



Case: A.19-08-013, Track 3

ALJ: Park and Seybert

Witness:

TURN HEARING EXHIBIT

Exhibit Number: TURN-T3-07

SCE Response to Data Request TURN-SCE 05, Q7a-b & Attachment:
Public Amended Version of SCE Vegetation Management Statement of Work
Used for Tree Trimming Contracts in 2020

Southern California Edison
A.19-08-013 Track 3 – SCE 2021 General Rate Case Track 3

DATA REQUEST SET T U R N - S C E - 0 0 5

To: TURN
Prepared by: Scott Yoshikawa
Job Title: Sr. Manager
Received Date: 5/26/2021

Response Date: 6/14/2021

Question 07.a-c:

Please provide:

- a. A list of all vegetation management contractors in 2018, 2019, and 2020.
- b. 2-5 contracts SCE executed for tree trimming services for 2018, 2019, and 2020 that are representative of the various types of contracts SCE executed for tree trimming services?
- c. Does SCE continue to have vegetation management contracts with all contractors it employed in 2018, 2019 and 2020? If the answer, to part c is anything other an unqualified yes, please provide:
1) the names of all vegetation management contract employed in 2018, 2019, and 2020 with whom SCE no longer has contracts; 2) the reasons why SCE no longer employs each contractor; and 3) the month and year in which SCE discontinued each contract.

Response to Question 07.a-c:

7a. Below are SCE Vegetation Line Clearing contractors. This is not exhaustive of all scopes (e.g. weed abatement or landscaping, etc).

- Utility Tree Service (2018-2020)
- The Original Mowbrays (2018-2020)
- Rolling Green (2020)
- ArborWorks (2020)
- Davey Tree Surgery (2018-2020)
- Core Tree Care (Supplemental 2019)
- Mario's Tree Service (Supplemental 2019)
- Community Tree Service (Supplemental 2019)

7b. Attachment entitled "TURN-SCE-005, 07.a-c Attachment Confidential.zip"

- 7c. No, the following vendors employed in 2019 are no longer active as prime contractors:
 - **Community Tree Service**
 - No longer utilized as this was part of a short-term project to meet deadlines₁ and maintain compliance with state regulations.

Vegetation Management Statement of Work

SCE Utility Vegetation Management (UVM) maintains and implements a robust scheduling process in order to meet federal and state mandated annual Compliance inspection and clearance requirements, as applicable. Maintenance work (pre-inspection and pruning/removal) is performed by qualified and approved SCE Vegetation Management contractors.

1.0 Scope of Work Overview

Contractor shall, at all times, ensure all of Southern California Edison (Edison) transmission and distribution systems, lines, poles, and other facilities ("T&D System") are kept clear from vegetation, including, without limitation, trees, palms, branches, fronds, Overhangs, and vines, in Compliance with UVM Clearance Standards as defined in Tables I-V, in Sections 3.1 and 3.2. Following the UVM clearance requirements keeps Edison in Compliance with the North American Electric Reliability Corp. (NERC) Reliability Standard FAC-003-4, California Public Utilities Commission (CPUC) General Order (GO) 95, Rule 35 requirements, California Public Resource Codes (PRC) 4292 and 4293, and Title 14, California Code of Regulations (CCR), all other applicable regulatory clearance requirements, and in accordance with the terms of the Master Services Agreement ("Agreement"), including without limitation the terms of this Statement of Work. For purposes of this Statement of Work, any recommendation included within industry accepted guidelines, best practices, or standards shall become a recommendation by SCE. SCE will notify Contractor of any change to the recommendations, and such change will not be binding until acknowledged by Contractor.

2.0 Laws, Regulations, and Standards

All services performed by Contractor shall at all times comply with all applicable laws and applicable standards. Contractor shall at all times keep and maintain Edison's T&D System in Compliance with SCE UVM established clearance distance standards, CPUC General Order 95, Rule 35, and California Public Resources Code Sections 4292 and 4293, NERC Reliability Standard FAC-003-4, and any other applicable regulations for Utility Vegetation Management. In addition, Contractor shall perform the services in Compliance with (a) all safety laws and regulations, including without limitation Cal OSHA (Including but not limited to Construction Safety Orders, General Industry Safety Orders, and High Voltage Safety Orders), 29 CFR Parts 1910.268, 1910.269, 1910.333 Electrical Safety, and the American National Standard Institute (ANSI) Z133.1 Safety Standard. Contractor shall follow all policies outlined in the latest revision of the SCE Environmental Health and Safety Handbook for Contractors. All tree work must adhere to the ANSI A300 Pruning Standards, when possible. The laws, regulations, and standards referenced above can change from time to time, and the most recently published versions shall be considered applicable and are included without limitation. SCE will notify Contractor of any change to the recommendations, and such change will not be binding until acknowledged by Contractor.

3.0 Compliance Line Clearing

Contractor shall perform vegetation maintenance throughout Edison's T&D System in order to ensure the Reliability and Compliance of Edison's T&D System at all times. Edison will provide the approved pre-inspection prescriptions of vegetation requiring work. Contractor shall employ proper directional pruning techniques and crown reductions to minimize any adverse tree health and/or structural integrity conditions and encourage future tree growth away from SCE overhead lines. Contractor is responsible for cleanup and disposal of all debris generated from line clearing activity. At the time and location and in the course of physically performing maintenance work, Contractor shall identify trees within their line of sight, including but not limited to the same property and neighboring properties and notify

Vegetation Pre-Inspection SOW

an Edison representative of any tree not prescribed by pre-inspection within the applicable Trigger Clearance Distance and, upon Edison approval, prune or remove any additional vegetation meeting the required conditions specified below and in Tables I-V, in Sections 3.1 and 3.2:

- 1) Grid Resiliency Clearance Distance (GRCD), or greater, is to be established at time of maintenance work based on line voltage.
- 2) Compliance Clearance Distances¹ (CCD) to be maintained at all times based on line voltage.
- 3) Trigger Clearance Distance² (TCD) for UVM work to be initiated based on line voltage.
- 4) Drop-in Zone is to be cleared of all vegetation as appropriate.

In situations where multiple clearance requirements are in conflict (e.g., combination construction, both T&D on same pole/span), the more restrictive of these requirements shall apply.

3.1 Distribution Clearance Requirements

Where possible, the GRCD-A and GRCD-B shall be attained at the time of maintenance. At all times, Contractor shall maintain the applicable CCD for all distribution lines within the Grow-in Zone, Blow-in Zone, and Side Grow-in Zone. Trees requiring additional pruning in between assigned annual pruning cycles will be pruned at no additional cost to Edison. All vegetation in the Drop-in Zone (Overhangs) within the designated fire areas shall be removed. Exceptions for Mature Overhangs must be reviewed and approved by the SCE Senior Specialist (SSP).

For purposes of this Statement of Work, distribution clearance requirements for fire and non-fire areas shall be defined in the tables below. The clearances noted in the following tables must take into consideration maximum sag and sway under all rated electrical operating conditions and vegetation movement.

¹ CCD = RCD x 1.5 (Safety Margin) rounded up

² TCD = CCD + 3-feet

Table I: Distribution Fire Area Clearances – DVMP (UVM-03 Version 4)

Fire Areas						
PRC 4293 and GO 95, Rule 35, Extreme and Very High Fire Areas (Case 14)						
Nominal Voltage	Grow-in Zone Clearance Distance at Time of Maintenance GRCD-A	Blow-in Zone Clearance Distance at Time of Maintenance GRCD-B	Grow-in & Blow-in Zones Clearance Distance that Triggers Work TCD	Grow-in & Blow-in Zones Clearance Distance to be Maintained for Compliance CCD	Drop-in Zone	Regulation Clearance Distance RCD
2.4 - 69kV	12 ⁵	12'	9'	6'	Clear of all Vegetation where Practical	4.0'
2.4 – 12kV Aerial Cable	4'	4'	Strain or abrasion	n/a	n/a	No strain or abrasion
≤ 750 volts Open Wire, Aerial and Bundled	4'	4'	Strain or abrasion	n/a	n/a	No strain or abrasion

Table 1: Clearance Distances – Fire Areas

⁵ GO 95 Rule 35 Appendix E recommended clearance (Case 14)

Table II: Distribution Non-Fire Area Clearances – DVMP (UVM-03 Version 4)

Non-Fire Areas						
GO 95, Rule 35 (Case 13)						
Nominal Voltage	Grow-in Zone Clearance Distance at Time of Maintenance GRCD-A	Blow-in Zone Clearance Distance at Time of Maintenance GRCD-B	All Zones Clearance Distance that Triggers Work TCD	All Zones Clearance Distance to be Maintained for Compliance CCD	Drop-in Zone	Regulation Clearance Distance RCD
2.4 - 69kV	6 ⁶⁷	6'	n/a	3'	Clear of all Vegetation where Practical	1.5'
2.4 – 12kV Aerial Cable	4'	4'	Strain or abrasion	n/a	n/a	No strain or abrasion
≤ 750 volts Open Wire, Aerial and Bundled	4'	4'	Strain or abrasion	n/a	n/a	No strain or abrasion

Table 2: Clearance Distances – Non-Fire Areas

⁶ Although GO95 Rule 35 Appendix E Case 13 (non-Fire Areas) recommends 4' clearance for 2.4kV to 72kV, SCE is adopting a 6' clearance

⁷ Required vegetation maintenance shall ensure RCD for 12 months

If Contractor is unable to prune or cut the vegetation in order to maintain the applicable CCD for the annual pruning cycle, then Contractor shall pursue complete removal of vegetation.

