

[FINAL]

Eldorado – Lugo – Mohave Series Capacitor Project

**Special-Status Plant Salvage
and Relocation Plan**

Prepared for
Southern California Edison

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Bureau of Land Management

National Park Service

California Public Utilities Commission

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Acronyms and Abbreviations

°F	Degrees Fahrenheit
BLM	Bureau of Land Management
CAISO	California Independent System Operator
CDFW	California Department of Fish and Wildlife
CESA	California Endangered Species Act
CEQA	California Environmental Quality Act
CMA	Conservation Management Action
CPUC	California Public Utilities Commission
CRPR	California Rare Plant Ranks
CYSRP	Cactus and Yucca Salvage and Relocation Plan
DRCEP	Desert Renewable Energy Conservation Plan
FESA	Federal Endangered Species Act
HRRP	Habitat Restoration and Revegetation Plan
kV	Kilovolt
MM	Mitigation Measure
NPS	National Park Service
OPGW Plan Project	Optical ground wire Special-Status Plant Salvage and Relocation Plan Eldorado-Lugo-Mohave Series Capacitor Project
ROW	Right-of-Way
SCE	Southern California Edison
SSPSRP	Special-Status Plant Salvage and Relocation Plan
TSP	Tubular steel poles
USFWS	U.S. Fish and Wildlife Service

1 Introduction

Southern California Edison (SCE) is proposing to construct two new mid-line series capacitors and make other improvements to increase capacity and power flow along three existing 500-kilovolt (kV) transmission lines under the Eldorado-Lugo-Mohave Series Capacitor Project (Project). This Special-Status Plant Salvage and Relocation Plan (SSPSRP or Plan) has primarily been prepared in response to mitigation measures required by authorizing agencies for the Project. The Plan prescribes methods and procedures to avoid impacts to special-status plants as defined by mitigation measures required by the Project's environmental permits, salvage special-status plants of appropriate species that cannot be avoided, either relocate those plants outside of work areas or maintain them in nurseries to be installed after construction during the restoration phase of the Project, and cultivate some special-status plants from seed that cannot be salvaged as mature plants. SCE and/or its designees or contractors will be responsible for carrying out the methods and procedures described in this Plan.

This Plan is based on surveys conducted during the Project's planning and permitting phase, and presents preliminary estimates of impacts and anticipated mitigation approaches. SCE intends to construct the Project in a manner that avoids these potential impacts to the extent feasible. A determination of the final impacts of the Project and associated mitigation will be made based on surveys and monitoring conducted during and after the construction phase, as described in this Plan.

1.1 Project Description

1.1.1 Project Purpose Statement

SCE is a public utility that provides electric service to a population of approximately 15 million people within an approximately 50,000-square-mile service area that encompasses 180 cities throughout Southern California. SCE's Project was approved by the California Independent System Operator (CAISO) following recommendations for approval as a policy-driven upgrade through the CAISO's Transmission Planning Process. As a policy-driven upgrade, the purpose of the Project is to integrate renewable generation and relieve area deliverability constraints. The capability of the existing infrastructure is limited by the existing series capacitors and terminal equipment and needs to be upgraded to meet the Project objectives by increasing the import capability of the existing transmission lines. These upgrades have been approved as CAISO policy-driven upgrades in the 2012-2013 and 2013-2014 Transmission Plans.

1.1.2 Project Overview

This Project will increase capacity and power flow between SCE's existing Eldorado, Lugo, and Mohave Substations to safely deliver renewable power to the Los Angeles Basin from the Eldorado and Mohave Substations. SCE's Proposed Project would:

- Construct 2 new 500 kV mid-line series capacitors (i.e., the proposed Newberry Springs Series Capacitor and Ludlow Series Capacitor) and associated equipment.
- Provide 2 communication paths between the series capacitor sites.

- Install approximately 2 miles of overhead and 700 feet of underground telecommunications facilities as one path to connect the proposed series capacitors to SCE's existing communication system.
- Install approximately 2 miles of underground telecommunications facilities as a second communication path to connect the series capacitors to SCE's existing communication system.
- Provide station light and power to the proposed series capacitors by extending and/or rerouting existing lines to create approximately 2 miles of overhead and 700 feet of underground 12 kV distribution circuits. (The new distribution poles would support overhead telecommunication facilities as well as the electric distribution lines.)
- Construct 3 new fiber optic repeater facilities (Barstow, Kelbaker, and Lanfair) within the Lugo-Mohave right-of-way (ROW).
- Install distribution lines for light and power at the 3 proposed fiber optic repeater sites.
- Install underground telecommunications facilities from existing transmission structures to the Barstow, Kelbaker, and Lanfair fiber optic repeater sites.
- Address 16 potential overhead clearance discrepancies at 14 locations by:
 - Relocating, replacing, or modifying existing transmission, subtransmission, and distribution facilities at approximately 12 locations along the Eldorado-Lugo, Eldorado-Mohave, and Lugo-Mohave 500 kV transmission lines to address 14 of the overhead clearance discrepancies. Tower modifications would include raising 9 towers up to approximately 18.5 feet by inserting new lattice-steel sections in tower bodies.
 - Performing minor grading at 2 locations along the Lugo-Mohave 500 kV transmission line to address 2 of the overhead clearance discrepancies.
- Install approximately 232 miles of optical ground wire (OPGW) (approximately 59 miles on the Eldorado-Mohave transmission line and approximately 173 miles on the Lugo-Mohave transmission line and approximately 3 miles of underground telecommunications facilities in the vicinity of the Mohave Substation).
- Modify and strengthen the ground wire peak of existing suspension towers where OPGW splices would occur. (Some of these towers would also require minor modifications to the steel in the tower body.)
- Install approximately 2,000 feet of underground telecommunications facilities within the existing Lugo, Mohave, and Eldorado substations.
- Within Lugo Substation, perform modifications on the existing series capacitors and install new terminating equipment and remove 2 existing tubular steel poles (TSP) and install 2 new TSPs on the Eldorado-Lugo and Lugo-Mohave 500 kV transmission lines.
- Within the Eldorado Substation, perform modifications on the existing series capacitors and upgrade the terminal equipment on the Eldorado-Lugo 500 kV transmission line.
- Within the Mohave Substation, replace existing series capacitors on the Lugo-Mohave 500 kV transmission line and install new terminal equipment on the Eldorado-Mohave and Lugo-Mohave 500 kV transmission lines.

- Install (if necessary) cathodic protection on approximately 60 miles of SoCalGas’s natural gas pipelines parallel to SCE’s Lugo-Mohave 500 kV transmission line and on other pipelines as needed.

