

Vegetation Management Hazard Notification Procedure

SUMMARY

This utility procedure presents instructions for vegetation management (VM) personnel handling vegetation conditions observed in the field affecting overhead transmission facilities requiring immediate or urgent mitigation. Such conditions may result from either encroachment into the Pacific Gas and Electric Company (PG&E) minimum clearance distances or from potential tree or limb failure.

- Hazard Notification-Immediate (HN-I or HN-Immediate) hazards must be mitigated within 24 hours of being reported to a PG&E employee.
- Hazard Notification-Urgent (HN-U or HN-Urgent) tags must be mitigated within 20 business days of being reported to a PG&E employee, unless constrained.

NOTE

For NERC lines where vegetation conditions are at or approaching the FAC-003-4 flashover distances (see Appendix A: Table 2) or pose an imminent risk to reliability, the imminent threat procedure is initiated (see [Utility Procedure TD-7103P-05, "Transmission Vegetation Management Imminent Threat Procedure"](#)).

Level of Use: Reference Use

TARGET AUDIENCE

Vegetation Management (VM) employees and contractors responsible for vegetation compliance around transmission facilities.

SAFETY

NA

BEFORE YOU START

NA

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PROCEDURE STEPS

1 Identification and Classification of Hazard

1.1 The first responder must perform the following steps to identify and classify a hazard condition:

1. ASSESS a condition conservatively AND, if unsure, IDENTIFY the condition as Hazard Notification (HN)-Immediate.
2. DETERMINE whether the observed condition affecting the electric transmission facilities require immediate or urgent mitigation, according to the following guidelines:
 - Imminent Threat: A vegetation condition affecting NERC transmission facilities and is likely to cause a fault at any moment.
 - HN-Immediate:
 - A vegetation condition affecting NERC transmission facilities at or approaching PG&E conformance distances with no imminent risk of flashover or foreseeable near-term failure, OR any vegetation threat that will not hold until routine scheduled tree work is performed and requires near-term mitigation.
 - A vegetation condition affecting non-NERC transmission facilities and is at or encroaching within the PG&E minimum clearance requirements, or poses an immediate threat to the conductors.
 - HN-Urgent: A vegetation condition affecting non-NERC transmission facilities and approaching the PG&E minimum clearance requirements. The threat is not immediate in nature but requires near-term mitigation.

1.2 For an imminent threat condition, FOLLOW [Utility Procedure TD-7103P-05, "Vegetation Management Transmission Imminent Threat Procedure."](#)

1.3 For an HN-Immediate condition, PROCEED to [Section 2, "Handling an HN-Immediate Condition."](#)

1.4 For an HN-Urgent condition, PROCEED to [Section 3, "Handling an HN-Urgent Condition."](#)

2 Handling an HN-Immediate Condition

2.1 The first responder must PERFORM the following tasks:

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NOTE

Leaving a voice mail alone does not meet minimum contact requirements. A verbal or electronic (email or text message) response by the vegetation program manager (VPM) is required.

1. TREAT each HN-I situation as an emergency location (e.g., a wire down condition) and REMAIN onsite. The situations listed below are appropriate reasons to leave a site unattended; to leave a site unattended for other reasons, OBTAIN approval from the VPM or supervising vegetation program manager (SVPM).
 - Appropriate reasons to leave the site unattended:
 - Unsafe to be onsite (e.g., hostile customer, extreme weather conditions, etc.)
 - Remote location requiring movement to gain cellular service
2. CONTACT the VPM.
3. COORDINATE hazard mitigation activities with the local VPM. Mitigation must be complete within 24 hrs. of identification.

2.2 The VPM must PERFORM the following tasks:

1. When requested to APPROVE LEAVING the site unattended AND before ISSUING approval, DEVELOP AND DOCUMENT a mitigation plan which must include estimation of the following activities:
 - Site re-occupation
 - Date and time of completion
2. CONTACT the transmission vegetation manager and VERBALIZE mitigation plan.

2.3 GENERATE AND ISSUE a tag work request with the HN-I md priority.

2.4 REFER to [Job Aid TD-7102P-17-JA01, "Work Packet Generation and Soft Closure of a Work Request."](#)

NOTE

The tree must be worked and invoiced on a separate HN WR.

- 2.5 The first responder must complete the top portion and Part I of the [Hazard Notification Form](#).
- 2.6 The SCUF, or delegate, must complete Parts II and III of the [Hazard Notification Form](#) AND send the form to the supervising vegetation program manager (SVPM) within 7 business days.