When the desired clearances cannot be attained at the time of scheduled maintenance due to easements, other legal agreements, or regulations that restrict vegetation management practices, the maximum allowable amount of vegetation will be removed or otherwise controlled as appropriate. At the time of work execution, Contractor is encouraged to pursue supplemental solicitation for tree removals on all identified Exception Trees. Contractor shall at least attain RCD clearance, and the tree shall be documented on the Abnormal Field Conditions Form as an Exception Tree. If RCD clearance cannot be attained, the tree shall be considered a refusal location, and Contractor shall follow the processes described in Section 5.3, Incomplete Locations.

Contractor shall also maintain clearances around distribution poles as required in the UVM Distribution Vegetation Management Plan, DVMP, (as required by PRC 4292 and CCR 1254) as follows: 10-foot, measured horizontally from the outer circumference of the distribution pole from a height of 8 feet to the conductors and above. *Note: The pole brushing contractor is responsible for maintaining clearances around distribution poles in a 10-foot radial area measured horizontally from the outer circumference of the pole from the ground to a height of 8 feet.*

3.2 Transmission Clearance Requirements

Where possible, the GRCD-A and GRCD-B shall be attained at the time of maintenance. At all times, Contractor shall maintain CCD's for all transmission lines within the Wire Zone and Border Zone. Trees requiring additional pruning in between assigned annual pruning cycles will be pruned at no additional cost to Edison.

For purposes of this Statement of Work, transmission clearance requirements for fire and non-fire areas shall be defined in the tables below. The clearances noted in the following tables must take into consideration maximum sag and sway under all rated electrical operating conditions and vegetation movement. SCE will provide known sag and sway data for Bulk Power circuits (220kV and higher).

Table III: Transmission Fire Area Clearances – TVMP (UVM-02 Version 5)

All Elevations in Fire Areas					
FAC-003-4, PRC 4293 and GO 95, Rule 35, Extreme and Very High Fire Areas (Case 14)					
Nominal Voltage ¹¹	Wire Zone/Sag - Clearance Distance at Time of Maintenance GRCD-A ¹²	Border Zone/Sway - Clearance Distance at Time of Maintenance GRCD-B ¹³	WZ / BZ Clearance Distance that Triggers Work TCD	WZ / BZ Clearance Distance to be Maintained for Compliance CCD	Regulation Clearance Distance RCD
500kV	30'	Clear to the greater of the following: (1) Defined ROW Boundaries or; (2) Maximum Blowout plus 30'	18'	15'	10.0'
230kV	30'		18'	15'	10.0'
161kV	30'		18'	15'	10.0'
115kV	30'		18'	15'	10.0'
69kV	12'	Clear to the greater of the following: (1) Defined ROW Boundaries or; (2) Maximum Blowout plus 12'	9'	6'	4.0'

Table 1: Clearance Distance –Fire Areas, FAC-003-4, PRC 4293, Rule 35 (Case 14)

The clearances in Table 1 must take into consideration maximum sag and sway under all Rated Electrical Operating Conditions and vegetation movement for lines subject to NERC Reliability Standard FAC-003-4.

¹¹ 161kV, 115kV, and 69kV Major WECC Transfer Path or IROL only. Reference Attachment A

¹² If GRCD-A recommended clearances cannot be achieved, required maintenance shall ensure RCD for 18 months

¹³ If GRCD-B recommended clearance (2) cannot be achieved, required maintenance shall ensure RCD for 18 months

Table IV: Transmission Non-Fire Area Clearances – TVMP (UVM-02 Version 5)

Non-Fire Areas -Based on Elevations up to 8000' in					
FAC-003-4 and GO95 Rule 35 (Case 13)					
Nominal Voltage ¹⁴	Wire Zone/Sag - Clearance Distance at Time of Maintenance GRCD-A ^{15 16 17}	Border Zone/Sway - Clearance Distance at Time of Maintenance GRCD-B ¹⁸	WZ / BZ Clearance Distance that Triggers Work TCD	WZ / BZ Clearance Distance to be Maintained for Compliance CCD	Regulation Clearance Distance RCD
500kV	30'	Clear to the greater of the following: (1) Defined ROW Boundaries <u>or</u> : (2) Maximum Blowout plus 30'	18'	15'	9.6'
230kV	30'		10'	7'	4.7'
161kV	10'	Clear to the greater of the following: (1) Defined ROW Boundaries <u>or</u> : (2) Maximum Blowout plus 10'	8'	5'	3.2'
115kV	10'		7'	4'	2.2'
69kV	6'	Clear to the greater of the following: (1) Defined ROW Boundaries <u>or</u> : (2) Maximum Blowout plus 6'	n/a	3'	1.5'

Table 2: Clearance Distances – Non-Fire Areas, FAC-003-4 and GO95 Rule 35 (Case 13)

¹⁴ 161kV, 115kV, and 69kV Major WECC Transfer Path or IROL only. Reference Attachment A

¹⁵ GO95 Rule 35 Appendix E Case 13 (non-Fire Areas) recommends 10' clearance for 110kV to 300kV

¹⁶ Although GO95 Rule 35 Appendix E Case 13 (non-Fire Areas) recommends 4' clearance for 2.4kV to 72kV, SCE is adopting a 6' clearance

¹⁷ If GRCD-A recommended clearances cannot be achieved, required maintenance shall ensure RCD for 18 months

¹⁸ If GRCD-B recommended clearance (2) cannot be achieved, required maintenance shall ensure RCD for 18 months

If Contractor is unable to prune or cut the vegetation in order to maintain the applicable CCD for an annual pruning cycle, then Contractor should pursue complete removal of vegetation.

When the desired clearances cannot be attained at the time of scheduled maintenance due to easements, other legal agreements, or regulations that restrict vegetation management practices, the maximum allowable amount of vegetation will be removed or otherwise controlled as appropriate. At the time of work execution, Contractor is encouraged to pursue supplemental solicitation for tree removals on all identified Exception Trees. Contractor shall at least attain RCD clearance, and the tree shall be documented on the Abnormal Field Conditions Form as an Exception Tree. If RCD clearance cannot be attained, the tree shall be considered a refusal location, and Contractor shall follow the processes described in Section 5.3, Incomplete Locations.

As prescribed, Contractor shall also maintain clearances around transmission poles/towers as required in the UVM Transmission Vegetation Management Plan, TVMP, (as required by PRC 4292 and CCR 1254) as follows: 10-foot, measured horizontally from the center of the transmission pole/tower from ground to sky. In some cases, 20-foot clearance will be required when vehicle access is needed.

On occasion, Contractor may be assigned vegetation mitigation work in and around generation and substation structures and facilities. In the event of performing generation and substation work, Contractor shall abide by Edison safety standards and procedures at all times, including but not limited to undergoing specialized training, undergoing site-specific briefings, utilizing fire rated clothing, and modifying vehicles with a ground lug as needed.

4.0 Additional Services

In addition to performing the line clearing as described in Section 3, in order to ensure Compliance and the Reliability of Edison's T&D System, Contractor shall also perform the below services.

4.1 Exception Tree Maintenance

Exception Tree pruning shall be completed within thirty (30) days after assignment. Trees requiring pruning for a second time during an annual cycle will be pruned at no additional cost to Edison. Edison will pay the appropriate T&E rate for trees requiring pruning for the first time in an annual cycle or for tree removals. The Contractor is encouraged to pursue supplemental solicitation for tree removals on all trees identified as Exception Trees at the time of work.

4.2 Tree Removal

Contractor shall remove and dispose of trees that could interfere with Edison's T&D System, especially ISO/transmission inventory trees, palms, and new small trees, per the TVMP and DVMP. Contractor shall document and submit to Edison all Tree Removal locations. Trees to be removed are defined as, but not limited to, the following:

- 1) Dead, dying, diseased, and/or decadent trees and trees leaning toward or overhanging a high voltage line shall be removed or portions pruned to remove the potential to impact SCE facilities.
- 2) Small trees (e.g. trees with less than 8" DBH) or brush that generally grow as a result of bird or seed pollination and are typically not generally maintained by the Edison customer.
- 3) Trees with which there is difficulty maintaining applicable CCD between assigned annual pruning cycles (e.g. Priority 1 and Exception Trees).
- 4) All fast growing tree species (see TVMP Attachment E/DVMP Attachment C: "Tree Species in SCE Service Territory") in the Grow-in Zone.
- 5) All trees that can't be maintained in accordance with ANSI A300 Tree Pruning Standards.
- 6) Trees under or around ISO designated or Bulk Power circuits.
- 7) All trees that have been identified in a Priority 1 condition.

4.3 Palm Removal

All palms identified during pre-inspection to be pruned for Compliance and Reliability of the T&D System shall be followed up with additional solicitation by Contractor for complete removal. Removal of all palms in SCE's inventory is the preferred mitigation option.

4.4 Vine Removal

All vines shall be removed from poles to the lowest possible level. Any portion of the vine remaining on the pole must also be removed as long as it is safely outside the minimum approach distance. Vines on poles shall be removed and treated with an herbicide to prevent regrowth. When performed during scheduled Compliance line clearing maintenance, each pole with vine material shall be invoiced as a maintenance trim unit rate.