1.2 Lead, Cooperating, and Consulting Agencies

1.2.1 Lead Agencies

Lead agencies have discretionary approval over the Project and are responsible for reviewing aspects of the measures documented in this Plan. The California Public Utilities Commission (CPUC) is California’s lead agency responsible for compliance with the California Environmental Quality Act (CEQA) for Project areas on non-federal lands. The CPUC issued an Initial Study/Mitigated Negative Declaration for the Project under CEQA. The Bureau of Land Management (BLM) Desert District Office is the federal lead agency responsible for compliance with National Environmental Policy Act (NEPA) for the Project areas on federal lands.

1.2.2 Cooperating Agencies

Because the Project also crosses the Mojave National Preserve, the National Park Service (NPS) elected to participate as a Cooperating Agency for the environmental review of the Project. Although the existing transmission lines associated with the Project also cross lands administered by the Bureau of Reclamation and the Department of Defense, the NPS represents the only federal cooperating agency at this time.

1.2.3 Consulting Agencies

Consulting agencies are public agencies, other than the lead agencies, that may provide guidance or information needed to satisfy the requirements of the measures contained in this Plan. Consulting agencies for select mitigation measures listed in Table 1 include U.S. Fish and Wildlife Service (USFWS), California Department of Fish and Wildlife (CDFW), and Nevada Department of Wildlife.

1.3 Regulatory Setting

There are a number of federal and state regulations and policies that address protection and management of native plants, including cacti and yuccas. The applicable regulations and permits are summarized below along with the applicable Environmental document(s) Mitigation Measures, which together provide the regulatory framework within which Project activities must comply.

1.3.1 Federal Regulations

1.3.1.1 National Environmental Policy Act

Title I of NEPA (42 United States Code Section 4321) requires federal agencies to incorporate environmental considerations in their planning and decision-making processes. Federal agencies are to prepare detailed statements, Environmental Impact Statements and Environmental Assessments, assessing the environmental impact of and alternatives to federal actions with the potential to significantly affecting the environment. Title II of NEPA established the Council on Environmental Quality (40 Code of Federal Regulations Parts 1500-1508) to oversee NEPA implementation by ensuring that federal agencies meet their obligations under NEPA, overseeing federal agency implementation of the

environmental impact assessment process, and issuing regulations and other guidance to federal agencies regarding NEPA compliance.

The BLM, with the NPS as a federal cooperating agency, analyzed the Project's impacts under NEPA through an Environmental Assessment and issued a Finding of No Significant Impact. This analysis included documentation of how the Project would comply with BLM and NPS land management planning, and included mitigation measures that would address potential impacts of the Project and ensure that impacts would be less than significant.

1.3.1.2 Endangered Species Act

The federal Endangered Species Act (FESA) and its subsequent amendments provide guidance for the conservation of endangered and threatened species and the ecosystems upon which they depend. FESA Section 9 lists activities that are prohibited by the act. For example, "take" of any listed species is prohibited. Take under FESA is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct. No plant species listed under the FESA are known to occur in the Project area.

1.3.1.3 Bureau of Land Management Special Status Species Policy

The BLM's Manual 6840 – Special-Status Species Management sets policies for managing species listed under the FESA and species proposed or candidates for listing. Manual 6840 also requires that each State Office director designate BLM sensitive species, which are defined, in summary, as species with the potential to eventually require listing under FESA that may also be affected by BLM actions. Consideration of BLM Sensitive species in agency decisions and land management actions has the potential to preclude the need for eventual FESA listing.

1.3.2 State of California Regulations

1.3.2.1 California Environmental Quality Act

The CEQA (Public Resources Code Section 15000, et seq.) requires identification of significant environmental effects of proposed projects (including impacts on biological resources) and avoidance (where feasible) or mitigation of the significant effects. CEQA applies to "projects" proposed to be undertaken or requiring approval by state and/or local governmental agencies. "Projects" are activities that have the potential to have a physical impact on the environment. For this Project, an Initial Study was conducted pursuant to Section 15063 of the CEQA Guidelines (Sections 15000–15387 of the California Code of Regulations), and it resulted with a Mitigated Negative Declaration.

1.3.2.2 California Fish and Game Code

California Endangered Species Act

The California Endangered Species Act (CESA) establishes the policy of the state to conserve, protect, restore, and enhance threatened or endangered species and their habitats. It generally prohibits the take of any species that the California Fish and Game Commission determines to be a threatened or endangered species and is administered by the CDFW, but permits may be issued for take under some circumstances. The CESA also mandates that state agencies should not approve projects that would

jeopardize the continued existence of threatened or endangered species if reasonable and prudent alternatives are available that would avoid jeopardy.

1.3.2.3 California Native Plant Protection Act

The California Fish and Wildlife Commission has designated certain native plants as endangered or rare under the Native Plant Protection Act of 1977 (FGC Sections 1900–1913). Section 1913B provides that the obligation of public utilities to provide service is not restricted by Section 1900 to 1912.

Qualifying species listed as endangered or rare include those identified by the California Native Plant Society (CNPS) through the California Rare Plant Ranks (CRPR) 1A, 1B, and 2. Plants with CRPRs of 3 and 4 are not provided automatic legal protection but may be given case-by-case protections under CEQA. CRPR definitions are as follows:

- 1A: Plants presumed to be extinct because they have not been seen or collected in the wild in California for many years. This rank includes plants that are both presumed extinct in California, as well as those plants that are presumed extirpated in California. A plant is extinct in California if it no longer occurs in or outside of California. A plant that is extirpated from California has been eliminated from California, but may still occur elsewhere in its range.
- 1B: Plants that are rare throughout their range with the majority of them endemic to California. Most of the plants of RPR 1B have declined significantly over the last century.
- 2A: Plants presumed extirpated in California but common elsewhere.
- 2B: Plants rare, threatened, or endangered in California but more common elsewhere. Together, RPR 2A and 2B recognize the importance of protecting the geographic range of widespread species.
- 3: A review list for plants for which there is inadequate information to assign them to one of the other lists or to reject them.
- 4: A watch list for plants that are of limited distribution or infrequent throughout a broader area in California and their vulnerability or susceptibility to threat appears relatively low at this time.

1.3.3 State of Nevada Regulations

1.3.3.1 Nevada Revised Statutes

Chapter 527 (Protection and Preservation of Timbered Lands, Trees, and Flora)

Nevada Revised Statutes 527.050 provides requirements related to the destruction and removal of native plants on private lands without permission, and 527.060 provides requirements related to tagging of cacti and yuccas that are transported off of the originating property. Nevada Revised Statutes 527.270 authorizes the State Forester Firewarden to list plants threatened with extinction as fully protected.

1.4 Measures and Conditions from Environmental Documents and Permits

The mitigation measures addressed in this Plan are listed in Table 1. Implementation of these measures is a commitment of the Applicant.

