


# Transmission & Distribution

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## **UVM-03 Distribution Vegetation Management Plan (DVMP)**


SCE	Legal, Regulatory, and Compliance	Transmission & Distribution Utility Vegetation Management Program	Methodology	Doc. No.	UVM-03	 <b>SOUTHERN CALIFORNIA EDISON</b> Energy for What's Ahead <sup>SM</sup>
				Version	2	
Effective Date		1/31/2019				
Supersedes		V1				
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## 1 Introduction

### 1.1 Purpose


Southern California Edison (SCE) maintains a reliable electric distribution system by managing vegetation located under and adjacent to electric conductors in order to minimize the risk of encroachments into the specified clearance zones.

### 1.2 Objectives

The SCE Distribution Vegetation Management Plan (DVMP) is designed to improve the reliability of SCE's distribution system and to comply with regulatory requirements established by the California Public Utilities Commission (CPUC) General Order (GO) 95, California Public Resource Codes (PRC), and Title 14 California Code of Regulations (CCR) by establishing maintenance and inspection procedures to:

- Manage vegetation to prevent vegetation encroachment into the clearance zones under normal conditions as stated in the following regulations, as applicable. During Force Majeure<sup>1</sup> events it may not be possible to ensure that an encroachment into the clearance zones will not occur.
  - GO 95, Rule 35 (Case 13 and Case 14)
  - GO 95, Rule 37
  - PRC Section 4292
  - PRC Section 4293
  - CCR Sections 1250-1258
- Document the maintenance procedures and processes used to manage vegetation to prevent the encroachment into the clearances described in the regulations noted above.
- Include consideration of 1) conductor (line) dynamics 2) vegetation movement during high winds (tree dynamics), and 3) the interrelationships between vegetation growth rates, control methods and inspection frequency.
- Provide timely notification to the appropriate Vegetation Management Operations (VM) Technical Specialist (TSP) or Manager of vegetation conditions that could cause a flash-over or Fault.
- Implement corrective actions to prevent encroachments into the clearance distances described in the regulations noted above due to work constraints.

<sup>1</sup> Circumstances that are beyond a utility's control, including natural disasters such as earthquakes, fires, tornados, hurricanes, landslides, wind shear, fresh gale, major storms, ice storms, and floods; human or animal activity such as logging, animal severing tree, vehicle contact with tree, or installation, removal, or digging of vegetation. Definition is from NERC Reliability Standard FAC-003-4.

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- Inspect vegetation conditions annually or more frequently, as needed.
- Complete the annual work needed to prevent encroachments into the clearance distances described in the regulations noted above.

## 2 Applicability

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### 2.1 Operating Units

This document is applicable to the OUs impacted by the Energy Regulatory Compliance Program (ERCP) Compliance Requirements related to Vegetation Management, including but are not limited to:

- Transmission & Distribution (Distribution)
- Generation

### 2.2 Distribution Facilities

Distribution lines and equipment that are operated at 2.4 kV to 69 kV with the exception of those lines that are part of the defined Bulk Electric System or are an element of a Major Western Electricity Coordinating Council (WECC) Transfer Path or an element of an Interconnection Reliability Operating Limit (IROL)<sup>2</sup>, which are managed according to SCE's Transmission Vegetation Management Plan (TVMP).


## 3 Definitions

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Refer to the NERC Glossary of Terms, the E&C Shared Services Glossary of Terms (ECSS-02), and the UVM Glossary of Terms (UVM-20) for any capitalized terms used in this document.

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<sup>2</sup> Major WECC Transfer Paths and IROLs are managed as described in SCE's Transmission Vegetation Management Plan (TVMP)

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**4 Details**

**4.1 Encroachments**

**4.1.1 GO 95, Rule 35 and Rule 37**

Where overhead conductors traverse trees and vegetation, safety and reliability of service demand that certain vegetation management activities are to be performed to establish and maintain necessary and reasonable clearances. Minimum clearances are established in Cases 13 and 14 of Rule 35.

- For distribution lines and equipment located in Non-fire areas, GO 95, Rule 35 (Case 13) applies.
- For distribution lines and equipment located in Extreme (Tier 3) and Very High (Tier 2) fire areas, GO 95, Rule 35 (Case 14) applies.

**Strategy and Supporting Documentation**

In order to prevent an encroachment into the Regulation Clearance Distance (RCD) described in Table 1 and Table 2 below, SCE or its approved contractor will inspect and manage all vegetation under and adjacent to its applicable lines operating under normal conditions. During the inspection and completion of work, movement of the line conductors, movement of the vegetation, and vegetation growth shall be taken into consideration.