4.5 Herbicide Application

All trees and vines that are removed that have the potential of stump re-growth shall be treated to ensure re-growth will not occur. Should trees regrow, it is Contractor's responsibility to remove regrowth and treat stump as directed. Contractor is responsible to be in Compliance for the use and application of all herbicides used in performing the services and shall maintain herbicide application records as required by the California Department of Pesticide Regulation.

4.6 Secondary Line Clearance

Clearances for low voltage lines, with 750 volts and below, are described in Section 3.1, Tables I and II. Any secondary line clearance outside of Routine Maintenance work shall be invoiced to the provided accounting number and will

be compensated with the appropriate T&E rate.

4.7 District and Region Work

Vegetation related work assigned by SCE districts or regions on an ad hoc basis (e.g. trouble orders, notifications, repair orders, etc.) to support other SCE projects and programs shall be invoiced to the job-specific TD/SAP number for billing purposes and charged the appropriate T&E rate.

5.0 Notifications, Access, Permission

No services shall be performed at a location without proper permits and the appropriate notification/permission of the applicable property owners or customers (excluding emergent work). All Routine Maintenance shall be performed during normal Edison business hours. Exceptions may be permitted with the prior written approval of the Edison representative.

5.1 Customer Coordinator

The following activities shall be performed by the Customer Coordinator if Edison has agreed upon the requirement of this role in any such Work Location. If no Customer Coordinator has been previously approved, Contractor shall maintain the responsibility of performing all the following activities in performance of the Services.

Customer Coordinator ("Coordinator") shall ensure all occupants, agents, and/or owners of private property where a need for utility vegetation management/tree maintenance (heavy, light or removal) has been identified receive proper notification either by in-person contact, phone contact, and/or detailed Door Hanger of SCE UVM planned activities. If the UVM work management system (database) sets forth specific notification procedures for any specific Edison customer, Customer Coordinator shall notify such customers as instructed.

Contractor shall provide one designated Customer Coordinator per every 10 crews. Additional Customer Coordinators may be permitted with the prior approval of the Edison representative.

Customer Coordinator shall respond to requests that are pre-identified through either a pre-inspection request or established UVM work processes. Coordinator shall work with the SCE Senior Specialist (SSP) and pre-inspection contractor to ensure all property occupants, agents, or property owners are appropriately notified of pre-identified tree maintenance or removal prior to the tree crews commencing with any tree pruning or removal work. Notification shall be provided within 7 calendar days of service date but no less than 24 hours before services commence.

The following are the different types of notification a property occupant, agent, or owner may receive prior to UVM work being performed:

- 1) In-Person Contact: Customer Coordinator will knock at the customer's door. In many instances this action will result in a person-to-person interaction. If it does not, Coordinator is required to leave a Door Hanger at the work location, identifying the reason for and the type of services to be completed.

- 2) Door Hanger: Customer Coordinator must provide a Door Hanger and/or insert that communicates the following:
 - a. Name of Employee
 - b. Vendor Name
 - c. Date of Notification
 - d. Description of Pre-Identified Work
 - e. Date Pre-Identified Work Scheduled
 - f. Telephone Number and Email Address
- 3) Telephone Contact: If Coordinator is unable to reach the property owner/agent through in-person contact, a request for confidential customer information may be made to obtain the SCE customer information associated with the property address in question.

Informational brochures shall be left at all Routine Maintenance locations or anytime customer contact is made, either in person or by Door Hanger. Customer Coordinator shall maintain a documented work notification process that consistently demonstrates clear and effective customer service.

Customer Coordinator shall make physical contact (phone or in-person) with customers requiring heavy tree work or removal and the property owner must sign the tree prune/Removal Form. If the property owner cannot sign the form, text message or email correspondence from the owner acknowledging property ownership and providing permission to commence work shall suffice.

Customer Coordinator will report in line of sight, including but not limited to the same property and neighboring properties and notify an Edison representative of any tree not prescribed by pre-inspection. Coordinator shall pursue the removal of trees that cannot maintain the Compliance Clearance Distance (CCD) for an annual pruning cycle and/or can't be pruned in accordance with ANSI A300.

On the scheduled date of service, Customer Coordinator shall work alongside pruning crews when applicable in order to ensure property access, resolve refusals, and perform any other customer coordination necessary to allow for completion of the service. If customer contact cannot be attained and/or services cannot be rendered, Coordinator and pruning crew shall follow the processes as described in Section 5.3, Incomplete Locations.

Workload permitting, Customer Coordinator shall also be qualified to perform additional services as needed, including but not limited to pre-inspection, quality control, and special project patrols.

5.2 Property Access

Locations that are accessible, where trees have been pruned in the past and there are no special notification requirements, may be routinely pruned after notification has been attempted twice.

Locations that impose imminent safety, Compliance, or Reliability concerns shall be

appropriately mitigated to eliminate the hazard only, and a follow-up contact shall be initiated to secure permission to maintain the appropriate transmission clearance requirements, distribution clearance requirements, or clearances required for Reliability. Notification of emergency maintenance and a follow-up request shall be left at the work location.

5.3 Incomplete Locations

Those locations where Contractor is not able to perform Routine Maintenance shall be limited to No Contact locations, refusal locations, and rejected discrepancy trees/locations. If the following procedures for handling each conflict are not followed, the SCE SSP will reject the invoice submittal. Below are the expectations for handling each conflict:

- 1) No Contact Locations: After two documented attempts to obtain access, Customer Coordinator shall contact the SCE SSP requesting confidential SCE customer contact (telephone number) information. These requests will be returned to Contractor within 72 hours. Upon receipt of the confidential SCE customer contact information, Customer Coordinator shall make an attempt to call the customer.

No Contact locations shall ONLY be documented if the aforementioned request for SCE customer contact information is made and the information provided was no longer good, the phone rings with no answer, or there is no customer contact information available.

- 2) Refusal Locations: Locations that have been identified for tree work but the property owner/resident refuses to allow the required maintenance. Customer Coordinator is required to make two documented attempts of resolution.

The documentation shall include at a minimum the clearance of the refusal tree(s) at the time of the second or last documented attempt, if known, the reason the customer is refusing and any safety remarks such as "approach with caution" or "customer threatened crew" etc. Specification refusals can be documented on the work status form and brought to attention to SSP and that specification can be worked on

If a Refusal Form with the customer's signature was not obtained by the pre-inspection contractor, Customer Coordinator shall provide the customers with a Refusal Form for their review and signature. If the customer signs the form or provides permission over text message/email, Coordinator shall email the Refusal Form or text message/email to the SCE SSP. If the customer refuses to sign the Refusal Form, Coordinator shall make a remark "customer refused to sign" and email the Refusal Form to the SCE SSP.

Note: Any refusal location identified with a Priority 1 needs to be resolved immediately. The SCE SSP shall be immediately notified of the condition and location.

Safety Note: If at any time during the process of the refusal resolution any customers make threats or act aggressively, the SCE SSP shall be notified

with a request for SCE corporate security assistance.

- 3) **Discrepancy Trees/Locations:** Upon identification of a tree discrepancy (defined as inventory not prescribed by the pre-inspection contractor for pruning or inventory prescribed but does not require pruning) the General Foreman has the ability to approve or deny the work and update the status in the work management system. General Foreman shall notify the supervising pre-inspector and SCE SSP of any discrepancy tree.

For all incomplete locations, Contractor documentation shall include the clearance of the tree at the time of documentation.

6.0 Timeline of Services

Edison will provide Contractor with the annual work plan ("Timeline of Services") setting forth the timeline on which Contractor shall complete the prescribed prunes. The Progress Sheet and/or work management system will set forth the schedule of all specific grids and circuits, which takes into consideration special conditions, such as governmental mandated schedules and requirements, environmental/weather access restrictions, etc. Each calendar year during the term of the Agreement, Contractor shall complete all services as set forth in the Progress Sheet. Should there need to be any deviation or adjustment to the Timeline of Services or Progress Sheet, Edison and Contractor shall work together and mutually agree on a resolution, although Edison has final determination in such resolution. Any changes to the Progress Sheet will come at no additional cost to Edison, and significant changes shall be memorialized through issuance of a change order. The Progress Sheet will be represented within the work management system and Contractor will be notified of any changes. All tree pruning shall be completed within thirty (30) days after assignment. The following reflects the anticipated Timeline of Services:

Table VI: Timeline of Services

ANTICIPATED TIMELINE OF SERVICES					
SCE grid/inventory provided to pre-inspector	Earliest day on which pre-inspection may begin	Pre-inspection due date	Pruning assignment date	Pruning due date	Records delivered to SCE
60 days before pruning assignment	45 days before pruning assignment	15 days before pruning assignment		30 days after pruning assignment	15 days after pruning due date

The parties acknowledge and agree that the Timeline of Services and Progress Sheet are tools for Contractor to manage its performance under the Agreement, and Contractor agrees that, as between the parties, the Timeline of Services does not, nor shall it be deemed to, at any time either allocate to Edison, or relieve Contractor from, any liability or responsibility for the performance or non-performance of the services.