Table 1 Mitigation Measures and Conservation Measures Addressed	
Measure	Description
CPUC Mitigation Measures	
CPUC BR-6	<p>Minimize and mitigate impacts to special-status plants. [Supersedes APM BIO-02.]</p> <p>Pre-construction survey. SCE shall conduct focused pre-construction surveys for federal- and state-listed and other special-status plants within suitable habitat. All special-status plant species (including listed threatened or endangered species, and CNPS California Rare Plant Rank (CRPR) 1 and 2 ranked species likely to be impacted by project activities shall be documented in pre-construction survey reports. Surveys shall be conducted by a qualified botanist during the appropriate season in all suitable habitat within 50 feet of disturbance areas. The field surveys and reporting must conform to current CDFW botanical field survey protocol (CDFG 2018). Where any special-status plants may be discovered, the survey area will extend beyond the ROW to determine the extent of the local occurrence, to evaluate the significance of any project impacts. The reports will describe any conditions that may have prevented target species from being located or identified, even if they are present as dormant seed or below-ground rootstock. If pre-construction survey areas conducted in years of poor rainfall or following other extreme events (e.g., recent intense overgrazing or wildfire), then the project shall use data from 2016/2017 and 2019 surveys to define population area and maximum number of individuals (Note, the unusually high rainfall in 2017 and 2019 are likely to better define rare plant locations and have more accurate results than subsequent years with lower rainfall). For species not previously detected on surveys but for which have a high potential to occur, reference populations will be used to determine if the species is detectable for pre-construction surveys conducted in suitable habitat. Prior to initial ground disturbance at individual construction work areas, SCE shall submit pre-construction field survey reports along with maps showing locations of survey areas and special-status plants to the CPUC and BLM for review and approval in coordination with CDFW.</p> <p>Native cactus and Yucca. Most native cactus and shrubby <i>Yucca</i> species (Joshua tree and Mohave yucca) can be successfully salvaged and transplanted, and yuccas often provide an important vertical component to wildlife habitat. Therefore, native cactus (excluding chollas in the genus <i>Cylindropuntia</i>) and yuccas (including Joshua trees, <i>Y. brevifolia</i>), shall be avoided or salvaged as follows:</p> <p>SCE will prepare and implement a cacti and yucca salvage plan. The goal shall be maximum practicable survivorship of salvaged plants. The Plan will include at minimum: (a) species and locations of plants identified for salvage; (b) criteria for determining whether an individual plant is appropriate for salvage; (c) the appropriate season for salvage; (d) equipment and methods for collection, transport, and re-planting plants or seed banks, to retain intact soil conditions and maximize success; (e) a requirement to mark each plant to identify the north-facing side prior to transport, and replant it in the same orientation; (f) details regarding storage of plants or seed banks for each species; (g) location of the proposed recipient site, and detailed site preparation and plant introduction techniques for top soil storage, as applicable; (h) a description of the irrigation, weed control, and other maintenance activities; (i) success criteria, including specific timeframe for survivorship and reproduction of each species; and (j) a detailed monitoring program, commensurate with the Plan's goals.</p> <p>Mitigation. SCE shall mitigate impacts to any state or federally listed plants or CRPR 1 or Nevada ranked S1, S2, or S3 species that may be located on the project disturbance areas or surrounding buffer areas through one or a combination of the following strategies.</p>

Table 1 Mitigation Measures and Conservation Measures Addressed	
Measure	Description
CPUC Mitigation Measures	
	<p>Additionally, impacts to CRPR 2 ranked plants occurring in California will be similarly mitigated.</p> <p>Avoidance of special-status plants will be the preferred strategy wherever feasible. Where avoidance is not feasible, and the project would directly or indirectly affect more than 10 percent of a local occurrence,¹ by either number of plants (shrubs and trees) or extent of occupied habitat (annuals or perennial herbs), SCE shall prepare and implement a mitigation plan to consist of off-site compensation, salvage, horticultural propagation/off-site introduction, or a combination of these.</p> <ul style="list-style-type: none"> • Avoidance. Work areas shall be located to avoid or minimize impacts to special-status plants to the greatest extent possible. Effective avoidance through project design shall include a buffer area surrounding each avoided occurrence, where no project activities will take place. The buffer area will be clearly staked, flagged, and signed for avoidance prior to the beginning of ground-disturbing activities, and maintained throughout the construction phase. At minimum, the buffer for shrub species shall be equal to twice the drip line (i.e., two times the distance from the trunk to the canopy edge) to protect and preserve the root systems. The buffer for herbaceous species shall be a minimum of 50 feet from the perimeter of the occupied habitat or the individual(s). However, for locations in the mountains, a larger buffer may need to be applied to shrub and herbaceous species if the construction monitors determine there is a risk of indirect effects from erosion or inundation. If a smaller buffer is necessary due to other project constraints, SCE will develop and implement site-specific monitoring and put other measures in place to avoid the take of the species, with the approval of the CPUC and BLM, in coordination with CDFW. • Off-site compensation. SCE shall provide compensation lands consisting of habitat occupied by the impacted CRPR 1 or 2 ranked plant populations at a 1:1 ratio of acreage and number of plants for any occupied habitat directly impacted (whether temporary or permanent) by the project. Occupied habitat will be calculated on the project site and on the compensation lands as including each special-status plant occurrence and a surrounding 50-foot buffer area. If compensation is selected as a means of mitigating special-status plant impacts, it may be accomplished by purchasing credit in an established mitigation bank, acquiring conservation easements, or direct purchase and preservation of compensation lands. Compensation for these impacts may be “nested” or “layered” with compensation for habitat loss described in Mitigation Measure BR-8. • Salvage. SCE shall consult with a qualified restoration ecologist or horticulturist regarding the feasibility and likely success of salvage efforts for each species. If salvage is deemed to be feasible, based on prior success with similar species, then SCE shall prepare and implement a Special-status Plant Salvage and Relocation Plan, to be reviewed and approved by the CPUC and BLM, in consultation with CDFW and USFWS, prior to direct or indirect disturbance of any occupied habitat. For special-status plants, excluding cacti and Yuccas (see above), the goal shall be to improve existing

¹An occurrence for a plant is defined as any population or group of nearby populations located more than 0.25 miles from any other population (CDFW 2009).