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- 2.7 To close out the ITS record, follow Job Aid TD-7103P-09-JA01, “Entering Vegetation Hazard Notification (HN) Information into the Incident Tracking System (ITS) Database.”

3 Handling an HN-Urgent Condition

- 3.1 GENERATE AND ISSUE a work request with the HN-Urg priority within 3 business days of the hazard being observed.
- 3.2 REFER to [Job Aid TD-7102P-17-JA01, “Work Packet Generation and Soft Closure of a Work Request.”](#)

4 Delays and Interferences with HN-Immediate Mitigation

- 4.1 IF the HN-Immediate tag cannot be mitigated within 24 hours,
THEN the first responder must DISCUSS the situation and solutions with the VPM.
- 4.2 The VPM must NOTIFY the SVPM and regional manager by email of the reason for the delay and the estimated time of completion.
- 4.3 The first responder, or delegate, must PERFORM one the following steps:
1. Stay onsite until the risk is mitigated.
 2. Work with the TC to remove the vegetation hazard.
- 4.4 Efforts to MITIGATE the HN-Immediate tag must not be DELAYED due interference by either of the following conditions:
- Customer or agency objections.
 - Environmental processes, bird nests, permits (i.e., city/county), or similar conditions.
- 4.5 The VPM or SVPM must promptly REPORT all actions PERFORMED outside the routine permit process to the appropriate agency.

END of Instructions

DEFINITIONS

Facilities: Any PG&E-owned electrical conductors or apparatus on a pole or cage structure, the pole or cage, or any pole supporting wires with voltage levels ranging from 60 kV up to 500 kV, excluding service drops.

It is common for transmission facilities to house distribution facilities; known as underbuild. Transmission with underbuild conductors can range from 60 kV up to 230 kV. The voltage of distribution underbuild conductors generally range from 4-21 kV.

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First Responder: A PG&E employee or contractor in the field who identifies or responds to hazard notification vegetation condition.

HFTD: High fire threat district.

Imminent Threat: A vegetation condition affecting NERC transmission lines where PG&E personnel and/or contractors identify and confirm that the vegetation condition is likely to cause a fault at any moment. This condition may arise from within or outside the electric transmission right-of-way (ROW) and may be the result of tree growth, potential tree or limb failure, or line movement due to sag or sway. The following are examples:

- A tree that is uprooting and has the potential at any time to fail and fall into the NERC line.
- Vegetation growing in proximity to a NERC line that is at or approaching the FAC 003-4 Minimum Vegetation Clearance Distance (MVCD).

Minimum Clearance Requirement (MCR) (may also be referred to as Minimum Distance Requirement (MDR)): Minimum clearance distance required by PG&E for distribution and transmission lines. See [Appendix A, Table 1](#).

Minimum Vegetation Clearance Distance (MVCD): Minimum vegetation clearance distance required to prevent flash-over. However, prudent vegetation practices dictate that substantially greater distances be achieved at time of vegetation maintenance. See [Appendix A, Table 2](#).

NERC-Regulated Transmission Lines (NERC lines): Transmission lines operated at 200 kV or higher and certain sub-200 kV lines that are elements of a Major Western Electric Coordinating Council (WECC) Transfer Path.

PG&E VM personnel: PG&E VM employees and VM contractors.

Pre-Inspection contractor (PI): The individual responsible for ground patrol of the facilities.

Prescription: The work prescribed to mitigate the vegetation condition. This could be removal or pruning.

Tree Contractor (TC): The individual or crew responsible for completing the vegetation work. Typically, the routine tree contractor.

IMPLEMENTATION RESPONSIBILITIES

The vegetation management transmission team is responsible for the implementation, communication, and maintenance of this procedure and associated standard.

- The VM manager communicates this procedure to the VM stakeholders.
- The VM supervisor communicates this procedure to the operational work teams.

