Job Aid: Overhead Assessment

Summary

This job aid is designed to assist Electric Distribution Compliance Inspectors, PG&E Employees, and Contractors in assessing and prioritizing compelling **abnormal conditions** on overhead facilities, including but not limited to GO 165 Inspections. Compelling Abnormal Condition is defined as any electric distribution pole, equipment, component, conductors, vegetation, or third-party condition that causes a safety or fire ignition risk that, in the judgment of the field employee, may adversely impact public safety and/or service reliability **within 5 years**.

The field employee's primary responsibility when inspecting an overhead electric facility is to **examine and record any compelling abnormal conditions** and per GO95 Rule 18 level 3 conditions that can be completed as opportunity work with a 5-year duration. This job aid provides guidance on issues that field employees may encounter most frequently in the field but is not intended to be an all-inclusive listing of all abnormal conditions or corrective actions.

During any inspection or field assessment, the field employee may change the priority of any EC Tag based on the field conditions.

Per GO 95, Rule 18, the maximum duration of E tags in HFTD (High Fire Treat District) is:

- 12 months for Tier 2
- 6 months for Tier 3

The statement "Minor Work" referenced in this document is specific to compliance inspectors. When in the field, if a compliance inspector completes minor work, the work must be completed to current construction standards, with the exception of make-safe situations.

The FDA (Facility Type / Damage / Action) located in Table 1 at the bottom of this document provides general guidance on EC tag notification for the specific scenario.

Job Aid: Overhead Assessment

Overhead Job Aid Training

• Refresher Training • TECH-0020	The Annual Refresher Training program is designed for PG&E's Compliance Inspectors who conducted detailed inspections in the previous year. Content includes explanations of changes to the annual inspection program, mobile applications, and the checklist. A review of this Job Aid is included in this course.
• New Inspector Training • ELEC-1000	The New Inspector Training program is a 3-day training program designed for new Compliance Inspectors and Canus contractors who may be assigned Electric Distribution GO165 Overhead/Underground inspection and patrol work. A review of this Job Aid is included in this course.
• New Contractor Training • ELEC-0340, 0341, 0342	The New Contractor Training program is a 3-day training program, followed by an assessment day plus a 2 day in-the-field-training. It is designed for new contractors who will be assigned Electric Distribution GO165 Overhead inspection work. A review of this Job Aid is included in this course.

Target Audience

- Qualified Electrical Workers (QEW)

Before You Start

- Follow all applicable safety rules, procedures, and protocols.
- Wear appropriate personal protective equipment (PPE) for specific tasks and work area.

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Climbing Space

1. Climbing Space – Obstructed

General Guidance: Evaluate pole to determine whether there is an obstruction caused by PG&E facilities or by third party facilities that is causing a compelling safety issue – based on the location of the pole and exposure to the worker - that needs to be addressed in 5 years.

Example: Equipment pole that cannot be accessed in a bucket truck.

Example: Pole in rear easement with secondary or service connection failures.

Example: where the climbing space **is not** a compelling condition: Equipment pole that is accessible 100% of the time in a bucket.

For PG&E obstructions: Create an EC notification.

For third party obstructions: Create a third-party notification if they pose a significant safety hazard.

If a third-party obstruction is causing an emergency safety or reliability issue, contact your supervisor for instructions.

Minor Work: No

EC Notification: Yes, if not able to perform minor work

Third Party Notification: Yes, if obstructed by third party

Select the Priority and Due Date based upon compelling abnormal condition that may adversely impact public safety and/or service reliability in the next 5 years.

Related Documents: 066210

Examples

COMMUNICATION IN CLIMBING SPACE	
	**At this Location:** Obstructed climbing space, access via bucket truck from street below. Also, look for clearance issues between communications facilities and the PG&E down guys. **Perform Minor Work:** No **Write 3rd Party Notification:** No **Write EC Notification:** No

CLIMBING SPACE OBSTRUCTED	
	**At this Location:** Climbing space obstruction by communication facilities on pole with equipment. Communication messengers are too close. No bucket truck access. **Perform Minor Work:** No **Write 3rd Party Notification:** Yes **Write EC Notification:** No

2. Climbing Space – Obstructed by Vegetation

General Guidance: For incidental vegetation in climbing space that can be moved when climbing, or quickly cleared prior to climbing, no action is required.

For major vegetation that cannot be quickly cleared or moved prior to climbing, evaluate the pole:

- Is there supply equipment on the pole that may need to be operated during emergency conditions?
- Should the obstruction be cleared for any other safety or reliability reason?

If the answer is yes to any of these questions, the inspector will need to create an EC Notification to clear vegetation unless it can be addressed as minor work.

Minor Work: Yes

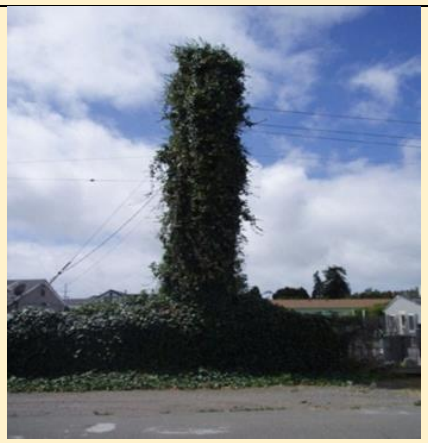
EC Notification: Yes, if not able to perform minor work

Select the Priority and Due Date based upon compelling abnormal condition that may adversely impact public safety and/or service reliability in the next 5 year.

Related Documents: 066210

Examples

OBSTRUCTED CLIMBING SPACE	CLIMBING SPACE OBSTRUCTED
	
At this Location: Obstructed climbing space. Inspector cannot see enough of the pole to complete Inspection (heavy vegetation, cannot see through). No equipment on pole. The only reason to address is to complete the inspection.	**At this Location:** Climbing space obstruction, able to perform inspection, no equipment on pole (able to see guys, able to see up the pole under tree)
Perform Minor Work: No	**Perform Minor Work:** No
Write 3rd Party Notification: No, only need clearing to perform inspection	**Write 3rd Party Notification:** No
Write EC Notification: Yes **FDA =** OH Facility / Limited Access/Obstruct / Inspect (Primary) **FDA=** OH Facility / Limited Access/Obstruct / Remove **Priority =** B tag**,** 0-3 months depending upon exposure; must complete before CPUC due date for map	**Write EC Notification:** No

Pole with Vegetation	IVY COVERED POLE
	
At this Location: 360° pole inspection not possible	**At this Location:** 360° pole inspection not possible
Perform Minor Work: No	**Perform Minor Work:** No
Write 3rd Party Notification: No	**Write 3rd Party Notification:** No
Write EC Notification: Yes **FDA =** OH Facility / Limited Access/Obstruct / Inspect (Primary) **FDA=** OH Facility / Limited Access/Obstruct / Remove **Priority =** B Tag**,** 0-3 months depending upon exposure; must complete before CPUC due date for map	**Write EC Notification:** Yes **FDA =** OH Facility / Limited Access/Obstruct / Inspect (Primary) **FDA=** OH Facility / Limited Access/Obstruct / Remove **Priority =** B Tag**,** 0-3 months depending upon exposure; must complete before CPUC due date for map

Conductor

1. Conductor Broken / Damaged

General Guidance:

Visually check all conductors (primary/secondary/service), associated attachments and dead-ends for damage from the structure being inspected to mid-span in all directions or the weather-head or to the conductor's termination point

A. Primary, secondary, and/or service conductors that are broken, damaged, burnt, corroded, loose, frayed or bird caging.

- General Guidance: If observed, create EC Notification to repair or replace the conductor.

  Note: If conductor has 40% or more of strands broken, A Tag stand by situation.

B. Conductor has splices tied into insulator or splices in contact with the tie wire, preventing free movement of splice with conductor

- General Guidance: Create EC to repair or replace conductor

C. Damaged grey AWAC, Damaged grey service drops, i.e., visually cracked, multiple cracks, discoloration, corrosion, degradation, and/or loose AWAC lashing.

- General Guidance: Create EC to replace conductor

D. Primary, secondary, or Service conductor has diminished clearance mid-span or uneven conductor sag.

- General Guidance: Refer to Clearance Job Aid in this document. If observed, create EC Notification to adjust clearance or to recommend a clearance pole.

E. Open wire secondary conductor with rack construction has missing spreader brackets for spans > 135'.

- General Guidance: If observed, create EC Notification to have spreader brackets installed where bucket truck accessible; use line of sight and if available, foreman-cane or rangefinder.

F. If no access due to excessive vegetation:

- General Guidance: create EC Notification, CGI OH Facility /Limited Access / Inspect if preventing complete inspection.

G. Hand or preform tie wire broken, damaged, burnt, loose, corroded, showing signs of wearing, completely missing and/or missing half of the tie wire, or missing armor rod (where armor rod could have mitigated damage under hand ties).

- General Guidance: Create EC Notification to replace tie wire and/or armor rod.

H. Jumper burnt or jumper clearance issues.

- General Guidance: If observed, create EC Notification to replace burnt jumper or to adjust clearance issues.

I. Visually check for excessively corroded or damaged connectors and dead-end hardware which has a potential to fail, drop conductor, or cause an ignition.

- General Guidance: If observed, create EC Notification to replace connectors or dead-end hardware

J. Visually check all splices for all conductors inside the scope of the inspection. If observed splices are damaged, corroded, cracked, tied into the insulator or underneath the tie wire, installed underneath the vibration dampener that prevent free movement of the splices with the conductor.

- General Guidance: Use binoculars. If observed, create EC Notification to repair or replace.

K. Is the service conductor cracked, exposing the hot leg?

- General Guidance: Use binoculars. Evaluate service drops looking for cracked or damaged insulation exposing hot legs. If insulation is cracked or damaged to the point where hot leg is exposed, this is an Emergency/Standby condition.

L. Look for broken service neutrals, or signs that the neutral is in poor condition i.e., damaged, burnt, loose, corroded, showing signs of wearing and about to fail. Conductor separation issues.

- General Guidance: Use binoculars. If observed, Create EC to repair or replace conductor

M. Visually check service conductors going into riser, especially at the bend radius and cable grip, obverse potential fraying of the conductor insulation at the entry point to the molding or conduit for exposed hot leg, etc.

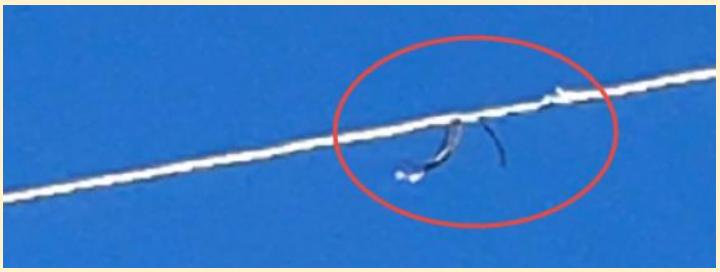
- General Guidance: Use binoculars. If observed, Create EC to repair or replace conductor

N. For other risks, hazards, or other maintenance conditions not previously identified above

- General Guidance: Reach out to lead or supervisor if needed, otherwise Create EC Notification

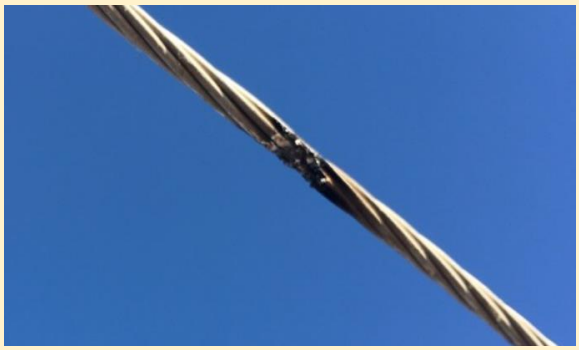
Examples

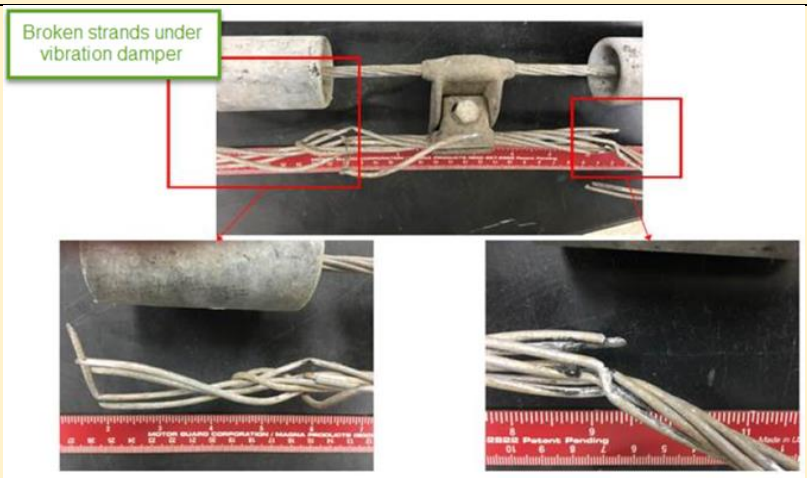
Excessive Bird Caging	
	**At this Location:** Conductor has excessive bird caging **Perform Minor Work:** No **Write 3rd Party Notification:** No **Write EC Notification:** Yes **FDA:** FDA = Conductor / Broken / Damaged / Repair or Replace **Priority:** E Tag 3-12 months depending on exposure

Gun Shot Damage	
	**At this Location:** Less than 40% broken strands in a Non-HFTD rural area with low public exposure. **Perform Minor Work:** No **Write 3rd Party Notification:** No **Write EC Notification:** Yes **FDA:** FDA = Conductor / Broken / Damaged / Repair or Replace **Priority:** E Tag 3-12 months depending on exposure

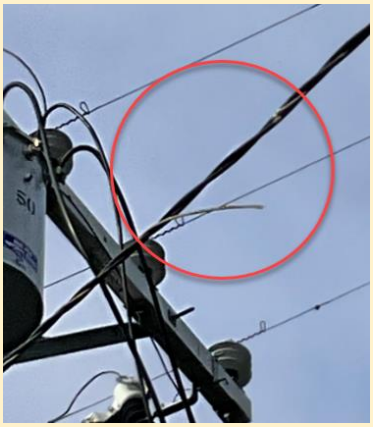
Broken Strands

At this Location: Damage to the conductor, more than 40% broken strands
Perform Minor Work: No
Write 3rd Party Notification: No
Write EC Notification: Yes **FDA =** Conductor / Broken / Damaged / Repair or Replace **Priority =** A Tag Emergency

Burnt Conductor Primary or Secondary	
	**At this Location:** Burnt Conductor, midspan, primary or secondary
	Perform Minor Work: No
	Write 3rd Party Notification: No
	Write EC Notification: Yes **FDA:** FDA = Conductor / Burnt / Repair or Replace **Priority:** E Tag 3-12 months depending on exposure

Broken Strands under Vibration damper

At this Location: Broken strands (more than 40%) under vibration Damper
Perform Minor Work: No
Write 3rd Party Notification: No
Write EC Notification: Yes **FDA =** Conductor / Broken / Damaged / Replace **Priority =** A Tag, follow emergency process

Broken or Open Service Neutral



At this Location: Broken / Open Service neutral

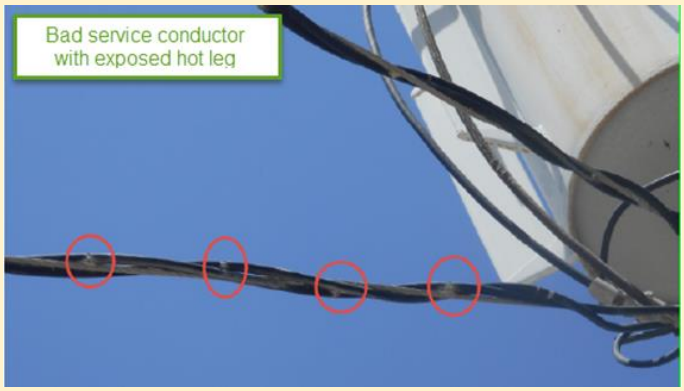
Perform Minor Work: Yes, if safe to do so. If you replace the service conductor, this is capital Minor Work. Fill out EC Notification to account for this minor work; charge time to your division standing order

Write 3rd Party Notification: No

Write EC Notification: Yes, if minor work is not possible, or to document completed capital minor work

FDA = Conductor / Broken / Damaged / Repair or Replace

Priority = A Tag, Emergency due to exposed hot leg, follow emergency process

Bad service conductor with exposed hot leg	
	**At this Location:** Bad service conductor with exposed hot leg, bundled with a potential to cross phase
	Perform Minor Work: No
	Write 3rd Party Notification: No
	Write EC Notification: Yes **FDA:** FDA = Conductor / Broken / Damaged / Replace **Priority:** A Tag, Emergency due to exposed hot leg, follow emergency process

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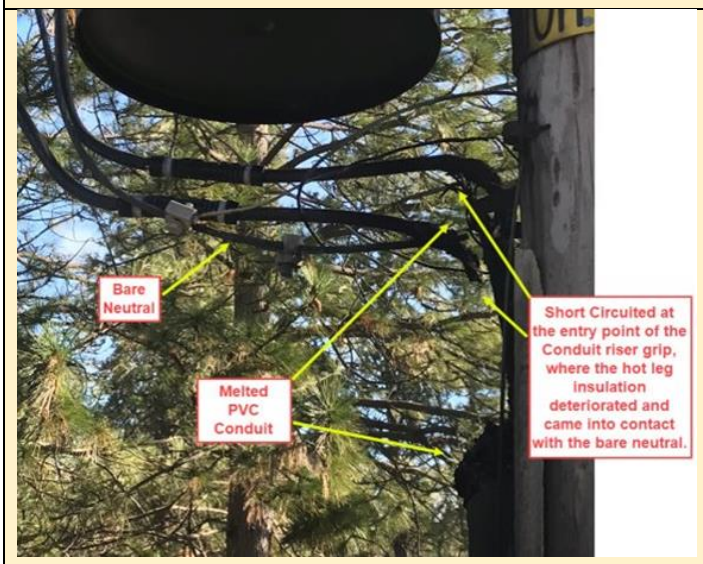
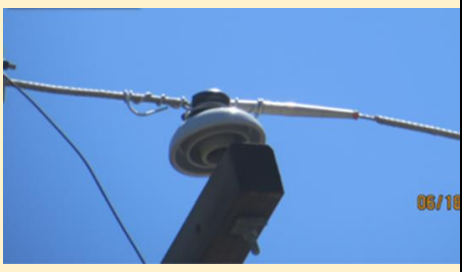
Secondary Service Riser Drops	
	
At this Location: hot leg insulation frayed at the point of entry point of the molding exposing the conductor into contact with the neutral	
Perform Minor Work: No	
Write 3rd Party Notification: No	
Write EC Notification: Yes **FDA=**Conductor / Broken / Damaged / Replace **Priority=** A Tag, follow the emergency process	

Splices tied into the insulator or under the tie wire
  
At this Location: Splice under the tie wire or tied into the insulator
Perform Minor Work: No
Write 3rd Party Notification: No
Write EC Notification: Yes **FDA =** Conductor / Splice Tied In / Replace **Priority =** E Tag, 3-12 months depending on exposure

Splices tied into the insulator or under the tie wire – Aerial View	
	**At this Location:** Splice under the tie wire or tied into the insulator. Splice bent / damaged.
	Perform Minor Work: No
	Write 3rd Party Notification: No
	Write EC Notification: Yes **FDA =** Conductor / Splice Tied In / Replace **Priority =** B Tag, 0-3 months depending on exposure

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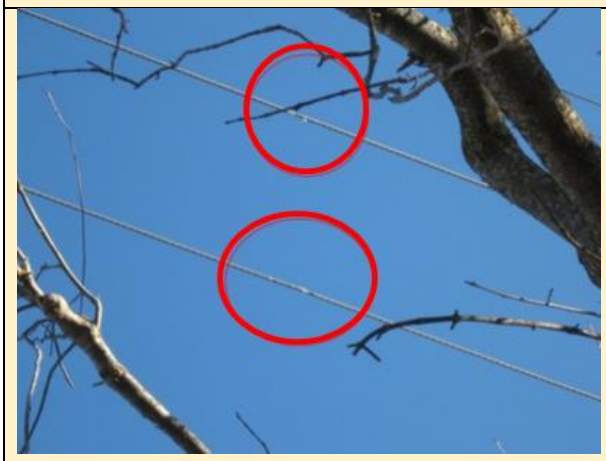
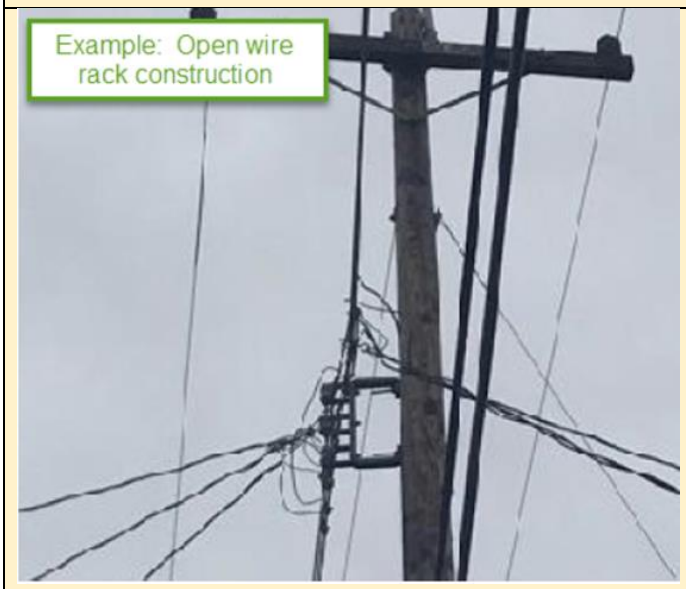
Damaged / Cracked Grey Service	
	**At this Location:** Cracked grey service / Aerial cable. Older grey services tend to crack and will appear to have rings around the insulation. Loose lashing, visually cracked, discoloration/corrosion, Degradation. Must be carefully evaluated. Call lead or supervisor.
	Perform Minor Work: Yes, if safe to do so. If you replace the service conductor, this is capital Minor Work. Fill out EC Notification to account for this minor work.
	Write 3rd Party Notification: No
	Write EC Notification: Yes **FDA=**Conductor / Broken / Replace *OR* **FDA=**Conductor / Damaged / Replace *OR* **FDA=**Conductor / Burnt / Replace **Priority =** E Tag, 0-12M depending on exposure. Consider A-Tag if signs of tracking between phases present.