Confirmation that SCE or its approved contractor managed vegetation to prevent encroachments into the RCD will include:

- Attachment A: Utility Vegetation Management (UVM) Inspection Report
- Attachment B: UVM Post Work Verification Report
- UVM Annual Work Plan

Vegetation inspections and maintenance should be completed annually or more often as deemed necessary. SCE or its approved contractor will verify the completion of annual vegetation maintenance.

**4.1.2 Public Resource Code (PRC) § 4292**

Any person that owns, controls, operates, or maintains any electrical transmission or distribution line upon any mountainous land, or forest covered land, brush-covered land, or grass-covered land shall, during such times and in such areas as are determined to be necessary by the director or the agency which has primary responsibility for fire protection of such areas, maintain around and adjacent to any pole or tower which supports a switch, fuse, transformer, lightning

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arrester, line junction, or dead end or corner pole, a firebreak which consists of a clearing of not less than 10-feet in each direction from the outer circumference of such pole or tower (see Figure 2).

**4.1.3 Title 14, California Code Regulations (CCR) Section § 1254 – Minimum Clearance Provisions PRC § 4292**

The firebreak clearances required by PRC § 4292 are applicable within an imaginary cylindrical space surrounding each pole or tower on which a switch, fuse, transformer or lightning arrester is attached and surrounding each dead-end or corner pole, unless such pole or tower is exempt from minimum clearance requirements by provisions of Title 14, CCR, § 1255 or PRC § 4296. The radius of the cylindroid is 3.1 m (10 feet) measured horizontally from the outer circumference of the specified pole or tower with height equal to the distance from the intersection of the imaginary vertical exterior surface of the cylindroid with the ground to an intersection with a horizontal plane passing through the highest point at which a conductor is attached to such pole or tower. Flammable vegetation and materials located wholly or partially within the firebreak space shall be treated as follows:

Distribution lines and equipment located in Fire areas where PRC § 4292 applies:(a) At ground level - remove flammable materials, including but not limited to, ground litter, duff and dead or desiccated vegetation that will allow fire to spread, and;

(b) From 0 - 2.4 m (0-8 feet) above ground level remove flammable trash, debris or other materials, grass, herbaceous and brush vegetation. All limbs and foliage of living trees shall be removed up to a height of 2.4 m (8 feet).


(c) From 2.4 m (8 feet) to horizontal plane of highest point of conductor attachment remove dead, diseased or dying limbs and foliage from living sound trees and any dead, diseased or dying trees in their entirety.

**Strategy and Supporting Documentation**

In order to prevent vegetation growth and maintain a firebreak at the base of poles that support non-exempt equipment, SCE or its approved contractor will inspect and manage vegetation at the base of poles, in accordance with PRC 4292 where feasible and permissible. In Tier 2 and Tier 3, SCE or its approved contractor will clear the base of exempt poles or apply a fire retardant to the base of the pole in a 10 foot radius.

Confirmation that SCE or its approved contractor managed vegetation to prevent vegetation growth at the base of poles that support non-exempt equipment shall include:

- Attachment A: Utility Vegetation Management (UVM) Inspection Report

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- Attachment B: UVM Post Work Verification Report
- UVM Annual Work Plan

Vegetation inspections and maintenance should be completed annually or more often as deemed necessary. SCE or its approved contractor will verify the completion of annual vegetation maintenance.

Maintenance work will be reviewed in accordance with the requirements established in Procedure UVM-07, “Post Work Verification and UVM Program Oversight” to provide reasonable assurance the work is completed in accordance with the work specification.

#### 4.1.4 Public Resource Code (PRC) § 4293

Any person that owns, controls, operates, or maintains any electrical transmission or distribution line upon any mountainous land, or in forest-covered land, brush-covered land, or grass-covered land shall, during such times and in such areas as are determined to be necessary by the director or the agency which has primary responsibility for the fire protection of such areas, maintain a clearance of the respective distances in all directions between all vegetation and all conductors which are carrying electric current

#### Strategy and Supporting Documentation

In order to prevent an encroachment into the RCD described in Table 1 below, SCE or its approved contractor will inspect and manage all vegetation under and adjacent to its applicable lines, as described in Section 2 above, operating under normal conditions. During the inspection and the completion of work, movement of the line conductors, movement of the vegetation, and vegetation growth shall be taken into consideration.


Confirmation that SCE or its approved contractor managed vegetation to prevent encroachments into the RCD shall include:

- Attachment A: Utility Vegetation Management (UVM) Inspection Report
- Attachment B: UVM Post Work Verification Report
- UVM Annual Work Plan

Vegetation inspections and maintenance should be completed annually or more often as deemed necessary. SCE or its approved contractor will verify the completion of annual vegetation maintenance.

