THIS DOCUMENT IS <u>REQUIRED</u> TO BE MAINTAINED IN ACCORDANCE WITH ERCP COMPLIANCE DOCUMENT REQUIREMENTS

UVM-01
Utility Vegetation Management
Program Manual

SCE	Legal, Regulatory, and Compliance	Utility Vegetation Management Program	Manual	Doc. No.	UVM-01
				Version	3
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SOUTHERN CALIFORNIA
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Program Manual

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1   Introduction

Southern California Edison (SCE) is committed to complying with laws and regulations that govern its operations. The Utility Vegetation Management (UVM) Program establishes effective controls and processes which are designed to comply with Federal and State regulations under ERCP's jurisdiction which relate to utility vegetation management. The UVM Program maintains procedures, processes, and controls to support SCE's compliance with the Energy Regulation Compliance Program (ERCP) Compliance Requirements assigned to the UVM Program (see section 4.1 for a list of the ERCP Compliance Requirements in scope).

The following are the Vision and Mission statements for the T&D UVM Department.

VISION – Be recognized for a best in class vegetation program that minimizes vegetation-related events. We accomplish this by: assessing, prioritizing, and mitigating risks; leveraging appropriate tools and technology that balance cost, effectiveness, and environmental impacts; and maintaining a process-driven, highly skilled, and customer-focused workforce.

MISSION: Prevent risks to public safety and system reliability by managing vegetation in proximity to our electric facilities.

2   Applicability

This Program is applicable to all Operating Units (OUs) impacted by the Compliance Requirements in section 4.1, including, but not limited to:

- Transmission & Distribution
- Generation

3   Definitions

3.1   Terms

Refer to ECSS-02, E&C Shared Services Glossary of Terms and the North American Electric Reliability Corporation (NERC) Glossary of Terms for any capitalized terms not listed in the UVM Program Glossary of Terms (UVM-16).

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3.2 Roles and Responsibilities

Refer to the ERCP Manual (ERCP-01) for a detailed description of the following roles and Responsibilities:

- Compliance Lead (PMO)
- Compliance Chief (PMO)
- Process Owner
- Control Owner
- OU Touchpoint

4 Program Manual Detail

4.1 Compliance Requirements and Work Standards

ERCP Compliance Requirements

The following ERCP Compliance Requirements are included in the UVM Program and assigned to the UVM Program Manager in the ERCP Requirements Catalog.

Regulator	Citation	Requirement ID
NERC	FAC-003-4	Requirements R1-R7
CPUC	G.O. 95	Rule 35 including the applicable Cases and Appendices
CA State Legislature	Public Resource Codes	4292, 4293

Regulatory Reports

The following reports are considered Regulatory reports and are within the scope of the UVM Program.

Regulator	Report Description	Frequency	Responsible Department
CAISO	Number of trees, trims, removals and last trim date for ISO lines	Annual	Compliance Integration
NERC/WECC	Number of trees, trims, removals and last trim date for 220 kV and above lines	Annual	Compliance Integration
NERC/WECC	Imminent Threats	As Event Occurs	Compliance Integration
CAL FIRE	Major Woody Stem Exemption Report	Annual	Compliance Integration

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Additional Requirements or Agreements with External Entities

The UVM Program must take into consider the following additional requirements:

Requirement	Organization or External Entity
• California Environmental Quality Act (Sections 21083.2, 21084.1) • California Code of Regulations, Title 14, Section 1250-1258 • National Historic Preservation Act • Federal and California Endangered Species Acts • Federal Clean Water Act • California Fish and Game Code Sections 1600-1616	Environmental Services
• OSHA 29 CFR 1910.269, Tree Trimming	Safety
• Wild Fire Mitigation Plan	CPUC
• Resolution ESRB-4	CPUC

4.2 Program Objectives

The objective of the UVM Program is to maintain a safe and reliable electric infrastructure (transmission, distribution, generation, substations etc.) by using a defense-in-depth strategy to manage vegetation and minimize encroachments from vegetation, thus effectively managing the risk to public safety, vegetation-related wildfires, and vegetation-related outages.

The elements of an effective UVM Program contain the following key governance and management plans.

- UVM Program Governance
- Transmission Vegetation Management Plan (TVMP)
- Distribution Vegetation Management Plan (DVMP)
- Integrated Vegetation Management Plan (IVMP)
- Hazard Tree Management Plan (HTMP)

The following functions and processes support the management plans.