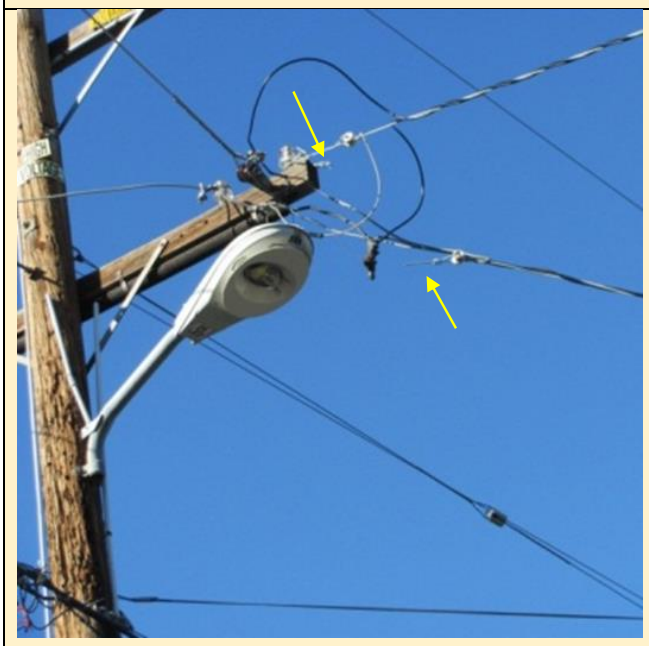
Damaged, Corroded, or Cracked Splices	
	**At this Location:** Cracked Splice
	Perform Minor Work: No
	Write 3rd Party Notification: No
	Write EC Notification: Yes **FDA=**Conductor / Broken Splice / Damaged / Replace **Priority =** B tag, 0-3 months, depending on exposure

Damaged Secondary	
	**At this Location:** Damaged strands, less than 40% **Perform Minor Work:** No **Write 3rd Party Notification:** No **Write EC Notification: Yes** **FDA=** Conductor / Damaged / Repair **Priority =** E Tag, 3-12 months depending on exposure

Exposed Service Connector	
	**At this Location:** Exposed Conductors, with an acceptable air gap between conductors **Perform Minor Work:** Yes, if safe to do so **Write 3rd Party Notification:** No **Write EC Notification:** Yes, if minor work cannot be performed **FDA=** Conductor / Broken / Damaged / Repair **Priority =** E Tag, 3-12 months depending on exposure

Cracked Grey Service and Deteriorated Insulation Tape	
	**At this Location:** Deteriorated cracked Grey service for potential cross-phasing **Perform Minor Work:** No **Write 3rd Party Notification:** No **Write EC Notification:** Yes **FDA=** Conductor / Damaged / Replace **FDA=** Connector/ Insulation Deteriorated / Repair **Priority =** E Tag, 3-12 months depending on exposure

Open Wire Rack Construction	
	**At this Location:** Span length >135' missing spreader bracket for open wire extended rack construction. **Perform Minor Work:** No **Write 3rd Party Notification:** No **Write EC Notification:** Yes **FDA=** Conductor / Sag / Clearance / Install Spreader Bracket **Priority =** E Tag, 3-12 months depending on exposure

Hardware Broken	
	**At this Location:** The #6 solid copper is broken causing strain on the conductor. Unsecured service. **Perform Minor Work:** Yes, if safe to do so **Write 3rd Party Notification:** No **Write EC Notification:** Yes, if minor work cannot be performed **FDA=** Hardware / Framing / Broken / Damaged / Repair **Priority =** E Tag, 3-12 months depending on exposure

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OVERHEAD SERVICE STRAIN OR ABRASION	OVERHEAD SERVICE STRAIN OR ABRASION
	
At this Location: Service strain abrasion, with possible burning at some sections. Damaged insulation.	**At this Location:** Service strain abrasion, no slack remaining
Perform Minor Work: Yes, if safe to do so. If you replace the service conductor, this is capital Minor Work. Fill out EC Form to account for this minor work; charge time to your division standing order.	**Perform Minor Work:** Yes, if safe to do so. If you replace the service conductor this is capital Minor Work. Fill out EC Form to account for this minor work; charge time to your division standing order.
Write 3rd Party Notification: No	**Write 3rd Party Notification:** No
Write EC Notification: Yes, if minor work not possible, or to document completed capital minor work **FDA =** Conductor / Broken / Damaged Repair or Replace **Priority =** E Tag, 3-12 months depending on exposure, in comments add note about strain abrasion burnt conductor If abrasion has caused an exposed hot leg, assign Priority “A”, emergency, and stand-by.	**Write EC Notification:** Yes, if minor work not possible, or to document completed capital minor work **FDA =** Conductor / Broken / Damaged Repair or Replace **Priority =** E Tag, 3-12 months depending on exposure, in comments add note about strain abrasion burnt conductor If abrasion has caused an exposed hot leg, assign Priority “A”, emergency, and stand-by.

Loose Primary Neutral Ground	
	
At this Location: Loose primary neutral ground, unsupported conductor, hanging	**At this Location:** Loose primary neutral ground, unsupported conductor, hanging
Perform Minor Work: No	**Perform Minor Work:** No
Write 3rd Party Notification: No	**Write 3rd Party Notification:** No
Write EC Notification: Yes **FDA =** Molding, Loose, Adjust **Priority =** E Tag, 3-12 month, depending on exposure	**Write EC Notification:** Yes **FDA =** Molding, Loose, Adjust **Priority =** E Tag, 3-12 month, depending on exposure

2. Connector Broken / Damaged

General Guidance:

Visually check all connectors for signs of damage, corrosion, or incorrect installation. Deteriorated aqua seal and/or insulation tape?

A. Are secondary connectors (mini wedge and Insulink) installed on primary conductor?

- Guidance: If yes, write EC notification to replace connector.

B. Are connections made with dissimilar metals installed incorrectly?

- Guidance: Proper installation is Aluminum over Copper.
- Guidance: If yes, write EC notification to replace connector.

C. Are tap clamps installed incorrectly?

- Guidance: If yes, write EC notification to replace connector.
- Identify improperly installed tap clamps (aka chance clamps); e.g.
  i. No tap guards installed on conductor smaller than 1/0 Al and/or smaller than #2 Cu
  ii. Installed on tap lines (jumpers) feeding more than 2 transformer banks.
  iii. Installed on armor rod (used for tying in conductor with hand ties; not an appropriate method of attaching tap clamps)
  iv. Used on any other type of equipment (recloser, capacitor, regulator, risers, etc.) other than a transformer.

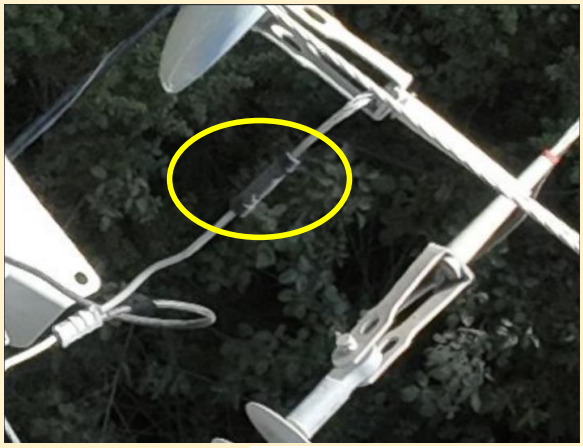
Note: Chance Clamp is a brand name; this is also known as a hot-line clamp or tap clamp, etc.

D. Is the connector excessively corroded or damaged with potential to fail, drop conductor, or cause an ignition?

- **Guidance:** If yes, write EC notification to replace connector.

Examples

Incorrectly Installed Chance Clamp	
 Tap clamp on armor rod installed incorrectly.	**At this Location:** Incorrectly installed per note C above - chance clamp on armor rod **Perform Minor Work:** No **Write 3rd Party Notification:** No **Write EC Notification:** Yes **FDA:** Connector / Incorrectly Installed / Replace **Priority:** E Tag 3-12 months depending on exposure

Secondary Connector Installed on Primary
  
At this Location: Secondary connector installed on primary
Perform Minor Work: No
Write 3rd Party Notification: No
Write EC Notification: Yes **FDA:** Connector / Incorrectly Installed / Replace **Priority:** E Tag 3-12 months max depending on exposure

Connector with Deteriorated Tape	
	**At this Location:** Deteriorated tape insulation**, potential** cross-phasing
	Perform Minor Work: No
	Write 3rd Party Notification: No
	Write EC Notification: Yes **FDA=** Connector/ Insulation Deteriorated / Repair **Priority =** E Tag, 3-12M depending on exposure

3. Tie Wire Damaged

A. Damaged / Corroded

General Guidance: Ensure tie wires are not damaged, broken, or corroded. Repair damaged secondary tie wire as minor work if possible.

Visually inspect hand ties to identify wear prior to failure; utilize bucket truck, binoculars, or camera to get a closer look - especially on older installations.

If damage to conductor or tie wire, create EC notification

Minor Work: Yes, on service or secondary only

- Repair damage to service or secondary as minor work if possible and if safe to do so.
- IF not able to perform minor work, THEN create EC notification.

EC Notification: Yes, only if not able to perform minor work.

Select the Priority and Due Date based upon compelling abnormal condition that may adversely impact public safety and/or service reliability in the next 5 years.

Reference: 052990 - Formed Insulator Ties for Distribution Line Conductors

Examples

Preform not attached to Insulator	
	**At this Location:** Preform not attached to the insulator, rural area, low exposure with no vehicular access **Perform Minor Work:** Yes, if safe to do so. **Write 3rd Party Notification:** No **Write EC Notification:** Yes **FDA=**Tie Wire / Loose / Replace **Priority =** E Tag, 3-12 months depending on exposure

Tie Wire Corroded	
	**At this Location:** Tie wire is corroded, strand is broken **Perform Minor Work:** No **Write 3rd Party Notification:** No **Write EC Notification:** Yes **FDA=**Tie Wire / Corroded / Replace **Priority =** E Tag, 3-12 months depending on exposure

Broken / Corroded Tie Wire

At this Location: Corroded and broken tie wire, top tie, with one strand remaining

Perform Minor Work: No

Write 3rd Party Notification: No

Write EC Notification: Yes

FDA = Tie wire / Broken / Damaged / Repair / Replace

Priority = E Tag, 3-12 months

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Broken / Corroded Tie Wire

At this Location: Broken tie wire

Perform Minor Work: No

Write 3rd Party Notification: No

Write EC Notification: Yes

FDA = Tie wire / Broken / Damaged / Repair / Replace

Priority = E Tag, 3-12 months

Questionable Tie Wire
  
At this Location: Not obvious if it's still attached, Transmission with distribution under-build, in HFTD. Insulator has spun.
Perform Minor Work: No
Write 3rd Party Notification: No
Write EC Notification: Yes **FDA =** Tie wire / Broken / Damaged / Repair / Replace **Priority =** B Tag, 0-3 months, depending on exposure

Tie Wire Slipping and Coming Loose, Angle Pole	
	**At this Location:** Tie wire is slipping from an inside angle **Perform Minor Work:** No **Write 3rd Party Notification:** No **Write EC Notification:** Yes **FDA=** Tie wire / Broken / Damaged / Repair / Replace **Priority =** A Tag, Follow the emergency procedure

Angle Pole with Tie wire, Bent Steel Pin	
	**At this Location:** Angle pole with post top insulator, where the inside angle insulator conductor is only being supported by tie wire (non-clamped). Post top insulator steel pin is bent **Perform Minor Work:** No **Write 3rd Party Notification:** No **Write EC Notification:** Yes **FDA=** Tie wire / Broken / Damaged / Repair / Replace **Priority =** A Tag, Follow the Emergency procedure

4. Primary Covered Conductor “Tree Wire”

A. Dead-End Covers Mis-aligned

General Guidance: If Dead-End Covers are:

- Rotated or mis-aligned
  - That have caused energized portions of the conductor that could be exposed to vegetation or animal contact, at a location of risk, and not meeting its purpose.
    - Rotated beyond the plane from level of the conductor, 45 degrees or more.
- Appear that it was installed and now missing. Tree Wire **Only.**

If observed, create EC Notification to repair (Installed Dead-End Cover with Anti-Rotation Clamp) or replace dead-end cover

Ref: Numbered Documents:

- 061149: "Raptor Safe Construction and Wildlife Protection,
- 015195 - Installation Details for Aluminum, ACSR, and Copper Covered Tree Wire

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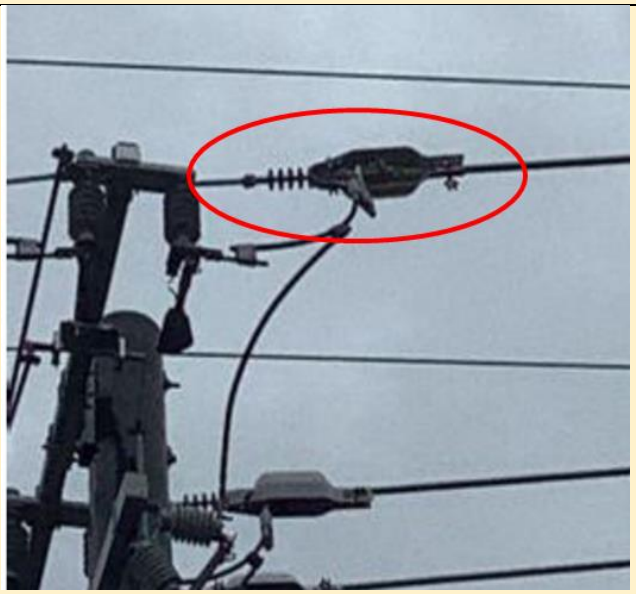
Example

Mis-Aligned Dead-End Covers	
	**At this Location:** Dead-End Cover mis-aligned on tree wire construction. **Perform Minor Work:** Yes, if safe to do so. Install anti-rotation Clamp **Write 3rd Party Notification:** No **Write EC Notification:** Yes **FDA=** Dead End Cover / Broken / Damaged / Replace ***OR*** **FDA=** Dead End Cover / Broken / Damaged / Repair **Priority =** F Tag, 5 years, depending on exposure

B. Exposed Primary Covered Conductor- Tree Wire

Guidance: Does covered conductor have any exposed conductor sections? Does the conductor have any exposed energized splices, connectors, flying bells, or any other components that are not covered?

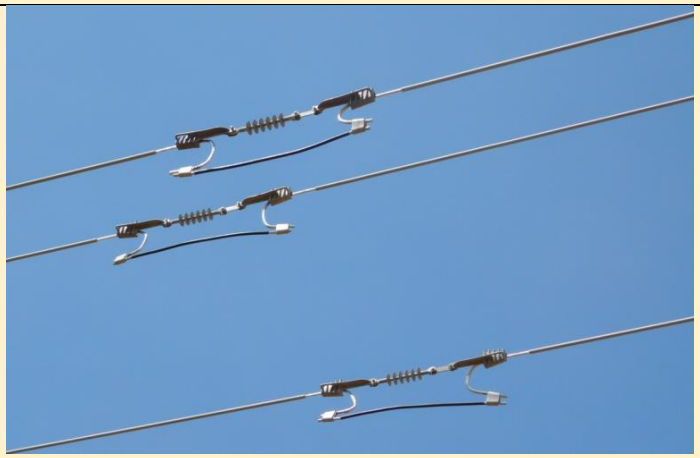
Minor work: No

EC Notification: Yes

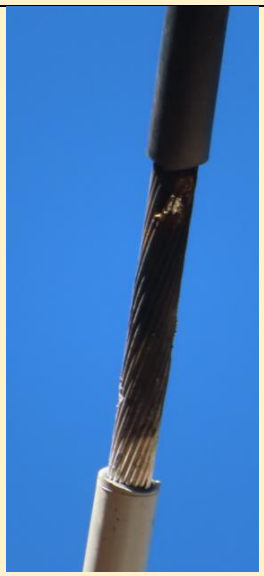
Ref: Numbered Documents:

- 061149: "Raptor Safe Construction and Wildlife Protection,
- 015195 - Installation Details for Aluminum, ACSR, and Copper Covered Tree Wire

Example

Exposed Primary Covered Conductor – Flying Bells, Wedge Connectors not removed after Work	
	**At this Location:** Flying Bells installed in on primary tree wire, now have exposed connectors and conductor.
	Perform Minor Work: No
	Write 3rd Party Notification: No
	Write EC Notification: Yes **FDA:** Tree Wire / Exposed / Repair **Priority:** F Tag, depending on exposure

Job Aid: Overhead Assessment

Exposed Primary Covered Conductor Tree Wire, Burnt Conductor	
	**At this Location:** Tree Wire conductor exposed and burnt **Perform Minor Work:** No **Write 3rd Party Notification:** No **Write EC Notification:** Yes **FDA=** Tree Wire / Exposed / Repair **FDA=** Conductor / Burnt / Repair **Priority:** E Tag, 3-12 months depending on exposure

Exposed Primary Covered Conductor Tree Wire	
	**At this Location:** Tree Wire jacket cut into, and bare conductor exposed **Perform Minor Work:** No **Write 3rd Party Notification:** No **Write EC Notification:** Yes **FDA:** Tree Wire / Exposed / Repair **Priority:** F Tag, depending on exposure

5. Conductor Not Properly Seated in the Insulator Groove

Ensure that the Conductor (covered or bare) is properly seated and tied into the insulator groove on straight through, non-angle construction.

Visually inspect conductor and insulator to identify prior to failure; utilize bucket truck, binoculars, or camera to get a closer look - especially on older installations.

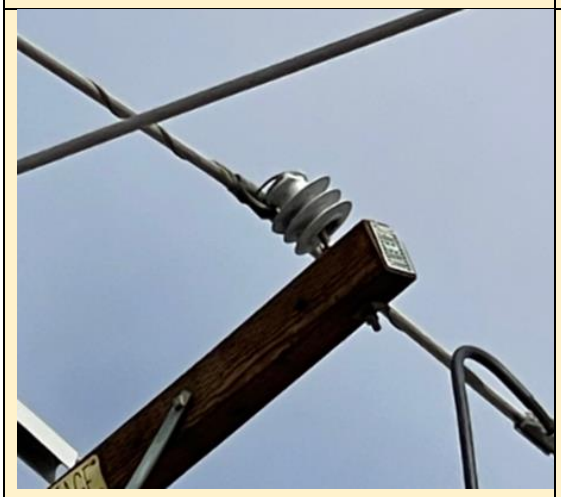
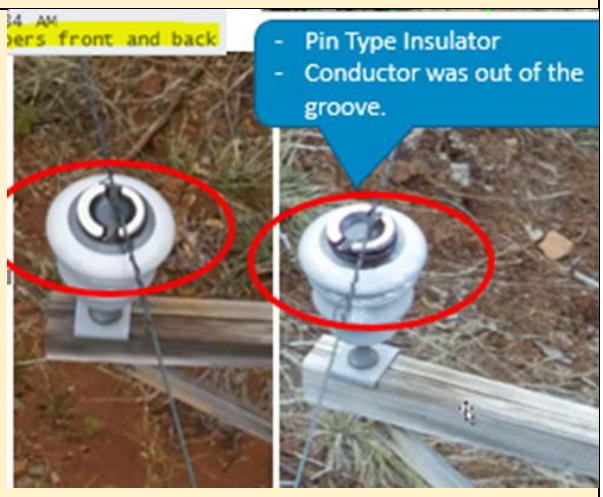
If installation is incorrect, create EC notification – see below (HFTD – A-tag) (non-HFTD or public safety issue B)

EC Notification: Yes

Related Documents: 021439, 028853, 052990

Examples

Broken Tie Wire	
	**At this Location:** Broken tie wire, which caused a floating conductor condition (sitting on the cross-arm) Insufficient clearance
	Perform Minor Work: No
	Write 3rd Party Notification: No
	Write EC Notification: Yes **FDA**= Conductor / Floater / Repair **Priority=** A Tag, Follow emergency procedure

Conductor Tied to Side of Skirt, not in Groove	Tie Wire Broken / Loose / Not in Groove
	
At this Location: Insulator spun, and conductor tied on the skirt, non-angle pole.	**At this Location:** Tie Wire Broken / Loose / Not in Groove
Perform Minor Work: No	**Perform Minor Work:** No
Write 3rd Party Notification: No	**Write 3rd Party Notification:** No
Write EC Notification: Yes **FDA =** Tie Wire / Broken / Damaged / Replace **Priority =** B Tag, 0-3 months depending on exposure	**Write EC Notification:** Yes **FDA =** Tie Wire / Improperly Installed / Repair **Priority =** B Tag, 0-3 months depending on exposure

6. Floaters

General Guidance: Does primary or secondary conductor(s) float? A floater is when the conductor is not attached to the crossarm/pole. Floaters are **ALWAYS** an Emergency/Standby condition. Create EC Notification using FDA Conductor / Floater / Repair.

Minor Work: No

EC Notification: Yes

Related Documents: 022088

Example

Floater	
	**At this Location:** Floater, conductor is not contacting the arm. Rotten crossarm. **Perform Minor Work:** No **Write 3rd Party Notification:** No **Write EC Notification:** Yes **FDA=**Crossarm / Decayed/Rotten/ Replace **FDA=** Conductor / Floater / Repair **Priority**= A Tag, follow Emergency Process

7. Broken or Unsecured Service Bob

General Guidance: Repair or Replace broken insulator, wires, pins, etc.

Minor Work: Yes

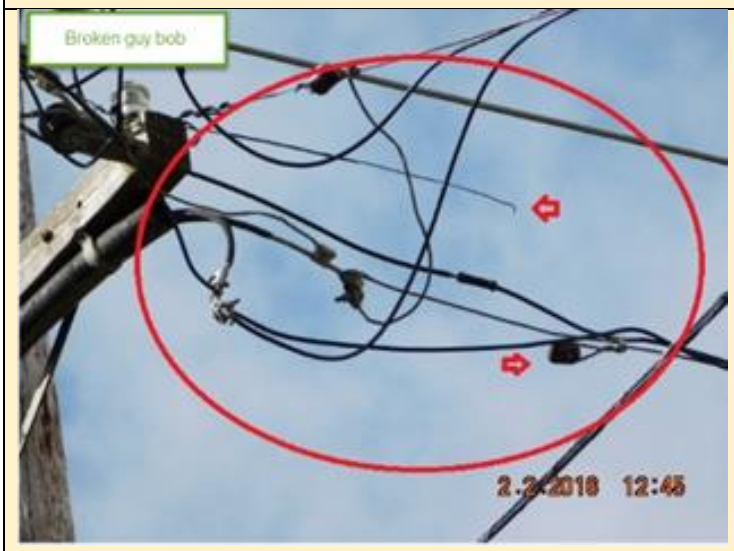
- Make repairs as minor work if possible and if safe to do so.
- IF not able to perform minor work, THEN create EC notification.

EC Notification: Yes

Select the Priority and Due Date based upon compelling abnormal condition that may adversely impact public safety and/or service reliability in the next 5 years.