## 4.2 Maintenance Work Validation



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Maintenance work will be validated in accordance with UVM-07, “Post Work Verification and UVM Program Oversight,” to provide reasonable assurance the work is completed in accordance with the work specification.

## 5 Clearance Requirements

### 5.1 Distribution Lines

Based on the conditions described below, the subsequent processes are to be used to establish the clearance requirements in the Encroachment Zones:

#### 5.1.1 Fire Areas (see Table 1 below)

Applicable regulations:

1. PRC § 4293
2. GO 95, Rule 35, Case 14

Grid Resiliency Clearance Distances (GRCD) are established to mitigate fire risk and maintain compliance with PRC § 4293 and GO 95, Rule 35 requirements.

- GRCD-A and GRCD-B are to be established at time of maintenance work based on line voltage
- Trigger Clearance Distance<sup>3</sup> (TCD) for UVM work to be initiated based on line voltage
- Compliance Clearance Distances<sup>4</sup> (CCD) to be maintained at all times based on line voltage
- Drop-in Zone is to be cleared of all vegetation as appropriate

#### 5.1.2 Non-Fire Areas (see Table 2 below)

Applicable regulation:

1. GO 95, Rule 35, Case 13


GRCDs are established to maintain compliance with GO 95, Rule 35 requirements.

- GRCD-A and GRCD-B are to be established at time of maintenance work based on line voltage
- TCD for UVM work to be initiated based on line voltage CCD to be maintained at all times based on voltage

#### 5.1.3 Restricted Areas

<sup>3</sup> TCD = CCD + 3-feet

<sup>4</sup> CCD = RCD x 1.5 (Safety Margin) rounded up

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Certain conditions may prevent UVM clearance requirements from being achieved. Examples may include crops, orchards, environmentally sensitive areas or lack of easement rights.

- GRCD-A or GRCD-B can be modified and documented to address the specific circumstances or restrictions at each specific location
- TCD for UVM work to be initiated based on line voltage
- CCD to be maintained at all times based on voltage


**5.1.4 Low Voltage Lines (Fire and Non-Fire Areas)**

Low voltage lines, 750 volts and below, are categorized as follows:

- Secondary – Pole to pole
  - Aerial Cable or Open Wire (Insulated or Uninsulated)
- Service Drop – Pole to weatherhead
  - Triplex and Quadruplex (Bundled), or Open Wire

Low voltage line clearances are described in the charts below.

To prevent encroachments into the RCD, clearance at time of scheduled maintenance, clearance to be maintained, and trigger distance for UVM work will be as follows:

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<b>Fire Areas</b>						
<b>PRC 4293 and GO 95, Rule 35, Extreme and Very High Fire Areas (Case 14)</b>						
<b>Nominal Voltage</b>	<b>Grow-in Zone Clearance Distance at Time of Maintenance GRCD-A</b>	<b>Blow-in Zone Clearance Distance at Time of Maintenance GRCD-B</b>	<b>Grow-in &amp; Blow-in Zones Clearance Distance that Triggers Work TCD</b>	<b>Grow-in &amp; Blow-in Zones Clearance Distance to be Maintained for Compliance CCD</b>	<b>Drop-in Zone</b>	<b>Regulation Clearance Distance RCD</b>
2.4 - 69kV	12' <sup>5</sup>	12'	9'	6'	Clear of all Vegetation where Practical	4.0'
750 volts and below Open Wire	4'	4'	1'	n/a	n/a	No strain or abrasion
750 volts and below Aerial and Bundled	No strain or abrasion	No strain or abrasion	n/a	n/a	n/a	No strain or abrasion

**Table 1: Clearance Distances – Fire Areas**

<sup>5</sup> GO 95 Rule 35 Appendix E recommended clearance (Case 14)