6.1 Adherence to Services Schedule and Progress Sheet

Should Contractor fall behind the services schedule, as distributed in the latest published version of the Progress Sheet, in performance of the services, Contractor shall, at no additional cost to Edison, accelerate the services to meet the services schedule, including without limitation, overtime, additional personnel, or additional

shifts. Contractor will be responsible for schedule maintenance other than for a Force Majeure Event, delays caused by Edison, or due to Contractor's failure to take reasonable steps to avoid or mitigate any delays caused by a Force Majeure Event or caused by Edison. Within ten (10) days of a request by Edison, Contractor shall submit a written plan detailing the steps taken, or to be taken, by Contractor to meet the services schedule. Contractor shall proceed in accordance with this plan or until otherwise directed by Edison. In the event Contractor is unable to provide deliverables in accordance to the plan or as otherwise directed by Edison, Edison may direct another contractor to supplement Contractor's grids or require Contractor to surrender their grids. Edison's action to supplement and/or surrender the grids to another contractor does not relieve Contractor from responsibility of maintaining Compliance of said grids on the subsequent Exception Tree and Routine Maintenance activities.

Contractor shall not reassign crews to other SCE or non-SCE contract work without prior notice to the Edison representative and an SCE-approved plan for maintaining the services schedule with fewer Contractor resources. Personnel may be removed without approval if they become unavailable for reasons beyond Contractor's control (e.g., death, disability, resignation of employment) or have been terminated by Contractor for cause. In the event of such a personnel change, the Edison representative must be immediately notified.

7.0 Emergent Work/Special Projects

As needed, Contractor shall work with Edison to provide additional services outside of the normal assigned zones. This work will be awarded based on the applicable unit rates. If no predetermined unit rate exists, this work will be awarded based on the applicable T&E rate. Work will support scopes such as capital work orders, supplementing another contractor's work assignments, and other various requests. Work may also include prunes and/or removals for palms and hardwood trees. Should Edison determine the need for any additional vegetation related services or special projects, any contractor in the Edison system shall be eligible to perform the services regardless of contractually assigned territory. Assignment of such work shall be at Edison's discretion.

In periods where zones are heavily impacted by storms, roving crews may also be requested to provide mutual aid (e.g. after heavy winter storms or wildland fires). In the event of emergency response or storm demands, preference will be given to those contractors that are most geographically associated to the area of need. However, Edison reserves the right to select contractors at its discretion. All emergency request response times must be met within two (2) hours.

7.1 Storm Affected or System Reliability Mitigation

Storm events or system Reliability events increase the likelihood of tree failure due to overall structural integrity and/or site conditions. While performing work during these events, Contractor shall identify such trees at risk of failure within their line of sight, including but not limited to the same property and neighboring properties. Contractor shall evaluate the condition of the tree, mitigate any imminent risk, and notify the Edison representative if the trees condition warrants additional assessment. UVM threat procedures are outlined in UVM-08, Managing Vegetation Threats.

8.0 SCE Proprietary Information

Edison will furnish appropriate maps (including those within the work management system), inventory data, work order requests, trouble orders, and pertinent forms. Edison shall provide Contractor with all public lands approvals (e.g., forest service, state parks, BLM, national parks), county, city, and/or state highway permits as required. Contractor is required to possess any applicable insurance and/or license to obtain any issued permit.

Edison will work with Contractor to identify and provide maps and information related to environmentally sensitive areas where rare, threatened, endangered or protected species, archeological resources, and regulated wetlands/waterways have been identified. SCE will provide the applicable permits before starting work in any environmentally sensitive areas. Contractor will provide site specific work details to support the permit process(es), as requested by SCE on a case by case basis. Contractor shall also provide appropriate schedule notification to assist SCE in coordinating environmental resource surveys and monitoring.

9.0 Technology

Contractor shall provide internal IT resources to aide in personnel hardware/software issues for Level 1 support type incidents. SCE, or approved IT contractor, will support escalated hardware/software issues after internal Contractor resources have been exhausted and all appropriate self-service efforts have been documented.

Access to GIS/web based automated vehicle management systems (AVMS) shall be made available to Edison. Access must include the ability to view and download all vehicle history for at least the past sixty (60) days.

9.1 Agreement to Enable Technology through Work Management Software

Contractor agrees to integrate SCE's work management system. Contractor crews will be required to identify work and record work electronically in Survey 123/Collector app, Fulcrum app and/or other app as directed by SCE.

To gain access to the apps, all users will be required to "onboard" with SCE. For the initial onboarding effort during rollout of Survey123, SCE will perform a background check on each user and reserves the right to deny access to the SCE system to individuals. To facilitate onboarding, Contractor will provide the following information for each user:

Full legal name
Last 4 digits of Social Security Number
Contractor personal email address
Role (i.e., scheduler, pre-inspector, foreman, tree crew, etc.)

Users are NOT to share iPads, user names or passwords per SCE Cyber Security requirements. iPads and logins are issued to users that have passed a SCE background check. These individuals are responsible for the data (Survey123, Collector, email and skype, internet use, etc.) and security of that device. Appropriate management of SCE data and devices are subject to audit findings.

SCE requires advanced notification when an "onboard" user departs or plans to

depart the Contractor and/or is no longer working under this contract. Contractor will provide SCE written notice of the users name and anticipated departure date as soon as feasible but no later than 24 hours after departure. Notification will be sent to Amanda Duchardt (Amanda.Duchardt@sce.com) and Ventsislav Korichkov (Ventsislav.Korichkov@sce.com) for "off-boarding".

Credentials are NOT transferable. iPads are NOT transferable and must be returned to SCE for reconfiguration before they can be redeployed to another/new user.

Hardware/devices (tablets/computers) will be provided by SCE. Edison shall provide the Contractor with SCE profiled iPads for use while conducting vegetation management activities on behalf of SCE. Contractor shall have care and custody of the iPads and shall be responsible for properly storing and maintaining the iPads while in their possession. Additionally Contractor shall be responsible for the replacement cost of any lost or damaged iPads. Contractor will notify SCE within 24 hours if a device is lost or stolen. Broken or damaged devices will be returned to SCE within one week. Contractor shall sign an acknowledgement form upon receipt of the iPads. Contractor shall return the iPads to Edison when user is "off boarded" and as upon demand by Edison

Contractor will not modify the profile settings established by SCE unless instructed to do so and/or granted permission on a case by case basis.

SCE will be responsible for software license costs and iPad wireless data plan costs.

Applications will be enhanced over time and contractors are expected to follow the most recently shared versions of the Walk Through documents (user guides). Edison encourages the Contractor to be actively engaged in the training and continuous improvement (including constructive feedback from leads/super-users) of the work management system with a mindset of partnered innovation and long term increased efficiencies.

10.0 Worker Qualifications and Equipment

Contractor shall maintain a list of all personnel performing any portion of the services, whether employed or retained by Contractor or any subcontractor, and such personnel's name, title, social security number, and work locations. Contractor's personnel shall be required to carry Contractor issued photo-identification cards at all times while performing the services.

10.1 Qualifications

Edison encourages Contractor to continuously and proactively seek to have all employees obtain ISA Arborist and/or ISA Certified Tree Worker certifications. At minimum, Contractor shall make available one ISA Arborist or ISA Certified Tree Worker per district where work is being performed. Additionally, Contractor must maintain a current qualified applicator license to perform herbicide application.

1) General Foreman Qualifications: At minimum, Contractor shall provide one

designated General Foreman per every eight (8) crews. General Foremen must be Certified Arborists (from the International Society of Arboriculture) and/or must possess a minimum of 3 years of related utility vegetation management pruning, inspection, or planning experience. All General Foreman must be fluent in English (including written fluency).

- 2) Customer Coordinator Qualifications: Customer Coordinators must possess a minimum of two (2) years of related utility vegetation management pruning, inspection, or planning experience. All Customer Coordinators must be fluent in English (including written fluency).
- 3) Tree Crew Qualifications: At minimum, one additional member of each crew besides the General Foreman and Customer Coordinator must be fluent in English (including written fluency).

All individuals must maintain a professional appearance. Company logos must be displayed at all times (including on shirts, hard hats, and/or safety vests). Contractor shall provide all such apparel and equipment to employees.

10.2 Compliance Training

Contractor personnel shall receive the majority of their training through their respective employers. Training provided by SCE to Contractor personnel includes but is not limited to the following:

- 1) Regulatory Compliance Requirements (state and federal)
- 2) Imminent threat procedures (UVM-08: Vegetation Threat Procedure)
- 3) Reporting inaccessible areas
- 4) Environmental training (habitat areas, cultural resource areas, wetlands/waterways, avian protection)
- 5) SCE operations and contractual requirements

The training SCE provides to Contractor personnel is not intended to qualify them and does not relieve Contractor or them of liability, but it is intended to provide reasonable assurance of their understanding. Contractor personnel shall attend annual Compliance Training sessions at Contractor's expense. Sessions must be documented with a list of attendees and submitted to the Edison representative.

10.3 Equipment

- 1) Vehicles must be kept in clean, safe working condition. Vehicles shall be free of large dents/damages. All vehicles and equipment must meet electrical rating standards.
- 2) All Contractor vehicles must display visible company logos on each door.
- 3) Approved Edison Contractor signs shall be prominently displayed on all

Contractor vehicles (both sides and rear) while performing the services. Contractor shall remove or cover all Edison logos and/or decals prior to performing any private contractor work within or outside the Edison service territory. Contractor shall ensure that all subcontractors adhere to the same requirements for vehicle logos while not performing services for Edison.