Related Documents: None

Example

Broken Service Bob	
	**At this Location:** Broken service Insulator which has become unattached between the copper wire and the insulator.
	Perform Minor Work: No
	Write 3rd Party Notification: No
	Write EC Notification: Yes **FDA=** Hardware/Framing / Broken / Damaged / Repair **Priority=**" E", 3-12 months depending upon exposure

8. Conductor Clearances (Job Aid Below)

General Guidance: Refer to the Conductor Clearance Job Aid and below.

Minor Work: No

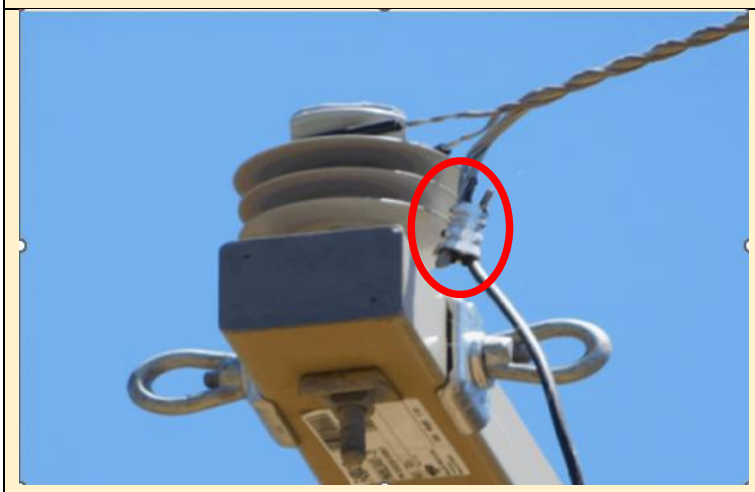
EC Notification: Yes

Select the Priority and Due Date based upon compelling abnormal condition that may adversely impact public safety and/or service reliability in the next 5 years.

Related Documents: TD-2305M-JA12

Example

Insufficient Clearance – Aerial View	
	**At this Location:** Over the top jumper laying on cross-arm **Perform Minor Work:** No **Write 3rd Party Notification:** No **Write EC Notification:** Yes **FDA:** Jumper / Clearance / Impaired / Adjust **Priority:** A Tag, Follow the emergency process

Insufficient Clearance	
	**At this Location:** Insufficient clearance between connector and cross-arm **Perform Minor Work:** No **Write 3rd Party Notification:** No **Write EC Notification:** Yes **FDA:** Conductor / Clearance / Impaired / Adjust **Priority:** E Tag 3-12 months max depending on exposure

9. Conductor: Uneven, Improper Sag, or Diminished Clearance

General Guidance: Check for primary or secondary conductor with improper sag or diminished clearance midspan or uneven conductors, phases touching, or broken at dead end supported by jumper.

- Any spans with uneven conductor - different tension, "bellies" (one is lower than the conductor next to it - when wind blows it may sway at different rates, etc.), then re-sag or install spreader brackets.

Look for damaged dead-end hardware ends that may cause uneven sag. Look for signs of annealing, excessive sag, splices, or discoloration that can result in failed conductor.

Identify clearance requirements utilizing the Clearance Evaluation Job Aid at the end of this document.

Minor Work: Yes.

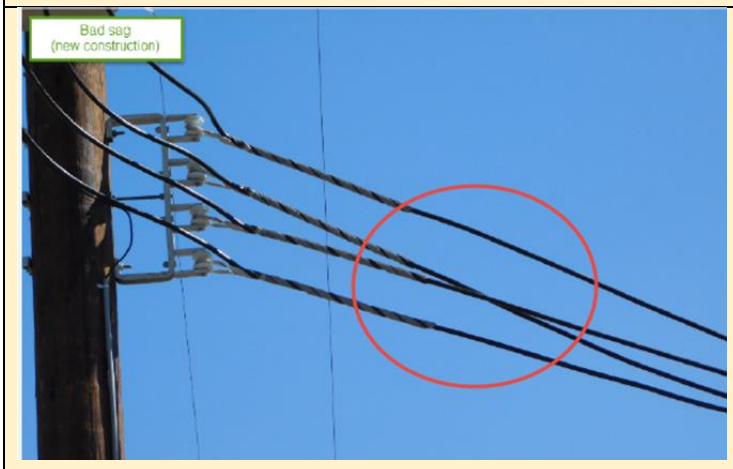
- Make repairs as minor work if possible and if safe to do so. Re-sag or install spreader brackets.
- IF not able to perform minor work, THEN create EC notification.

EC Notification: Yes

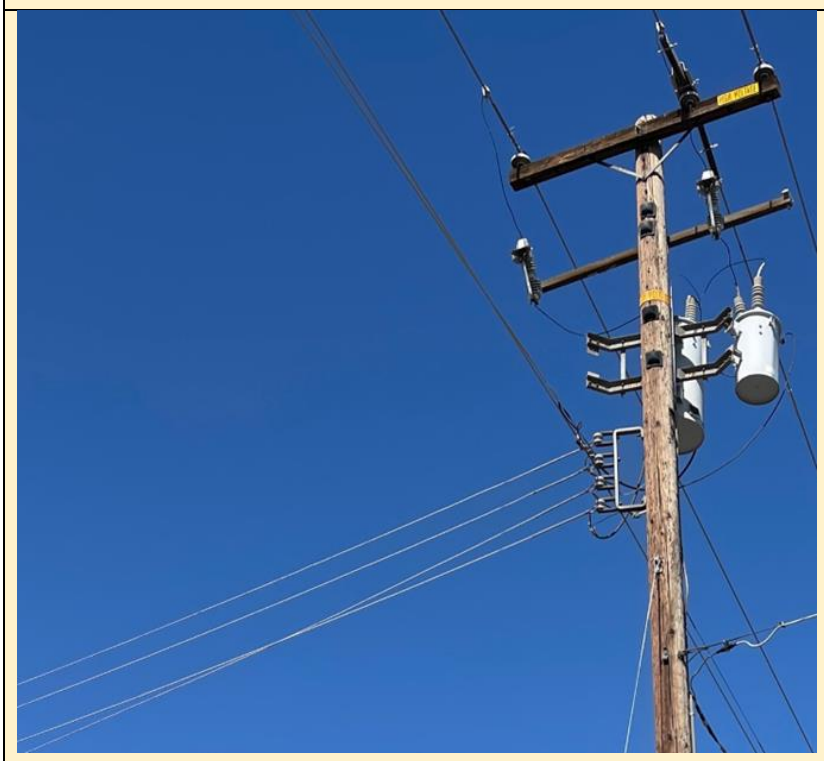
Select the Priority and Due Date based upon compelling abnormal condition that may adversely impact public safety and/or service reliability in the next 5 years.

Related Documents: TD-7103P-09 pg16, appendix B, table 1

Examples

Secondary Sagging Conductor	
	**At this Location:** Extended Rack Construction sagging covered and insulated secondary conductor, resulting in conductors touching
	Perform Minor Work: Yes, if safe to do so
	Write 3rd Party Notification: No
	Write EC Notification: Yes **FDA**= Conductor / Sag / Clearance / Adjust **PRIORITY=** E TAG**,** 3-12 months depending upon exposure

Job Aid: Overhead Assessment

Open Wire Secondary Sag	
	**At this Location:** Open wire secondary sag into neutral, energizing the neutral **Perform Minor Work:** No **Write 3rd Party Notification:** No **Write EC Notification:** Yes **FDA=** Conductor/ Sag / Clearance / Adjust or replace **PRIORITY=** A tag, follow emergency procedure

Primary Sagging Conductor	
	**At this Location:** Sagging Primary Conductor **Perform Minor Work:** No **Write 3rd Party Notification:** No **Write EC Notification:** Yes **FDA=** Conductor / Sag / Clearance / Adjust **PRIORITY=** E tag, 3-12 months depending upon exposure

10. Jumpers

General Guidance: Are jumpers burnt or are there clearance issues? If yes, create EC notification.

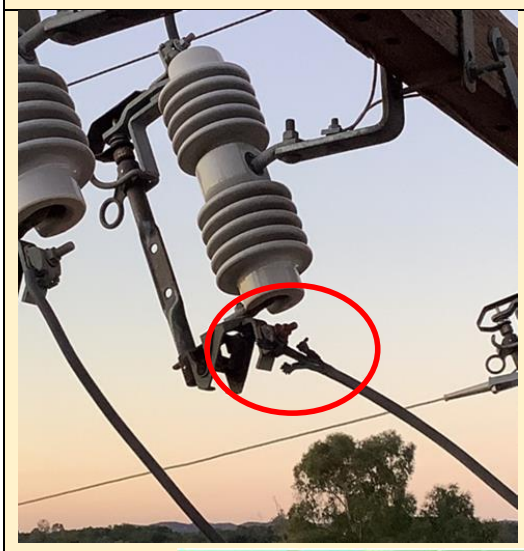
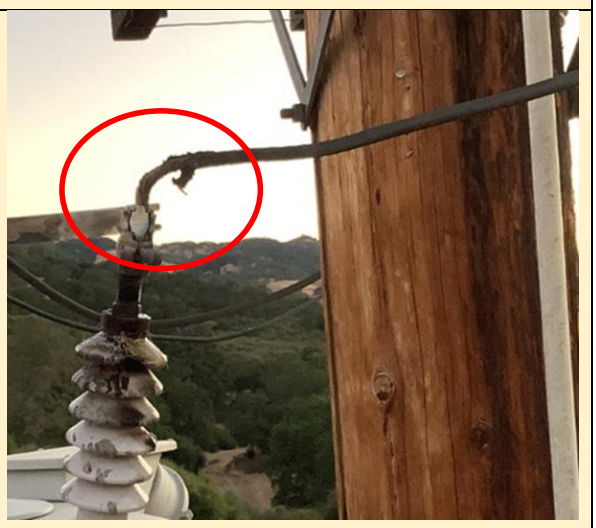
Minor Work: No

EC Notification: Yes

Select the Priority and Due Date based upon compelling abnormal condition that may adversely impact public safety and/or service reliability in the next 5 years.

Examples

JUMPER TENSION	Jumper Clearance
	
At this Location: Jumper Tension, pulling over cutout	**At this Location:** Jumper Clearance
Perform Minor Work: No	**Perform Minor Work:** No
Write 3rd Party Notification: No	**Write 3rd Party Notification:** No
Write EC Notification: Yes **FDA=** Jumper / Clearance impaired / Adjust **Priority=** E Tag, 3-12 months depending upon exposure	**Write EC Notification:** Yes **FDA=** Jumper / Clearance impaired / Adjust **Priority=** E Tag, 3-12 months depending upon exposure

Burnt Jumper
  
At this Location: Primary jumpers and / or transformer secondary connection jumpers frayed and burnt.
Perform Minor Work: No
Write 3rd Party Notification: No
Write EC Notification: Yes **FDA =** Jumper / Burnt / Replaced **Priority =** E Tag, 3-12 months, depending on exposure

Cutouts / Fuses / Switches

1. Damaged Arcing Horns

General Guidance: Call Restoration Dispatch to get a T-Man dispatched to the location to create a COE (CE) notification. Consider installing a warning tag on the pole.

Minor Work: No

EC Notification: No

Related Documents: 015225, 066195

Example

Arcing horn with burnt tip	
	**At this Location:** Arcing horn with burnt tip **Perform Minor Work:** No **Write 3rd Party Notification:** No **Write EC Notification:** No **FOLLOW COE PROCESS**

2. Cutouts

General Guidance: Are cutouts broken, damaged, cracked, loose, contaminated, or flashed?

Guidance: Yes/No, if yes, THEN create an EC Notification.

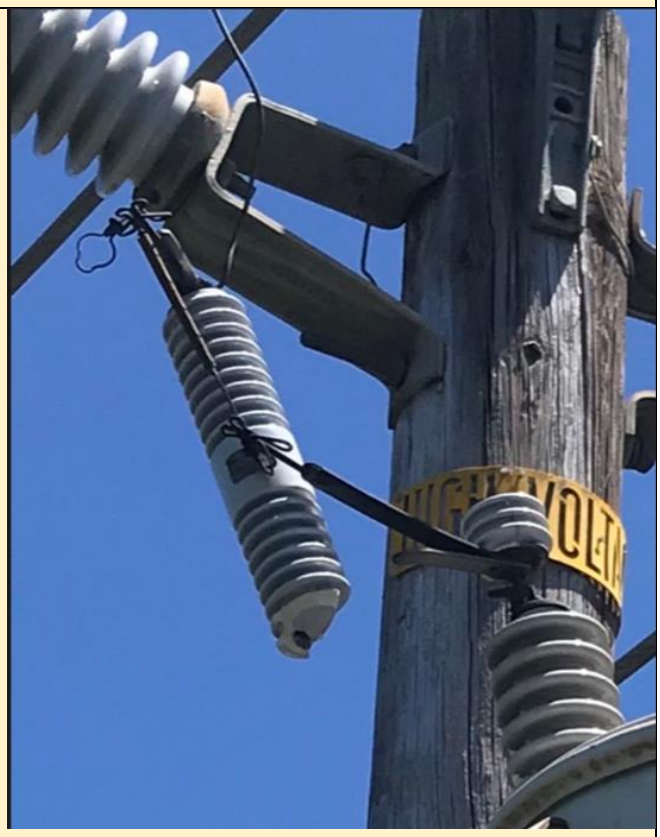
Minor Work: No

EC Notification: Yes

Select the Priority and Due Date based upon compelling abnormal condition that may adversely impact public safety and/or service reliability in the next 5 years.

Related Documents: 015225

Examples

BROKEN DAMAGED CROSSARM MOUNTED CUTOUT	Broken Cutout
	
At this Location: Broken/Flashed cutout	**At this Location:** Broken Cutout
Perform Minor Work: No	**Perform Minor Work:** No
Write 3rd Party Notification: No	**Write 3rd Party Notification:** No
Write EC Notification: Yes **FDA =** Cutout / Broken/Damaged / Replace **Priority =** E Tag, 3-12 months depending upon exposure, no COE	**Write EC Notification:** Yes **FDA =** Cutout / Broken/Damaged / Replace **Priority =** A Tag, Follow the emergency procedure

3. Fuses

General Guidance: Are the Fuses corroded on the mountings or end fittings, red cap missing (E Fuse only), paint finish is flaking or cracked, fiberglass layer exposed, E Fuse found hanging upside down (E Fuse only), missing components, cracks, deterioration, burnt, charring, or blown? Do liquid fuses have the appropriate fluid level?

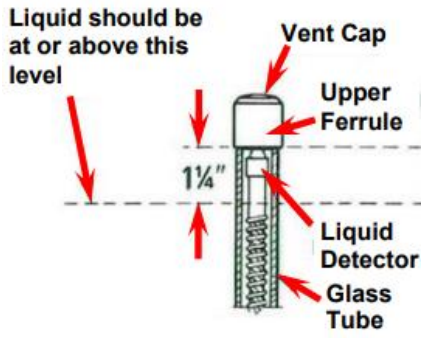
Minor Work: No

EC Notification: Yes

Liquid Filled Fuses (Per TD-2305M-JA14):

General Guidance:

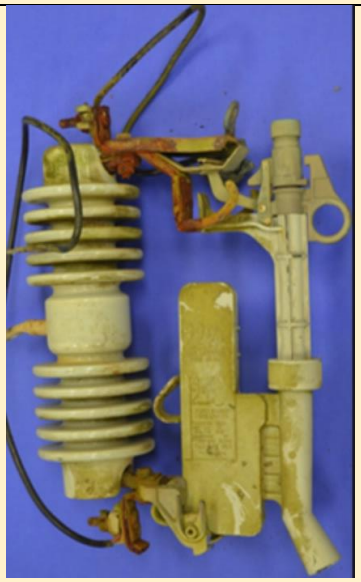
- Low, missing, or undetermined liquid in HFTD
  - Create EC tag with **Priority B (90 days)** to replace liquid fuse element with approved ELF-LR
- Low, missing, or undetermined liquid in non-HFTD
  - Create EC tag with **Priority E (1 year)** to replace liquid fuse element with approved ELF-LR



Select the Priority due date based upon compelling abnormal conditions that may adversely impact public safety and/or service reliability in the next 5 years.

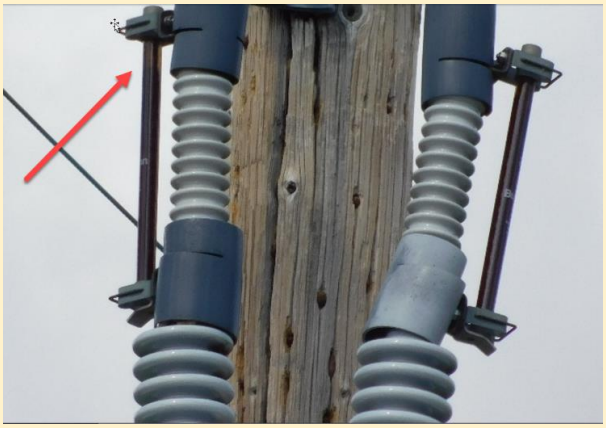
Related Doc: 015225, TD-2908P-01-JA260, TD-2908P-01-JA261, TD-2305M-JA14, TD-2908P-01-JA243

Examples

PART 63 POWER FUSE	Part 75 Fault Tamer
	
At this Location: Fuse End fitting corroded; fiberglass layer exposed	**At this Location:** excessive cutout corrosion leading to corrosion on the metal components of the FT Fuse, deteriorated housing on the FT Fuse will not contain an arc withing the snuffing tube. Any reasonable suspicion of damage that will not be able to operate correctly
Perform Minor Work: No	**Perform Minor Work:** No
Write 3rd Party Notification: No	**Write 3rd Party Notification:** No
Write EC Notification: Yes **FDA =** Fuse / Broken / Damaged / Replace **Priority =** E Tag – 3-12 months depending on exposure.	**Write EC Notification:** Yes **FDA =** Cutout / Broken/Damaged / Replace **And** **FDA=** Fuse / Broken / Damaged / Replace **Priority =** E Tag – 3-12 months depending on exposure.

Job Aid: Overhead Assessment

Liquid Fuse with no Liquid	
	**At this Location:** Liquid Fuse with no liquid, not in HFTD **Perform Minor Work:** No **Write 3rd Party Notification:** No **Write EC Notification: Yes** **FDA =** Fuse / Broken/Damaged / Replace **Priority =** E Tag, 3-12 month, depending on exposure **REFERENCES:** TD-2305M-JA14 - Liquid Fuse Level Check During Overhead Inspection TD-2908P-01-JA243- Operating Liquid Filled and Current Limiting Bushing Mounted Cutouts

Liquid Fuse Oil Level is Low	
	**At this Location:** Liquid Fuse with low oil level in HFTD area. **Perform Minor Work:** No **Write 3rd Party Notification:** No **Write EC Notification: Yes** **FDA =** Fuse / Broken/Damaged / Replace **Priority =** B Tag, 90 days depending on exposure **REFERENCES:** TD-2305M-JA14 - Liquid Fuse Level Check During Overhead Inspection TD-2908P-01-JA243- Operating Liquid Filled and Current Limiting Bushing Mounted Cutouts

Switch Handle/Control Box is Not Locked

General Guidance: Ensure that boxes or enclosures located 8 feet or less above the ground are locked.

Minor Work: Yes

- Perform minor work if possible and if safe to do so.
- IF not able to perform minor work, THEN create EC notification.

EC Notification: Yes, only if not able to perform minor work

Select the Priority and Due Date based upon compelling abnormal condition that may adversely impact public safety and/or service reliability in the next 5 years.

Related Documents: 066195

Distribution Towers / Steel Lattice

General Guidance: Inspectors are required to inspect distribution towers / lattices for the following:

- Steel Covered by Earth
- Rust or Corrosion at Tower Footings
- Tower Footing Damaged
- Tower Member Loose
- Marking Hi-Sign Missing/Not Legible
- Guarding - Tower Not Guarded (Where Applicable)
- Guy Attachment, Turn Buckles, or Preformed Guys Loose
- Tower Rusty – Needs Paint

Minor Work: No

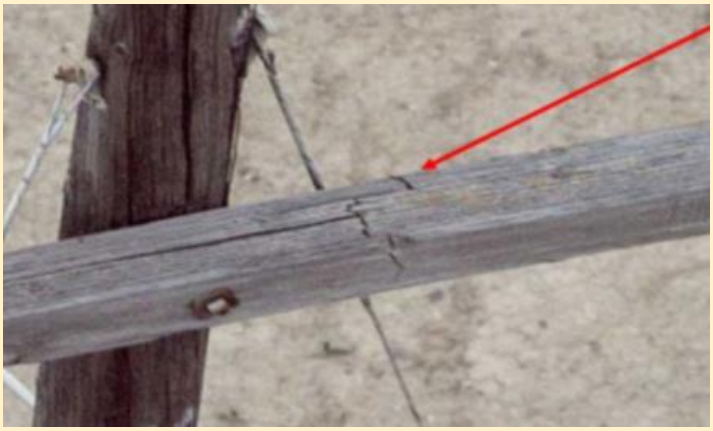
EC Notification: Yes

Related Documents: 022168

Framing

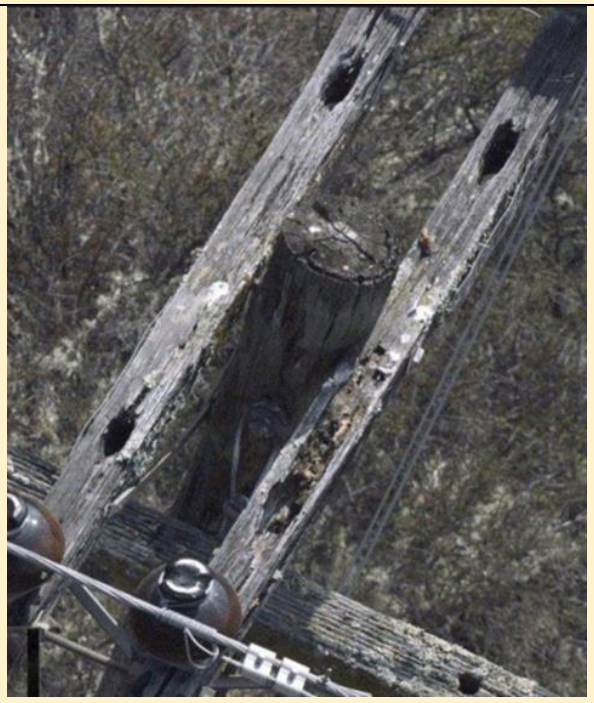
1. Crossarm Broken/Deteriorated

General Guidance: Refer to Crossarm Evaluation Job Aid in this document.