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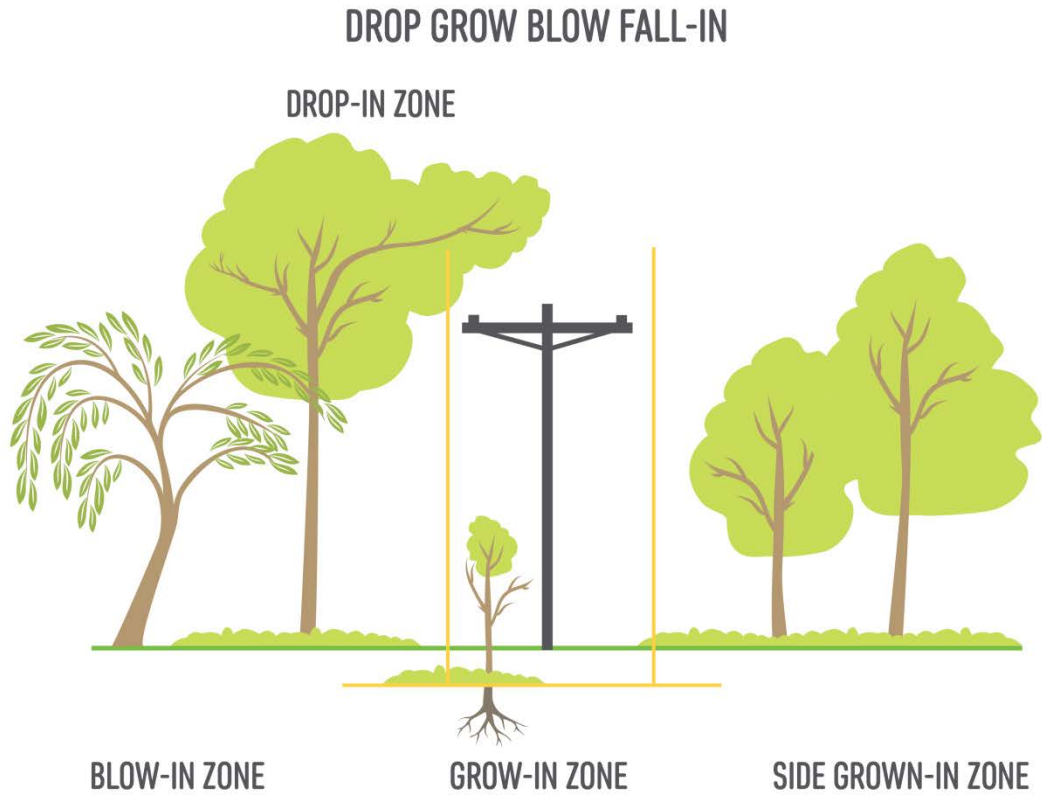
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Non-Fire Areas						
GO 95, Rule 35 (Case 13)						
Nominal Voltage	Grow-in Zone Clearance Distance at Time of Maintenance GRCD-A	Blow-in Zone Clearance Distance at Time of Maintenance GRCD-B	All Zones Clearance Distance that Triggers Work TCD	All Zones Clearance Distance to be Maintained for Compliance CCD	Drop-in Zone	Regulation Clearance Distance RCD
2.4 - 69kV	12' <sup>6</sup>	12'	6'	3'	Clear of all Vegetation where Practical	1.5'
750 volts and below Open Wire	4'	4'	1'	n/a	n/a	No strain or abrasion
750 volts and below Aerial and Bundled	No strain or abrasion	No strain or abrasion	n/a	n/a	n/a	No strain or abrasion


**Table 2: Clearance Distances – Non-Fire Areas**

<sup>6</sup> Non-fire Area GRCD-A consistent with Fire Area GRCD-A (GO 95 Rule 35 Appendix E recommended clearance)

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**Figure 1: Encroachment Zones**

