



## Vegetation Management Utility Defensible Space Standard

### SUMMARY

This utility standard defines the Pacific Gas and Electric Company (PG&E) vegetation management (VM) program requirements for the utility defensible space (UDS) program. The UDS program supports the PG&E commitment to reducing wildfire risk by modifying fuels underneath and adjacent to overhead distribution primary voltage power lines in California Public Utilities Commission (CPUC)-designated high fire threat districts (HFTDs). The following are the UDS program objectives:

- Reduce the likelihood of rapid fire development or impact in proximity to PG&E assets.
- Improve access to facilities for first responders.
- Improve asset protection in the event of a wildfire.
- Improve public safety by contributing to defensible space.

### TARGET AUDIENCE

PG&E VM employees and contractors involved with managing and completing defensible space activities around overhead distribution assets.

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### REQUIREMENTS

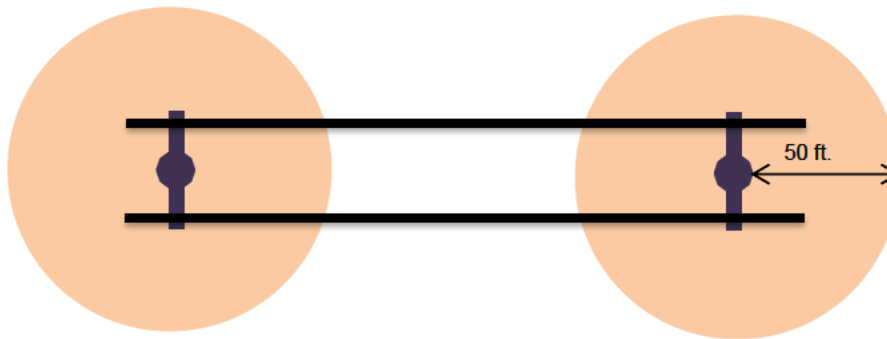
#### 1 Requirements

- 1.1 The UDS program is a commitment outlined in the [2021 Wildfire Mitigation Plan \(WMP\), Section 7.3.5.5.](#)
- 1.2 Customer permission is obtained when PG&E believes there are no assumed land rights.
- 1.3 The UDS is specific to overhead distribution primary voltage power lines in CPUC-designated high fire threat districts (HFTDs).
- 1.4 Several types of vegetation (trees, shrubs, and grass) and vegetative debris (brush and slash) are targeted within a UDS unless qualified under the exempt criteria specified in [California Code of Regulations \(CCR\) 1255, "Exemptions to Minimum Clearance Provisions - PRC 4292."](#)
- 1.5 The UDS addresses the continuity of vegetation from the following three perspectives:
  - Vertical clearance
  - Horizontal clearance
  - Surface-level fuel accumulation
- 1.6 Minimum vertical clearance requirements:
  - Removal of all tree branches a minimum of 6 feet (ft.) from the ground.
  - Understory vegetation that exists under a tree canopy, the vertical clearance from the top of the understory vegetation to the lowest branch of the tree must be a minimum of three times the height of the shrub. For example, a 3 ft. tall shrub must be a minimum of 9 ft. away from the lowest tree branch.
- 1.7 Minimum horizontal clearance requirements:
  - Shrub-to-shrub spacing must be at least 2 times the height of the shrub.
- 1.8 Accumulated surface level fuels (fallen leaves, needles, twigs, bark, cones, and small branches, downed dead fuels) must be removed so as not to exceed a maximum depth of 18 inches (in.).
- 1.9 Trim annual grasses and forbs down to a maximum height of 4 in.

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### 2 Attributes of Utility Defensible Space (UDS)

- 2.1 The target attribute of UDS is a horizontal radial distance of 50 ft. around a pole that supports electric distribution equipment. As demonstrated in Figure 1.



**Figure 1. Overhead view of a Utility Defensible Space (UDS).**

### 3 Vegetation Prescriptive Expectation

- 3.1 All trees within the UDS must have the lower limbs pruned to achieve the minimum vertical distance, as specified in Section [1.6](#).
- 3.2 The desired outcome is that all shrubs are removed from the UDS, although the following exemptions apply:
- Shrubs may remain if the conditions in Section [1.7](#) is met.
  - Shrubs that are part of a maintained landscape may remain if they are fire resistive vegetation. See [Appendix A, "Fire Resistance Landscape."](#)
- 3.3 Herbicide products may be applied to help prevent regrowth.

### 4 Debris Management

- 4.1 Subject to existing fuel loading, accessibility, site conditions, and property owner discussion, debris created by the pruning and removal of vegetation using one or more of the following methods that align with California Forest Practice Rules:
1. If the site is accessible to chipping equipment, then debris must be chipped and spread to a maximum depth of 18 in.

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### 4.1 (continued)

2. Debris that cannot be chipped or is not accessible to chipping equipment must be handled in the appropriate method listed below:
  - a. Hauled away
  - b. Cut, relocated outside the UDS, and
    - lopped and scattered to a maximum depth of 18 in., and/or
    - left in full contact with the ground
3. Debris that cannot be relocated due to size must be left in contact with the ground, according to Forest Practice Rule. Stacking or piling is not permitted.