Cracked Cross-Arm – Aerial View	
	**At this Location:** Top view of a cracked cross-arm on top and sides. May not be seen from the ground. **Perform Minor Work:** No **Write 3rd Party Notification:** No **Write EC Notification:** Yes **FDA =** Cross-arm / Broken / Damaged / Replace **Priority =** A Tag, Follow emergency procedure

Deteriorated Cross-Arm – Aerial View	
	**At this Location:** Top view of a Deteriorated/Rotten cross-arm. May not be seen from the ground. Quarter brace hardware coming loose. **Perform Minor Work:** No **Write 3rd Party Notification:** No **Write EC Notification:** Yes **FDA =** Cross-arm / Broken / Damaged / Replace **Priority =** Minimum B tag 0-3 months, consider A Tag for conditions such as conductor size, double / single arm, exposure, etc.

Deteriorated Cross-Arm – Aerial View	
	**At this Location:** Deteriorated Cross-Arm – Aerial View **Perform Minor Work:** No **Write 3rd Party Notification:** No **Write EC Notification:** Yes **FDA =** Cross-arm / Broken / Damaged / Replace **Priority =** Minimum B tag 0-3months, consider A Tag for conditions such as conductor size, double / single arm, exposure, etc.

Deteriorated Cross-Arm – Aerial View	
	**At this Location:** Deteriorated/Rotten Cross-Arm – Aerial View **Perform Minor Work:** No **Write 3rd Party Notification:** No **Write EC Notification:** Yes **FDA =** Cross-arm / Broken / Damaged / Replace **Priority =** Minimum B tag 0-3months, consider A Tag for conditions such as conductor size, double / single arm, exposure, etc.

Crossarm Evaluation Job Aid

General Information:

Environmental conditions throughout the service territory expose support structures to a variety of conditions that can cause or accelerate deterioration of wood components. This section provides guidelines for assessing wood crossarms.

General Guidance: During detailed inspections, examine wood crossarms and assess their condition: Is primary or secondary crossarm damaged, broken, burnt, decayed, rotten, loose, missing hardware or showing signs of bent bolts or brackets, gun shots, insect damage or woodpecker damage, or splitting that compromises the integrity of the crossarm? If yes, create EC notification to replace crossarm; always consider replacing wood crossarms with composite.

Additional Guidance:

Identify conditions such as crossarm configuration, number of phases, location (e.g., urban, rural, forest, inaccessible, traffic, etc.), loading (e.g., double/triple arms, dead ends, alley arms, proximity to trees, angles/conductor size, heavy loading, damaged wood pins, etc.) and the likelihood of these conditions contributing to further deterioration or failure of the crossarm or attached components.

Often cross arms experience significant decay on the top of the arm without exhibiting clues that are visible from the ground[1]. For this reason, arms that exhibit two or more of the following characteristics are more likely to decay on the top and should be considered for a more detailed aerial/climbing inspection:

- Arms that appear to be greater than 50 years old[2](based on age of pole, presence of wood pins, brown/glass insulators, or other indicators).
- Arms mounted on poles where the pole top is showing signs of decay or crowning.
- Severely weathered arms or arms rounded or apparently decayed ends.
- Damaged wood pins or elongated pinholes.
- Active moss/vegetation growth.
- Presence of woodpecker holes (greater than one inch diameter) on the arm
- Arms in areas of higher rainfall/moisture and reduced sunlight such as those in many coast and mountain areas.
- Wood pins on arms located in agricultural areas or orchards contaminated by aerial spraying and dirt, which contributes to tracking and arm or pin deterioration.

[1] Examples of top and bottom views of crossarm conditions are shown in table 2

[2] Many, but not all, arms prior to 1955 were untreated.

Examples

BROKEN CROSSARM	SPLIT CROSSARM
Crossarm is completely broken/fractured  Emergency - make safe immediately	Primary Squatter (wood pin). Crossarm split within 2" of pinhole.  Replace in the next 3 months.
TOP OF CROSSARM DECAYED	**DETERIORATED CROSSARM**
Evidence of pole top decay and face of crossarm decay; may need additional assessment of crossarm.  Replace 3-12 months	Significant deterioration, both arms are broken/split. Evidence of previous temporary repair.  Replace 3-12 months
BROKEN SECONDARY CROSSARM	
Secondary arm broken; split/fractured within 2" of bolt holes in heavy tree area.  Replace 3-12 months	

Through Bolt Loose

At this Location: The nut has come off of the Through Bolt
Perform Minor Work: No
Write 3rd Party Notification: No
Write EC Notification: Yes **FDA =** Hardware / Loose / Adjust **Priority =** A Tag Emergency

Missing Hardware – Aerial View	
	**At this Location:** The nut on the through bolt has come off of the king pin.
	Perform Minor Work: No
	Write 3rd Party Notification: No
	Write EC Notification: Yes **FDA =** Hardware / Loose / Adjust **FDA =** Pole / Rotten / Replace **Priority =** B Tag, 0-3 months, depending on exposure

2. Bonding Exists and Needs to be Repaired

General Guidance: Visual observation of broken / unattached bonding wire on a cross-arm. Create EC notification.

Minor Work: No

EC Notification: Yes

Related Documents: 06667

Example

Bonding	
	**At this Location:** Broken or unattached bonding **Perform Minor Work:** No **Write 3rd Party Notification:** No **Write EC Notification:** Yes **FDA =** Bonding / Broken / Damaged / Replace **Priority =** E Tag, 3-12 months depending on exposure

3. Underarm Bus Not Securely Attached

General Guidance:

It is a requirement to have at least two attachment points, secured to an underarm bus, one on each side.

It is a requirement to use the following corrosion resistant materials for attaching the underarm bus to the crossarm: straps, plumber's tape, lags, galvanized nails, staples, screws, bolts, zip ties, etc.

If an inspector finds an underarm bus secured with non-authorized material, such as duct tape, electrical tape, or rope, it must be secured by at least two additional approved attachment points.

When an inspector re-secures a bus, it must be brought up to construction standards; four attachment points using corrosion resistant materials.

Complete as minor work/re-secure the bus. IF it cannot be completed as minor work, then create EC notification if compelling and needs to be addressed within 5 years.

Minor Work: Yes

EC Notification: Yes, only if not able to perform minor work

Select the Priority and Due Date based upon compelling abnormal condition that may adversely impact public safety and/or service reliability in the next 5 years.

Related Documents: 021924, Crossarm Evaluation

Examples

Under-Arm Bus Loose and Deteriorated

At this Location: UAB deteriorated, partial repair with rope, secured with one strap
Perform Minor Work: No
Write 3rd Party Notification: No
Write EC Notification: Yes **FDA=**Under-Arm Bus / Broken/Damaged / Repair **Priority =** At minimum – must write up as F Tag, next inspection cycle; based on field condition and exposure, corrosion, etc.; prioritize as needed (A, B, E, or F)

Under-arm Bus Loose	
	**At this Location:** UAB Loose, unattached and hanging
	Perform Minor Work: No
	Write 3rd Party Notification: No
	Write EC Notification: Yes **FDA=** Under-Arm Bus / Broken/Damaged / Repair **Priority=** E Tag, 3-12 months depending upon exposure

4. Wood Pin Burnt/Tracking or Broken

General Guidance:

Primary wood pins: If the primary wood pin is leaning or broken, or if there are signs of burning or tracking, create a 0–3-month Priority “B” EC Notification.

Primary or Secondary wood pins: If wood pin is broken or “floating”, create emergency EC to address immediately.

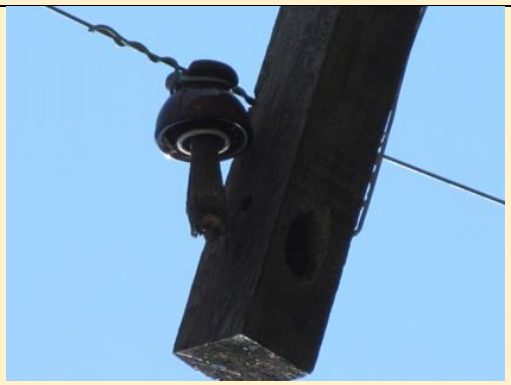
Minor Work: No

EC Notification: Yes

Select the Priority and Due Date based upon compelling abnormal condition that may adversely impact public safety and/or service reliability in the next 5 years

Related Documents: 015202, Crossarm Evaluation

Examples

PIN BROKEN	PIN BROKEN (FLOATER)
	
At this Location: Primary wood pin is broken, and the conductor is laying on the crossarm. Wood pin arm replace with Composite arm	**At this Location:** Secondary wood pin is broken, and the conductor is laying on the crossarm. Wood pin arm. Replace arm with composite arm
Perform Minor Work: No	**Perform Minor Work:** No
Write 3rd Party Notification: No	**Write 3rd Party Notification:** No
Write EC Notification: Yes **FDA =** Conductor / Floater / Repair **FDA=** Crossarm/Broken Damaged/Replace **Priority =** A Tag, follow emergency process	**Write EC Notification:** Yes **FDA=** Conductor / Floating / Repair **FDA=** Crossarm/Broken Damaged/Replace **Priority=** A Tag, follow Emergency Process

PRIMARY WOOD PIN AT ANGLE	PRIMARY WOOD PIN SQUATTER
	
At this Location: Deteriorated primary wood pin at angle. All insulators need to be replaced. Cross-arm ends still in good condition. Replace the crossarm with a composite arm.	**At this Location:** Primary wood pin squatter. Replace Crossarm with composite arm. No armor rod with hand-tie.
Perform Minor Work: No	**Perform Minor Work:** No
Write 3rd Party Notification: No	**Write 3rd Party Notification:** Yes, replace wooden pin with steel pin.
Write EC Notification: Yes **FDA=** Crossarm/Broken Damaged/Replace **FDA=**Hardware/Framing / /Broken/Damaged / Replace **Priority=** E Tag, 3-6 Months depending on exposure.	**Write EC Notification:** Yes **FDA=** Crossarm/Broken Damaged/Replace **FDA=** Insulator / Primary Squatter/ Replace **Priority=** E Tag, 3-12 months depending upon exposure

5. Corrosion

General Guidance: Visually check for corrosion on PG&E owned components, hardware, equipment, etc.

Minor Work: No

EC Notification: Yes

Select the Priority and Due Date based upon compelling abnormal condition that may adversely impact public safety and/or service reliability in the next 5 years

Related Documents: 052990

Examples

Corroded Hardware	
	**At this Location:** Bolt hardware extremely corroded **Perform Minor Work: No** **Write 3rd Party Notification:** No **Write EC Notification:** Yes **FDA=** Hardware / Broken / Damaged / Replace **Priority=** E tag, 3-12, depending on exposure / Severity

Corroded Anchor	
	**At this Location:** Corroded Anchor **Perform Minor Work: No** **Write 3rd Party Notification:** No **Write EC Notification:** Yes **FDA=** Anchor / Corroded / Replace **Priority=** E tag, 3-12, depending on exposure / Severity

Corroded Preform Tie	
	**At this Location:** Corroded Preform Tie **Perform Minor Work: No** **Write 3rd Party Notification:** No **Write EC Notification:** Yes **FDA=** Tie Wire / Corroded / Replace **Priority=** E tag, 3-12, depending on exposure / Severity

Primary Dead-End Hardware Corroded	
	**At this Location:** Primary Dead-End Hardware Corroded **Perform Minor Work: No** **Write 3rd Party Notification:** No **Write EC Notification:** Yes **FDA=** Hardware / Broken / Damaged / Replace **Priority=** E tag, 3-12, depending on exposure / Severity

Grounds / Ground Molding

Ground is considered exposed when:

- Can physically touch it with hand or tool
- Can see the ground conductor
- Covered ground situation where the insulation is cut into

1. Exposed Ground Below 8’

General Guidance: Exposed grounds 8 feet or less from the ground must be covered.

- Inspectors must make every effort to cover the ground as minor work.
- If the exposed ground can be completed as minor work - preferred repair method is to use 1-1/2 inch plastic molding and not wood molding; if wood molding is used to make repair, use straps and not staples.
- Gaps in between molding segments should be covered if, in the inspector's judgment, they are large enough to allow human contact.

Consider a higher priority based on how much of the ground is exposed, and on the amount of public exposure. Inspector should “make safe” if cannot be addressed as minor work, based on location and exposure to the public.

The correct FDA is **Ground/Exposed/Repair** and **NOT** Molding Broken/damaged/ repair or replace.

Minor Work: Yes

EC Notification: Yes

Select the Priority and Due Date based upon compelling abnormal condition that may adversely impact public safety and/or service reliability in the next 5 years

Related Documents: TD-2990P-01

Examples

Exposed Ground	
	**At this Location:** Exposed grounds near sidewalk **Perform Minor Work:** Yes, at minimum make safe **Write 3rd Party Notification:** No **Write EC Notification:** Yes **FDA=**Ground / Exposed / Repair **Priority=** A Tag, emergency – due to **High** public exposure at ground level.

Job Aid: Overhead Assessment

REPAIR WITH 1.5” MOLDING	
 **Before:** Copper Wire sticking out from under the wood molding	 **After:** 1.5-inch u-shaped molding installed over existing wood molding
At this Location: Wood molding with ground exposed	
Perform Minor Work: Yes	
Write 3rd Party Notification: No	
Write EC Notification: Only if not able to perform minor work **FDA=** Ground / Exposed / Repair **Priority =** A Tag**,** Emergency due to **<u>High</u>** public exposure below 8’ on sidewalk	

REPAIR WITH 2” PLASTIC	REPAIR WITH WOOD MOLDING
	
At this Location: Condition acceptable after repair of exposed ground	**At this Location:** Condition acceptable after repair with wood molding

2. Exposed Ground above 8' to the Communication Level

General Guidance: If there are communication facilities on the pole, exposed grounds above 8 feet to the communication level must be covered. Cover the ground as minor work if possible. If not, create an EC Notification.

Gaps in between molding segments should be covered if, in the inspector's judgment, they are large enough to allow human contact.

If the pole is not a joint pole, **no action required**, because there is no exposure to the communication worker.

Minor Work: Yes

EC Notification: Yes

Select the Priority and Due Date based upon compelling abnormal condition that may adversely impact public safety and/or service reliability in the next 5 years

Related Documents: 021904, 036229

Examples

EXPOSED GROUND AT COMMUNICATION LEVEL	EXPOSED GROUND DUE TO TWISTED MOLDING
	
At this Location: Exposed ground at communications level. Wood molding broken in climbing space	**At this Location:** Exposed ground in wood molding.
Perform Minor Work: Yes, if safe to do so	**Perform Minor Work:** Yes, if safe to do so
Write 3rd Party Notification: No	**Write 3rd Party Notification:** No
Write EC Notification: Yes, only if unable to perform minor work. **FDA=** Ground / Exposed / Repair **Priority=** F Tag At minimum – next inspection cycle; based on field condition and exposure, corrosion, etc.; prioritize as needed (A, B, E, or F)	**Write EC Notification:** Yes, only if unable to perform minor work. **FDA=**Ground / Exposed / Repair **Priority=** F Tag At minimum – next inspection cycle; based on field condition and exposure, corrosion, etc.; prioritize as needed (A, B, E, or F)

3. Ground Molding Unsecured/Loose

General Guidance: Ensure that the molding is in good condition and secured to the pole.

- Look for unsecured and loose wood ground molding, unglued PVC ground molding joints, molding joints that have come apart exposing the ground wire, etc.
- Gaps in between molding segments should be covered if, in the inspector's judgment, they are large enough to allow human contact.

When making repairs - must meet construction standards.

Minor Work: Yes

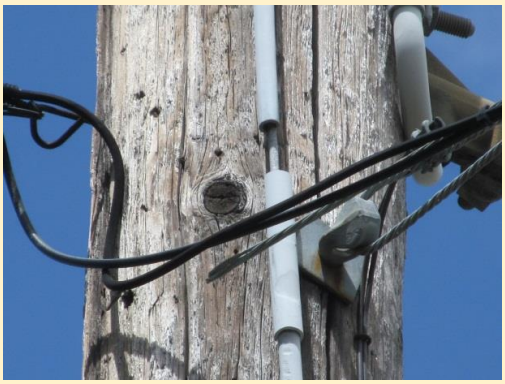
EC Notification: Yes

Select the Priority and Due Date based upon compelling abnormal condition that may adversely impact public safety and/or service reliability in the next 5 years.

Related Documents: 021904

Examples

MOLDING SECURED	MOLDING SECURED
	
At this Location: Molding adequately secured with staples upon arrival. No action is required.	**At this Location:** Molding adequately secured with straps spacing 36 inches or less upon arrival. No action required.

WOOD MOLDING ABOVE 8', NOT SECURE EXPOSING GROUND	PVC MOLDING ABOVE 8', NOT SECURE EXPOSING GROUND
	
At this Location: PG&E solely owned pole**,** Wood molding is not secure allowing human contact.	**At this Location:** At communication level, PVC molding not secure, due to failure of previous repairs, allowing human contact.
Perform Minor Work: Yes, if safe to do so	**Perform Minor Work:** Yes, if safe to do so
Write 3rd Party Notification: No	**Write 3rd Party Notification:** No
Write EC Notification: No	**Write EC Notification:** Yes, only if unable to perform minor work. **FDA=**Ground / Exposed / Repair **Priority=** F Tag At minimum – next inspection cycle; based on field condition and exposure, corrosion, etc.; prioritize as needed (A, B, E, or F)

4. Exposed Ground Rod

General Guidance: If the ground rod can be permanently covered as minor work, do so. If not, create EC notification.

Minor Work: Yes

EC Notification: Yes

Select the Priority and Due Date based upon compelling abnormal condition that may adversely impact public safety and/or service reliability in the next 5 years.

Related Documents: None

Examples

EXPOSED GROUND ROD	
	**At this Location:** Exposed ground rod, public exposure
	Perform Minor Work: Yes, at minimum make safe
	Write 3rd Party Notification: No
	Write EC Notification: Yes **FDA=**Ground / Exposed / Repair **Priority=** A Tag, emergency – due to public exposure at ground level, if minor work not done.

5. Broken Grounds

General Guidance: Inspector identifies a broken ground

Minor Work: Yes

- Perform minor work if possible and if safe to do so.
- IF not able to perform minor work, THEN create EC notification.

EC Notification: Yes

Consider an emergency priority based on where the ground is exposed (Above / Below 8'), and on the amount of public exposure. Inspector should "make safe" if cannot be addressed as minor work, based on location and exposure to the public.

When there is confusion on a PG&E broken ground, contact the lead or supervisor for clarification.

Select the Priority and Due Date based upon compelling abnormal condition that may adversely impact public safety and/or service reliability in the next 5 years.

Related Documents: TD-2990P-01;

Examples

Broken Ground Run	
	**At this Location:** Pole ground has broken, above 8', on a Common Neutral 1000' ground.
	Perform Minor Work: Yes, if safe to do so, Refer to TD-2990P-01 for repair.
	Write 3rd Party Notification: No
	Write EC Notification: Yes, if not able to be performed under minor work **FDA=** Ground / Broken / Damaged / Replace or Repair **Priority=** B Tag, 0-3 months, depending on exposure

Job Aid: Overhead Assessment

Broken Ground Run	
	**At this Location:** Transformer ground has broken, below 8', in the sidewalk, exposed to the public
	Perform Minor Work: Yes, if safe to do so, Refer to TD-2990P-01 for repair.
	Write 3rd Party Notification: No
	Write EC Notification: Yes, if not able to be performed under minor work **FDA=** Ground / Broken / Damaged / Replace or Repair **Priority=** A Tag, Follow the emergency procedure

Guys / Anchors

1. Down Guy Preform Buried

General Guidance:

Top of anchor head must be above grade. Expose anchor as minor work. Evaluate the unburied anchor guy pre-forms and visually inspect them.

Perform minor work to add extension or grade around anchor so the anchor head becomes visible.

If the pre-form cannot be unburied as minor work, create an EC notification.

Notes:

A. If you cannot dig up the anchor and create an EC with a photo of a buried anchor **only** - the Gatekeeper will **not know** if the anchor can be replaced or if an extension can be installed; you should make every effort to dig up the anchor to perform a complete assessment. If your photo is of a buried anchor only, the general rule of thumb is that the EC will be created to **replace** the anchor.

B. If you **cannot** dig up the anchor, but you can see most of the pre-form - an extension can *usually* be added (only one extension can be installed)

C. If you are performing an Overhead Inspection, and you cannot dig up a deeply buried anchor, for example, cannot see the preform, the assumption is the anchor is too deep to expose. Create and EC to replace the anchor.

D. The type of construction will determine the priority of the tag, for example:

- Prioritize higher
  - Large wire on a dead end or angle construction
- Prioritize Lower
  - Small wire on dead end or angle construction

E. Add a picture of the location

Minor Work: Yes

- Perform minor work if possible and if safe to do so.
- IF not able to perform minor work, THEN create EC notification.

EC Notification: Yes

Select the Priority and Due Date based upon compelling abnormal condition that may adversely impact public safety and/or service reliability in the next 5 years.

Related Documents: 022221

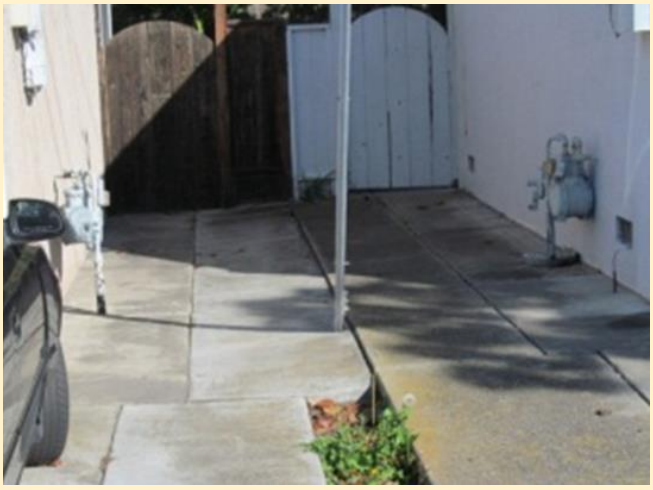
Examples

<table>
<tr><th colspan="2">BURIED ANCHOR</th></tr>
<tr><td> 
Before: Vegetation covers anchor</td><td> 
After: Vegetation cleared from anchor</td></tr>
<tr><td colspan="2">At this Location: Anchor below grade overgrown with vegetation. After minor work inspector decides if the anchor can be adjusted or needs replaced.</td></tr>
<tr><td colspan="2">Perform Minor Work: Yes, remove the vegetation
Yes, expose anchor and evaluate condition/corrosion
Yes, preferred method is to adjust anchor by adding extension</td></tr>
<tr><td colspan="2">Write 3rd Party Notification: No</td></tr>
<tr><td colspan="2">Write EC Notification: Yes, if cannot be addressed as minor work
FDA= Anchor / Soil/Eroded/Graded / Replace (if the anchor cannot be adjusted)

Priority= F Tag at minimum – must write up as, next inspection cycle; based on field condition and exposure, corrosion, etc.; prioritize as needed (A, B, E, or F)</td></tr>
</table>

Job Aid: Overhead Assessment

ANCHOR EXTENSION	
 **Anchor extension**	 **Close-Up**
At this Location: Inspector performed minor work, exposed anchor, evaluated anchor to be in good condition so that extension could be installed, then installed extension. (Back fill not shown)	
Perform Minor Work: Yes	
Write 3rd Party Notification: No	
Write EC Notification: No	

ANCHOR COVERED BY CONCRETE	
	**At this Location:** Anchor covered by concrete
	Perform Minor Work: No
	Write 3rd Party Notification: No
	Write EC Notification: Yes **FDA=** Anchor /Soil/Eroded/Graded / Replace **Priority=** F Tag at minimum, next inspection cycle; based on field condition and exposure, corrosion, etc.; prioritize as needed (A, B, E, or F)

Job Aid: Overhead Assessment

ANCHOR BURIED BY VEGETATION	
Anchor buried by roots	**Anchor buried by tree**
	
At this Location: Anchor buried by ivy roots / tree	
Perform Minor Work: No	
Write 3rd Party Notification: No	
Write EC Notification: Yes **FDA=**Anchor / Soil / Eroded / Graded / Replace **Priority=** F Tag at minimum, next inspection cycle; based on field condition and exposure, corrosion, etc.; prioritize as needed (A, B, E, or F)	

2. Visible Portion of Anchor Rod has Significant Corrosion

General Guidance: IF the anchor rod is significantly corroded, THEN create EC notification.