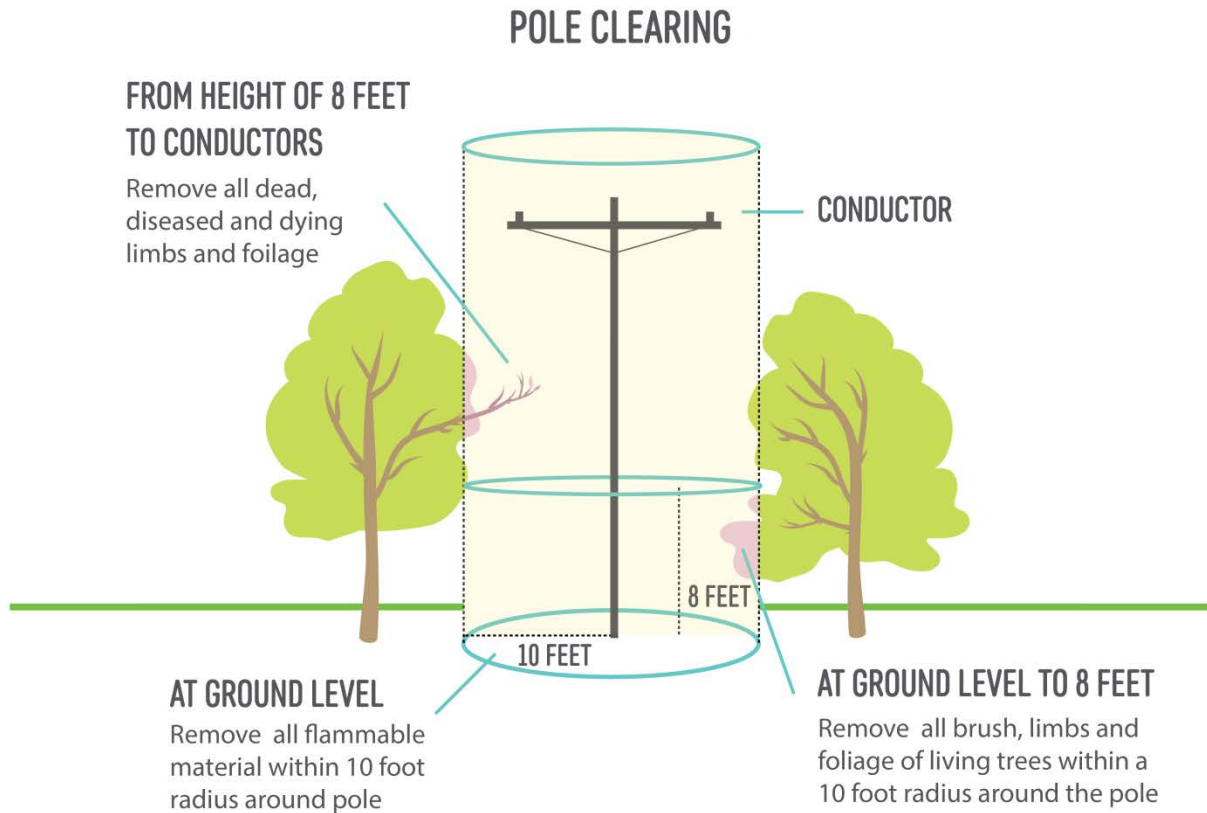
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- Vegetation in the Grow-in Zone and Blow-in Zone and Side Grow-in Zone must be cleared to, and maintained per the clearances noted in the Clearance Distances (Table 1 and Table 2). All fast growing tree species described in the Tree Species in SCE Service Territory (Attachment C), Fast Growing Tree Species that are located in the Grow-in Zone shall be removed as appropriate.
- Where practical and achievable, all vegetation in the Drop-in Zone (overhangs) within the designated fire areas shall be removed (see Table 1).
- Vegetation identified as a Hazard Tree will be mitigated in accordance with UVM-04, "Hazard Tree Management Plan."
- When the stated clearances cannot be attained at the time of scheduled maintenance due to easement restrictions, other legal restrictions, or regulations that restrict vegetation management practices, the maximum allowable amount of vegetation will be mitigated or removed as appropriate. These Exception Tree(s) will be documented in the tree inventory and re-inspected as necessary.

The following clearances around poles are to be maintained as required in PRC 4292 and CCR 1254.

- Where practical and achievable all vegetation is cleared from above the 8 foot cylinder height established by PRC 4292 to the bottom of the conductors.

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**Figure 2: PRC §4292 & CCR §1254 Pole Clearance**

## 6 Other Program Elements

### 6.1 Inspection Types


#### 6.1.1 Pre-inspections

SCE conducts Pre-Inspections of applicable lines to identify:

- 1) Vegetation management work needed to maintain compliance with applicable regulations
- 2) Potential CCD and RCD encroachments
- 3) Hazard Risk Trees, see UVM-04, Hazard Tree Management Plan

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4) Exception Trees

**6.1.2 Supplemental Inspections**

Supplemental inspections are performed by qualified Distribution Operations personnel throughout the year. Identified conditions requiring vegetation-related work are documented and reported to the VM personnel and scheduled for remediation.

**6.2 Inspection Methods**

**6.2.1 Ground Inspections**

SCE shall conduct inspections, for lines with identified vegetation, from vehicles or by foot from the source point to the end of line.

**6.2.2 LiDAR Inspections**

LiDAR should be used where lines cannot be readily accessed by ground or the clearances between vegetation and conductors cannot be obtained both vertically and horizontally from an aerial patrol.

Based on topography, line construction, and ecosystem type, LiDAR inspection shall be scheduled as needed.

If necessary, the LiDAR inspection can be performed as early as one year from the previous flight but can be delayed if the LiDAR data is still actionable pursuant to UVM-06, LiDAR Reference Guide.

Slow-growing plant communities or potential Hazard Trees near or beyond the Border Zone can have valid LiDAR data older than five years from the inspection.


**6.2.3 LiDAR Supplemented Ground Inspections.**

Vegetation concerns identified from evaluation of the LiDAR data will be followed up with LiDAR Supplemented Ground Inspections.

**6.2.4 Aerial Inspections**

Where vegetation to line clearance cannot be readily accessed from the ground but the horizontal and vertical clearance between the vegetation and conductors can be determined from an aerial inspection, then aerial inspections are an acceptable form of inspection. Aerial inspections are also an acceptable method for conducting post-storm/post-fire emergency inspections.