Table 1 Mitigation Measures and Conservation Measures Addressed	
Measure	Description
CPUC Mitigation Measures	
	<p>populations or establish new populations. For cacti and yuccas, the goal shall be maximum practicable survivorship of salvaged plants. The Plan will include at minimum: (a) species and locations of plants identified for salvage; (b) criteria for determining whether an individual plant is appropriate for salvage; (c) the appropriate season for salvage; (d) equipment and methods for collection, transport, and re-planting plants or seed banks, to retain intact soil conditions and maximize success; (e) for shrubs, cacti, and yucca, a requirement to mark each plant to identify the north-facing side prior to transport, and replant it in the same orientation; (f) details regarding storage of plants or seed banks for each species; (g) location of the proposed recipient site, and detailed site preparation and plant introduction techniques for top soil storage, as applicable; (h) a description of the irrigation, weed control, and other maintenance activities; (i) success criteria, including specific timeframe for survivorship and reproduction of each species; and (j) a detailed monitoring program, commensurate with the Plan’s goals.</p> <p>Annual monitoring reports shall be submitted to CPUC and BLM for five years or until the relocation effort is deemed successful on agreement of SCE and the CPUC. Reports shall include, but not be limited to, details of plants salvaged, stored, and transplanted (salvage and transplanting locations, species, number, size, condition, etc.); adaptive management efforts implemented (date, location, type of treatment, results, etc.); and evaluation of success of transplantation.</p> <ul style="list-style-type: none"> • Horticultural propagation and off-site introduction. If salvage and relocation is not believed feasible for special-status plants, then SCE shall consult with a qualified entity to develop an appropriate experimental propagation and relocation strategy, based on the life history of the species affected. The Plan will include at minimum: (a) collection and salvage measures for plant materials (e.g., cuttings), seed, or seed banks, to maximize success likelihood; (b) details regarding storage of plant, plant materials, or seed banks; (c) location of the proposed propagation facility, and proposed methods; (d); time of year that the salvage and other practices will occur; (e) success criteria; and (f) a detailed monitoring program, commensurate with the Plan’s goals.
NPS Mitigation Measures	
Unnumbered Measure	<ul style="list-style-type: none"> • Special-status Plants. Locations of any special-status plants shall be flagged and avoided as possible and monitored by a qualified biologist during construction. Dust control measures will also be implemented to minimize fugitive dust impacts on plants. See LUPA-BIO-7/13, LUPA-BIO-PLANT2/3, and CONS-BIO-PLANT-1 (BLM Mitigation BR-2).
BLM Mitigation Measures	
BR-2	Locations of any special-status plants shall be flagged and avoided as possible, and monitored by a qualified biologist during construction. Dust control measures will also be implemented to minimize fugitive dust impacts on plants. A Special Status Plant Salvage Plan and Relocation Plan will be prepared and implemented. See LUPA-BIO-7/13, LUPA-BIO-PLANT2/3, and CONS-BIO-PLANT-1.

1.5 Applicability of Mitigation Measures

1.5.1 Timing

The measures described in this Plan and listed in Table 1 are applicable for the following periods of the Project, as shown in Table 2.

Table 2 Timing of Mitigation Measure Applicability			
Measure	Period		
	Preconstruction (Mobilization)	During Construction (Active)	Post-construction (Restoration) ¹
CPUC BR-6	☒	☒	☒
NPS Unnumbered	☒	☒	☒
MM BR-2	☒	☒	☒
NOTE: ¹ Restoration will be conducted in accordance with the Habitat Restoration and Revegetation Plan (HRRP) prepared for the Project under a different title.			

1.5.2 Location

This Plan applies to the entire Project area, although BLM and NPS mitigation measures will only be implemented within each agency's respective federal jurisdiction.

1.5.3 Species

Table 1 provides definitions of special-status plants used in this SSPSRP. CPUC MM BR-6 defines special-status plants as "including listed threatened or endangered species and CNPS California Rare Plant Rank (CRPR) 1 and 2 ranked species". BLM MM BR-2 does not provide a further definition, but plants listed as Sensitive by the BLM in California or Nevada are assumed to be considered special-status by the BLM.

The Cactus and Yucca Salvage and Relocation Plan (CYSRP) and SSPSRP are complementary to each other and both required by CPUC MM BR-6 and have been prepared to avoid redundancy and overlap in specific mitigation actions. All cacti and yuccas within the Project area are addressed in the CYSRP.

1.6 Plan Goals and Objectives

The goal is to minimize the Project's impacts to special-status plants by effectively implementing mitigation measures listed in Section 1.4. The objective of this Plan is to provide information that will support the Project's construction personnel and the salvage and revegetation contractor in avoiding special-status plants where possible, and in achieving maximum survivorship of plants that must be salvaged or cultivated.

2 Biological Baseline

2.1 Project Habitat Description

The existing transmission lines associated with the Project transect the Mojave Desert Geomorphic Province. The elevation of the Project ranges from 780 feet near Mohave Substation to 4,000 feet above

mean sea level at various points. Between 1981 and 2010, rainfall records from the nearest climatological station to Eldorado Substation show an average annual rainfall of approximately 4.9 inches. Between 1981 and 2010, the average annual high temperature was approximately 80.1 degrees Fahrenheit (°F) and the average annual low temperature was 58.7°F.

The Project is within the Southern Mojave and Piute Wash Hydrological Units. With the exception of the Mojave River and several smaller intermittent streams, streams consist almost exclusively of ephemeral dry washes that only hold water for a short period of time as the result of seasonal precipitation. Major drainages crossed by the Project include the Mojave River, Budweiser Wash, and Piute Wash. Within the vicinity of the Lugo Substation, water generally flows from south to northeast, toward the Mojave River, and from there to closed basins in the interior of the Mojave. Near the Mohave Substation, water flows from west to east, toward the Colorado River. The Colorado River eventually empties to the Gulf of California, south of the U.S.-Mexico border. In the vicinity of the Eldorado Substation, water generally flows from southwest to northeast and into the Eldorado Dry Lake, a closed basin.

2.2 Special-status Plant Special-Status Plant Survey Summary

Surveys of a biological study area encompassing the entire Project area and a variable buffer were completed during the Project’s planning and permitting process (Insignia Environmental 2017, 2020). Table 3 lists the dates that special-status plant surveys were conducted as well as the survey areas. The purpose of these surveys was to document vegetation alliances within areas that would be affected by the Project, and to document the presence or potential presence of special-status plant species. Detailed descriptions of vegetation alliances are presented in those reports.

Table 3 Summary of Special-Status Plant Surveys	
Survey Period	Survey Area
Spring 2016	Project design as of 2016, variable buffer
Spring 2017	Modifications to Project design since spring 2016, variable buffer
Fall 2017	Project design as of 2017, variable buffer
Spring 2019	Project design as of 2019, 50-foot buffer

Survey methods are described in detail in reports prepared after the special-status plant surveys (Insignia Environmental 2017, 2020). Surveyors recorded individual plants or clusters of plants less than 10 feet wide as points with the plant count as an attribute and recorded polygons for clusters of plants more than 10 feet wide with the real or estimated plant count as an attribute. These reports also discussed the potential presence of other special status plants that were not detected in any surveys, but are known to be present near the Project based on existing records.