Minor Work: No

EC Notification: Yes

Select the Priority and Due Date based upon compelling abnormal condition that may adversely impact public safety and/or service reliability in the next 5 years.

Related Documents: 025998

Examples

ANCHOR ROD WITH SIGNIFICANT CORROSION	
Anchor above ground	**Below**
	
At this Location: Corroded Anchor	
Perform Minor Work: No	
Write 3rd Party Notification: No	
Write EC Notification: Yes **FDA=** Anchor / Corroded / Replace **Priority=** E Tag, 3-12 months depending upon exposure	

3. Guy Broken/Slack/Corroded

General Guidance: Important: Before any work is performed on a down guy, inspect the guy insulator; if broken, check for presence of voltage (with dead tester). Pole must be straight with Guy no more than 2" from taut, that does not have significant impact on the structural integrity of the pole. Tighten the guy as minor work if possible. If not possible, create an EC Notification.

If tightening the guy would exacerbate any pre-existing conditions on a facility (e.g., increase the lean of an already leaning pole, deform an already deforming pole), create an EC Notification with comments describing the situation.

Heavily rusted and signs of pitting with material loss, higher priority

Minor Work: Yes

EC Notification: Yes

Select the Priority and Due Date based upon compelling abnormal condition that may adversely impact public safety and/or service reliability in the next 5 years.

Related Documents: 022178

Examples

GUY CLEARANCE	GUY DAMAGED REPAIR
	
At this Location: Acceptable solution through plastic barrier	**At this Location:** Guy tail extends beyond the preform, **Nar sidewalk**, safety hazard
Perform Minor Work: No	**Perform Minor Work:** Yes, if safe to do so
Write 3rd Party Notification: No	**Write 3rd Party Notification:** No
Write EC Notification: No	**Write EC Notification:** Yes, only if unable to perform minor work. **FDA=** Guy / Broken / Damaged / Repair **Priority=** E Tag, 3-12 months depending upon exposure

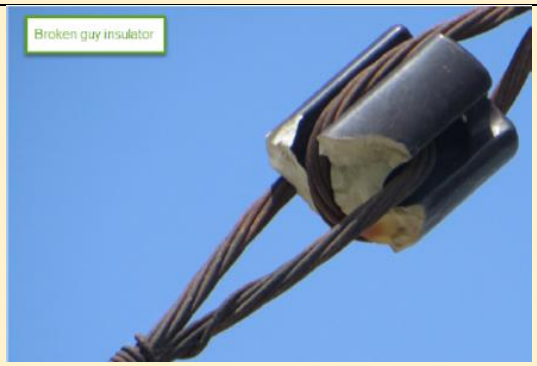
Job Aid: Overhead Assessment

SLACK GUY	
	**At this Location:** Loose guy on left side **Perform Minor Work:** Yes **Write 3rd Party Notification:** No **Write EC Notification:** Yes, only if minor work is not possible **FDA=**Guy / Loose / Adjust **Priority=** F Tag at minimum, next inspection cycle; based on field condition and exposure, corrosion, etc.; prioritize as needed (A, B, E, or F)

OVERGROWN GUY	TREE GROWING AROUND GUY
	
At this Location: Extensive dead ivy covering half of length of guy, below the bob.	**At this Location:** Tree growing around guy, below the bob.
Perform Minor Work: No	**Perform Minor Work:** No
Write 3rd Party Notification: No	**Write 3rd Party Notification:** No
Write EC Notification: Yes **FDA=**Guy / Broken/Damaged / Replace **Priority=** E Tag, 3-12 months depending upon exposure	**Write EC Notification:** Yes **FDA=**Guy / Broken/Damaged / Replace **Priority=** E Tag, 3-12 months depending upon exposure

Job Aid: Overhead Assessment

GUY GROUNDED BY VEGETATION		
Guy grounded by vegetation	**Guy grounded by vegetation**	**Guy overgrown by vegetation**
		
At this Location: Guy grounded by vegetation, above the bob		
Perform Minor Work: Yes		
Write 3rd Party Notification: No		
Write EC Notification: Yes, only if minor work cannot be performed **FDA=**Guy / Overgrown / Trim **Priority=** E Tag, 3-12 months depending upon exposure		

Broken guy insulator	
	**At this Location:** Broken guy insulator **Perform Minor Work:** No **Write 3rd Party Notification:** No **Write EC Notification:** Yes **FDA=** Guy / Broken/Damaged / Replace **Priority=** E Tag, 3-12 months depending upon exposure

TREE LIMB GROWING AROUND GUY	
Guy through tree	**Close Up**
	
At this Location: Tree limb growing around guy, below the bob	
Perform Minor Work: No	
Write 3rd Party Notification: No	
Write EC Notification: Yes **FDA=** Guy / Strain/Abrasion / Remove **Priority=** E Tag, 3-12 months depending upon exposure	

Job Aid: Overhead Assessment

GUY CORRODED AND MISSING STRANDS

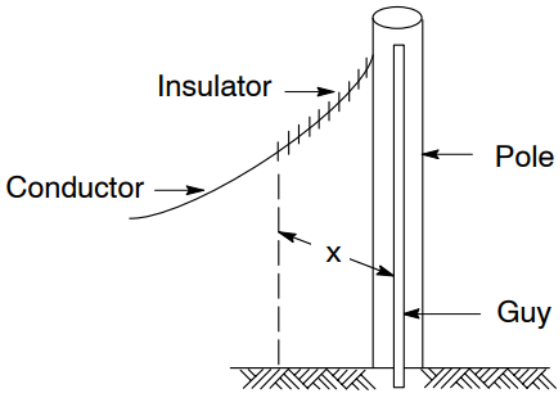
At this Location: Guy corroded and missing strands
Perform Minor Work: No
Write 3rd Party Notification: No
Write EC Notification: Yes **FDA=** Guy / Corroded / Replace **Priority=** E Tag, 3-12 months depending upon exposure

4. Guy Clearance Issue

General Guidance: Guys in the cylinder of "proximity" to conductors less than 35kV:

a) A guy is in "proximity" if any portion of the guy is both within a vertical distance of less than 8 feet from the level of the supply conductors, and a radial distance of less than 6 feet from the surface of a wood pole or structure.

b) A guy is "exposed" if any portion of the guy is less than 8 feet horizontally from the vertical plane of any supply conductor of more than 250 volts.



If distance "x" is less than 8', guy is exposed.

If a guy is exposed to any supply conductor of 22,500 volts or more, it will not be sectionalized and shall be securely grounded. All other guys, including overhead guys and guys in the proximity (i.e., cylinder of proximity), shall be sectionalized

c) Any two anchor or overhead guys attached to the same wood pole, which are approximately parallel to each other and act in the same direction, should be separated at the points of attachment to the pole by approximately 12 inches if either of the guys is sectionalized. The purpose of this separation is to maintain a minimum separation of 3 inches between the surface of a strain insulator in one guy and the surface of the other guy. If this minimum separation of 3 inches is not obtained by the 12-inch separation at pole, use other means, such as greater separation than 12 inches, or attachment to separate anchors. This rule does not prohibit the two guys from contacting the same strain plate, nor does it prohibit attaching guys not acting in the same direction to the same through bolt.

d) Not more than two guys, having a vertical separation of 18 inches or less, can be installed in any 4-foot section of climbing space.

e) Overhead guys less than 17 feet long with neither end grounded, shall be sectionalized by installing one insulator approximately midway between points of attachment, in place of two insulators between 6 and 9 feet from each end.

f) Place sectionalizing insulators in guys as high as permissible, giving due consideration to the future installation of additional supply circuits. This is necessary to prevent the grounding of the upper end of such guys by the future installation of grounded telephone cables, tree growth, etc.

g) Guys may be grounded by connecting them to a metallic anchor rod, a securely grounded steel pole, a ground rod, or another grounded guy.

h) The requirements for grounding or sectionalizing sidewalk and truss guys, and the conditions under which they may be grounded, are the same as for anchor guys. Braces for these guys which fall within cylinders of proximity (i.e., braces that are less than 8 feet below supply conductors of 0−35,500 V), must not be grounded.

i) Those portions of guys that are more than 6 inches from the surface of wood poles or crossarms (measured from the point of attachment along the guy) shall clear transformer cases and hangers by not less than 4 inches. Those portions that are less than 6 inches from the surface of wood poles or crossarms shall clear transformer cases and hangers by not less than 1-1/2 inches.

j) Guys in climbing space may not be closer than 1-1/2 inches to any through bolt that is mechanically connected to dead-end hardware. Guys and guy attachments shall clear ground wires and metal riser conduits for supply cables by 1-1/2 inches minimum.

Minor Work: No

EC Notification: Yes

Select the Priority and Due Date based upon compelling abnormal condition that may adversely impact public safety and/or service reliability in the next 5 years.

Related Documents: 022178

5. Down Guy Grounded above Guy Insulator (vegetation or other)

General Guidance: Ensure that all guys are not grounded above the guy insulator. Remove any foreign objects (e.g., vegetation) contacting and grounding the guy above the insulator as minor work. Clear so that new growth will not contact or ground the guy.

Rule of thumb is that growth per year is 1 foot, so trim back 5 feet.

Minor Work: Yes

EC Notification: Yes

Select the Priority and Due Date based upon compelling abnormal condition that may adversely impact public safety and/or service reliability in the next 5 years.

Related Documents: 022178

Examples

DOWN GUY GROUNDED ABOVE GUY INSULATOR	DOWN GUY GROUNDED ABOVE GUY INSULATOR CAUSING STRAIN AND ABRASION
	
At this Location: Vine growing up and across the guy insulator grounding the guy	**At this Location:** Tree grounding the guy above the guy insulator causing strain and abrasion.
Perform Minor Work: Yes	**Perform Minor Work:** Yes
Write 3rd Party Notification: No	**Write 3rd Party Notification:** No
Write EC Notification: Yes, only if minor work cannot be performed **FDA=**Guy / Overgrown / Trim **Priority=** E Tag, 3-12 months depending upon exposure	**Write EC Notification:** Yes, only if minor work cannot be performed **FDA=**Guy / Strain/Abrasion / Remove **FDA=**Guy / Overgrown / Trim **Priority=** E Tag, 3-12 months depending upon exposure

6. Down Guy Marker Missing/Damaged

General Guidance: For poles installed with down guys:

- **After 1996,** Guy Markers are required on **all** down guys. The markers must be a minimum 8 ft. in length.
- **Prior to 1996**, guy markers are only required on poles which are exposed to traffic. Inspector should confirm the age of the pole via the date nail to verify the requirement.

Install a single guy marker on multiple guys which are clamped together. For guys that are not clamped together, but on the same anchor, consider separate guy markers on each guy if the separation is large.

Note 1: Installing yellow colored guy marker does not negate the need to install visibility strips on the markers. Install visibility strips around traffic areas, on state highways, near curbs, driveways, etc.

Note 2: For existing guy markers, ensure markers are in good condition and attached securely.

See details below:

Reflective visibility strips shall be installed on wood, fiberglass, or steel poles, streetlight poles, and guy markers as follows:

A. On poles and guy markers installed on state highways.

B. On poles and guy markers located within 15 feet from the paved surface or 15 feet from the edge of the traveled, unpaved portion of city or county roads (streets) where not protected by curbs.

C. On poles and guy markers within 6 feet of an adjacent driveway, private roadway (street), turnaround, parking lot, or thoroughfare in rural district, capable of being traversed by vehicles, where these are not protected by curbs.

Note: Install a segment of guy marker above cattle guards to ensure a minimum 8 ft. of guarding.

Minor Work: Yes

EC Notification: Yes

Select the Priority and Due Date based upon compelling abnormal condition that may adversely impact public safety and/or service reliability in the next 5 years.

Job Aid: Overhead Assessment

Related Documents: 022178

Examples

GUY MARKER MISSING	CATTLE GUARD LESS THAN 8 FT
	
At this Location: Guy marker missing	**At this Location:** Cattle guard is less than 8 feet in length
Perform Minor Work: Yes, install new guy marker	**Perform Minor Work:** Yes, lower cattle guard and add guy marker to meet 8 feet requirement.
Write 3rd Party Notification: No	**Write 3rd Party Notification:** No
Write EC Notification: No, perform minor work. **If minor work cannot be performed** **FDA=:** Guy Marker / missing / Install or replace **Priority=**: F Tag	**Write EC Notification:** No, perform minor work **If minor work cannot be performed** **FDA=** Guy Marker / missing / Install or replace **Priority=** F Tag

DOWN GUY: MARKER NOT REQUIRED	
	
At this Location: Acceptable down guy attached to building; no marker required	**At this Location:** Acceptable down guy in marsh, no marker required

Idle Facilities

1. Identifying and Documenting Idle Facilities

- Inspectors identify and document idle lines as they would for any other field condition found, per the requirements and procedures in the Electric Distribution Preventative Maintenance (EDPM) Manual TD-2305M.

  Notes:

  1) Whether a line is idle or not, continue to create EC notifications to document safety, reliability, and/or regulatory issues and create EC notifications for Vegetation Issues.
  2) All vegetations issues on idle facilities shall be written up on an EC tag. Do not create Veg only notifications for idle lines. Vegetation management personnel do not patrol or maintain vegetation on de-energized tap lines.
     - Compliance Inspections follow the Idle Facility Program as documented in TD-2459P-01 and use the annual Detailed Overhead Inspection Checklist to indicate when an Idle condition is present for the inspection location by checking the observed an Idle Facility box.
- When an idle condition is selected, the inspector shall select from 4 reasons:

  1. Pole is not mapped idle. It is de-energized.
     - Create IF Notification (using the Inspect App)
  2. Pole is not mapped idle. It is energized.
     - Create IF Notification (using the Inspect App)
     - Create EC Notification (to de-energize)
  3. Pole is mapped idle. It is de-energized.
     - No further action required
  4. Pole is mapped idle. It is energized.
     - Create EC Notification (to de-energize)

- **Inspect App:** Use the IF Notification in the Inspect App to document an observed Idle Facility field condition. These include asset information, location information, facility type, field conditions, and comments and photos. Compliance Inspectors will select the appropriate Priority as follows:

1. High Priority
   - Location is associated with a new or existing EC Notification B Priority for maintenance work at this location

     NOTE: Excludes “Idle Facility/De Energize”

2. Medium Priority

   - Transformer Present (Suspect PCB could elevate this to high priority depending on field conditions or exposure)
   - HFTD T3/T2
   - Oil Filled Equipment
   - Modesto Irrigation District (60 days)

3. Low Priority
   - All other conditions

This listing is an overall summary of the guidance for IF Priority selection. For more detailed guidance please refer to the table below also included in TD-2459P-01

- At a **minimum**, attach the following three images to each IF Notification:

  - Two field photos of the field condition
  - Screenshot of Map with the idle area clearly identified

  In addition, please include any other photos that may be useful to the investigation e.g., photo of the meter or a panel with no meter

  Notes:

  1) Continue to document safety, reliability, and/or regulatory issues for EC and Vegetation Notifications. Vegetation management personnel **do not** patrol or maintain vegetation on de-energized tap lines.

  2) Use Table 1 from TD-2459P-01 to help in understanding the various priorities.

  3) Mapping resources are an additional tool help to identify idle facilities but should **NOT** be solely relied on to create EC Notifications to de-energize. Be sure to field confirm.

Pacific Gas and Electric Company®

Utility Procedure: TD-2459P-01
Publication Date: 03/03/2022, Effective Date: 03/03/2022, Rev: 4

Idle Facility Program

Table 1. Idle Facility Field Conditions and Investigation Priorities

Condition	Action	Investigation Priority
Safety situation/risk.	• Mitigate hazard and make safe, which may include de-energizing. • Initiate an IF notification for investigation. • Initiate an electric corrective (EC) notification to document any other abnormal conditions to resolve. • Initiate a Priority B, 3-month EC notification to de-energize the facility.	• High • Submit to supervisor by end of day. • Enter in SAP and communicate to idle facility investigation personnel within two business days.
Idle transformers that do not have a blue sticker indicating a polychlorinated biphenyl (PCB) content of less than 5 parts per million (ppm) may be classified as high, medium, or low priority. Consider current field conditions[1], the transformer condition, and if the following sensitive locations are nearby: • Surface or ground waters • Sewers or sewage treatment systems • Private or public drinking water sources or distribution systems • Grazing lands • Vegetable gardens or agricultural areas • Daycare centers and schools	If high priority, then mitigate hazard and make safe, which may include de-energizing. • Initiate an IF notification for investigation; priority is dependent on field and equipment conditions. • Note the specific field conditions, transformer condition, and transform locations (see "Condition" column notes) in the Comments section • Initiate a Priority B, 3-month EC notification to de-energize the facility	• High – Medium – Low • To designate as high priority, consider the identified idle transformer locations, current condition of the transformer (see "Condition" column notes), and current condition of associated facilities (pole, crossarm, etc.)
Future work required to maintain existing idle facility (EC notifications to repair/replace/relocate facilities).	• Initiate an IF notification for investigation and ensure the Future Work Requested field is checked • Initiate a Priority B, 3-month EC notification to de-energize the facility	High – Medium – Low
PG&E and Modesto Irrigation District (MID) service areas.	• Initiate an IF notification for investigation • Initiate a Priority B, 3-month EC notification to de-energize the facility	Medium
Idle facilities in raptor concentration zones (RCZs) with suitable habitat to support threatened or endangered raptors.	• Initiate an IF notification for investigation. • Initiate a Priority B, 3-month EC notification to de-energize the facility.	Medium – Low
Oil-filled equipment considerations: • Surface or ground waters • Sewers or sewage treatment systems • Private or public drinking water sources or distribution systems • Grazing lands • Vegetable gardens or agricultural areas • Daycare centers and schools	• Initiate an IF notification for investigation. • For idle transformers, note the absence or presence of a blue sticker on the IF notification; a blue sticker indicates a PCB content of less than 5 ppm • Initiate a Priority B, 3-month EC notification to de-energize the facility.	Medium
Idle facility in Tier 2 & 3 fire zone.	• Initiate an IF notification for investigation. • Initiate a Priority B, 3-month EC notification to de-energize the facility.	Medium
Potential use for agricultural pumps or vacant buildings.	• Initiate an IF notification for investigation. • Initiate a Priority B, 3-month EC notification to de-energize the facility	Low
Entire primary tap is identified as idle and is unfused. No future work is required to maintain the existing idle facility.	• Initiate an IF notification for investigation. • Initiate a Priority B, 3-month EC notification to de-energize the line.	Low

4) **You may find coding already annotated on the maps when inspecting idle lines.** Use Table 2 to help in understand the mapping annotations

Table 2. TOS/TIF Classifications

Temporary Out of Service (TOS) De-Energized Temporary Idle Facility (TIF) Energized		
Facilities with a future use are grouped into one of the following classifications:		
TOS-AG	Potential agricultural use	De-energized
TIF-AG	Potential agricultural use	Energized
TOS-V	Potential service to an existing vacant building	De-energized
TIF-V	Potential service to an existing vacant building	Energized
TOS-CAP	Potential PG&E use for capacity or reliability	De-energized
TIF-CAP	Potential PG&E use for capacity or reliability	Energized
TOS-F	Future customer use identified by service planning	De-energized
TIF-F	Future customer use identified by service planning	Energized
TOS-MLX	Current Main Line Extension Agreement	De-energized
TIF-MLX	Current Main Line Extension Agreement	Energized
TOS-SFA	Current Special Facilities Agreement	De-energized
TIF-SFA	Current Special Facilities Agreement	Energized

5) When new maintenance is identified on energized idle facilities, write **THREE** notifications:

- One IF Notification (TD-2459S-F01) for the entire idle line
- One EC Notification to de-energize the entire idle line
- One EC Notification per location requiring maintenance or veg work

6) After identifying pending maintenance on idle facilities, ensure that the IF Notification has the Field Condition box “Future work required to maintain existing idle facility” checked.
   - Enter the following note in the EC Notification comments section: “IDLE notification created.”
   - Enter a note in both IF Notification and EC Notification comments with corresponding notification numbers, when available.

7) Always ask your PG&E Lead, IRS, or Supervisor for help in determining priority, creating the IF Notification, and creating an EC Notification to de-energize the idle line.

Raptor Concentration Zone (RCZ) Guidance:

- Raptor Concentration Zone becomes important to help determine the priority of de-energization and whether de-energization includes removal of jumpers.
- In the Inspect App, do the following:
  A. Go to Map Preferences
  B. Set the Raptor Concentration Zone “ON”
  C. View the map with purple RCZ layer displayed
  D. The IF Program administrators use all the information you provide on the IF Notification in conjunction with RCZ flag indicating if this location is or is not in an RCZ area to further assess risk

Minor Work: No

EC Notification: No

Idle Facility Form: Yes

Select the Priority and Due Date based upon compelling abnormal condition that may adversely impact public safety and/or service reliability in the next 5 years.

Related Documents: TD-2459P-01

2. Energized Electric Line Facility No Longer Used to Serve Customer Load

General Guidance: It may be necessary to de-energize the idle facility:

- If primary lines are energized, de-energize line sections by opening cut-outs when possible and safe to do so. If you are unable to safely de-energize OR you are in raptor concentration zones (RCZs) OR if the primary tap line is unfused, create a Priority B, 3-month Electric Corrective (EC) Notification to de-energize the facilities (AND de-energize jumpers if in RCZ).