- 4) Contractor shall follow all requirements related to wearing personal protective equipment (PPE).
- 5) Contractor shall furnish the General Foremen with cell phones as well as laptops (or email-enabled smart devices) with company sponsored email accounts. Contractor shall provide all cell phone numbers by personnel to Edison. Contractor shall immediately provide any updates to Edison as information changes occur.

11.0 Post-Routine Quality Control

After performing Customer Coordination responsibilities of assigned grid, Coordinator shall conduct quality control to ensure proper notification has been left for all property owners/occupants requiring tree maintenance. Customer Coordination quality control shall include field verification by talking to property owners/occupants and a desktop review by confirming an entry of notification was placed in the work management system.

After performing Routine Maintenance on any geographic location or within any circuit, Contractor shall conduct a physical patrol of all work performed by Contractor to assure absolute and complete Compliance. Contractor shall make reasonable efforts to identify and notify Edison for any added prunes encountered in its normal course of work (e.g. if a crew performs work on a particular span next to an observed Compliance issue, which was not identified to be pruned, they shall notify Edison of the observed non-conformance issue. Upon Contractor's completion of its post-routine quality control of any location or circuit, Contractor shall utilize the work management system to document all applicable data. Contractor shall perform internal quality control to ensure all data and documentation submitted to Edison is accurate. Quality control performance data shall be maintained and submitted monthly to Edison.

Edison may initiate an inspection of portions of Contractor's completed work. Edison's inspection may consist of sampling portions of a geographic location or circuit or a physical patrol of any portion of Edison's T&D System, to assure the quality of Contractor's services and Contractor's Compliance and conformance with all requirements under the Agreement. Edison's inspection of any portions of Contractor's Routine Maintenance or other services shall not relieve Contractor from its obligations to keep all of Edison's T&D System in Compliance at all times. Any work found during the post-routine quality control found to be inadequately performed (defined as not meeting ANSI-300, PRC 4292, PRC 4293, California Public Utility Commission General Order 95 Rules 35 and 37, all Edison contract specifications, all other applicable rules and regulations, or as deemed necessary by Edison) shall be corrected within a reasonable amount of time with consideration to the infraction be corrected by Contractor as soon as possible at Contractor's expense.

12.0 Complaints/Claims

Edison shall refer any third party complaints or claims that Edison reasonably determines arise or result from Contractor's performance or non-performance of the services to Contractor and Contractor shall make customer contact regarding the complaints or claims within 5 working days, and thereafter work to resolve the complaints or claims as quickly as possible. Contractor shall treat all Edison customers with the utmost respect and consideration. Contractor shall immediately notify the Edison Vegetation Manager or his representative of any damage to Edison facilities, damage in excess of \$500 to customer property, injury to any third party, or injury to employees engaged in performing the services. Contractor shall also deliver to Edison's Vegetation Management Resource Center, no later than the 10th day of each month, a monthly report of all third party complaints or claims that it has received (whether or not referred by Edison) which arise or result from the performance or non-performance of the services and their status as to resolution.

13.0 Safety Requirements

13.1 Safety Representatives

- 1) Contractor shall provide an on-site, dedicated, safety management team and staff at a ratio of one safety representative per every twenty (20) crews, inclusive of all prime and subcontractors.
- 2) Contractor shall furnish a safety resource plan with resumes for SCE review and approval prior to onboarding.
- 3) Safety representatives should be experienced in Vegetation Management safety practices when working near energized lines.
- 4) Safety representatives shall provide safety support for the work awarded in accordance with this Statement of Work. Safety representatives shall have authority to stop and/or direct work for all matters regarding safety. Safety representatives shall be responsible for coordinating efforts to ensure Compliance with safety plans, corporate safety plans and policies, project requirements, and all federal, state, local requirements.
- 5) Safety representatives shall ensure the following:
 - a) Safety training is provided to notify all employees, including subcontractors, of safety requirements, Contractor's specific plans, and required Federal, State, and local laws, rules, and regulations.
 - b) Adequate safety oversight over employees and subcontractors is provided at all times during vegetation mitigation activities.
 - c) Adequate, appropriate, and timely actions are taken to correct hazards once identified.
 - d) Attendance and participation at project safety meetings including attendance of subcontractor safety personnel.
 - e) Incident reporting procedures are in place and understood as required in these specifications.
 - f) All reporting is completed in a timely fashion as required in these specifications.

13.2 Contractor Orientation

- 1) Within 15 calendar days after receipt of notice to proceed or in advance of the Contractor's start of work (whichever is sooner), the Contractor representative shall participate in a Contractor orientation, which is performed in collaboration with the Edison representative, by ensuring the review, development and completion of the following:
 - a) Contractor Hazard Assessment and Safety Plan.
 - b) Contractor Handbook and Orientation Checklist.
- 2) Upon completely executing these documents, Contractor shall ensure these plans are uploaded into ISNetworld and are updated as outlined in SCE's Handbook for Contractors. The Contractor representative shall conduct a Contractor orientation for their crews, including subcontractors, as well as any new employees/subcontractors that begin work on the project subsequent to the original Contractor orientation. Signed copies of the current Contractor Hazard Assessment & Safety Plan and Contractor Handbook and Orientation Checklist shall be provided to each crew performing work on the project and be available to visitors with the site tailboard.

13.3 Safety Representatives

- 1) Contractor shall notify the Edison representative of all safety incidents occurring during work for SCE, including low-level incidents such as sprains and strains. These safety incidents include: first-aid incidents, injuries above first-aid, close calls, safety violations, vehicle accidents, property damage, equipment failure, crew-caused circuit interruptions (CCCI), unplanned outages, primary/secondary electrical flashes, switching incidents, wiring/conductor incidents, grounding incidents, hazardous material releases, environmental incidents, customer complaint/negative contacts, and fires.
- 2) Contractor shall report incidents immediately via phone call with an e-mail back up identifying date, time, location, contractor, and a brief description of the incident including immediate steps to provide care for the worker. The incident shall be followed up with an Incident Evaluation Report within 24 hours. The investigation shall provide pictures, witness statements, identify the sequence of events, contributing factors, root cause, and corrective actions with date specific deliverables. Reference SCE's Handbook for Contractors for detailed instructions and Incident Evaluation Report forms.

14.0 Deliverables/Reporting

Notwithstanding the following, any documentation pertaining to any primary or secondary service interruption, third party damage, third party injury, or imminent threat condition shall be reported by Contractor to Edison immediately and any related documentation shall be provided by Contractor to Edison within 24 hours of incident.

14.1 Compliance Line Clearing Deliverables

Upon completion of each work unit by the assigned due date, Contractor shall submit to Edison representative all assigned work in the work management system or all Excel grids in the event of issues with the work management system. The documentation shall include and is not limited to:

- 1) Document title, revision, and date.
- 2) Documentation detailing:
 - a) The post-prune distance of the vegetation from conductor in the Excel grid or work management system.
 - b) Documented special conditions (Abnormal Field Conditions Form).
 - c) Signed Removal Forms.
- 3) Certification of completed work: all completed mitigation work assignments shall include certification language confirming that all required specifications have been met. In the event of issues with the work management system, this confirmation must be signed and dated by the person who performed the work.

If a Mature Overhang is identified and is not practical to remove, it shall be identified on the Abnormal Field Conditions Form, for consideration by SCE as an approved exception.

14.2 Additional Services Deliverables

When performing additional services as described in Section 4.0 and as assigned by Edison, Contractor shall submit the following documentation:

- 1) Tree Removal: Contractor shall document and submit to Edison all tree removal locations.
- 2) Palm Removal: Contractor shall document and submit to Edison all palm removal locations.
- 3) Vine Removal: Should there be any remaining portion of vine/material left on the pole within minimum approach distances, Contractor shall notify the Edison representative (via written documentation). Vines not completely removed from the pole outside the minimum approach distance must be documented on the Abnormal Field Conditions Form identifying the restriction from completing the removal.
- 4) Herbicide Application: Contractor shall document and submit to Edison all locations where herbicide has been applied.
- 5) Secondary Line Clearance: Contractor shall document and submit to Edison all secondary clearance locations.
- 6) District and Region Work: Work shall be completed by the provided due date and documentation returned to the Edison representative (via email) within three business days from time of completion. Additionally, Contractor shall deliver the following data:

- a) Completed work requests with daily logs prior to the work due date
- b) Requests for line outages using the appropriate SCE notification processes
- c) Requests for line crew assistance using the appropriate SCE notification processes

14.3 Customer Coordination Deliverables

Customer Coordinator must document the date in which each notification was given as well as any method of notification that was used in attempting to notify all property owners and/or customers. Coordinator shall document each instance of notification in the work management system. Coordinator shall submit a weekly status update via the Customer Coordinator Tracker Template Excel spreadsheet. Coordinator shall e-mail a copy to the Edison representative.

14.4 Emergent Work/Special Projects Deliverables

Work shall be completed by the provided due date and documentation returned to the Edison representative (via email) by the following business day from time of completion.