Eighteen species of special-status plants were recorded during the 2016, 2017, and 2019 surveys (Table 4). Several of these species were only found within the variable survey buffer and were not recorded within any Project features. During the 2019 surveys, botanists determined that Clokey’s cryptantha found within the survey buffer may have been previously misidentified (Insignia Environmental 2020). At least one record for the species was reported by the California Natural Diversity Database and is acknowledged in the Project’s Biological Resources Technical Report (Insignia Environmental 2018). Although additional information may be developed as a result of surveys during construction, this information represents the current known baseline conditions for special-status plants.

Table 4. Summary of Special-Status Plant Survey Results							
Common Name	Scientific Name	Status	Survey Period Detections				Notes
			Spring 2016	Spring 2017	Fall 2017	Spring 2019	
Appressed Muhly	<i>Muhlenbergia appressa</i>	CRPR 2B.2	X			X	All recorded plants outside Project features.
Clokey's Cryptantha	<i>Cryptantha clokeyi</i>	CRPR 1B.2, BLMS	X				All recorded plants outside Project features.
Coves' Cassia	<i>Senna covesii</i>	CRPR 2B.2				X	All recorded plants outside Project features.
Johnson's Beehive Cactus	<i>Sclerocactus johnsonii</i>	CRPR 2B.2	X				All recorded plants outside Project features. Addressed in CYSRP.
Western Joshua Tree	<i>Yucca brevifolia</i>	CESA Candidate, BLMS	X	X	X	X	Present within Project features. Addressed in CYSRP.
Mojave Menodora	<i>Menodora spinescens var. mohavensis</i>	CRPR 1B.2, BLMS	X	X	X	X	Present within Project features.
Mojave Milkweed	<i>Asclepias nyctaginifolia</i>	CRPR 2B.1				X	All recorded plants outside Project features.
Narrow-leafed Yerba Santa	<i>Eriodictyon angustifolium</i>	CRPR 2B.3	X				All recorded plants outside Project features.
Parish's Club Cholla	<i>Grusonia parishii</i>	CRPR 2B.2	X				Present within Project features. Addressed in CYSRP.
Playa Milkvetch	<i>Astragalus allochrous var. playanus</i>	CRPR 2B.2	X				All recorded plants outside Project features.
Pink Funnel Lily	<i>Androstephium breviflorum</i>	CRPR 2B.2		X		X	Present within Project features.
Rosy Two-toned Beardtongue	<i>Penstemon bicolor ssp. roseus</i>	CRPR 1B.2, BLMS	X			X	All recorded plants outside Project features.
Rough Menodora	<i>Menodora scabra var. scabra</i>	CRPR 2B.3				X	All recorded plants outside Project features.
Rusby's Desert Mallow	<i>Sphaeralcea rusbyi</i>	CRPR 1B.2, BLMS	X			X	Present within Project features.
Salina Pass Wild-Rye	<i>Elymus salina</i>	CRPR 2B.3	X				All recorded plants outside Project features.
Short-jointed Beavertail	<i>Opuntia basilaris var. brachyclada</i>	CRPR 1B.2, BLMS	X			X	All recorded plants outside Project features. Addressed in CYSRP.
Slender Cottonheads	<i>Nemacaulis denudata var. gracilis</i>	CRPR 2B.2	X			X	All recorded plants outside Project features.
Spiny Cliff-Brake	<i>Pellaea truncata</i>	CRPR 2B.3	X				All recorded plants outside Project features.
Spinyhair Blazingstar	<i>Mentzelia tricuspis</i>	CRPR 2B.1				X	Present within Project features.

3 Impact Analysis Process

For the purposes of the SSPSRP, critical information includes the number of plants that would be affected by Project activities relative to the total number of plants present in a single occurrence. CPUC MM BR-6 defines an “occurrence” of a special-status plant as all individuals of that species separated by at least 0.25 miles from other individuals of the species. CPUC MM BR-6 further requires that mitigation be implemented if more than 10 percent of an occurrence would be affected by Project activities.

Additionally, the BLM Environmental Assessment was approved in consideration of Conservation Management Actions (CMA) for actions authorized under the Desert Renewable Energy Conservation Plan (DRECP). These CMAs require consideration of special-status plants, with goals to authorize disturbance to no more than 1 percent of modeled suitable habitat for special-status plants across the entire area covered by the DRECP. The SSPSRP will aid in reducing and avoiding impacts to special-status plants but is not intended to provide an analysis of DRECP-wide impacts.

Determinations on the extent of an occurrence, according to MM BR-6, should be based on information developed from surveys conducted in the appropriate season immediately prior to construction, if possible. When the Project schedule does not allow those surveys to be conducted, impact determinations should be made based on the prior survey data.

The surveys conducted by Insignia Environmental were conducted to support the environmental impacts analysis for the Project’s permitting process, rather than to detect and record all individuals within 0.25 miles of their initial survey area. When a patch of occupied habitat was found, the surveyors attempted to delineate the boundaries of the patch near the survey area, but the survey never attempted to extend 0.25 miles beyond the observed occupied habitat. Thus, estimates of the percentage of an occurrence affected by the Project based on the Insignia Environmental survey data are likely to be an overestimate, and do not directly allow accurate mapping of the true extent of each occurrence.

To achieve the most accurate determination of whether the Project’s impacts exceed the 10 percent threshold requiring mitigation, the following process will be followed and adapted as needed to the Project’s construction schedule. First, preconstruction surveys for work areas in or near (within 0.25 miles) occupied special-status plant habitat will be conducted during the growing season. Surveys will be planned to address work areas scheduled for construction before the next growing season. Surveyors will record special-status plants within the work area, then survey outward up to 0.25 miles or until the determination can be made that less than 10 percent of the occurrence would be affected (i.e., at least 9 times as many plants are found outside the work area within 0.25 miles). SCE will review the survey results and determine which plants can be avoided or preserved in place to further reduce impacts. After the process of determining avoidance, a final assessment of impacts and required mitigation will be made. If mitigation is required, it will follow the species-specific processes in this Plan.

If construction proceeds at specific locations on a schedule that precludes seasonally appropriate surveys, mitigation determinations will be based on the 2016 through 2019 survey data. SCE may choose to conduct surveys after construction within 0.25 miles of those Project features to provide an updated mitigation determination, based on the percentage of plants assumed to have been lost to construction within the newly surveyed occurrence as a whole.

4 Avoidance, Minimization, and Salvage

4.1 Focused Preconstruction Surveys

The surveys conducted by Insignia Environmental were conducted to support the environmental impacts analysis for the Project's permitting process, rather than to detect and record all individual special-status plants within 0.25 miles of their initial survey area. When a patch of occupied habitat was found, the surveyors attempted to delineate the boundaries of the patch near the survey area, but the survey never attempted to extend 0.25 miles beyond the observed occupied habitat. Thus, estimates of the percentage of an occurrence affected by the Project based on the Insignia Environmental survey data are likely to be an overestimate, and do not directly allow accurate mapping of the true extent of each occurrence.