NOTE:

When idle transformers or sections of the line de-energized by cut-outs, are located in non-raptor areas, an EC Notification is **NOT REQUIRED** to de-energize the jumpers.

Do not initiate an IF Notification or an EC Notification when attachments to poles (cross-arms, miscellaneous hardware, brackets, insulators, etc.) do not pose a safety or reliability risk to an idle facility. If it is not necessary to de-energize the idle facility, create a Priority "F" EC Notification.

Continue to document safety or reliability issues that meet criteria for vegetation notifications.

Minor Work: No

EC Notification: Yes, to de-energize

Idle Facility Form: Yes

Related Documents: TD-2459P-01

3. De-Energized Electric Line Facility Already Identified on a Pending EC Notification but Not Mapped

General Guidance: Create a map change request if the facility is not mapped as idle.

Minor Work: No

Map Correction: Yes

Related Documents: TD-2459P-01

4. Idle Hardware

General Guidance:

When a field employee encounters extra unused hardware on a pole (cross-arms, miscellaneous hardware, brackets, insulators, etc.)

- If Hardware poses or could pose safety or reliability issue
- If Hardware poses no safety or reliability issue, then no action required.
- Do not write up IF notification solely due to “idle hardware”

Minor Work: No

EC Notification: Yes

Select the Priority and Due date based upon compelling abnormal condition that may adversely impact public safety and/or service reliability in the next 5 years.

5. Abandoned Pole Butt

General Guidance: If there is any compelling safety related issue regarding an abandoned pole butt, not just the existence of an abandoned pole butt, write EC notification.

Minor Work: No

EC Notification: Yes

Select the Priority and Due Date based upon compelling abnormal condition that may adversely impact public safety and/or service reliability in the next 5 years.

Example

Abandoned Pole Butt	
	**At this Location:** Abandoned Pole Butt, low risk **Perform Minor Work:** No **Write 3rd Party Notification:** No **Write EC Notification: No**

Job Aid: Overhead Assessment

Abandoned Pole Butt – Hollowed Out Below Ground Level	
	**At this Location:** Abandoned Pole Butt with a safety issue such as a tripping hazard, hollowed out below ground level. **Perform Minor Work:** No **Write 3rd Party Notification:** No **Write EC Notification:** Yes **FDA=** Relinquished Pole / Decayed / Rotten / Remove **Priority=** E Tag, 3-12 months depending on exposure

Relinquished Pole	
	**At this Location:** Relinquished Pole, no compelling abnormal conditions **Perform Minor Work:** No **Write 3rd Party Notification:** No **Write EC Notification:** No

Insulators

1. Damaged Insulators

General Guidance Are Insulators chipped, cracked, corroded, contaminated, flashed, have signs of tracking/arcing, broken, or damaged? If yes, create EC notification.

Replace ALL insulators if one is chipped, cracked, contaminated, broken, or damaged. **Do Not** mismatch insulators.

Note for construction: If an insulator is damaged due to gunshot, replace with epoxy or polymer insulators.

Note for construction: Cannot mix insulator types, always replace full set of insulators.

Note: Inspector should always consider replacing wood crossarm with composite crossarm, based on condition of crossarm.

Minor Work: No

EC Notification: Yes

Select the Priority and Due Date based upon compelling abnormal condition that may adversely impact public safety and/or service reliability in the next 5 years.

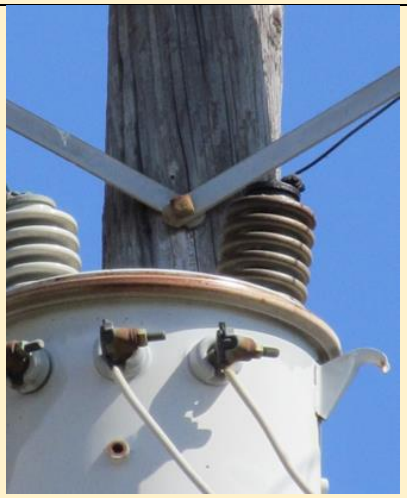
Related Documents: 022088, 068180 (composite crossarm), Crossarm Evaluation Job Aid in this document.

Examples

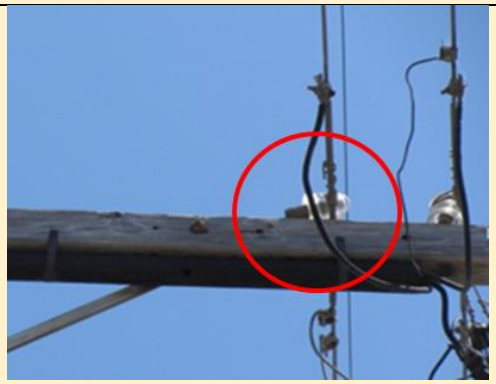
DAMAGED INSULATOR	INSULATOR LAYING ON ITS SIDE / PRIMARY ON THE ARM
	
At this Location: Damaged insulator, Replace all insulators and the arm	**At this Location:** Insulator lying on its side. Primary on the arm.
Perform Minor Work: No	**Perform Minor Work:** No
Write 3rd Party Notification: No	**Write 3rd Party Notification:** No
Write EC Notification: Yes **FDA=** Crossarm / Decayed/Rotten / Replace **FDA=**Insulator / Broken/ Damage / Replace **Priority=** E Tag, 3-12 months depending upon exposure	**Write EC Notification:** Yes **FDA=** Crossarm / Decayed/Rotten / Replace **FDA=** Conductor / Floater / Repair **Priority=** A Tag, follow Emergency Process

FLASHED INSULATOR POTHEAD	
	**At this Location:** Flashed pothead
	Perform Minor Work: No
	Write 3rd Party Notification: No
	Write EC Notification: Yes, or COE (see a set of combo cutouts at location follow COE process) **FDA=** Riser/Pothead / Flashed / Replace **Priority=** F Tag At minimum, next inspection cycle; based on field condition and exposure, corrosion, etc.; prioritize as needed (A, B, E, or F)

Job Aid: Overhead Assessment

FLASHED INSULATOR ON TRANSFORMER	BROKEN WOOD PIN ON PRIMARY
	
At this Location: Flashed insulator on transformer	**At this Location:** Broken wood pin. Conductor on arm. Replace all insulators and the crossarm with a composite arm.
Perform Minor Work: No	**Perform Minor Work:** No
Write 3rd Party Notification: No	**Write 3rd Party Notification:** No
Write EC Notification: Yes **FDA=** Transformer / Flashed / Replace **Priority=** E Tag, 3-12 months depending upon exposure	**Write EC Notification:** Yes **FDA=** Crossarm / Decayed/Rotten / Replace **FDA=** Conductor / Floater / Repair **Priority=** A Tag, follow Emergency Process, (Conductor contacting crossarm)

Job Aid: Overhead Assessment

BROKEN WOOD PIN ON SECONDARY	BROKEN SECONDARY INSULATOR
	
At this Location: Broken secondary wood pin. Conductor lying on the arm, tangent pole. (Excluding urban wildfire areas, use risk priority matrix). Wood pin arm at end of life replace arm with composite arm	**At this Location:** Broken secondary insulator. Strain is controlled by the second insulator on the Double arm construction.
Perform Minor Work: Yes, if safe to do so	**Perform Minor Work:** No
Write 3rd Party Notification: No	**Write 3rd Party Notification:** No
Write EC Notification: Yes, if minor work not possible **FDA=** Crossarm / Decayed/Rotten / Replace **FDA=** Conductor / Floater / Replace **Priority=** A Tag, Follow emergency process	**Write EC Notification:** Yes **FDA=** Crossarm / Decayed/Rotten / Replace **FDA=** Insulator / Broken/ Damage / Replace **Priority=** E Tag, 3-12 months depending on exposure

2. Squatters – Primary or Secondary

General Guidance: Are primary or secondary insulators squatting? If yes, create EC Notification.

Minor Work: No

EC Notification: Yes

Select the Priority and Due Date based upon compelling abnormal condition that may adversely impact public safety and/or service reliability in the next 5 years.

Notes:

- Inspector should always replace wood crossarm with composite crossarm when needed.
- Cannot mix insulator types, always replace full set of insulators.

Related Documents: 022088, Crossarm Evaluation

Example

Primary Squatter	
	**At this Location:** 2 Primary wood pin squatters, replace wood crossarm with composite arm
	Perform Minor Work: No
	Write 3rd Party Notification: No
	Write EC Notification: Yes **FDA=** Crossarm Decayed / Rotten / Replace **FDA=** Insulator / Primary Squatter / Replace **Priority=** E Tag, 3-12 months, at minimum, next inspection cycle; based on field condition and exposure, corrosion, etc.; prioritize as needed (A, B, E, or F)

Job Aid: Overhead Assessment

Secondary Squatter and Decayed Crossarm	
	**At this Location:** Secondary Squatter and decayed crossarm, replace wood crossarm with composite arm. **Perform Minor Work:** No **Write 3rd Party Notification:** No **Write EC Notification:** Yes **FDA=** Crossarm Decayed / Rotten / Replace **FDA=** Secondary Squatter / Broken / Damaged / Replace **Priority=** E Tag, 3-12 months at minimum, next inspection cycle; based on field condition and exposure, corrosion, etc.; prioritize as needed (A, B, E, or F)

Secondary Squatter, Crossarm in good shape	
	**At this Location:** Secondary Squatter, crossarm in good shape **Perform Minor Work:** No **Write 3rd Party Notification:** No **Write EC Notification:** Yes **FDA=** Secondary Squatter / Broken / Damaged / Replace **Priority=** E Tag, 3-12 months Depending on exposure

3. Flying Bells

General Guidance: Are flying bells broken or damage? If yes, create EC notification.

Note: If flying bells were installed to de-energize idle facilities, assess vegetation around idle conductor; create EC notification to trim, as vegetation management does not perform trimming on idle facilities.

Minor Work: No

EC Notification: Yes

Select the Priority and Due Date based upon compelling abnormal condition that may adversely impact public safety and/or service reliability in the next 5 years.

Refer to the Glossary for Flying Bell picture

4. Cotter Key

General Guidance: Loose or missing condition, Is Retainer Pin fully seated? Use binoculars. If observed, create EC Notification.

Minor Work: No

EC Notification: Yes

Select the Priority and Due Date based upon compelling abnormal condition that may adversely impact public safety and/or service reliability in the next 5 years.

Example

Missing Cotter Key / Retainer Pin Fully Seated	
	**At this Location:** Missing Cotter Key / Retainer Pin Fully Seated, may fall out
	Perform Minor Work: No
	Write 3rd Party Notification: No
	Write EC Notification: Yes **FDA=** Hardware / Missing / Install **Priority=** B Tag, 0-3 months, depending on exposure

Job Aid: Overhead Assessment

Cotter Key Backed Out	
	**At this Location:** Cotter Key partially backed out
	Perform Minor Work: No
	Write 3rd Party Notification: No
	Write EC Notification: Yes **FDA=** Hardware / Loose / Adjust **Priority=** E Tag, 3-12 months, depending on exposure

Retainer Pin Coming loose, almost pulled out	
	
At this Location: Retainer Pin coming loose, almost pulled out	
Perform Minor Work: No	
Write 3rd Party Notification: No	
Write EC Notification: Yes **FDA =** Hardware / Loose / Adjust **Priority =** A Tag, Follow emergency procedure	

Surge “Lightning” Arrestors

1. Broken or Flashed

General Guidance: Are arrestors broken, damaged, flashed, or is the ground lead disconnect activated? If yes, Create EC notification to replace lightning arrestor.

Minor Work: No

EC Notification: Yes

Select the Priority and Due Date based upon compelling abnormal condition that may adversely impact public safety and/or service reliability in the next 5 years.

Related Documents: 031822

Examples

Non-Exempt Surge Arrestor Blown	Exempt ABB-type Arrestor Blown
	
At this Location: Non-Exempt Surge Arrestor Blown	**At this Location:** Exempt ABB arrestor operated / blown indicated by the orange marker sticking out the bottom
Perform Minor Work: No	**Perform Minor Work:** No
Write 3rd Party Notification: No	**Write 3rd Party Notification:** No
Write EC Notification: Yes **FDA=** Lightning Arrestor / Broken / Damaged / Replace **Priority=** E Tag, 3-12 months, depending on exposure	**Write EC Notification:** Yes **FDA=** Lightning Arrestor / Broken / Damaged / Replace **Priority=** E Tag, 3-12 months, depending on exposure

Markings

1. High Voltage Sign Not Installed as Required

General Guidance: Inspectors are required to look for missing or broken high voltage signs during inspections. If inspectors find missing or broken signs, they should install new signs as minor work if they have the appropriate materials and equipment and can perform the work safely. If the inspector cannot install a sign as minor work, the inspector must create a Priority 'F' EC notification. Below is guidance on how to evaluate high voltage signage.

Minor Work: Yes

EC Notification: Yes, if cannot be completed as minor work

Select the Priority and Due Date based upon compelling abnormal condition that may adversely impact public safety and/or service reliability in the next 5 years.

Related Documents: 022168

High Voltage Sign Requirements:

Poles that support line conductors or risers energized at **more than 750 volts** must be marked with high voltage signs.

IMPORTANT: If a pole is marked under **any of the options below**, it satisfies the high voltage marking requirement.

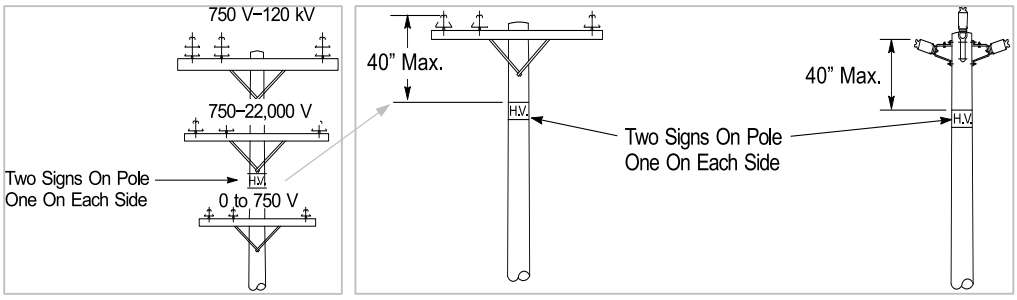
When installing *new* high voltage signs using one option, inspectors are not required to remove signs previously installed under different options.

Marking Options

A. Sign the Pole Below the Lowest 750V+ Line Conductor **(Preferred Method)**

Marking requirements are satisfied under this option if:

- There are two signs, attached to the surface of each side of the poleP[1]P.
- The top of each sign is no more than 40'' below the lowest level line conductor that exceeds 750V.

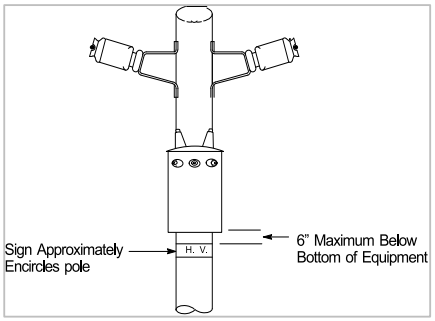


[1]**Exception:** If an inspector finds only one high-voltage sign within 40'' below the lowest 750V or greater conductor, the inspector **is not required to install a second sign.** However, when performing work at the lowest crossarm level, a second sign must be installed.

B. Sign the Pole Below Equipment

Marking requirements are satisfied under this option if:

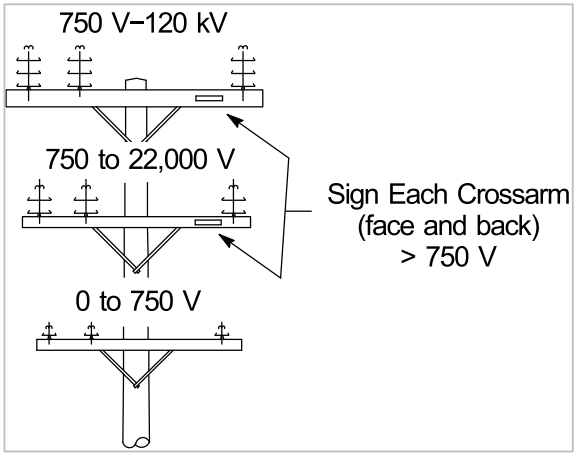
- There are two signs attached to the surface of each side of the pole[2].
- The top of each sign is no more than 6'' below the equipment.
- The signs are above all 0-750V supply and communication line conductors.



[2] **Exception:** If an inspector finds only one high-voltage sign installed within 6'' below the equipment, the inspector **is not required to install a second sign.** However, when performing work at the equipment level, a second sign must be installed.

C. Sign Each Crossarm

Marking requirements are satisfied under this option **if each crossarm** (line arm) supporting line conductors in excess of 750V are signed both front and back. Signs are not required on the inside faces of double arms.



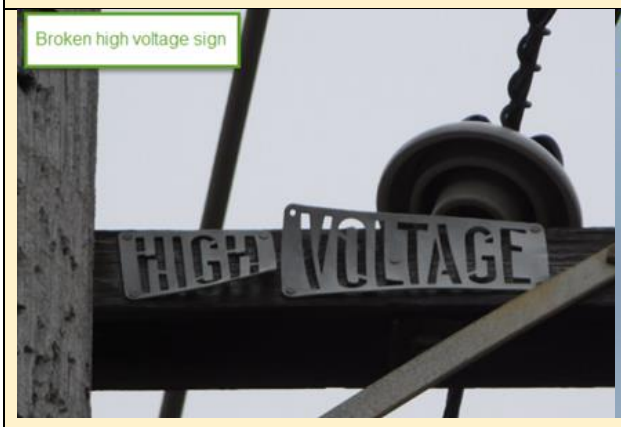
The exceptions in Sections A and B do not apply when, in the judgment of the inspector, the two high voltage signs should be installed so that they may be visible from all sides of the pole.

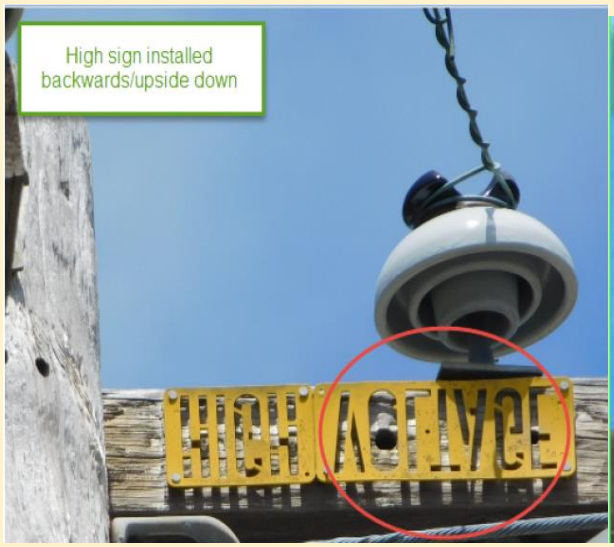
Typical examples are poles near water areas suitable for sailboats, near established boat ramps and associated rigging areas, adjacent to swimming pools, and in agricultural areas with moveable irrigation piping.

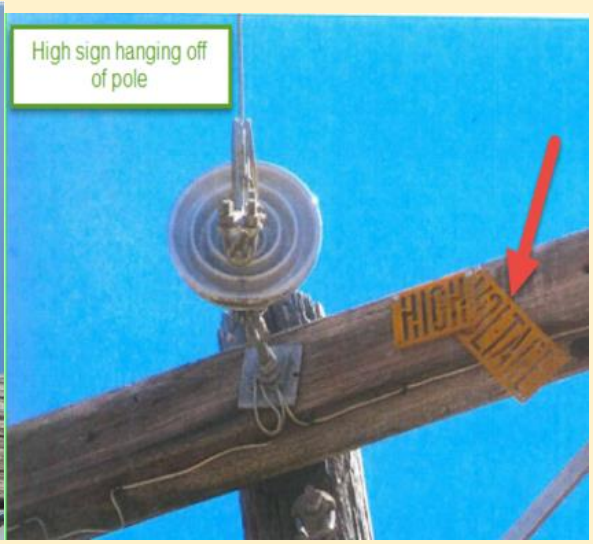
Job Aid: Overhead Assessment

Examples

BROKEN / MISSING HIGH SIGN







At this Location: Broken / Missing High Sign

Perform Minor Work: Yes

Write 3rd Party Notification: No

Write EC Notification: Yes, only if minor work cannot be performed

FDA= High Sign / Missing / Install

FDA= High Sign / Broken / Damaged / Replace

Priority= F Tag, 5 years

2. Operating Number Incorrect / Illegible / Missing

General Guidance:

IF the operating number on the field equipment does **not** match the operating number printed on inspection map:

THEN **contact the local Distribution Operation (DO)** to confirm the discrepancy and to get further instructions

I. Equipment has a number, does not match GIS mapping records

A. DO confirms the field equipment number is **correct;** then complete a **map correction**

- Field employee confirmed with DO the field equipment number is correct
- Mapping corrects number in GIS

B. DO confirms the field equipment number is **not correct**; then **perform minor work to correct the operating numbers** on the field equipment

- Field employee has the ability to perform the minor work
- If minor work cannot be performed, create EC to install correct operating number
    - FDA = Operating Number / Broken / Replace

      or
    - FDA = Operating Number / Missing / Install
    - Priority “E” 12 months

II. Equipment does not have a number

A. DO **cannot confirm the operating number**

- Get a PIN from DO

- Create EC Notification to get an operating number assigned
    - FDA = Operating Number / Missing / Install
    - Priority “E” 12 months

(Estimating will assign number, crew to complete, and mapping to update GIS)

B. DO **confirms** the operating number for the field equipment then:

- **complete minor work to install the equipment number**

  OR if unsafe to complete

- Create EC notification for M&C to install number
    - FDA = Operating Number / Missing / Install
    - Priority “E” 12 months
- Create a RW for a mapping change, for either minor work or EC
- Inspector or crew will install operating number in the field, mapping will update GIS.

Notes:

- Alpha characters may differ between divisions. Be sure to confirm the "number" with the local DO
- Operating number should be installed in the operating position; if missing, they should be installed on the operating position, not at the 6' level. Consider also adding the # at the 6' level for ease of identification for field EE's.
- If operating number exists, is it legible (faded, etc.); if not legible replace them as minor work or create an EC notification.
- If operating number is not installed in the field, but on the inspection map - call the DO to confirm the correct number before installing.

- If confirmed that the field is wrong, correct as minor work or create an EC to have corrected.
- If confirmed that the operating number is mapped but not installed in the field, install the operating number as minor work.
- If operating number is not installed in the field, but on the inspection map and/or in GIS - call the team lead who will contact the DO to confirm the correct number before installing.
- If confirmed that the number is mapped but not installed in the field, or the field is incorrect, correct as minor work if possible, or write EC notification.
- Please include detailed comments on what is needed at location.