- Annual Planning
- Vendor & Contract Management
- Inspection/Pruning
- Managing Events (event examples: Imminent (Priority 1) Threats, Refusals, Inaccessible Areas)
- Post Work Verification and Program Oversight (QA/QC)
- Inventory & Record Management
- UVM Safety
- Public Outreach

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In order for the UVM Program to provide a reasonable level of electric system reliability, safety and cost containment performance relative to vegetation risks, the following are vital implementation factors:

- Qualified, experienced, responsive personnel to design and administer (operate) the program;
- State-of-the-art, best management practices;
- Comprehensive, accurate, up-to-date and accessible tree inventory and prune database;
- Adequate back office/operations support staffing to manage scheduling, invoicing and data;
- Management support and funding of the program; and
- Public education of the need and importance of the UVM Program.

4.3   Program Plans

The following four plans form the overarching methodologies used by the UVM Program. Each is fully described in a separate UVM compliance document. The following are high level purpose statements for each of the plans.

UVM-02, Transmission Vegetation Management Plan (TVMP)
Maintenance strategies for transmission circuits designed to comply with published regulatory Compliance Requirements such as NERC Standard FAC-003-4 and CPUC GO95, for management of vegetation located in SCE's Transmission Rights-of-Way (ROW), and to manage vegetation to prevent encroachments from vegetation located adjacent to the ROW.

UVM-03, Distribution Vegetation Management Plan (DVMP)
Maintenance strategies for distribution circuits designed to comply with regulatory Compliance Requirements, such as CPUC GO95 Rule 35 and Rule 37, Public Resource Codes 4292 and 4293, and applicable California Department of Forestry and Fire Protection (CALFIRE) Codes for management of vegetation to ensure safety and reliability.

UVM-04, Hazard Tree Management Plan (HTMP)
Maintenance strategies to identify, document, and mitigate trees that are located within the Utility Strike Zone and are expected to pose a risk to electric facilities based on the tree's observed structural condition. This plan has the objective to mitigate the potential risk to SCE's electric facilities and reduce ignition sources from structurally unsound trees that can fail in total or in part, and palm trees that can dislodge palm fronds during high winds.

UVM-05, Integrated Vegetation Management Plan (IVMP)
Maintenance strategy that introduces integrated vegetation management practices around SCE's Rights-of-Way to promote desirable, stable, low-growing plant communities that will resist invasive tall-growing tree species through the use of appropriate, environmentally sound, and cost effective control methods.

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4.4 Program Risk Management

The goal of the UVM Program is to reduce the risk of vegetation caused outages and to further reduce the risk of vegetation caused fires. The reduction of risk from vegetation caused fires is accomplished through vegetation management as well as distribution and transmission system design. Internal controls are documented within all UVM processes. Documented internal controls provide UVM management with reasonable assurance that designed processes are functioning correctly.

4.5 Program Dependencies

The following is a list of UVM Program dependencies with other SCE OUs and/or departments. The list includes a description of the dependency and the UVM integration point of the dependency.

OU / Dept	Description of Dependency	Integration Point
Legal, Claims	Reviews, develops, and responds to customer complaints as appropriate.	UVM-10, Manage UVM Work Plans and Events
Customer Service	Maintains and documents customer physical addresses. Reviews, develops, and responds to customer inquiries and/or complaints as appropriate.	UVM-10, Manage UVM Work Plans and Events
Customer Service/ Consumer Affairs	Reviews, develops, and delivers communications and messaging to local government agencies	UVM-01, UVM Program Manual
Corporate Communications	Reviews, develops, and delivers communications and messaging to customers	UVM-01, UVM Program Manual
IT	Owns and manages the infrastructure supporting the Work Management systems, including servers.	UVM-15, Critical Business Records
Operational Services/Supply Chain	Maintains and documents vendor contracts	Vendor and Contract Management
Environmental Services Department	Maintains and documents interactions for tree removals with City, County, State, and Forestry to obtain approvals for SCE to remove listed trees. Coordinates Bio Surveys and provides status of trees to SCE/UTS on Status of Bio HOLDs.	UVM-09, Inspection Manual UVM-10, Manage UVM Work Plans and Events
T&D/Government Lands	Works with Government Lands (e.g. BLM), National Parks, and Reservations to obtain approvals for SCE to remove listed trees	UVM-09, Inspection Manual UVM-10, Manage UVM Work Plans and Events
Government Affairs/LPA	Reviews, develops, and delivers communications and messaging to local government agencies and the CPUC	UVM-01, UVM Program Manual