Therefore, prior to the start of construction at each Project component or site in or near occupied special-status plant habitat, focused preconstruction surveys will be conducted during the appropriate seasons to verify and update mapping of the special-status plant occurrences in the Project area. The survey data will inform an impacts analysis that will be conducted to determine if, after considering avoidance of individual plants, the Project will impact greater than 10 percent of the local occurrence. Section 4.2 addresses the approach required if the construction schedule does not allow for focused preconstruction surveys during the appropriate floristic period. Note that for some species such as perennial shrubs, surveys may be appropriate year-round.

4.2 Impact Analysis

CPUC MM BR-6 defines an "occurrence" of a special-status plant as all individuals of that species separated by at least 0.25 miles from other individuals of the species. MM BR-6 further requires that mitigation be implemented if more than 10 percent of an occurrence would be affected by Project activities.

Following the focused preconstruction or postconstruction surveys, a GIS analysis will be conducted to determine the extent of the Project impacts to any given special-status plant occurrence (as defined above) based on the Project design. If construction proceeds at specific locations on a schedule that precludes seasonally appropriate surveys, mitigation determinations will be based on the 2016 through 2019 survey data or postconstruction surveys. The data will inform avoidance efforts and, if the impacts are expected to exceed the 10 percent threshold, will be the basis for the mitigation determinations.

4.3 Avoidance

The initial step of construction involves preparation of each work area for use. This would include any grading or recontouring (when drive-and-crush is not feasible), removal of obstacles, and salvage of natural materials to be used in restoration or revegetation of the site. Use of drive-and-crush travel rather than blading may still result in damage or destruction of plants but is more likely to allow avoidance of some individuals and preserve an intact seed bank when compared to graded sites.

Prior to the initiation of ground-disturbing activities, the sites where impacts to special-status plant occurrences could occur will be evaluated for impact avoidance. In some cases, the designed work areas may be modified to avoid the plants or portions of the plant population. Where feasible, the work areas will be redefined in the Project data and a follow-up impact analysis will be conducted to determine if the

impact avoidance effort successfully reduced the overall impacts to less than 10 percent of the local occurrence.

Where impacts are not completely avoidable and regardless of whether or not the threshold has been met, a plant salvage contractor will work with construction personnel to determine which special-status plants can be preserved in place and avoided to the extent possible, and those plants will be flagged or staked if appropriate to ensure avoidance by construction activities.

Where impacts to occurrences exceed the 10 percent threshold, plants that cannot be preserved in place will be assessed for mitigation actions. Plants will be salvaged if appropriate for the species and if the individual is salvageable (e.g., in good health and without physical barriers to salvage such as growth in bedrock). Seed may be collected, particularly from plants that cannot be salvaged. Once a determination has been made whether individual plants can be avoided or salvaged, a count of the plants remaining within disturbance areas and likely to be damaged or destroyed will be recorded.

4.4 Salvage and Cultivation Methods

Not all species of special-status plants can be effectively salvaged as mature plants. Annual plants, tuberous plants with only seasonal above-ground growth, and plants growing in bedrock are examples of cases where mitigation approaches will require methods other than direct salvage. Table 5 provides a summary of the growth form and flowering season for each species (Insignia Environmental 2017, 2020). Section 4.4 provides detail on the implementation of mitigation methods in response to the growth forms of special-status plant species. In general, including for species not detected by previous surveys, the following approaches will be used for each growth form of special-status plant:

- Annual herb: Salvage seeds for use in restoration.
- Perennial herb: Salvage seeds for use in restoration.
- Perennial shrub: Salvage individual plants if possible. Salvage seeds for cultivation and transplant.
- Perennial bulb: Salvage bulbs for transplant if possible. Salvage seeds for use in restoration.
- Cacti and yuccas: Refer to CYSRP.

Species	Flowering Season	Growth Form
Appressed Muhly	April to May	Annual herb (grass)
Clokey's Cryptantha	April to May	Annual herb
Coves' Cassia	March to April	Perennial herb
Mojave Menodora	April to May	Perennial shrub
Mojave Milkweed	May to June	Perennial herb
Narrow-leafed Yerba Santa	May to August	Perennial shrub
Playa Milkvetch	March to July	Perennial herb
Pink Funnel Lily	March to April	Perennial bulb with annual growth
Rosy Two-toned Beardtongue	May	Perennial herb
Rusby's Desert Mallow	March to June	Perennial herb
Salina Pass Wild-Rye	May to June	Perennial herb
Slender Cottonheads	March to May	Annual herb
Spiny Cliff-Brake	April to June	Perennial herb
Spinyhair Blazingstar	Spring	Annual herb

4.4.1 General Information

If the results of preconstruction surveys determine that mitigation is required for a special-status plant occurrence, the methods described in the following sections will be implemented.

Seed salvage will be attempted from special-status plants within each affected occurrence requiring mitigation. Seed salvage will prioritize plants likely to be damaged or destroyed, but may be supplemented by any plants from within the occurrence if necessary. The original location of any special-status plant seed collected will be recorded and kept with the seed material.

4.4.2 Perennial Shrubs

Special-status perennial shrubs recorded during special-status plant surveys include Mojave menodora and narrow-leafed yerba santa. Only Mojave menodora is known to be present within the boundaries of any Project feature.

4.4.2.1 Salvage of Mature Plants

All special-status shrubs affected by the Project are within temporary disturbance areas and in sites where work is likely to occur over a period of less than 14 days. The salvage contractor will have the discretion to determine whether individual special-status shrubs warrant attempted salvage, based on the plant's health and other factors affecting the transplant process. Plants not salvaged will be replaced by cultivating plants from seed and replanting them as a proxy for the impacted individuals.

Individually salvaged special-status shrubs will be excavated with hand tools, including a root mass extending approximately 12 inches around the base of each plant. Injured or cut roots will be treated with sulfur. Special-status shrubs will be placed in temporary pots and stored on-site under shade cloth, then replanted in approximately the original location after post-construction site stabilization treatments have been applied, generally within 1 week of the initial excavation. Replanted plants will be watered immediately with at least 1 gallon of water. Monitoring and supplemental watering will occur monthly for the first year after construction, concurrent with similar monitoring and watering conducted under the CYSRP.