Minor Work: Yes

Map Correction: Yes, if operating number needs to be corrected

EC Notification Yes, if you cannot perform minor work

Select the Priority and Due Date based upon compelling abnormal condition that may adversely impact public safety and/or service reliability in the next 5 years.

Related Documents: 057352

Job Aid: Overhead Assessment

Example

FADED OPERATING NUMBER		
Before: Faded operating number	**Close Up**	**After:** Minor work completed, operating number applied below operating position.
		
At this Location: Operating number is faded		
Perform Minor Work: Yes		
Write 3rd Party Notification: No		
Write EC Notification: Yes, only if minor work cannot be performed **FDA=** Marking / Broken / Damaged / Replace **Priority=** E Tag, 12 months		

3. Damaged or Missing Visibility Strips on Poles / Guy Markers

General Guidance: Reflective visibility strips shall be installed on wood, fiberglass, or steel poles, streetlight poles, and guy markers as follows:

A. On poles and guy markers installed on state highways.

B. On poles and guy markers located within 15 feet from the paved surface or 15 feet from the edge of the traveled, unpaved portion of city or county roads (streets) where not protected by curbs.

C. On poles and guy markers within 6 feet of an adjacent driveway, private roadway (street), turnaround, parking lot, or thoroughfare in rural district, capable of being traversed by vehicles, where these are not protected by curbs.

Notes:

Visibility strips are not required on poles or guy markers behind a curb, approximately 5-1/2” x 5-1/2” and 90 degrees to the surface.

Visibility strips should not be installed if there is no reasonable expectation of traffic. For example: Cross country poles, poles through waterways or wetlands, rear easements poles, poles behind guardrails, or poles on embankments that are well above or below the road.

Reminders:

- Do not install visibility strips on top of the old one. Inspectors must remove the old strip first.
- If the old strip is in good condition, but became loose, re-secure the strip to the structure.
- Do not install metal visibility strips over any vertical molding/riser.
- If any visibility strip work is required, bring the location up to the current visibility strip standard (all must be the same color – yellow)
- Install visibility strips on the side facing oncoming traffic when known.
- Do not install visibility strips within 1-1/2” of U-shaped molding
- Visibility strips cannot be installed over wood molding, including third party installations.
- If existing visibility strips become damaged or otherwise do not serve their intended purpose, they shall be replaced.
- If unable to install at time of inspection due to lack of material, create EC notification

Job Aid: Overhead Assessment

Minor Work: Yes

EC Notification: Yes, if cannot be completed as minor work.

Select the Priority and Due Date based upon compelling abnormal condition that may adversely impact public safety and/or service reliability in the next 5 years.

Related Documents: 022168, GO 95 Rule 56.9 (1964, 1990, 1996 Change to Guy Marker)

Examples

ACCEPTIBLE	
ADHESIVE VISIBILITY STRIPS	**CLEARANCE FROM GROUND**
	
At this Location: Acceptable application of plastic and adhesive visibility strips	**At this Location:** Acceptable metal visibility strips attached 1 ½“ from ground.

Job Aid: Overhead Assessment

INADEQUATE VISIBILITY STRIPS	
	**At this Location:** Pole with vehicular exposure. Two small sections of yellow adhesive visibility strips.
	Perform Minor Work: Yes apply 3 adhesive visibility strips on the pipe. apply 3 adhesive visibility strips to the plastic molding.
	Write 3rd Party Notification: No
	Write EC Notification: Yes, if minor work cannot be performed **FDA=** Vis-Strips / Broken / Damaged / Replace **Priority=** At minimum –must write up as Priority F Tag next inspection cycle; based on field condition and exposure, corrosion, etc.; prioritize as needed (A, B, E, or F)

VISIBILITY STRIPS PAINTED OVER NO LONGER REFLECTIVE	
	**At this Location:** Visibility strips painted brown (3PrdP visibility strip located above not shown in picture).
	Perform Minor Work: Yes Remove old visibility strips and install new
	Write 3rd Party Notification: No
	Write EC Notification: Yes, if minor work cannot be performed **FDA=** Vis-Strips / Broken / Damaged / Replace **Priority=** At minimum – must write up as Priority F Tag next inspection cycle; based on field condition and exposure, corrosion, etc.; prioritize as needed (A, B, E, or F)

Job Aid: Overhead Assessment

METAL OVER MOLDING	
Before	**After**
	
At this Location: Metal visibility strips under wood molding and over wood molding with protruding edge.	
Perform Minor Work: Yes, remove old metal visibility strips and apply new visibility strips; **visibility strips installed in "after" photo are fiber, not metal** (coded item)	
Write 3rd Party Notification: No	
Write EC Notification: Yes, only if minor work cannot be performed **FDA=** Vis-Strips / Broken / Damaged / Replace **Priority=** At minimum – must write up as Priority F Tag next inspection cycle; based on field condition and exposure, corrosion, etc.; prioritize as needed (A, B, E, or F)	

Job Aid: Overhead Assessment

OLD METHOD VISIBILITY STRIPS NOT YELLOW	OLD AND NEW VISIBILITY STRIPS NOT YELLOW
	
At this Location: Aged visibility strips have lost reflectivity.	**At this Location:** Yellow visibility strips mounted over old white visibility strips.
Perform Minor Work: Yes, Replace with 3 yellow visibility strips	**Perform Minor Work:** Yes, remove old visibility strips
Write 3rd Party Notification: No	**Write 3rd Party Notification:** No
Write EC Notification: Yes, if minor work cannot be performed. **FDA=** Vis-Strips / Broken / Damaged / Replace **Priority=** At minimum – must write up as Priority F Tag next inspection cycle; based on field condition and exposure, corrosion, etc.; prioritize as needed (A, B, E, or F)	**Write EC Notification:** Yes, if minor work cannot be performed. **FDA=** Vis-Strips / Broken / Damaged / Replace **Priority=** At minimum – must write up as Priority F Tag next inspection cycle; based on field condition and exposure, corrosion, etc.; prioritize as needed (A, B, E, or F)

Oil-filled Equipment

1. Equipment Oil: Leaking/Weeping Stain

General Guidance: Refer to TD-2305M EDPM Manual - Assessments and Notifications Section for additional information about addressing oil in the field.

IF you observe a **stain or leak**

THEN (1) Look for **exposure or contamination**

Refer to the PCB Spill/Leak Category Response Matrix to determine the appropriate action and priority.

- **Field employees must comply with the oil spill matrix table for how to handle oil conditions. Field employees should use the oil "indicator" language from the oil spill matrix table to describe the oil condition in the comments of the EC notification.**

Reminders:

- The field employee must create an emergency notification if the table directs creation of an A tag.
- If an Inspector identifies the emergency condition, they must create the A tag (do not wait for responder to create the A tag).
- WHEN the table directs you to contact EFS, the field employee must provide information and photos for EFS to make an informed decision.
- If identified after working hours, contact Environment Emergency Hotline,

  1-800-874-4043.
- The field employee must note results of discussion with EFS in the notification:
  - Name of EFS
  - Guidance from EFS
- If you are unsure how to handle an oil condition, contact your supervisor or lead for guidance.

Job Aid: Overhead Assessment

Minor Work: No

EC Notification: Yes

Related Documents: TD-2320P-01, Attachment 1 - PCB Spill/Leak Category Response Matrix for Overhead, Sub-Surface, and Padmount Equipment

PCB Spill/Leak Category Response Matrix – Overhead & Sub-Surface Equipment

Indicator	PCB Equipment Manufactured Before July 1979		Non-PCB Equipment Manufactured July 1979 or later	
	EC Notification Priority	Standby at Site	EC Notification Priority	Standby at Site
Equipment has failed and insulating fluid has run off the surface of the equipment and is in contact with the soil, vegetation, or water.	A Replace	Yes	A Replace	Yes
Insulating fluid has run off the surface of the equipment and is in contact with the soil, vegetation, or water OR Insulating fluid Is actively dripping.	A Replace	Yes	A Replace	Supervisor discusses with EFS to determine a need to standby based on the location and size of spill.
Insulating fluid is about to run off the surface of the equipment but has not made contact with the soil, vegetation, water, or structure.	A Replace	Yes	A Replace	Supervisor discusses with EFS to determine a need to standby based on the location and size of spill.

PCB Spill/Leak Category Response Matrix – Overhead & Sub-Surface Equipment (continued)

Indicator	PCB Equipment Manufactured Before July 1979			Non-PCB Equipment Manufactured July 1979 or later	
	EC Notification Priority		Standby at Site	EC Notification Priority	Standby at Site
Insulating fluid is on the surface of the equipment and is not about to run off the surface and has sheen (Weeps or Seeps).	Supervisor discusses with EFS to determine EC notification category based on sensitivity of location and upcoming weather.				
	Sensitive Areas	A Replace	Not needed	B 3 Month Recheck • Describe sheen in notification • Re-check in 3 months.	Not needed
	Non-sensitive Areas	B 30 day Replace IF estimating cannot be completed in time to meet 30 day deadline, THEN replace with like.			
Residual stain is a mark on the equipment that appears dried. Examples: • Stain on side of overhead transformer • Stain on concrete	No further action needed		Not needed	No further action needed	Not needed

Example

LEAKING OH TRANSFORMER	
	**At this Location:** Leaking OH Transformer, Residual Stain mark that appears dried, no sign of oil on ground. Oil has leaked out of the high side bushing, appears dried. **Perform Minor Work:** No **Write 3rd Party Notification:** No **Write EC Notification:** No No further action
LEAKING OH TRANSFORMER	
	**At this Location:** Leaking OH Transformer, Residual Stain mark that appears dried on IFD (Internal Fault Detection) **Perform Minor Work:** No **Write 3rd Party Notification:** No **Write EC Notification:** No No further action

Job Aid: Overhead Assessment

LEAKING OH TRANSFOMER, OIL ON THE GROND

AFTER - Taped off, cleaning measures applied, stand by still

At this Location: Leaking OH transformer, oil on the ground

Perform Minor Work: No

Write 3rd Party Notification: No

Write EC Notification: Yes

FDA= Transformer / Leaking / Seeping / Replace

Priority= A Tag, Follow the emergency process

2. Corrosion

General Guidance: In many parts of PGE's service territory, facilities are exposed to conditions that both cause and accelerate corrosion of metal components.

During detailed inspections, examine facilities and assess their condition for corrosion. If corrosion is minor, repairs to the protective coatings that cover the metal surfaces on the equipment should be made. In addition, during the diagnostic testing for specific types of distribution line equipment, perform an examination for corrosion.

Minor Work: Yes

EC Notification: Yes, if compelling

Select the Priority and Due Date based upon compelling abnormal condition that may adversely impact public safety and/or service reliability in the next 5 years.

IF you observe corrosion:

THEN:

I. Look for exposure

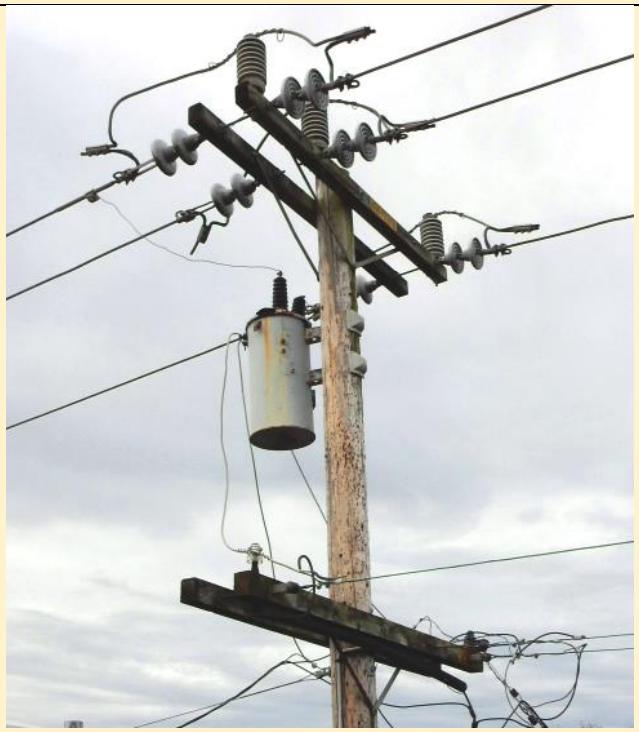
II. Refer to the below table ~~for~~ to determine the corrosion rating and the required actions to perform. Visual examples follow:

Description	Symptoms	Required Actions
Integrity is breached	Hole(s) in metal (public exposure to High Voltage, Cover not securable, significant oil leak or spill, etc..)	EC notification Priority A - replace immediately or make safe and issue Priority B - Replace/Repair
Metal is damaged	Separation, layering, bubbling	EC notification Priority E - replace/repair. Not to exceed 12 months
Moderate to little or no corrosion	No sight of metal degradation, Discolored paint, staining	Inspect at next interval. No action required

Examples

OH CORROSION	
	**At this Location:** Corrosion Weakening Integrity of Tank. Metal is separating into layers. Corrosion will breach tank
	Perform Minor Work: No
	Write 3rd Party Notification: No
	Write EC Notification: Yes **FDA=** Transformer / Corroded / Replace **Priority=** E Tag, 3-12 months depending upon exposure

Job Aid: Overhead Assessment

TRANSFORMER CORROSION	
	
Picture from ground	**Close up Picture**
At this Location: Transformer with heavy corrosion.	
Perform Minor Work: No	
Write 3rd Party Notification: No	
Write EC Notification: Yes **FDA =** Transformer / Corroded / Replace **Priority =** A Tag, Follow Emergency Process	

3. Internal Fault Device Activated

General Guidance: Is the Internal Fault Device activated (overheated) on the transformer (orange band is visible).

Minor Work: No

Related Documents: N/A

Example

Transformer Internal Fault Device Activated	
	
Not Activated	**Activated**
At this Location: Transformer internal fault device activated, indicating overheating, and the orange band is visible.	
Perform Minor Work: No	
Write 3rd Party Notification: No	
Write EC Notification: Yes **FDA=** Transformer / Broken / Damaged / Replace **Priority=** E Tag, 3-12 months depending on exposure	

4. PCB Transformer

General Guidance: Use binoculars to confirm the presence or absence of a blue sticker or Non-PCB indicator. If Blue or Non-PCB sticker is absent, then transformer is suspect of having PCB oil.

Select the Priority and Due Date based upon compelling abnormal condition that may adversely impact public safety and/or service reliability in the next 5 years.

Example

BLUE STICKER TRANSFORMER

At this Location: Blue Sticker not present on transformer, suspect for PCB. Answer questionnaire.
Perform Minor Work: No
Write 3rd Party Notification: No
Write EC Notification: No

5. Transformer – Parallel

Is there an obvious paralleled transformer condition at this location? If yes, create EC notification to address parallel condition in the field.

Always determine if the transformer is a SP (self-protecting) transformer or not.

Minor Work: No

Related Documents: N/A

2022 Checklist Equipment Section:

General Guidance: Use a combination of the mapping symbols and the actual field observations to properly assess the condition, priority (B or E) when creating an EC Notification.

A. If you observed the following conditions:

In the field: You observed Conventional transformers in obvious parallel connection, with no self-protected (SP) transformer present.

Create EC: FDA = Transformer / Parallel / Replace with Priority E

B. If you observed the following conditions:

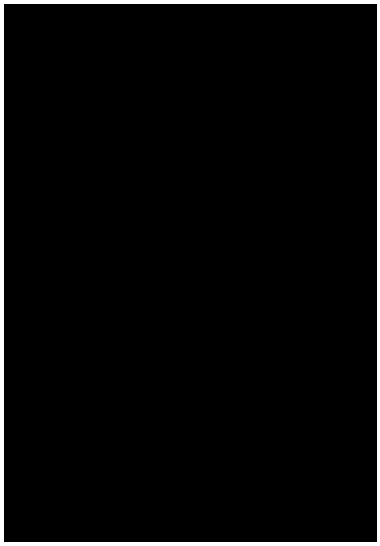
In the field: You observed transformers in obvious parallel connection, and at least one is a Self-Protected (SP) transformer.

Create EC: FDA = Transformer / Parallel / Replace with Priority B

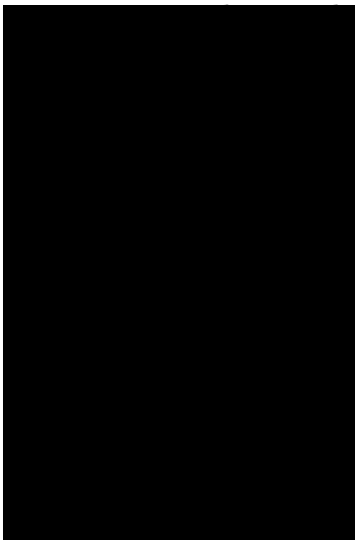
Examples

Banked transformers on separate poles should be identified as banked.

OH Paralleled Transformers



OH Transformers separated by bobs are ok



Poles

1. Solely Owned Poles with Third-Party Utility Attachments

General Guidance: Identify all solely owned pole with third-party attachments (based on how it is mapped). Write a standalone EC Notification for Pole / Overloaded / Test, for Estimating to confirm pole loading.

Minor Work: No

EC Notification: Yes

Related Documents: TD-2305M EDPM Pole Inspection, TD-2325S

2. Broken, Deteriorated, Deformed Poles

General Guidance: Observations in the field may include the following types of pole damage:

- Broken
- Split
- Cracked poles: assess for potential failure
- Decayed / Rotten
- Woodpecker / Animal / Vehicle damage
- Vandalized
- Any pole deformity
- Any condition that may impair conductor clearance
- Significant reduced circumference
- Buddy poles
- Animal
- Vehicle

The following guidance is to ensure adherence to G.O. 95 Rule 44.3 and 47.3:

Structural Integrity – At any attachment level on the pole, consider an EC tag if any of these conditions exist:

- Multiple vertical cracks in the same proximity to each other
- Pole twist causing spiral cracks
- Checks causing an un-natural taper to the exterior diameter of the pole (checks being forced opened).
- Hardware sinking into the pole, e.g., not naturally sitting on the outside of the pole.
- Multiple issues existing on a single structure, e.g., Pole degradation, insect/woodpecker damage, and/or any other abnormal compelling conditions

Level I (A -Tag)

- Horizontal Break in the grain or cuts **GREATER THAN** 30% of the diameter
- Vertical Cracks, splits, or damage that are impacting the structural integrity on any attachment points.
    - Hardware has moved from its original installation location and no split bolt in proximity.

Level II (B Tags 3 months and E -Tags 6-12 months)

Horizontal Break in the grain or cuts **GREATER THAN** 30% of the diameter but is supported by multiple guys. Consider a higher priority depending on condition of the pole and exposure.

Horizontal Break in the grain or cuts **LESS THAN** 30% (any breaks) of the diameter

- Vertical Cracks, splits, or damage at any attachment points impacting structural integrity that are loose or can become loose in the next 5 years (compelling abnormal condition), regardless of the existence of a split bolt.
- Substantial deterioration or damage present inside the vertical cracks or splits.
- Vertical cracks that split the pole in half and you can see through, consider a higher priority depending on condition of the pole and exposure.

Minor Work: No

Is pole damaged, broken, burnt, deformed, corroded, gunshot, or showing signs of cracking, or decay that needs to be addressed in the next 5 years? If yes, create EC notification.

EC Notification: Yes

Related Documents: TD-2305M EDPM Pole Inspection, TD-2325S, 066209, G.O. 95 Rule 44.3 and 47.3.

An 'N' tag indicates previously identified damaged pole.

Definitions:

1. **Buckling** at the ground line or an unusual angle with respect to the ground may indicate that the pole has rotted or is broken.
2. **Cracks** -
    a. **Horizontal cracks (Breaks)** perpendicular to the grain of the wood may weaken the pole.
    b. **Vertical cracks**, although not normally considered to be a sign of a defective pole, can pose a hazard to the climber, and the employee should keep his or her gaffs away from them while climbing.
3. **Checks (Vertical)** are a natural separation of the wood normally occurring across or through the rings and usually as a result of seasoning. Surface seasoning checks have a negligible effect on all strength properties.
4. **Splits (Vertical)** are a separation of the wood through the piece to the opposite surface or to an adjoining surface due to the tearing apart of the wood cells
5. **Holes**. Hollow spots and woodpecker holes can reduce the strength of a wood pole.
6. **Shell rot and decay**. Some poles have a strong outside shell and a center more susceptible to internal decay or 'heart rot', Others have a strong center and tend to decay externally, called 'shell rot.'
7. **Knots**. One large knot or several smaller ones at the same height on the pole may be evidence of a weak point on the pole.
8. **Depth of setting**. Evidence of the existence of a former ground line substantially above the existing ground level may be an indication that the pole is no longer buried to a sufficient depth.
9. **Burn marks**. Burning from transformer failures or conductor faults could damage the pole so that it cannot withstand changes in mechanical stress.

Examples

A. Broken (Horizontal Separation)

HORIZONTAL BREAKS	
POLE BROKEN AT THE COMMUNICATION LEVEL	**POLE BROKEN AT MIDDLE SECTION**
	
At this Location: Pole broken at the communication level. Horizontal Crack. Greater than 30% Complete Pole Inspection Test Report	**At this Location:** Broken pole, Supported by guy. Complete Pole Inspection Test Report.
Perform Minor Work: No	**Perform Minor Work:** No
Write 3rd Party Notification: No	**Write 3rd Party Notification:** No
Write EC Notification: Yes **FDA=** Pole / Broken/Damaged / Replace **Priority=** A Tag, Follow the emergency process	**Write EC Notification:** Yes **FDA=** Pole / Broken/Damaged / Replace **Priority=** B Tag, 3 months, depending on exposure

Job Aid: Overhead Assessment

BROKEN POLE	
	**At this Location:** Broken pole, Rural area, low public exposure. More Than 30% of the diameter. Complete the Pole Inspection Test Report.
	Perform Minor Work: No
	Write 3rd Party Notification: No
	Write EC Notification: Yes **FDA=** Pole / Broken/Damaged / Replace **Priority=** A Tag, Follow the Emergency Procedure

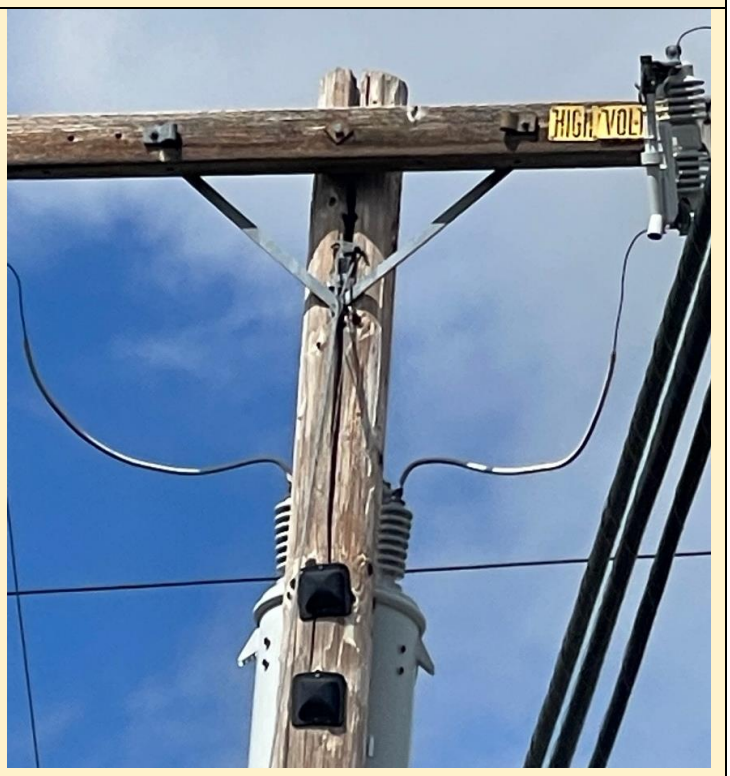
B. Split (Vertical Separation)

Split at Communication Level - Whole length or location near equipment, supporting structure. A vertical “Check” is a normal process of wood pole drying out. See example below.