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OU / Dept	Description of Dependency	Integration Point
Business Resiliency	Maintains and documents Emergency Management & Storm Response Plans, Wildfire Plans, and Business Continuity Plans	UVM-13, UVM Safety Manual UVM-10, Manage UVM Work Plans and Events
Safety	Administers CSQAR (Contractor Safety Quality Assurance Review)	UVM-13, UVM Safety Manual
T&D/Districts	Maintains and documents interactions within SCE Districts and Customers. Identifies trim needs during infrastructure inspections.	UVM-01, UVM Program Manual
T&D/Regions	Maintains and documents interactions within SCE Regions and Customers. Integrates design of large line construction with UVM.	UVM-01, UVM Program Manual
T&D/Roads & ROWs	Coordinates road and brush clearing prior to vegetation work	UVM-10, Manage UVM Work Plans and Events
T&D/Asset Management	Maintains and documents T&D assets (poles), works with TSPs to determine pole placement (right pole, right place)	UVM-10, Manage UVM Work Plans and Events
Generation	Coordinates vegetation management at generation facilities	UVM-10, Manage UVM Work Plans and Events UVM-09 Inspection Manual
Corporate Security	Provides security to prune/remove Priority 1 threat trees when customer refuses, coordinates with local law enforcement	UVM-10, Manage UVM Work Plans and Events UVM-08, Manage Vegetation Threats

4.6 In Scope and Out of Scope

The following lists areas of the business that are included or excluded from the UVM Program.

The UVM Program will encompass the following:

- **Dead and Dying Tree (DRI)/Bark Beetle (BB) Tree Mortality Program** scope includes contracts, statement of work (SOW), policy, standards, processes, and procedures/Job Aids for DRI/BB Tree Listing, Inspections for Tree Listers, Tree Inspectors, and Tree Removal Contractor's personnel. This work will be performed under the Heavy Tree Program (HTP which encompasses Hazard Tree Management Plan (HTMP) and Dead and Dying Tree Program (DDT)
- **T&D Compliance Vegetation Management** includes contracts, statement of work (SOW), procedures/Job Aids for Tree/Weed Abatement, Inspections, and Compliance Tree Removal Contractor's personnel
- **Generation Compliance Vegetation Management** includes generation interconnections to transmission facilities and generation assets (penstocks, flow lines, dams, and access points including roads and trails)

The UVM Program will not encompass the following scopes:

- Forestry Fire Mitigation
- Land Management Landscape Maintenance
- Vegetation Management inside substation perimeter

4.7   Document Inventory

The following documents are the primary governance, plan, process, and reference documents included in the UVM Program.

Doc. ID	Description	Type	ERCP Maintained	Owner
UVM-01	UVM Program Manual	Governance	Yes	Melanie Jocelyn
UVM-02	Transmission Vegetation Management Plan (TVMP)	Plan	Yes	Bill Kotteakos
UVM-03	Distribution Vegetation Management Plan (DVMP)	Plan	Yes	Bill Kotteakos
UVM-04	Hazard Tree Management Plan (HTMP)	Plan	Yes	Bill Kotteakos
UVM-05	Integrated Vegetation Management Plan (IVMP)	Plan	Yes	Bill Kotteakos
UVM-06	LiDAR Schedule Reference Guide	Reference		Seth Reid
UVM-07	Post Work Verification & UVM Program Oversight	Process		Bill Kotteakos
UVM-08	Manage Vegetation Threat Events	Process	Yes	Bill Kotteakos
UVM-09	Pre-Inspection Manual	Process	Yes	Bill Kotteakos
UVM-10	Manage UVM Work and Events	Process	Yes	Bill Kotteakos
UVM-11	Qualification of UVM Senior Specialists	Process		Bill Kotteakos
UVM-12	Employee and Contractor Training	Process		Bill Kotteakos
UVM-13	UVM Safety Manual	Reference		Michael Metcho
UVM-14	Manage Refusal Events	Process	Yes	Bill Kotteakos
UVM-15	Critical Business Records	Process		Bill Kotteakos
UVM-16	UVM Program Glossary of Terms	Reference		Bill Kotteakos