14.5 Safety Deliverables

Contractor shall submit a monthly safety report to Edison including but not limited to the following information:

- 1) Number of Contractor safety observations.
- 2) Number and details related to any safety incidents and/or TCCIs.
- 3) Number of safety meetings.
- 4) Number of stand downs.
- 5) Number of employees trained for the job that month.
- 6) Subcontractor names, crew counts, ISN grade, and confirmation they have received Contractor safety orientation.
- 7) Safety staff to crew ratio.
- 8) A table identifying prime and subcontractor man hours, days away restrictions and transfers (DART), total recordable incident rate (TRIR), and severity rates. The table shall include incident counts for all incident categories, days away from work, restricted days, and transfer cases.

14.6 General Reporting Requirements and Deliverables

Contractor will provide the following on a weekly basis:

- 1) Contractor Resource Summary: Either as part of work management system

(if available) or separately through SCE-provided form, Contractor must submit counts of # of crews and # of personnel working by zone-district-grid/circuit and UVM Program (e.g., DVMP, HTMP) on a weekly basis at minimum. Contractor shall electronically provide the "Contractor Resource Summary" by 10:00 a.m. each Monday. This summary shall be made available via email by Contractor and shall include crews, personnel, telephone numbers, and work locations. An update to this "Contractor Resource Summary" shall be sent any time a new grid or circuit is started or when a change to crews occurs. Edison shall provide Contractor an e-mail distribution list of Edison representatives who shall receive the "Contractor Resource Summary".

- 2) Contractor Invoice Requirements: Contractor will submit a single invoice per UVM Program and grid, with some exceptions to be granted on a case-by-case basis. Contractor must follow SCE documentation requirements, including Grid Cover Sheet, Abnormal Field Conditions Form, Pre-Inspection Discrepancy Report, and additional Reliability forms if needed.
- 3) Work Management System Requirements: Contractor agrees to provide all required data fields per UVM program needs. In the event of issues with the work management system, Contractor must provide: district, grid, ISO (if applicable), prune month, prior year inventory, date started, due date, percent completion, estimated completion date, days past due, total trees pruned, total trees removed, total prunes remaining, total removals remaining, number of crews assigned, prune rate (measure of productivity), quality control start date, quality control completion date, date submitted to SCE, hours invoiced, invoice amount.

The content and level of detail in these reports will be determined in consultation with SCE. Reporting may be streamlined with other deliverables (Contractor Resource Summary, Contractor performance metrics, etc.) as the UVM Program evolves. SCE shall provide email distribution lists for reporting purposes.

15.0 Contractor Performance

Contractor performance will be reported on a monthly scorecard which may include but will not be limited to:

- 1) Quality, such as safety, notifications left, permission obtained, pruning accuracy (i.e. appropriate cuts [volume and pruning techniques]), herbicide application, etc.
- 2) Schedule adherence.
- 3) Incidents including safety, customer complaints, etc., and timeliness of applicable resolutions.
- 4) Documentation submittal timeliness.

Contractor will be evaluated and scored on a monthly basis in accordance with Contractor performance metrics. These metrics will include control stages which may result in probation or withholding of future work. The metrics are considered to be "living" measures and may be

modified at Edison's discretion. Performance metrics will be discussed on an ongoing basis, including, but not limited to:

- 1) Monthly project-based Compliance meetings (in-person and/or via Skype) attended by Contractor management and select supervisors/leads (including safety managers). Contractor is encouraged to invite different supervisors/leads to attend so as to help share information and make different individuals available to share feedback and engage in problem solving.

Contractor shall be ready to discuss and/or present detailed performance metrics, including, but not limited to:

- a. Safety – Incidents reported to SCE
 - b. Service – Deliverables and status of progress toward deadlines
 - c. Quality – Invoice accuracy, spend rate
 - d. Social Responsibility (DBE spend)
 - e. Employees – Number of crews onsite, assignments, hours worked
 - f. Customer Interaction – Notifications and refusals
 - g. Productivity – Number of prunes/removals and hourly rates
 - h. QC/Compliance – Missed or modified prescriptions
- 2) Monthly region based benchmarking meetings (in-person) attended by local Contractor team members (including supervisors, General Foremen, Customer Coordinators, leads, pre-inspectors, safety supervisors, etc.). Such meetings can be arranged with the assistance of SCE SSPs and Managers.

16.0 Glossary

The purpose of this glossary is to provide standardized terms and their definitions for the Vegetation Management Pruning Statement of Work.

Abrasion	Damage to a Conductor's insulation resulting from the friction between a tree and the Conductor.
Access Conflict	An access conflict is any location where the homeowner or renter has not provided access to the work location for maintenance.
Abnormal Field Conditions Form	Internal SCE UVM document utilized for documenting unusual or abnormal conditions.
Agreement	Master Services Agreement.
ANSI A300 (Part 1)	American National Standard practices for tree pruning.
ANSI A300 (Part 7)	Standard practices (Integrated Vegetation Management).
ANSI A300 (Part 9)	Standard practices (Tree Risk Assessment).
ANSI Z133.1	American National Standard for Pruning and Safety Requirements.
Avoidable Tree Outages	Any outage that could have been prevented by routine tree maintenance or proper pruning techniques.
Best Practice	A procedure that has been shown by research and experience to produce optimal results and that is established or proposed as a standard suitable for widespread adoption.
BLM	Bureau of Land Management.
Blow-in Zone	Encroachment zone as described in the DVMP UVM document.
Border Zone	A Clearance Zone area outside the Wire Zone from the edge of the defined ROW ground to sky.
Brush Unit	One brush unit is payable at the equivalent rate of one tree unit. The area of one brush unit equals 10 ft. x 10 ft. (or equivalent to 100 sq. ft. area).
Bulk Power	As defined by the Regional Reliability Organization, the electrical generation resources, transmission lines, interconnections with neighboring systems, and associated equipment, generally operated at voltages of 100 kV or higher.
CAL-ISO	California Independent System Operator.
CAL FIRE	California Department of Forestry and Fire Protection.
Certified Arborist	Certification status obtained through ISA testing and qualifications.
Certified Tree Worker	Certification status obtained through ISA testing and qualifications.
Claim	Damage caused to Edison facilities or customer property by Contractor and validated by Edison. A recordable incident requiring mitigation.
Compliance	In adherence with all Applicable Laws, Applicable Standards, Edison Policies and this Statement of Work with respect to and in connection with line clearing and vegetation management of electrical transmission and distribution Conductors and facilities.
Compliance Clearance Distance (CCD)	Line Clearance distance established by SCE to maintain regulatory Compliance.

Compliance Zone	The minimum radial distance surrounding Conductors and other Edison electrical facilities that is required to be maintained in accordance with Applicable Law, Applicable Standards, and Edison Policies.
Conductor	A wire, either aluminum or copper, used to supply electricity.
Contract Operations	Responsible for performing tree pruning and removal operations under a contract Purchase Order.
Contractor Resource Summary	An electronic transmission identifying all grids being worked and the number of crews and crew types available.
Control Stage	A designation applied to a contractor based on performance against a scorecard that may reflect Contractor being on probation, suspension, or termination.
Corporate Fiscal Governance	Financial governance over Corporate Operations.
CPUC	California Public Utilities Commission.
CS	Construction Support (Formerly CCM: Central Construction Management) responsible for contract management and Tree Maintenance Operations.
Customer Complaint	A written, in-person, or phone message complaint stating unacceptable work quality or reporting alleged crew behavior from a customer due to vegetation maintenance operations.
Customer Coordinator	Contractor personnel point of contact for all customer contact and coordination.
Customer Refusal	When Contractor is unable to provide or maintain any and all vegetation to a distance of 18" (CPUC area) or 4 ft. (PRC - Fire designated area) and applicable transmission clearances between the conductor and all vegetation because permission to execute work was denied by the customer.
Daily Log (Pink)	An Edison form (SCE TDBU 6) used to recap tree maintenance work performed in the field in the Very High or Extreme Fire designated area under the interim CPUC OIR.
Daily Log (White)	An Edison form (Edison 14-178) used to recap tree maintenance work performed in the field and for validation of work completed. Also used to submit work for payment.
DBH (Diameter Breast Height)	Diameter of a tree measured at breast height.
Direct contact	When any part of the body touches or contacts an energized electrical conductor.
Distribution voltages	Voltage ranging from 2.4 kV up to and including 69 kV.
DOC	Distribution Operations Center.
Documented Attempts	An attempt made to gain access to property for work which is documented in the work management system, including the date of attempted contact, the name of the personnel attempting to make contact, reason contact was attempted, and note the condition and clearances of the tree at the time contact was attempted.
Door Hanger	A printed card left at a customer residence to request permission to provide vegetation maintenance or to leave awareness information.
Drop-In Zone	Clearance Zone above the high-voltage conductors.