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**6.3 Abnormal Field Conditions**

Inspections that cannot be completed due to inaccessibility or restrictions will be promptly reported to VM personnel. These areas will be documented on the UVM Abnormal Field Conditions form (Attachment D).

**6.4 Vegetation Control Techniques**

SCE utilizes industry standard Integrated Vegetation Management (IVM) techniques to perform scheduled and required work. These techniques may include:

- Manual (Pruning and Removal)
- Chemical (Herbicides)
- Mechanical (Mowing, Mastication, Feller Bunchers, etc.)
- Other cultural and biological practices to promote desirable, stable, low - growing plant communities that will resist invasion by tall growing tree species

Prescriptions for required work are generally developed on a case by case basis and consider a myriad of local factors.

**6.5 Post Work Verifications**

VM TSPs perform a Post Work Verification after completion of contractor(s) work. A report such as UVM Post Work Verification Report (Attachment B) is issued. The VM TSP review occurs after the clearing work is completed. Review samples are selected in accordance with UVM-07, Post Work Verification and UVM Program Oversight.


**7 Distribution and Data Retention**

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The approved version of the document shall be stored on the Vegetation Management SharePoint site while in effect and for at least seven (7) years thereafter.

Distribution:

- T&D VM Managers
- Impacted OU Touchpoints
- E&C PMO

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## 8 Approvals

Program Manager	Signature	Date
Melanie Jocelyn, Principal Manager		09/27/2018

## 9 Revision History

Version	Date	Description of the Revision	By	Next Review Year
1	9/27/18	Initial DVMP for the UVM Program	UVM Build Team	2019
2	2/1/19	Updated clearance distances in all tables Formatted Attachments	Bill Kotteakos	2019

## 10 References

### External References


- NERC Glossary of Terms
- CPUC General Order (GO) 95
- Cal Fire Public Resource Codes (PRC) 4292 and 4293 and 4296
- Title 14, CCR, § 1255

### Internal References

- ECSS-02, E&C Shared Services Glossary of Terms
- UVM-04, Hazard Tree Management Plan

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- UVM-06, LiDAR Reference Guide
- UVM-07, Post Work Verification and UVM Program Oversight
- UVM-16, Qualification of UVM Technical Specialist
- UVM-17, Training Employee and Contractor Training
- UVM-20, UVM Program Glossary of Terms

## 11 Attachments

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Attachment A: UVM Inspection Report

Attachment B: UVM Post Work Verification Report

Attachment C: Tree Species in SCE Service Territory

Attachment D: Abnormal Field Conditions Form

## 12 Key Contacts


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T&D, Vegetation Management Operations Senior Manager: Jeffrey Copeland, 310-995-6178

# Attachment A

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SCE	Legal, Regulatory, and Compliance	Transmission & Distribution Utility Vegetation Management (UVM)	Methodology	Doc. No.	UVM-03	 <b>SOUTHERN CALIFORNIA EDISON</b> Energy for What's Ahead <sup>SM</sup>
				Version	V2	
Effective Date	1/31/2019					
Supersedes	V1					
<b>Distribution Vegetation Management Plan (DVMP)</b>						

# UVM Inspection Report

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## Attachment A: UVM Inspection Report

### 2017 GRID COVER SHEET

Circle one: **ROUTINE** or **CYCLE BUSTER**

Circle one: **DISTRIBUTION** or **TRANSMISSION**

Zone:  District:  Grid:  ISO:

2016 (Previous Cycle)	2017 (Current Cycle)	Summary
Total Inventory:	Total Inventory:	Trim Rate: 0%
Prescribed Trims:	Prescribed Trims:	Trim Rate Change: 0%
Prescribed Removals:	Prescribed Removals:	Inventory Change: 0%
Total PI Prescribed Units:	Total PI Prescribed Units:	Cycle Buster Change: 0%
Performed Trims:	Performed Trims:	Removal Rate: 0%
Performed Removals:	Performed Removals:	PI Discrepancy: 0%
Total Performed Units:	Total Performed Units:	
# Of Cycle Busters:	# Of Cycle Busters:	

Company Name:	Notes:
Pre-Inspector:	
Start Date:	
Completion Date:	
I certify the work I performed within this grid to be accurate and in accordance with the applicable Statement of Work"	
Print/Signature:	

Company Name:	Notes:
VM Contractor GF:	
Start Date:	
Completion Date:	
I certify the work I performed within this grid to be accurate and in accordance with the applicable Statement of Work"	
Print/Signature:	

SCE TSP Review Date:	
Print/Signature:	

