturbance are considered less than significant (Class III) for Alternative 7. No additional mitigation measures would be required.

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

The re-routed portions of Alternative 7 traverse some suitable habitat for burrowing owl. Because implementation of Alternative 7 would slightly increase the ground disturbance associated with the Project, the impacted area would be slightly larger in size, and the loss of occupied burrowing owl habitat would potentially be slightly greater 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.

Suitable habitat for California spotted owl does not occur in the re-routed portions of Alternative 7. In the Alternative 7 project area, this species occurs only in the Central Region where Alternative 7 is identical to the proposed Project. 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 (Class II). Additional mitigation measures would not be required.

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

As described above under Impact B-29, suitable habitat for California spotted owl does not occur in the re-routed portions of Alternative 7. In the Alternative 7 project area, this species occurs only in the Central Region where Alternative 7 is identical to the proposed Project. Therefore, impacts to nesting California spotted owls 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 would be 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. Compared to the proposed Project, Alternative 7 Segment 8A reroute Option 1 would impact slightly more riparian, coastal sage scrub, and nonnative woodland habitats that could support nesting avian species of special concern. Route Option 2 would impact slightly more nonnative woodland and coastal sage scrub that could support nesting birds. Therefore, disturbance to these species 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 would be required.

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

Alternative 7 would include construction of an overhead 66-kV subtransmission line through additional coastal sage scrub, ruderal grassland, nonnative woodland (Segment 8A route Options 1 and 2), and various riparian habitats (Segment 8A route Option 1) compared to Alternative 2. All of these vegetation communities could potentially support special-status bat species. Therefore, 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 these re-route options, impacts to special-status bat species would be slightly less than those described for the proposed Project because of the reduction in 66-kV towers along Segment 7 in the Whittier Narrows Recreation Area. 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). Additional mitigation would not be required under this alternative.

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

As implementation of Alternative 7 would re-route subtransmission lines along Segments 7 and 8 underground by a total of approximately 1.76 miles, the impacted area would be slightly smaller in size, and the potential for collisions with overhead wires by special-status bat species would be slightly lower. However, the overhead re-route Option 1 along Segment 8A would introduce subtransmission line conductors in a primarily riparian area that currently includes subtransmission towers but no conductors. This would marginally increase the potential for line strikes in this area. Alternative 7 would potentially impact special-status bat species through the mortality of individuals from fatal strikes with transmission and subtransmission lines. 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. In addition, 954 kcmil AAC subtransmission line conductor has a diameter of approximately 1.12 inches, large enough for bats to detect through echolocation. Therefore, the number of fatal strikes is still expected to be quite low and insufficient to substantially reduce the number of these species, and impacts would be less than significant (Class III).

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

Suitable habitat for southern grasshopper mouse, San Diego black-tailed jackrabbit, and northwestern San Diego pocket mouse occurs within the re-routed portions of Alternative 7. Although the habitat impacted by implementation of Alternative 7 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 7 would be less than significant with mitigation incorporated (Class II).

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

Alternative 7 would not increase the likelihood of mortality to the San Diego desert woodrat as the species is not likely occur within the Alternative 7 re-routes due to a lack of suitable habitat. 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 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 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 would be required.

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

Marginal habitat for ringtails occurs in the Whittier Narrows Recreation Area in the vicinity of the Segment 8A overhead 66-kV subtransmission line re-route Option 1. This additional acreage of riparian habitat, compared to the proposed Project, would marginally increase the magnitude of impacts to ringtails, if present. In all other areas, impacts to ringtails 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 Alternative 7 impacts to ringtails to a less-than-significant level (Class II). No additional mitigation measures would be required.

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

Suitable grassland habitat for American badgers exists within the Segment 7 Duck Farm Project underground portion and the Segment 8A overhead re-route options of the 66-kV subtransmission line. The Segment 7 underground re-route along Durfee Avenue does not support suitable habitat for American badgers as it traverses primarily developed lands. The potential for mortality of American badgers along the re-routed portions of this alternative is small, as potential habitat acreages are small and fragmented. However, any potential mortality would be significant but 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 would be 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.

The above-ground Segment 8A re-route Option 1 would traverse riparian habitat near federally protected wetlands in the Whittier Narrows Recreation Area. Any loss of these habitats is significant. Implementation of this alternative may increase the potential to disturb wetland habitat. 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) would reduce the impacts to federally protected wetlands to less-than-significant levels (Class II). Therefore, no additional mitigation measures would be 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.