## **5 Records Management**

- 5.1 The program coordinator is responsible for tracking the line miles and acres completed.
- 5.2 The data must be stored and maintained in the ArcGIS Collector and ESRI applications and capture the following input:
  - a. Customer information (name, property address captured in the veg points and brush area points being created, and phone number)
  - b. Customer approval status and/or constraints to the full achievement of target attributes
  - c. Location
  - d. Inspection and work performed statuses

**END of Requirements**

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### DEFINITIONS

**Brush:** Any woody vegetation that is less than 4 in. in diameter.

**Forbs:** Non-woody herbaceous broadleaf plants that are not grass-like. Sometimes referred to as herbs.

**Hardscape:** Landscaping elements such as roads, walkways, decks, retaining walls, patios, potting containers that use asphalt, stone, sand, pebbles, brick, metal, and other similar materials.

**Horizontal spacing:** The closest point between two plants, such as a tree or shrub. Specifically, from one crown to another.

**Maintained landscape:** Irrigated and debris managed, conform to CalFire defensible space program.

**Overhead distribution:** In Table 2 of TD-8105, "Distribution Line Overhead Asset Management Plan," the key components of overhead distribution assets are: pole/support structure, primary conductor, voltage regulating equipment, protection equipment, switching equipment, transformers, and secondary conductor.

**Shrub:** Specific to irrigated landscapes. A woody plant with several perennial stems that may be erect or may lie close to the ground with a DBH less than 4 in. Shrubs usually have a height less than 13 ft. and stems no more than about 3 in. in diameter.

**Slash:** Woody debris generated by vegetation work that is less than 4 in. in diameter.

**Tree:** A woody perennial plant, typically having a single stem or trunk growing to a considerable height and bearing lateral branches at some distance from the ground, with a DBH greater than 4 in.

**Vertical clearance:** Spacing between the lowest branches of trees and ground-level or top of understory vegetation.



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### IMPLEMENTATION RESPONSIBILITIES

The VM team is responsible for the implementation, communication, and maintenance of this utility standard and its associated utility procedures.

### GOVERNING DOCUMENT

[Utility Policy TD-05, "Vegetation Management"](#)

### COMPLIANCE REQUIREMENT / REGULATORY COMMITMENT

#### Records and Information Management:

PG&E records are company assets that must be managed with integrity to ensure authenticity and reliability. Each Line of Business (LOB) must manage Records and Information in accordance with the Enterprise Records and Information (ERIM) Policy, Standards and Enterprise Records Retention Schedule (ERRS). Each Line of Business (LOB) is also responsible for ensuring records are complete, accurate, verifiable and can be retrieved upon request. Refer to [GOV-7101S, "Enterprise Records and Information Management Standard"](#) for further records management guidance or contact ERIM at [Enterprise\\_RIM@pge.com](mailto:Enterprise_RIM@pge.com).

[Pacific Gas and Electric Company 2021 Wildfire Mitigation Plan Report, Rulemaking 18-10-007](#)

### REFERENCE DOCUMENTS

#### Developmental References:

[Public Resources Code 4291 \(Cal Fire Defensible Space Requirements\)](#)

[California Code of Regulations \(CCR\) 1255 "Exemptions to Minimum Clearance Provisions - PRC 4292"](#)

Fuel Reduction Permitting Under the Forest Practice Rules. [Dead Tree Removal and Fuel Reduction Under the Forest Practice Rules Permit Chart](#).

<https://www.readyforwildfire.org/prepare-for-wildfire/get-ready/defensible-space/>

<https://www.readyforwildfire.org/prepare-for-wildfire/get-ready/fire-resistant-landscaping/>

#### Supplemental References:

NA

### APPENDICES

[Appendix A, "Fire-Resistant Landscaping – Ready for Wildfire"](#)





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### ATTACHMENTS

TD-7109S, "Guidance Tailboard for TD-7109S – Vegetation Management Utility Defensible Space"

### DOCUMENT REVISION

This revised document cancels and supersedes "Vegetation Management Fuel Reduction Program," Version 1.2, dated 4/05/18.

### DOCUMENT APPROVER

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### REVISION NOTES

| Where? | What Changed?           |
|--------|-------------------------|
| NA     | This is a new document. |

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### Appendix A, Fire-Resistant Landscape

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*This appendix is for informational purposes only.*

#### Landscapes: Hardscape and Softscapes

Landscapes are often referenced in two categories: hardscape and softscape. Hardscapes are typically fire-resistant and considered an effective firebreak when establishing defensible space. Softscapes are vegetative in nature. They range from well irrigated (established watering system) to naturally irrigated (i.e. when it rains). Since no plants are “fire-proof,” softscapes are the focus areas when establishing and maintaining defensible space against wildfires.

#### Fire-Resistant Materials and Plants

- Stone walls, non-combustible patios and decks, pathways, and roadways.
- Non-combustible materials: rock, gravel, concrete and pavers.
- Rock, mulch, flower beds, and ground cover for bare spaces are effective firebreaks.
- High-moisture plants that grow close to the ground and have a low sap or resin content.
- Fire-retardant plant species such as rockrose, ice plant, aloe, hedging roses, bush honeysuckles, currant, cotoneaster, sumac, and shrub apples.
- Hardwood trees such as maple, poplar, and cherry trees that are less flammable than pine, fir, other conifers, and sweetgum due to their high resin content.

The following are examples of commonly planted fire-resistant plants:



French Lavender



Red Monkey Flower



California Fuchsia



Sage



California Lilac



Society Garlic



Ornamental  
Strawberry



Yellow Ice Plant



Coreopsis



California Red  
Bud

Graphics and information accessed from <https://www.readyforwildfire.org/prepare-for-wildfire/get-ready/fire-resistant-landscaping>