Special-status shrubs requiring salvage will be tagged with a unique identifier, the north side of the plant will be marked, and the following information will be recorded for each tag number:

- Location
- Species
- Size
- Health
 - Good: Plant is primarily normal and healthy growth, less than 10 percent dead or yellowed leaves and tissue.
 - Fair: Plant shows signs of stress but is primarily live growth, 10 to 40 percent dead or yellowed leaves and tissue.
 - Poor: Plant shows signs of severe stress or disease, more than 40 percent dead or yellowed leaves and tissue.
- Salvageability (e.g., growth in bedrock or within another large plant, or other challenges to salvage)

- Disposition
 - Restore to original location
 - Transplant to adjacent habitat
- Final location (data to be collected after final transplant)

4.4.2.2 Cultivation from Seed

To supplement salvaged plants and replace those that could not be salvaged in occurrences requiring mitigation, some special-status shrubs will be grown from seed. In spring or early summer prior to construction, the salvage contractor will collect seed from special-status shrubs in or adjacent to Project features. Native soil will also be collected and used in cultivation. Special-status shrubs will be grown in offsite nurseries, and will be planted within restored temporary disturbance areas in the fall after at least 1 year of nursery growth. Special-status shrubs will be replanted within the occurrence that was the original source of their seed. Care and maintenance after planting will follow the same procedures used for salvaged mature plants.

4.4.3 Perennial and Annual Herbs

Special-status perennial herbs recorded during special-status plant surveys include Cove's cassia, Mojave milkweed, playa milkvetch, rosy two-toned beardtongue, Rusby's desert-mallow, Salina Pass wild-rye, and spiny cliff-brake. Only Rusby's desert-mallow is known to be present within the boundaries of any Project feature.

Special-status annual herbs recorded during special-status plant surveys include appressed muhly, Clokey's cryptantha, slender cottonhead, and spinyhair blazingstar. Only spinyhair blazingstar is known to be present within the boundaries of any Project feature.

4.4.3.1 Salvage and Application of Seeds

Salvage or cultivation of perennial and annual herbs will generally not be attempted. Mitigation for perennial and annual herbs will be addressed through seed salvage and use of those seeds to attempt to replace lost individuals/occurrence extent through the restoration process. Seed collection is the most viable direct mitigation approach to minimize or offset the loss of perennial herbs and the only viable approach for annual herbs. However, topsoil salvage may incidentally also preserve the natural seedbank and potentially support restoration of special-status herbs in sites that are subject to grading.

In the spring prior to construction, the salvage contractor, in coordination with a qualified restoration ecologist, will attempt to collect all recoverable seed from special-status herbs within the area subject to temporary ground disturbance. Additionally, the salvage contractor may discretionarily collect up to 50 percent of recoverable seed per plant from plants within the same occurrence but outside the disturbance areas. If blading is required within special-status herb habitat, topsoil salvage and replacement will be conducted if feasible. Steep slopes, bedrock, and other factors may preclude topsoil salvage.

Collected seed will be incorporated into the seed mix that will be used in restoration of temporary disturbance and applied according to the Project's HRRP. Special-status herb seeds will only be applied to temporary disturbance within the occurrence that was the seed's original source and will not be introduced into other Project locations.

One perennial herb, the spiny cliff-brake, is a fern with spores rather than seeds. If spiny cliff-brakes are found within the boundaries of a Project feature prior to construction and avoidance is not feasible, plant material will be salvaged. Successful transplant of intact plants may be difficult for this species but will be attempted if feasible. Transplant will be conducted by recovering as much of the plant intact as possible and transplanting the plant into a setting similar to its original location. If intact salvage is not feasible, intact fronds will be clipped at the base, temporarily placed in a plastic bag, and immediately placed in a similar microhabitat (shaded rock crevices) outside the boundaries of Project disturbance. This may provide an opportunity to preserve some of the plant's spores.

4.4.4 Perennial Bulbs

The pink funnel lily is a perennial herb growing from a small corm (bulb) with above-ground annual growth in spring and is the only special-status perennial bulb recorded during special-status plant surveys. Pink funnel lilies are associated with sandy, relatively level valley-bottom soils in the Project area

4.4.4.1 Salvage of Bulbs and Seeds

Pink funnel lilies have the potential to be successfully salvaged and transplanted as corms. Because the plants are only detectable during the several weeks when leaves and flowering stems are visible above ground, the potential salvage period for this species is limited. Additionally, some pink funnel lily occurrences are present within the Ludlow and Newberry Springs Series Capacitor Stations, which represent permanent disturbance. This is the only special-status plant known at this time to be present in areas affected by permanent disturbance, which can affect the options available for mitigation.

Within temporary disturbance areas if compatible with the Project's schedule, preconstruction spring surveys will occur with the objective of locating and recording the locations of pink funnel lilies. After the blooming period has concluded but while above-ground plant material is still visible, the salvage contractor will excavate pink funnel lily corms to be transplanted outside of the temporary disturbance area. The presence of above-ground leaves and stems will allow the salvage contractor to efficiently locate and excavate the corm. Leaves should be allowed to reach a point of nearly complete senescence before excavating to ensure the plant has recovered nutrients and water from the above-ground growth. If recoverable seeds are present, the salvage contractor will collect the seeds.

The salvage contractor will use hand tools to excavate each corm and replant it outside the temporary disturbance area in similar soils and at the same depth as its original location. The salvage contractor will tamp and hand-water the replanting area to settle the soil after planting the corm. Collected seeds will be incorporated into the seed mix that will be used in restoration of temporary disturbance and applied according to the Project's HRRP. Pink funnel lily seeds will only be applied to temporary disturbance within the occurrence that was the seed's original source and will not be introduced into other Project locations. Pink funnel lily seeds will not be placed within 10 feet of transplanted bulbs to aid in monitoring the survival of transplanted bulbs as well as seeding success.

The same approach will be used in permanent disturbance areas to the extent compatible with the seasonal timing of work in permanent disturbance areas, with any recovered corms transplanted outside of the permanent disturbance area into adjacent undisturbed habitat. Any seeds that may be collected from permanent disturbance areas would be used in the seed mix for restoration of nearby temporary disturbance areas within the same pink funnel lily occurrence, or scattered directly into adjacent undisturbed habitat if no temporary disturbance areas require restoration within that occurrence.

5 Maintenance

All maintenance activities will be planned in coordination with a qualified restoration ecologist. During hot, dry weather, special-status container plants will be provided with supplemental water for 1 year after they are transplanted into or adjacent to the Project area. Generally, the watering frequency will be approximately every 14 days but may change in response to rainfall events or the needs of the species. Special-status container plants will be watered monthly from November through March, unless above-average rainfall reduces the need to provide supplemental water.

Direct watering with a hose fed by a water truck may be appropriate near access roads if the process can be accomplished without damaging restored vegetation. In cases of very small or remote planting sites, DRiWATER or equivalent gel water product or hand watering using buckets may be used to irrigate the transplanted plants. Supplemental watering in seeded areas without transplanted container plants is not anticipated.

Plants transplanted in spring or summer may be covered with shade cloth during the supplemental watering period to minimize drought stress until the root system recovers adequate function. Any transplanted special-status plants may be covered with shade cloth if drought stress is apparent or suspected.

Weed treatment around transplanted plants will be limited to hand-pulling.