DVMP	Distribution Vegetation Management Plan.
Edison Senior Specialists or SSPs	Field specialists who oversee Vegetation Management operations.
Electrical Hazard Awareness	Information given to a customer on a card or by brochure to identify tree and power line safety. Contract crews hand this information out on Edison-provided Door Hangers any time they perform any work at the customer's location.
Electrical Safety Orders	Regulations Contractor shall comply with when OSHA Title 8, Section 2951 performing tree pruning operations.
Environmental Conditions	Sensitive habitats, waterways and cultural resource areas may require Contractor to obtain a permit before starting work and adhere to special procedures, including the assistance of Edison's Environmental Services Department (ESD) group biologists.
Exception Tree	Vegetation that is not expected to hold an annual pruning cycle to maintain the CCD.
Exclusion Zone	Zone under and around transmission towers cleared to bare ground, measuring a minimum of 10 feet out from the outside perimeter of the tower footings and a 20 foot perimeter where necessary for access and maintenance.
Force Majeure Event	Unforeseeable circumstances that prevent someone from fulfilling a contract.
Future Schedule Request	When a customer has requested tree maintenance be delayed from routine schedules due to any number of reasons including, but not limited to, going out of town, new landscaping, pets, wanting to be present at time of prune, or access restrictions.
General Foreman	Contractor personnel point of contact for assigned work territories; supervising position within Contractor workforce, oversees tree crews.
General Order 95 (CPUC)	A governmental document containing vegetation separation distance from power lines under California Public Utilities Code Sections 35 and 37.
Grid Cover Sheet	Internal SCE UVM document utilized for documenting completion of assigned work.
Grid Polygon	An area identified by north, south, east and west boundaries for the purpose of gathering and identifying data for vegetation management purposes.
Grid Maintenance	Vegetation maintenance performed within a grid in accordance to the Vegetation Management Operations Manual.
Grid Resiliency Clearance Distance (GRCD)	Maximum established Line Clearance to be established at time of maintenance to protect against fire ignition and vegetation caused outage.
Grow-in Zone	Clearance Zone between the outside phases on a distribution tower or pole, to the horizontal plane defined by the top of the tower or pole.
Hanger	A cut branch or limb lodged in a tree.
Hazard Tree	Subject Tree which is expected to pose a risk to electric facilities based on its structural condition.
Heavy Top	The topping of a tree to lower its height for Reliability of the electric system.

Height Reduction	Removal of a large portion of a tree to achieve adequate clearance between vegetation and conductor.
Imminent Threat	Vegetation identified to be a threat to power line operations.
Incident Evaluation Report	Internal SCE UVM document utilized for documenting safety incidents.
Indirect Contact	When a person receives electrical contact through any object that touches an energized power line.
ISA	International Society of Arboriculture.
ISO	Independent System Operator.
KPI	Key Performance Indicator.
Lateral	A secondary tree branch that has grown from a main leader of a tree.
LE 38	An advisory that identifies non-Compliance conditions. Also known as LE-38A and USFC 5100-209.
Leader	The main leader or leaders of a tree.
Leaner	A tree leaning toward or away from an object or power line.
Level Assessments	Limited Visual Assessment (Level 1) – Assessment of individual tree by schedule or immediately after a storm or system Reliability needs to view obvious defects or damage. Inspection normally performed as a drive by or foot patrol or from an airborne prospective. Basic Assessment (Level 2) – A detailed visual inspection of a tree and its surrounding site requiring a complete walk around of the tree to inspect buttress roots, trunk and branches. This may require specific tools such as binoculars, mallet and probe. For Utility operations the purpose of a level 2 assessment is to determine potential structural failures or maintenance needs within the target zone resulting from storm activity or system Reliability needs. Advanced Assessment (Level 3) – This is a detailed assessment requiring advance qualification as a Tree Risk Assessor and use of specialized tools and equipment. Vegetation requiring a level 3 assessment should be documented and forwarded to SCE for assignment.
Line Number	Number used in the Vegetation Management database (grid data listing) to identify tree inventory by address or location.
MPC	Manager of Programs and Contracts who oversees area vegetation management operations at the field level.
MWS	Major Woody Stem exemption tree.
No Contact	Inability to make contact with an owner or occupant of property for tree maintenance for at least two separate Documented Attempts by Door Hanger, phone, or written request to obtain permission to perform tree work.
OIR	Order Instituting Rulemaking – Relating to CPUC Fire Disaster Management OIR (R.08-11-005) Filed November 6, 2008.
Overhang (Mature)	A limb or branch overhanging a power line or electrical equipment that is greater than four inches in diameter.
Overhang (Non-mature)	A limb or branch overhanging a power line or electrical equipment that is less than four inches in diameter.

Palm Skinning	Removal of dead palm fronds from palm trees overhanging or adjacent to Edison primary conductors.
PI	Pre-Inspection.
Post Audit Review	A review of completed work to determine quality and Compliance to Applicable Laws, Applicable Standards and Edison Policies. This review will include a sample of tree maintenance grids and tree locations and will be used as a quality assurance measure of Contractor's Compliance with the terms of the Agreement.
PRC	Public Resources Code (Forestry area regulations).
Pre-Inspection Discrepancy Report	Internal SCE UVM document utilized for documenting discrepancies in the field in order to justify additional prunes not prescribed by pre-inspection contractor.
Primary Conductor	Any Conductor with a voltage above 750 volts.
Priority 1	Any observed tree, or parts thereof, that is expected to fail and contact with electric facilities is imminent; and/or observed vegetation condition where contact has occurred or contact with electric facilities is imminent.
Progress Sheet	Monthly schedule of services.
Propagated Volunteer Trees	Trees or shrubs that sprout as result of bird droppings in or around Edison facilities. Trees not planted or generally maintained by the customer. Trees must be in the Vegetation Management database or growth which may encroach on the secondary level within a year, to be accountable for removal.
Prune	Arbor culturally-correct terminology to describe a pruner cut to a tree for maintenance operations.
PSPS	Public Safety Power Shut-off.
RCD	Regulation Clearance Distance.
Refusal Form	Internal SCE UVM document utilized for documenting customer refusals.
Reliability	Term used in Vegetation Management to describe uninterrupted service without any tree-caused circuit interruptions or other vegetation-caused outages.
Reliability Tree	Dead, dying, or diseased, or decadent tree that could lean or fall onto a high voltage line, or tree leaning toward or overhanging a high voltage line.
Removal Form	Internal SCE UVM document that must be signed by property owner before a tree can be removed.
Routine Maintenance	Pruning and removal of vegetation around Conductors and energized equipment to meet governmental regulations and industry safety standards.
ROW	Right of way.
Secondary Voltage	Voltage, or conductors carrying voltage, less than 600 V on the distribution system. Also refers to the low side voltage on a transformer.
Side Grow-In Zone	Clearance zone located on either side of a distribution line where vegetation can grow into the conductors.
Strain	Additional tension on a Conductor that causes a deflection of the Conductor beyond the slack of the span.

Storm Tree	A tree that has been subject to any storm event, including without limitation, trees affected by wind, rain, snow, heat, soil erosion, lean due to weight shift or other forces of nature that show evidence or signs of failure or compromise from a normal healthy state of growth.
Stubs	Cuts made beyond the callus ring and not acceptable in proper pruning.
T&E	Time and expense.
T&D	Transmission and distribution.
T&D System	Transmission and distribution systems, lines, poles, and other facilities.
TCCI	Tree-caused circuit interruptions.
TCCCI	Tree-crew-caused circuit interruptions.
Timeline of Services	Anticipated timeline of services, indicating expectations for timeline of commencing work, completing work, and delivering work records.
Tree Risk Assessment Qualification (TRAQ)	Issued by ISA as supplemental qualification for certified arborists to perform tree risk assessments.
Tree Pruning	Cutting away unwanted or interfering branches.
Tree Removal	The removal of an entire tree to ground level or as close as possible.
Tree Surgery	The science of making proper cuts to Leaders and Laterals.
Tree Pruner	An individual who, through related training and on-the job Arborist experience, is familiar with the equipment and hazards in line clearance and has demonstrated the ability to perform the special techniques involved.
TLC or Tree Line Contact	When a limb, vine, brush, or any vegetation makes direct contact with an energized Conductor.
TMP	Tree Maintenance Program.
Trigger Clearance Distance	Clearance distance for work to be initiated.
TVMP	Transmission Vegetation Management Plan.
Transmission Voltages	Voltages ranging from greater than 33 kV to 500 kV.
USFS	United States Forest Service.
UVM	Utility Vegetation Management.
Wire Zone	Clearance Zone between the outside phases on a transmission tower or pole, plus the Wire Security Zone, from ground to sky.
WMS	Work Management System.

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**Utility Vegetation Management
Hazard Tree Removal Program
Scope of Work Updated 04.28.2020**

The Contractor shall provide necessary supervision, labor, material, tools and equipment to fell and remove trees, including debris, that are adjacent to or outside of the rights-of-way (ROW) that if they should fall have the ability to impact Edison's overhead facilities and/or violate the Minimum Vegetation Clearance Distance (MVCD). In certain situations, complete tree removal may not be required to mitigate the risk that the tree poses to electric facilities, the contractor shall prune or remove portions of the tree to mitigate the risk. Where trees are pruned or other portions are removed to make safe, the tree should be cut in a manner that would ensure reliability for a minimum of 3 years, if those measures can't be obtained total removal should be pursued. Mitigation measures will be determined by third-party tree assessment contractors and/or Edison representative. This work will be conducted throughout Southern California Edison (SCE) high fire risk area (HFRA).

Overhead facilities include Primaries and Open-wire Secondaries.

Definitions of Work are as follows:

DBH – Diameter at Breast Height

BUCK AND SLASH - Remove slash and pile at locations convenient for chipping. Prepare logs according to industry standards. Locate logs for convenient loading.