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GOVERNING DOCUMENT

[Utility Standard TD-7103S, "Transmission Vegetation Management Standard \(TVMS\)"](#)

COMPLIANCE REQUIREMENT / REGULATORY COMMITMENT

Records and Information Management:

Information or records generated by this procedure must be managed in accordance with the Enterprise Records and Information (ERIM) program Policy, Standards and Enterprise Records Retention Schedule (ERRS). REFER to [GOV-7101S, "Enterprise Records and Information Management Standard"](#) and related standards. Management of records includes, but is not limited to the following activities:

- Integrity
- Storage
- Retention and disposition
- Classification and protection

[California Public Resource Code \(PRC\) 4292](#)

[California PRC 4293](#)

[California Public Utility Commission \(CPUC\) General Order \(G.O.\) 95, Rule 35](#)

[Federal Energy Regulatory Commission \(FERC\) Order No. 777](#)

North American Electric Reliability Corporation (NERC) Standards for Vegetation Management, [NERC FAC-003-4 Transmission Vegetation Management](#)

REFERENCE DOCUMENTS

Developmental References:

NA

Supplemental References:

[Utility Procedure TD-7103P-05, "Transmission Vegetation Management Imminent Threat Procedure"](#)

APPENDICES

[Appendix A, Minimum Clearance Requirements](#)

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ATTACHMENTS

[TD-7103P-09-F01, "Hazard Notification / Imminent Threat Form"](#)

Job Aid TD-7103P-09-JA01, "Entering Vegetation Hazard Notification (HN) Information into the Incident Tracking System (ITS) Database."

DOCUMENT REVISION

This revised document cancels and supersedes Utility Procedure TD-7103P-09, "Vegetation Hazard Notification Procedure," Rev. 3, dated 05/07/2019.

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REVISION NOTES

| Where? | What Changed? |
|---------------------------------------|---|
| Throughout | Removed all instructions pertaining to distribution facilities. Instructions are moved to an independent procedure. |
| Summary | Removed compliance and regulatory language. Changed timeline for HN-Urgent from 30 days to 20 business days. |
| Document Approver, Owner, and Contact | Updated. |
| Definitions section | Clarified definitions. |
| Appendix A | Removed roles and responsibilities. Moved minimum clearance requirements (MCR) from Appendix B to A. Added minimum clearance requirements for 4-21 kV LRA and 4-21 kV for HFTD and SRA to Table 1, "PG&E Clearance Requirements." |

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Appendix A, Minimum Clearance Requirements

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Table 1. PG&E Clearance Requirements

| Voltage | 4-21kV LRA | 4-21kV HFTD/SRA | 60/70 kV | 115 kV | 230 kV | 500 kV |
|------------------------------------|---------------|--------------------|----------|--------|--------|--------|
| PG&E Minimum Clearance Requirement | 18 in. | 4 ft. | 4 ft. | 10 ft. | 10 ft. | 15 ft. |

Note: PG&E-defined minimum clearance is designed to meet or exceed all applicable regulatory requirements at all times, including FAC-003-4.

Table 2. NERC Minimum Vegetation Clearance Distance (MVCD) in Feet

| NERC Minimum Vegetation Clearance Distance (MVCD) in Feet | | | | |
|---|----------|--------|--------|--------|
| Elevation (feet) | 60/70 kV | 115 kV | 230 kV | 500 kV |
| 0 - 500 | 1.1 | 1.9 | 4 | 7 |
| 501 - 1000 | 1.1 | 1.9 | 4.1 | 7.1 |
| 1001 - 2000 | 1.1 | 1.9 | 4.2 | 7.2 |
| 2001 - 3000 | 1.2 | 2 | 4.3 | 7.4 |
| 3001 - 4000 | 1.2 | 2 | 4.3 | 7.5 |
| 4001 - 5000 | 1.2 | 2.1 | 4.4 | 7.6 |
| 5001 - 6000 | 1.2 | 2.1 | 4.5 | 7.8 |
| 6001 - 7000 | 1.3 | 2.2 | 4.6 | 7.9 |
| 7001 - 8000 | 1.3 | 2.2 | 4.7 | 8.1 |
| 8001 - 9000 | 1.3 | 2.3 | 4.8 | 8.2 |
| 9001 - 10000 | 1.4 | 2.3 | 4.9 | 8.3 |
| 10001 - 11000 | 1.4 | 2.4 | 5 | 8.5 |
| 11001 - 12000 | 1.4 | 2.5 | 5.1 | 8.6 |
| 12001 - 13000 | 1.5 | 2.5 | 5.2 | 8.8 |
| 13001 - 14000 | 1.6 | 2.6 | 5.3 | 8.9 |
| 14001 - 15000 | 1.6 | 2.7 | 5.4 | 9.1 |

Note: The maximum tree heights described in this document must always meet (or exceed) the NERC MVCD requirements described in this table