Monthly maintenance reports will be prepared and provided to SCE based on information provided by the salvage contractor, in coordination with a qualified restoration ecologist, during the initial establishment period (1 year of supplemental watering). These monthly reports will include information on watering provided, plant survival, additional maintenance actions, and recommendations for any further remedial actions to increase plant survival.

A final maintenance summary report will be prepared at the end of the first year of maintenance and provided to the CPUC, BLM, and NPS. The final report will be an evaluation of the overall success of the maintenance program and include documentation of the removal of all supporting material such as shade cloth or staking. This report will also summarize the initial first-year success of any plant salvage and transplant of plants cultivated from seed.

6 Monitoring and Success Criteria

6.1 Monitoring

Annual monitoring is required for up to 5 years after construction, or until the success criteria have been met. Annual monitoring surveys may be conducted concurrently with monitoring surveys performed as required by the HRRP by qualified botanists with experience identifying native and non-native plants present in the Mojave Desert. Monitoring frequency may be increased in response to observed conditions, such as unusually dry years or the potential need for remedial actions after the first year of maintenance. Monitoring data will include the following:

- Presence and area occupied by special-status plant seedlings within reseeded areas
- Growth and flowering status of special-status plants within the same occurrence outside disturbance areas

- Health status and survival of each transplanted plant
- Determination whether salvage has succeeded
- Cause of health decline of each plant, if apparent
- Signs of vandalism or other human-caused injury
- Representative photographs
- Recommendations for maintenance actions
- Maintenance actions conducted
- Remedial actions conducted (e.g., transplant of newly cultivated plants or supplemental seeding)

6.2 Success Criteria and Remedial Actions

Objectives for special-status plants in occurrences requiring mitigation will be based on the CPUC MM BR-6 goal of improving existing populations. Progress towards meeting success criteria will be assessed based on the monitoring results, with a final determination whether criteria have been met at the end of the 5-year monitoring period. Adaptive management and maintenance will be conducted in response to conditions observed during each monitoring period.

The overall objective for all species will be a one-to-one or greater replacement of all individuals impacted by the Project through the methods outlined in this Plan, achieved by the end of the 5-year monitoring period. Replacement will be defined as survival and establishment (survival for 2 years without supplemental watering), with successful reproduction (flowering and seed set) of transplanted plants comparable to undisturbed plants from the surrounding occurrence. Some perennial plants grown from seed, whether in the nursery or direct seeding into Project work areas, may take several years to achieve reproductive maturity. Adaptive management may require supplemental seeding or container plants before Year 5 to achieve the overall objective, if supported by monitoring results.

Table 6 provides a summary of success criteria and potential remedial actions by the growth form of the plant species, although remedial actions may not be limited to the primary approach listed. If special-status plant species not listed in Table 6 are found to be present within Project work areas, they would be held to success standards consistent with their growth form. Note that remedial actions are conducted in addition to any maintenance for surviving plants as discussed in Section 5. Remedial actions are intended to address evidence that success criteria may not be met, such as conditions that result in poor survival of transplants or seedlings.

At the end of the 5-year monitoring period, if success criteria have not been met sufficiently to reduce the impacts of the Project to less than 10 percent of a given occurrence, compensatory mitigation may be required. Compensatory mitigation is beyond the scope of the SSPSRP.

Table 6 Summary of Special-Status Plant Success Criteria			
Growth Form	Species	Success Criteria	Primary Remedial Actions
Perennial Shrub	Mojave Menodora	<p>Overall: Numerical replacement of all plants destroyed by Project activities.</p> <p>Salvaged plants: 50 percent survival at all times. Establishment by the close of the monitoring period.</p> <p>Cultivated plants: 75 percent survival. Establishment by the close of the monitoring period.</p>	Supplemental transplants of nursery-grown plants sourced from the affected occurrence. If survival objectives are not met at any point, proportional nursery-grown plants will be provided to achieve the overall objective.
	Narrow-leafed Yerba Santa		
Perennial Herb	Coves' Cassia	<p>Overall: Numerical replacement of all plants destroyed by Project activities.</p> <p>Seeding results: By Year 3, growth and survival of sufficient plants to achieve greater than 100 percent numerical replacement. By Year 5, growth and survival to reproductive maturity of sufficient plants to achieve numerical replacement by the close of the monitoring period.</p>	Supplemental seeding with seed from the affected occurrence. Additional seed salvage and supplemental seeding will occur if numerical replacement is not likely to be met based on the monitoring results in Year 3. Supplemental seeding may be repeated in Years 4 or 5 if needed and depending on weather conditions.
	Salina Pass Wild-Rye		
	Mojave Milkweed		
	Rusby's Desert Mallow		
	Playa Milkvetch		
	Spiny Cliff-brake		
Perennial Bulb	Pink Funnel Lily	<p>Overall: Numerical replacement of all plants destroyed by Project activities.</p> <p>Salvaged bulbs: Evidence of 75 percent survival in the same locations as known transplanted bulbs.</p> <p>Salvaged seed: Evidence of growth of sufficient plants to achieve numerical replacement together with surviving bulbs.</p>	Supplemental seeding with seed from the affected occurrence. Additional seed salvage and supplemental seeding will occur in Year 3 if survival of transplanted bulbs is not likely to meet success criteria.
Annual Herb	Clokey's Cryptantha	<p>Overall: Numerical replacement of all plants destroyed by Project activities.</p> <p>Seeding results: Success criteria for annual herbs will be met if full numerical replacement of reproducing plants is met any year during the 5-year monitoring period.</p>	Supplemental seeding with seed from the affected occurrence. Additional seed salvage and supplemental seeding will occur in Year 3, if success criteria have not yet been met. Supplemental seeding may be repeated in Years 4 or 5 if needed and depending on weather conditions.
	Slender Cottonheads		
	Appressed Muhly		
	Spinyhair Blazingstar		

7 Reporting

Reporting requirements under this Plan include the following:

- Year 1 Final Maintenance Summary Report
- Year 1 through Year 5 Annual Monitoring Report

Annual monitoring reports will summarize all monitoring data collected and discuss maintenance actions conducted in the previous year, weather-related effects on plant survival, and recommendations for future actions. The final maintenance summary report and annual monitoring reports will be submitted to the CPUC, the NPS, and the BLM.

8 References

Insignia Environmental. 2020. Special-Status Plant Species Survey Report II for the Eldorado-Lugo-Mohave Series Capacitor Project. 36 pp. + attachments.

Insignia Environmental. 2018. Revised Biological Resources Technical Report for the Eldorado-Lugo-Mohave Series Capacitor Project. 89 pp. + attachments.

Insignia Environmental. 2017. Special-Status Plant Species Survey Report for the Eldorado-Lugo-Mohave Series Capacitor Project. 33 pp. + attachments.