CHIP AND HAUL - Chip, haul and dispose of all slash and debris up to 20 inches in diameter generated by utility-related operations.

HAUL LOGS - Load, haul, and dispose of millable logs generated by utility-related removal operations. Edison shall approve accounting of board feet prior to haul. It is recommended that all marketable timber be cut to a minimum of 10' lengths. It is reasonable to assume that safety or environmental concerns may require smaller lengths to be cut. In these cases, smaller lengths will be allowed.

SHORT LOGS - Load, haul and dispose of log sections generated by utility-related removals which are greater than 20 inches in diameter and less than six (6) feet long, which do not satisfy industry requirements or milling. Edison shall approve accounting of wood volume prior to haul. It is recommended that all marketable timber be cut to a minimum of 10' lengths. It is reasonable to assume that safety or

environmental concerns may require smaller lengths to be cut. In these cases, smaller lengths will be allowed.

TREE FELLED WITH CRANE – A tree that has been identified by Contractor, and approved by an Edison Representative, to be brought to ground safely in minimum 16 foot sections with the use of overhead crane(s). May include sections less than 16 feet in larger trees.

HERBICIDE APPLICATION TO PREVENT REGROWTH

All trees and vines that are removed that have the potential of stump re-growth shall be treated to ensure re-growth will not occur. Should trees regrow due to failure of herbicide application, it is the Contractor's responsibility to remove regrowth and treat stump as directed. The Contractor is responsible to be in Compliance for the use and application of all herbicides used in performing the Services and shall maintain herbicide application records as required by the California Department of Pesticide Regulation.

ADDITIONAL SAFETY REQUIREMENTS

Due to the nature of this program (Hazard Tree Mitigation) SCE will be requiring a minimum of 1 Safety Specialist per 12 crews to be on site on a daily basis. However, if there is a need to have crews working in different districts at the same time SCE may require additional Safety Monitors in order to ensure proper safety oversight on a regular basis.

TECHNOLOGY

At the request of the Edison Representative, access to GIS/web based AVMS (automated vehicle management systems) shall be made available to Edison.

Agreement to Enable Technology through Work Management Software – Contractor agrees to enable Technology as directed by Edison Representative. Contractor shall receive proper notification of any modifications to the Work Management Software in order to maintain compliance with all Technology Requirements.

WORKER QUALIFICATION AND EQUIPMENT

Contractor shall maintain a list of all personnel performing any portion of the Services, whether employed or retained by Contractor or any subcontractor, and such personnel's name, title, social security number and work locations. Contractor's personnel shall be required to carry Contractor issued photo-identification cards for work assigned while performing the Services.

Qualifications

1. General Foreman and Tree Crew Qualifications: General Foreman must be 1. Certified Arborists (from the International Society of Arboriculture) and/or 2. Must possess a minimum of 3 years of related utility vegetation management inspection/planning experience. Edison encourages the Contractor to continuously and proactively seek to have all employees obtain ISA Arborist certifications. At minimum, Contractor shall make available one ISA Arborist or Certified Tree Care Professional per zone.
2. All General Foreman and at minimum, one member of each crew must be fluent in English (including written fluency).
3. Individuals must maintain a professional appearance. Company logos must be displayed for work assigned (including shirts, hard hats, and/or safety vests). Contractors shall provide all such apparel and equipment to employees.

Compliance Training

Contractor personnel shall receive the majority of their training through their respective employers.

Training provided by SCE to contract personnel includes but is not limited to the following:

- Regulatory Compliance Requirements (state and federal)
- Imminent threat procedures (UVM-08: Vegetation Threat Procedure)
- Reporting inaccessible areas
- Environmental training (habitat areas, cultural resource areas, wetlands/waterways, avian protection)
- SCE operations and contractual requirements

The training provided to contractors is not intended to qualify the contractors or relieve them of liability, but to provide reasonable assurance of their understanding. Contractors shall attend annual Compliance Training sessions at Contractor's expense. Sessions must be documented with a list of attendees and submitted to the Edison Representative.

Equipment

1. Vehicles must be kept in clean, safe working condition. Vehicles shall be free of large dents/damages.
2. All Contractor vehicles must display visible Company logos on each door.
3. Approved Edison Contractor signs shall be prominently displayed on all Contractor vehicles (both sides and rear) while performing the Services. Contractor shall remove or cover all Edison logos and/or decals prior to performing any private contractor work within or outside the Edison service territory. Contractor shall ensure that all subcontractors adhere to the same requirements for vehicle logos while not performing services for Edison.
4. Contractors shall follow all requirements related to wearing Personal Protective Equipment (PPE).
5. Contractor shall furnish the General Foreman with cell phones as well as laptops (or email-enabled smart devices) with company sponsored email accounts. Contractor shall provide all cell phone numbers

by personnel to Edison. Contractor shall immediately provide any updates to Edison as information changes occur.

COMPLAINTS AND CLAIMS

Edison shall refer any third party complaints or Claims that Edison reasonably determines arise or result from Contractor's performance or non-performance of the Services to Contractor and Contractor shall promptly make customer contact regarding the complaints or Claims within 5 working days, and thereafter work to resolve the complaints or Claims as quickly as possible.

Contractor shall treat all Edison customers with the utmost respect and consideration. Contractor shall immediately notify the Edison Vegetation Manager or his representative of any damage to Edison facilities, damage in excess of \$500 to customer property, injury to any third party, or injury to employees engaged in performing the Services. Contractor shall also deliver to Edison's Vegetation Management Resource Center, not later than the 10th day of each month, a monthly report of all third party complaints or Claims that it has received (whether or not referred by Edison) which arise or result from the performance or non-performance of the Services and their status as to resolution.

TREE FELLING WITH CRANE

Before the start of Work, Contractor is to submit a Crew Form to the Edison Representative that lists the trees which have been identified to be felled with the use of overhead crane(s). The review and approval of the list by the Edison Representative is required for Contractor to bill against this unit rate. Upon invoice submittal, Contractor must also submit photo documentation of before and after images of each tree felled by crane(s).

The pre-approval and pre-identification required for invoicing against this unit rate should not preclude Contractor from, while performing the Work, felling additional trees with an overhead crane(s) when it proves safe and efficient to do so. The felling of these trees will be charged against the standard Tree Felling Rate.

ESTIMATED WORKLOAD

The average monthly workload may fluctuate significantly. While efforts have been made to provide a reasonably accurate forecast of the Work, Contractor is notified that these are only estimates and the actual amount of Work in any area may be substantially more or less than anticipated.

ADDITIONAL REQUIREMENTS/CONDITIONS

Contractor shall be required to secure all necessary permits and licenses with the appropriate city, county or agency having jurisdiction over the project and be in accordance with all applicable codes, standards, and regulations associated with the scope of work.

SCOPE OF WORK

The Contractor shall provide necessary supervision, labor, material, tools and equipment to fell and remove dead, dying, and hazardous trees, including debris, that have the ability to impact Edison's overhead facilities in the affected areas of San Bernardino and Riverside Counties in support of the Bark Beetle Project as identified by the California Public Utilities Commission (CPUC) as Bark Beetle Resolution E-2834, dated April 3, 2003. The Contractor shall additionally provide said services when requested by the Edison Representative in the affected areas of Los Angeles, Ventura, Santa Barbara, Inyo, Kern, Tulare, Kings, Fresno and Mono Counties in support of the Drought Resolution Program as identified by the CPUC as Drought Resolution ESRB-4, dated June 12, 2014.

Overhead facilities include Primaries, Secondaries, Service drops, Guy wires and any other attachment that may cause Edison's facilities to spark and start a wild fire.

Definitions of Work are as follows:

DBH - Diameter of breast height as determined under the supervision of a Registered Professional Forester according to industry standards.

BUCK AND SLASH - Remove slash and pile at locations convenient for chipping. Prepare logs according to industry standards. Locate logs for convenient loading.

CHIP AND HAUL - Chip, haul and dispose of all slash and debris up to 20 inches in diameter generated by utility-related operations.

HAUL LOGS - Load, haul, and dispose of millable logs generated by utility-related removal operations. Edison shall approve accounting of board feet prior to haul. It is recommended that all marketable timber be cut to a minimum of 10' lengths. It is reasonable to assume that safety or environmental concerns may require smaller lengths to be cut. In these cases, smaller lengths will be allowed.

SHORT LOGS - Load, haul and dispose of log sections generated by utility-related removals which are greater than 20 inches in diameter and less than six (6) feet long, which do not satisfy industry requirements or milling. Edison shall approve accounting of wood volume prior to haul. It is recommended that all marketable timber be cut to a minimum of 10' lengths. It is reasonable to assume

that safety or environmental concerns may require smaller lengths to be cut. In these cases, smaller lengths will be allowed.

LIMB REMOVAL - Upon any dead or dying tree that has at least one overhanging branch, remove all branches on the conductor side of the tree to the trunk or a minimum of ten (10) feet from a vertical plane through the closest conductor beginning just below the conductors to the top of the tree.

Upon healthy trees with at least one overhanging breach ten (10) feet or less above the conductors, remove all branches ten feet above and ten feet to the side of the conductors beginning just below the conductors.

Chip and remove all cut limbs upon felling. All disposal fees associated with the removal of chipped debris shall be billed in accordance with the fixed unit rates identified below.