Alternative 7 would potentially impact migrating bird and bat species through interference with established migratory corridors as a result of fatal collisions with transmission and subtransmission lines. Because implementation of Alternative 7 (Options 1 and 2) would introduce 66-kV subtransmission lines in an area that currently does not support subtransmission lines, interference with bird and bat migratory corridors could be slightly greater in magnitude. However, the frequency of transmission line strikes is still expected to be extremely low. Therefore, implementation of Alternative 7 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 7 would introduce 66-kV subtransmission lines in an area that currently does not support subtransmission lines, this impact is potentially slightly greater in magnitude than the proposed Project. However, corona noise is not known to occur on subtransmission lines at levels that would cause disturbance. In addition, the two underground re-routes associated with this alternative would eliminate the potential for corona noise from the 66-kV subtransmission lines in the area of the Duck Farm Project and along Durfee Avenue in the City of South El Monte. Corona noise impacts associated with the transmission facilities that are proposed for this alternative would be identical to those described for the proposed Project. 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 7, and while Alternative 7 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 7 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.

In the Alternative 7 project area, MIS occur only in the Central Region (ANF) where Alternative 7 is identical to the proposed Project. Therefore, impacts to MIS would be exactly the same as the proposed Project (Section 6.1) and would require 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-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-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), AQ-1a (Implement Construction Fugitive Dust Control Plan), H-1a (Implement an Erosion Control Plan

and demonstrate compliance with water quality permits), and H-1b (Dry weather construction) to reduce impacts to less than significant (Class II). No further mitigation is 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 7 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. No additional policies or ordinances apply to the Alternative 7 re-routes. 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. Implementation of Alternative 7 will not affect the conservation goals of the WMPHCP differently than was described for the proposed Project because the re-routes associated with this alternative do not occur within the WMPHCP planning area. Therefore, no impact would occur.

11.2 Cumulative Effects Analysis

This section addresses potential cumulative effects that would occur as a result of implementation of Alternative 7 (66-kV Subtransmission Alternative). This alternative consists of an underground 66-kV subtransmission line segment through the Duck Farm Project along Segment 7, a brief underground re-route of the 66-kV subtransmission line along Durfee Avenue around the Whittier Narrows Recreation Area, an above-ground modification to the configuration of the 66-kV subtransmission line within Segment 7 in the Whittier Narrows Recreation Area, and two above-ground re-route options of the 66-kV subtransmission line in the vicinity of the Whittier Narrows Recreation Area and the San Gabriel River. The remainder of this alternative route and the transmission line components of this Alternative 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 7 route generally parallels the proposed Project route. As a result, this alternative traverses the same or similar habitat types as the portion of the proposed Project 66-kV subtransmission 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 7 to the proposed Project, this alternative's contribution to cumulative impacts would be identical to that of the proposed Project.

11.2.1 Geographic Extent

Alternative 7 only differs from the proposed Project for a very small portion of the proposed 66-kV subtransmission line route in the vicinity of the Whittier Narrows Recreation Area along Segments 7 and 8A and the Duck Farm Project along Segment 7. These areas are still encompassed by the geographic extent of the cumulative analysis defined for Alternative 2 in Section 6.2. Therefore, the geographic extent of the cumulative analysis for Alternative 7 is exactly the same as that for Alternative 2 and would include all of the Northern, Central, and Southern Regions.

11.2.2 Existing Cumulative Conditions

The existing cumulative conditions for Alternative 7 are exactly the same as for Alternative 2, as described in Section 6.2.

11.2.3 Reasonably Foreseeable Future Projects and Changes

Reasonably foreseeable future projects and changes to the cumulative scenario for Alternative 7 would be exactly the same as Alternative 2, described in Section 6.2.

11.2.4 Cumulative Impact Analysis

As described in Section 6.2, impacts associated with Alternative 7 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-routes of the proposed Project 66-kV subtransmission lines associated with Alternative 7 would not differ from the proposed Project's contribution to cumulative impacts and therefore, cumulative impacts of Alternative 7 would be exactly the same as cumulative impacts for Alternative 2.

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

Mitigation measures introduced for Alternative 7 in Section 11.1 (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.