Date Received by SCE:	
Date Updated in Database:	


Updated 12/1/16

2017 Grid Coversheet.xlsx

**EXAMPLE**

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Up-Front Review <input checked="" type="checkbox"/>		<b>2018 Grid / Circuit Review Report</b>					Distribution <input checked="" type="checkbox"/>	
Cycle Buster Review <input type="checkbox"/>							Transmission <input type="checkbox"/>	
							ISO <input type="checkbox"/>	
District #	Grid #	Total Distribution Non-Compliance Areas (Compliance Areas) (All Pages)		Transmission Non-Compliance (SCE Requirement) (All Pages)	Recommended Trim (Outside Compliance Zone) (All Pages)		Non-Reimbursable Trim (Trees under One Cycle O&I/Specification Re-Trim) C-At Contractor Expense	Reimbursable Trim (New Trees/Trees Over One Cycle/ T&E Trim/Removal) E-SCE Approved Payment
50	20	0	0	0	0	TOTAL Account Finding (All Pages)	0	0
Line # / Tree ID Reviewed	Tree Species	18" Non-Compliance	48" Non-Compliance	12", 15", or 25" Non-Compliance	SCE Required Trim	Accounting C/E	Review Finding (SCE Comments)	Re-Trim Data (Contractor Comments)
							All trees are in compliance with PRC 4293.	No additional trees require work at this time.
Address						Tree Prescription		
Address						Tree Prescription		
Address						Tree Prescription		
Address						Tree Prescription		
	TOTAL Review Finding (This Page)					TOTAL Account Finding (This Page)		
Review Page		Add Page			SCE Representative		Date of TSP Review	
					Seth T. Reid		3.16.2018	
Date Reliability Form Sent to GF		Date Reliability Form Sent to HFH			Date Reliability Form Sent to DRI			
NA		NA			NA			
Date TSP Sent to Manager	Date SCE Issued to Contractor	Date Contractor Returned to SCE		SCE Manager Review Date		Date Received at SCE Data Center		
3.16.2018								
Note: Trees estimated to be less than 18 inches at time of review in a CPUC compliance area. Note: Trees estimated to be less than 48 inches at time of review in a High Fire designated area. Note: Trees located outside the compliance zone (more than 18 or 48 inches) at time of review. SCE approval required prior to work. Note: For contractor comments, identify date of trim or re-trim and any comments to validate trim/re-trim decisions.								
Updated 1/31/2017								
Additional Comments:								
Sampling Review								


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# Attachment B

## UVM Post Work Verification Report

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### Attachment B UVM Post Work Verification Report


Up-Front Review <input checked="" type="checkbox"/> Cycle Buster Review <input type="checkbox"/>						<b>2018 Quality Assurance Audit Report</b>			Distribution <input type="checkbox"/> Transmission <input checked="" type="checkbox"/> ISO <input checked="" type="checkbox"/>	
District #	Grid #	Total Distribution Non-Conformance (Compliance Areas) (All Pages)		Transmission Non-Conformance (SCE Requirement)	Recommended Trims (Outside Conformance Zone) (All Pages)	TOTAL Account Finding (All Pages)	Non-Reimbursable Trims (Trees under One Cycle Old/Specification Re-Trim) C=At Contractor Expense	Reimbursable Trims (New Trees/Trees Over One Cycle/ T&E Trims/Removals) E=SCE Approved Payment		
		0		0	0	0	0	0		
Line # / Tree ID Reviewed	Tree Species	18" Max-Conformance	48" Max-Conformance	12", 15", or 25" Non-Conformance	SCE Required Trims	Accounting C/E	Review Findings (SCE Comments)	Re-Trim Data (Contractor Comments)		
Address						Tree Prescription	* No encroachments were identified within the MVCD at the time of inspection			
Address						Tree Prescription	*All emergency trim locations were completed			
Address						Tree Prescription	*Additional work required in 2018 to achieve greater clearances.			
Address						Tree Prescription				
Address						Tree Prescription				
Address						Tree Prescription				
Address						Tree Prescription				
Address						Tree Prescription				
Address						Tree Prescription				
Address						Tree Prescription				
Address						Tree Prescription				
Address						Tree Prescription				
	TOTAL Review Finding (This Page)	0	0	0	0	TOTAL Account Finding (This Page)	0	0		
Review Pages		Add Pages		SCE Representative			Date of TSP Review			
0		0								
Date Reliability Forms Sent to GF		Date Reliability Forms Sent to HFH		Date Reliability Forms Sent to DRI			0			
0		0								
Date TSP Sent to Manager	Date SCE Issued to Contractor	ate Contractor Returned to SCE		SCE Manager Review Date	Date Received at SCE Data Center					
12.7.2017	0	12.7.2017								
<b>Note: Trees estimated to be less than 18 inches at time of review in a CPUC compliance area.</b> <b>Note: Trees estimated to be less than 48 inches at time of review in a High Fire designated area.</b> <b>Note: Trees located outside the conformance zone (more than 18 or 48 inches) at time of review. SCE approval required prior to work.</b> <b>Note: For contractor comments, identify date of trim or re-trim and any comments to validate trim/no trim decisions.</b>										
Updated 1/31/2017										
Additional Comments: All trees clear of MVCD, PRC 4293, and GO 95 Rule 35 at time of inspection. Additional tree work required in 2018.										