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Doc. ID	Description	Type	ERCP Maintained	Owner
UVM-17	UVM Invoice Review and Approval	Process		Bill Kotteakos
UVM-18	Assessment and Removal of Dead and Dying Trees	Process		Bill Kotteakos
UVM-19	Targeted Environmental Mitigations	Process		Amanda Duchardt
UVM-20	Pole Brushing	Process		Bill Kotteakos
UVM-21	Internal Controls	Process		Bill Kotteakos
UVM-22	Corrective Actions	Process		Bill Kotteakos
UVM-RACM	UVM Risk and Controls Matrix	Reference		Bill Kotteakos

4.8 Program Governance

The UVM Program adheres to the Program framework defined in the ERCP Manual (ERCP-01). Program deliverables and revisions will follow the ERCP Compliance Project Life Cycle Methodology documented in ERCP-02. SCE employees, contractors, consultants, and vendors are subject to the UVM Program provisions and requirements. SCE OUs subject to the UVM Program will adhere to the processes, procedures, and controls within the Program. The following sections provide high level descriptions of the UVM Program governance. Refer to UVM-07 Post Work Verification & UVM Program Oversight for more details on Quality Control and Quality Assurance.

Quality Assurance

The Program Owner and Program Manager ensure the UVM Program-related controls (processes and procedures) are documented, maintained and reviewed annually to assess compliance risks and to identify potential process improvements. The reviews consider any potential noncompliance events discovered through compliance monitoring processes. The Program adheres to, and complies with the ERCP Compliance Self-Certification Procedure (ERCP-06) and periodic Compliance Quality Assurance (QA) reviews by Compliance and Quality Team or the E&C Quality Assurance Team. Key controls are tested annually to verify they are effectively designed and operating to meet Program objectives.

A Reliability Standard Audit Worksheet (RSAW) is documented, maintained, and reviewed annually to verify it accurately represents the processes followed by the Program and OUs in compliance with the NERC regulatory requirements. Compliance with non-NERC regulatory requirements is documented in the appropriate process documents.

Program metrics and measures are collected and reported to the Program Owner and Program Manager to ensure Program objectives are being met.

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The UVM Program ensures compliance issues are reported in a timely manner.

Continuous Improvement

The annual UVM Program QA review will include an analysis of benchmarking data and new technologies and industry standards for integration into the Program as appropriate. This QA review also assesses processes for efficiency and effectiveness in meeting the objectives of the Program.

Business Rules

The UVM Program Manual and related process and procedure documents must be readily available to all SCE personnel and external contractors.

Program processes and documentation must be reviewed by impacted stakeholders and refreshed at least annually, or upon significant change.

Potential instances of non-compliance must be reported immediately to the UVM Program Manager upon discovery.

Program processes will, where appropriate, leverage existing communication distribution channels.

UVM identifies and manages Critical business records in alignment with the Critical Business Records Quality Standard and as documented in Management Plan CBR-02, Management Plan – Vegetation Management."

4.9   Communication and Training Plan

UVM Employees & Contractors

Ongoing communication needed to support the UVM Program is as follows:

- Notifications for Process Owner changes within the Program
- Notifications for vendor changes within the Program
- UVM Program concerns or issues with other OU Programs
- Changes in process or procedure within the Program
- Changes in regulatory requirements affecting the Program
- Changes in organizational requirements affecting the Program
- Changes to systems and tools affecting the Program

Training Plan elements are covered in the following documents:

- UVM-11, Qualification of UVM Senior Specialists
- UVM-12, Employee and Contractor Training

SCE/EIX Awareness and Integration

Ongoing integration and awareness needed to support the UVM Program are as follows:

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- UVM personnel participate in the SCE outreach program, which is a pro-active and effective communication solution that allows SCE to target specific areas of our territory with important information for our customers.
- UVM personnel participate in Community Meetings to provide awareness to customers about our Public Safety Shut-off program, Wildfire Mitigation, and Vegetation Management practices
- SCE's community outreach programs are an element of SCE's Wildfire Mitigation Plan

Public Outreach

UVM personnel participate in ongoing Public Outreach activities. These activities include vegetation management/utility forum memberships, attendance and/or participation in conferences and educational events, partnerships with other utilities, and attending seminars for continuing education needed to support the UVM Program. Examples of management/utility forums and memberships may include the following:

- Centre for Energy Advancement through Technological Innovation (CEATI) - *https://www.ceati.com/*
- Utility Vegetation Management Association (UVMA) - *https://www.uvma.ca/*
- Arbor Day Foundation - *https://www.arborday.org/programs/*
- Utility Arborist Association (UAA) - *https://www.gotouaa.org/*
- International Society of Arboriculture (ISA) - *https://www.isa-arbor.com/*
- Tree Care Industry Association (TCIA) - *https://tcia.org/*
- CalFire - *http://www.fire.ca.gov/*
- California Urban Forest Council - *https://caufc.org/*
- Local Fire Safe Councils - *http://www.cafiresafecouncil.org/*
- Tree Street Seminars - *http://www.streettreeseminar.com/aboutus.aspx*
- Insurance providers - *Present VM information for High Fire Areas*
- The Society of Municipal Arborists - *https://www.urban-forestry.com/*
- Various Government Agencies – Federal, State, County, City

5   Document Maintenance

This UVM Program Manual is reviewed annually with a revision history section to provide version control. The Program Manager updates and publishes this document on an annual basis.

The UVM Program adheres to the following internal UVM change control process:
- Review all compliance documents annually
- Review E&C notification on regulation updates
- Assess changes to Compliance Requirements and impacted documents (processes, procedures, guidelines, handbooks, job aids, and/or training materials
- Conduct an internal UVM Change Control meeting (with process owners), as necessary, to discuss impacts to existing documents
- Identify and assign edits to Process Owners to make the necessary changes

- Conduct an OU Change Control meeting with process owners, and impacted OUs to approve significant changes to documents and/or to communication awareness of changes that may affect other OUs
- Edit and finalize relevant documents and store them for reference (internal / external use)

Document management and change control procedures shall be adhered to during the update. Revisions to processes and documentation of the UVM Program identified as "ERCP Maintained" are conducted in accordance with ERCP-03, Program Change Control Procedure.

6 Approvals

UVM Program Owner	Signature	Date
Terry Ohanian , Director	*Terry Ohanian* / Approved by E-mail	9/7/22

7 Revision History

Revision Number	Date	Description of Revision	By	Next Review Date
2	5/17/19	General document refresh; renumbered UVM documents and deleted documents no longer required	Bill Kotteakos	5/17/20
3	9/19/22	General Update	Bill Kotteakos	9/19/23

8 References

External References

- North American Electric Reliability Corporation (NERC) Glossary of Terms
- Federal Occupational Safety and Health Administration (OSHA), 29 CFR 1910.39, Fire Prevention Plans http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_id=12887&p_table=STANDARDS
- State - Title 8 of the CCR, Section 3221, Fire Prevention Plan http://www.dir.ca.gov/Title8/3221.html
- California Powerline Fire Prevention Field Guide http://cdfdata.fire.ca.gov/fire_er/fpp_engineering_view?guide_id=15
- **Spark Arrestor Guide List is available on line at**: http://wwwnotes.fs.fed.us:81/r5/regional/sag.nsf

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- **PRC Section 4292** – Power Line Hazard Reduction, 10' clearance around power poles with non-exempt hardware.
- **PRC Section 4293** – Power Line Clearance Required, between vegetation and conductors, 4' for 2,400-71,999 volts, 6' for 72,000-109,999 volts, and 10' for 110,000 and above.
- **ESRB-4** – CPUC Drought Resolution, dated June 12, 2014
- **ANSI** - A300 Part 9-Tree Risk Assessment a. Tree Failure (A300Part9-TreeRisk-D1V1-PR.pdf)
- **OSHA** 1910TreeTrimming.pdf - 29 CFR 1910.269

Internal References

- ERCP-01, ERCP Manual
- ERCP-02, ERCP Compliance Project Lifecycle Methodology
- ERCP-03, ERCP Program Change Procedure
- ERCP-06, ERCP Self-Certification Procedure
- ECSS-02, E&C Shared Services Glossary of Terms

9   Distribution and Data Retention

The official version of the document shall be stored in the UVM Document Repository Portal Library while in effect and retained for at least ten (10) years thereafter.

Distribution list:

- ERCP Program Managers
- SCE Utility Vegetation Management Department
- OU Touchpoints
- Utility Vegetation Management Program SharePoint site
- SCE Portal

10   Key Contacts

UVM Program Owner: Terry Ohanian , Director, Vegetation and Land Management , (909) 274-1393

UVM Program Manager: Melanie Jocelyn, Principal Manager, Vegetation Management, (909) 274-1236

UVM Program Lead: Bill Kotteakos, Senior Manager, Vegetation Management Compliance (949) 379-9470