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# Attachment C

## Tree Species in SCE Service Territory

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## Attachment C: Tree Species in SCE Service Territory


Table 1: Tree Species Names and Growth Rates


Species Name	Growth Rate	Species Name	Growth Rate
Acacia-Bbw	Medium	Joshua	Slow
Ailanthus	Fast	Juniper	Slow
Albizzia	Medium	Lemon	Medium
Alder,White	Medium	LiqAmber-Gum	Medium
Almond	Medium	Locust	Fast
Ash	Fast	Magnolia	Slow
Aspen	Slow	Maple	Medium
Athel	Medium	Melaleuca	Medium
Avocado	Medium	Mesquite	Medium
Bamboo	Fast	Mimosa	Slow
Banana	Slow	Monkey Puzzle	Slow
Bay	Slow	Mulberry	Fast
Birch	Slow	Myoporum	Slow
Bird of Paradise	Medium	Oak	Slow
Bottle	Slow	Oleander	Slow
Bottlebrush	Slow	Olive	Medium
Brisbane Box	Medium	Orange	Medium
Buckeye	Slow	Orchid	Medium
Camphor	Medium	Other	Medium
Carob	Medium	Palm	Fast
Carrotwood	Medium	Palo Verde	Slow
Casuarina	Medium	Pear	Medium
Catalpa	Medium	Pecan	Fast
Cedar	Slow	Pepper	Fast
Century Plant	Slow	Persimmon	Medium
Cherry	Medium	Pine	Medium
Chinaberry	Medium	Pistache	Medium
Citrus	Slow	Pistachio	Medium
Coral	Medium	Pittysporum	Medium
Cottonwood	Fast	Plum	Medium
Cow Itch	Slow	Podocarpus	Medium
Crape Myrtle	Slow	Poplar	Fast
Cypress	Slow	Privet	Medium
Deodara	Slow	Redwood	Medium
Dogwood	Slow	Rubber	Medium
Elder,Box	Medium	Salt Cedar	Medium
Elderberry	Medium	Sequoia	Slow
Elm	Fast	Spruce	Medium
Eucalyptus	Fast	Sumac	Medium
Eugenia	Medium	Sycamore	Fast
Ficus	Medium	Tallow	Medium
Fgi	Medium	Tulip	Fast
Fir	Slow	Unknown	Medium
Floss, Silk	Medium	Vine	Fast
Ginkgo	Slow	Walnut	Fast
Golden Rain	Slow	Willow	Fast
Grevillea	Fast	Yucca	Slow
Hackberry	Medium	Zekl ova	Medium
Jacaranda	Fast		

Approximate Growth Rate:  
(S) Slow: 0 to 3 feet Annually  
(M) Medium: 3.1 to 6 feet Annually  
(F) Fast: More than 6 feet Annually

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# Attachment D

## Abnormal Field Conditions Form

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## Attachment D: Abnormal Field Conditions Form

### Abnormal Field Conditions Form

#### General Information:

Date:	Reporter:	Inspector Name and Company:	Local TSP:	Transmission Supervisor:

#### Location Information:

Circuit ID#	
Circuit ID Name	
Substation Origin	
Substation Destination	
Line Voltage	
Location Address(es)	
Property Owner(s)	
Location Origin GPS Coordinates	
Location Destination GPS Coordinates	
Origin Tower	
Destination Tower	
Span or Partial Span Length	

#### Restrictions:

Weather Conditions:								
Access Restrictions:								
Biological /Archaeological Restrictions?	Y	N	If yes, explain:					
Previous Inspection Date:			Method:					
Refusal Location:	Y	N	What easement rights do we have?					
What is the ROW width at this location?			Maximum line sag for this span:		Maximum line sag for the location			
Tier 1 Imminent Threat Location:	Y	N	Tier 2 Emergent Threat Location:	Y	N			
How often does the location need to be re-inspected?								
Is this an orchard?	Y	N	Will there be crop lost?	Y	N	Should this location be considered for orchard?	Y	N

#### Comments:

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