POLE SPLIT AT COMMUNICATION LEVEL	Pole Check
	
At this Location: Pole split at communication level. Joint pole. Complete the Pole Inspection Test Report.	**At this Location:** Pole Check, structural integrity not compromised. Natural cracking on the pole. Not due to strain or loading.
Perform Minor Work: No	**Perform Minor Work:** No
Write 3rd Party Notification: No	**Write 3rd Party Notification:** No
Write EC Notification: Yes **FDA=** Pole / Broken/Damaged / Replace **Priority=** B Tag, 3 months, depending on exposure	**Write EC Notification:** No

Job Aid: Overhead Assessment

POLE SPLIT



At this Location: Pole top split and can see daylight. Dead end single guy, down guy fixture has moved and slid down from original location onto the brace. Cross-arm brace hardware also compromised. No split bolt.

Perform Minor Work: No

Write 3rd Party Notification: No

Write EC Notification: Yes

FDA= Pole / Broken/Damaged / Replace

Priority= A Tag, Follow the emergency procedure.

Job Aid: Overhead Assessment

POLE SPLIT

At this Location: Checks are opening on the pole at the equipment level. Multiple checks, possible movement on the cross-arm hardware, at the brace bolt on the top cross-arm. Hardware sinking in, pole twist spiral.
Perform Minor Work: No
Write 3rd Party Notification: No
Write EC Notification: Yes **FDA =** Pole / Broken/Damaged / Replace **Priority =** B Tag, 3 months, Depending on exposure

Job Aid: Overhead Assessment

POLE SPLIT
 
At this Location: Split in the pole top has been corrected with a split bolt, but the dead end has moved and is laying on top of the split bolt.
Perform Minor Work: No
Write 3rd Party Notification: No
Write EC Notification: Yes **FDA =** Pole / Broken/Damaged / Replace **Priority =** B Tag, 3 months, depending on exposure

Job Aid: Overhead Assessment

POLE CHECKS	
	
At this Location: Pole Checks. Down guy acting as split bolt. Multiple vertical cracks running down pole are not at the points of attachment affecting the hardware. No compelling abnormal conditions to report.	
Perform Minor Work: No	
Write 3rd Party Notification: No	
Write EC Notification: No	

POLE CHECK

At this Location: Pole checks at the equipment level attachments but not affecting the hardware. Not a compelling abnormal condition, will last another 5 years.
Perform Minor Work: No
Write 3rd Party Notification: No
Write EC Notification: No

Job Aid: Overhead Assessment

DECAYED POLE, MULTIPLE ISSUES

At this Location: Pole has multiple conditions: Pole in poor condition, decayed, and extensive weathering, and pole top rot. Pole checks alone are not a compelling abnormal condition, but in combination with all the other conditions, write EC tag.

Perform Minor Work: No

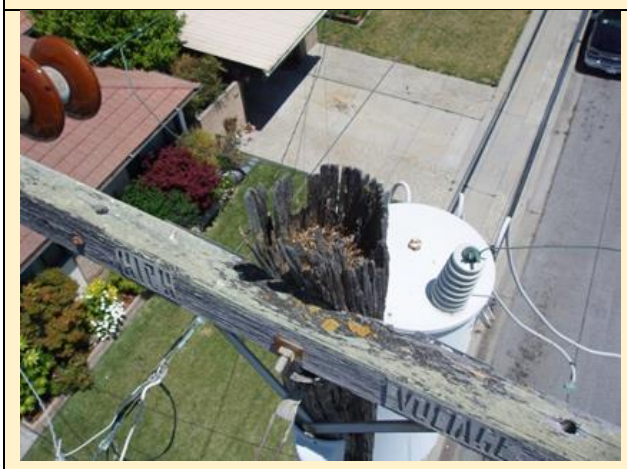
Write 3rd Party Notification: No

Write EC Notification: Yes

FDA = Pole Decayed/Rotten/Replace

Priority = E Tag, 6-12 months, depending on exposure

C. Decayed / Rotten

DECAY OF POLE OVER TIME	SEVERE DETERIORIATION AT GROUND LEVEL
	
At this Location: Pole top decayed Complete the Pole Inspection Test Report	**At this Location:** Deteriorated condition found during inspection. Complete Pole Inspection Test Report.
Perform Minor Work: No	**Perform Minor Work:** No
Write 3rd Party Notification: No	**Write 3rd Party Notification:** No
Write EC Notification: Yes **FDA=** Pole Decayed/Rotten/Replace **Priority=** B Tag, 0-3 months, depending on exposure	**Write EC Notification:** Yes **FDA=** Pole Decayed/Rotten/Replace **Priority=** A Tag, Follow the emergency process.

Job Aid: Overhead Assessment

DECAY OF POLE OVER TIME – AERIAL VIEW	
	
At this Location: Pole top decayed. Complete the Pole Inspection Test Report	
Perform Minor Work: No	**Perform Minor Work:** No
Write 3rd Party Notification: No	**Write 3rd Party Notification:** No
Write EC Notification: Yes **FDA=** Pole Decayed/Rotten/Replace **Priority=** A Tag, Follow emergency Procedure	**Write EC Notification:** Yes **FDA=** Pole Decayed/Rotten/Replace **Priority=** B Tag, 0-3 Months depending on exposure

Job Aid: Overhead Assessment

DECAY OF POLE OVER TIME – AERIAL VIEW

At this Location: Pole top decayed. Complete the Pole Inspection Test Report
Perform Minor Work: No
Write 3rd Party Notification: No
Write EC Notification: Yes **FDA=** Pole Decayed/Rotten/Replace **Priority=** E Tag, 3-12 Months depending on exposure

D. Woodpecker

General Guidance: Visually inspect poles for woodpecker damage that needs to address in the next 5 years.

Refer to "Assess Woodpecker Damage Guidelines" below.

Minor Work: No

Write 3rd Party Notification: No

EC Notification: Yes – Create EC notification to repair, assess, or replace pole (E, 3-12mo).

Reference: 066209 – Repair of Damaged Pole Tops

Per 066209:

Active Nests:

- Active Nests are ones with eggs or young in them.
- Do not disturb active nests unless they present an immediate safety or operating hazard.

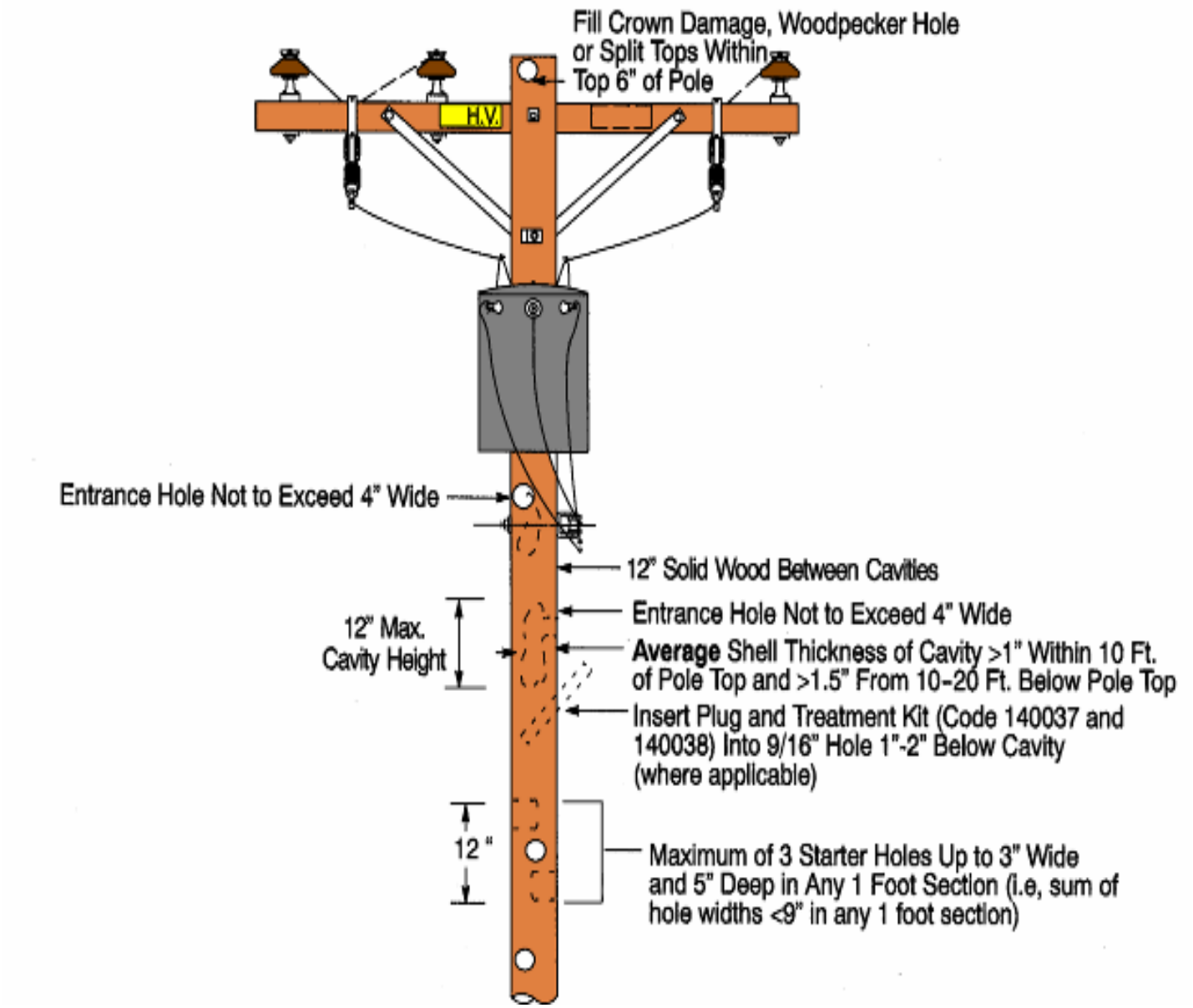
Inactive Nests:

- Inactive nests are those nests without viable eggs or young.
- Inactive nests, except eagle nests or T&E (threatened and endangered) species' nests, can be removed; however, do not keep an inactive nest without notifying avian program management personnel or governmental agencies. Nests may be difficult to identify.

  If there is any uncertainty about the type of nest, contact Lead / Supervisor or the avian program management personnel or the Bird Hotline at (415) 973-9453 for assistance with an active nest removal or relocation.

Job Aid: Overhead Assessment

Repair of Woodpecker-Damaged Pole Tops



Assessing Woodpecker Damage Guidelines

The QCR should note the approximate location, number, and size of woodpecker holes to use in the evaluation of the pole.

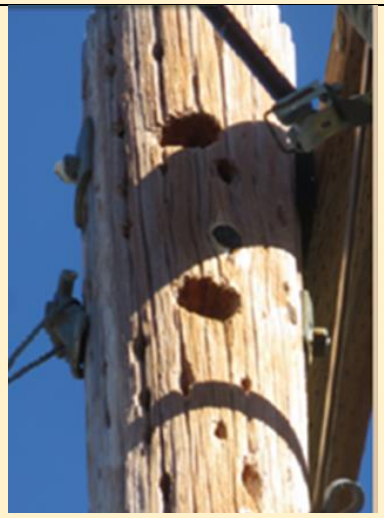
Determine whether identified above-ground or pole-top damage is suitable for restoration. **Poles are suitable for restoration and can remain in service if they meet the criteria listed below and are repaired by a construction crew with the epoxy method per 066209**:

- There is 1 vertical inch of solid wood directly below any through bolt to support existing or proposed attachments.
- Nesting cavities or other open pockets have an outside hole diameter that is less than 4 inches wide.
- Internal cavities are estimated to be less than 12 inches high and 7 inches in diameter.
- The average shell thickness of the cavity is greater than 1 inch within the top 10 feet of the pole, and greater than 1½ inches between 10 feet and 20 feet from the top. See Exhibit B, Part 1, for shell thickness between 20 feet of the pole top and the groundline.
- There is more than 12 inches of sound wood vertically between nesting cavities.
- There are three or fewer starter holes less than 3 inches wide, 3 inches high, and 5 inches deep within any 1-foot vertical section of the pole. The maximum sum of the diameters of the holes must be less than 9 inches wide in a 1-foot vertical section.
- The pole-top crown damage or split tops extend downward less than 6 inches from the pole top.

Examples

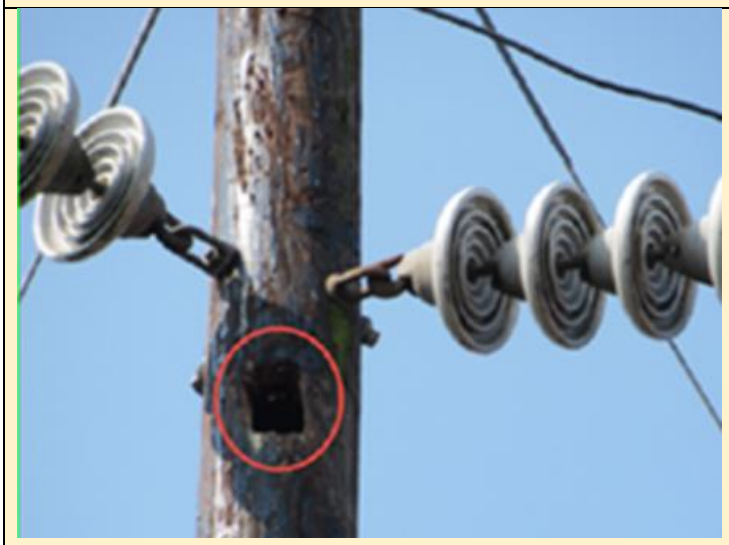
Poles with woodpecker damage – assess using woodpecker assessment guidelines.

WOODPECKER DAMAGE NESTNG CAVITY	
	**At this Location:** Obvious sign of a cavity in the pole by seeing daylight through the pole. Unable to determine the depth of the cavity. **Perform Minor Work:** No **Write 3rd Party Notification:** No **If unable to determine damage:** • **Write EC Notification:** Yes • **FDA=** Pole / Woodpecker Damage / Assessment • **Priority=** E Tag, 3-12 months **If damage is determined sufficient:** • **Write EC Notification:** Yes • **FDA=** Pole / Woodpecker Damage / Replace • **Priority=** E Tag, 3-12 months

WOODPECKER DAMAGE AT THE TOP OF THE POLE	
	**At this Location:** Woodpecker holes near framing hardware. **Perform Minor Work:** No **Write 3rd Party Notification:** No **Write EC Notification:** Yes **FDA=** Pole / Woodpecker Damage / Replace **Priority=** E Tag, 3-12 months

Job Aid: Overhead Assessment

WOODPECKER DAMAGE MEDIUM CAVITY	
	**At this Location:** Woodpecker holes near framing hardware, per Guidance “There is 1 vertical inch of solid wood directly below any through bolt to support existing or proposed attachments”.
	Perform Minor Work: No
	Write 3rd Party Notification: No
	Write EC Notification: Yes **FDA=** Pole / Woodpecker Damage / Replace **Priority=** E Tag, 3-12 months, depending on exposure

WOODPECKER DAMAGE LARGE CAVITY	
	**At this Location: Comparing to the insulators** Woodpecker holes appear to be close to 7” per Guideline “Nesting cavities or other open pockets have an outside hole diameter that is less than 4 inches wide.”. When in doubt, write notification
	Perform Minor Work: No
	Write 3rd Party Notification: No
	Write EC Notification: Yes **FDA=** Pole / Woodpecker Damage / Replace **Priority=** E Tag, 3-12 months, depending on exposure

E. Vandalized

CUT INTO POLE	
	
At this Location: Vandalized pole. Chain saw cut into lower portion of pole. Half of pole circumference cut into. Complete Pole Inspection Test Report	
Perform Minor Work: No	
Write 3rd Party Notification: No	
Write EC Notification: Yes **FDA=** Pole / Broken / Damaged / Replace **Priority=** A Tag, Follow the emergency process	

CUT INTO POLE	
	**At this Location:** Cut into pole. Not a deep cut, no strain on pole, no public exposure. Complete the Pole Inspection Test Report.
	Perform Minor Work: No
	Write 3rd Party Notification: No
	Write EC Notification: Yes **FDA=** Pole / Broken/Damaged / Replace **Priority=** E Tag, 3-12 months, depending on exposure send to estimating for pole loading calc. (pole overload test)

F. Significant reduced circumference

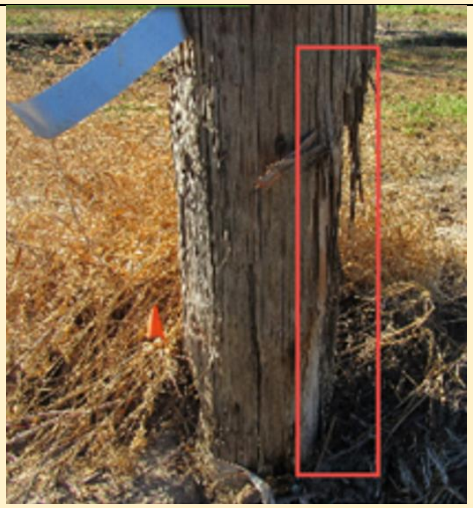
Does pole have significant reduced circumference?

General Guidance: For example, animal, vehicle, vandalism, burnt, shell rot, which has caused a pole circumference reduction that could cause the pole to be overloaded or deformed needs to be written up on an EC Notification, FDA = Pole Overloaded Test. If circumference is significant and needs to be addressed in the next 12 months, create EC notification to replace pole.

Example

DAMAGE TO POLE FROM SPECIFIC EVENT	
	**At this Location:** Pole has reduced circumference, write EC notification for estimating to confirm pole loading.
	Perform Minor Work: No
	Write 3rd Party Notification: No
	Write EC Notification: Yes **FDA=** Pole / Overloaded / Test **Priority=** E Tag, 3-12 months depending on exposure

Job Aid: Overhead Assessment

Significant Reduced Circumference (Tractor Damage)	
	**At this Location:** Significant Reduced Circumference (Tractor Damage) **Perform Minor Work:** No **Write 3rd Party Notification:** No **Write EC Notification:** Yes **FDA=** Pole / Overloaded / Test **Priority=** E Tag, 12 months, depending on exposure

Significant Reduced Circumference (Bear Damage)	
	**At this Location:** Significant Reduced Circumference (Bear Damage). Temporary Repairs made. **Perform Minor Work:** No **Write 3rd Party Notification:** No **Write EC Notification:** Yes **FDA=** Pole / Broken / Damaged / Replace **Priority=** B Tag, 0-3 Months depending on exposure

G. Vehicle

VEHICLE DAMAGE, TEMP REPAIRS MADE	
	**At this Location:** Pole damaged by vehicle. Cross-arm acting as Splint installed as temporary repair **Perform Minor Work:** No **Write 3rd Party Notification:** No **Write EC Notification:** Yes **FDA=** Pole / Broken / Damaged / Replace **Priority=** E Tag, 3-12 Mo depending on exposure

3. Leaning Pole

General Guidance: Consider the following when evaluating a leaning pole:

- Is the pole leaning/out of plumb by more than 10% of its height above the ground?
- Is the leaning pole causing excessive conductor sag or reduced clearance issues that could result in contact, fire risk, or public safety?
- Does the lean appear as if it will become worse or affect safety or reliability in the next 5 years (considering environmental and configuration factors -soil, wind, pole attachments, equipment, guying)?

If the answer is **yes** to any of these questions, at minimum **create an EC Notification (Pole /Overloaded /Test)**. All poles need to be load calculated prior to straightening. Estimating will create an EC to straighten (Pole/Lean/Adjust) or replace (Pole/Lean/Replace). If Inspector determines that pole needs to be replaced, create EC notification to replace pole.

Note: If the Inspector suspects that a third-party attachment is causing the pole to lean, consider writing a Third-Party Utility notification in addition to an EC Notification.

Minor Work: No

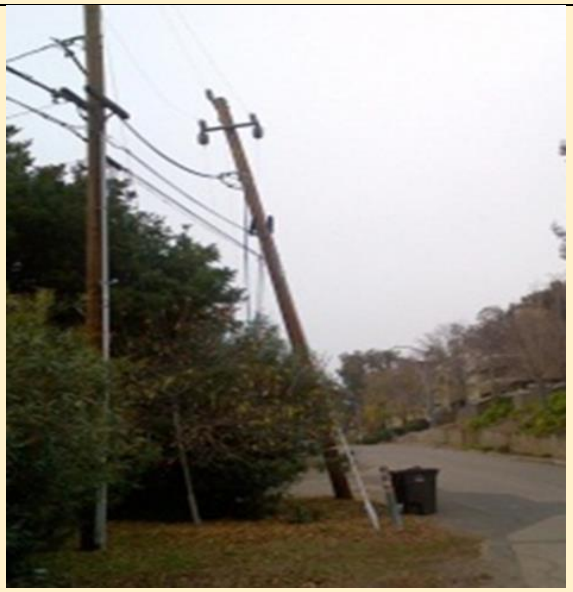
EC Notification: Yes

Select the Priority and Due Date based upon compelling abnormal condition that may adversely impact public safety and/or service reliability in the next 5 years.

Related Documents: 023058, TD-2014S – Third Party Damage

Job Aid: Overhead Assessment

Examples

LEANING POLE	LEANING SLACK SPAN
	
At this Location: Leaning pole greater than 10% out of plumb. Pole is stable. No equipment, in rural area. Causing reduced clearance.	**At this Location:** Leaning towards a tree more than 10% out of plumb. Inspector pulled plug and confirmed pole is solid below ground. Probability of equipment failure is moderate.
Perform Minor Work: No	**Perform Minor Work:** No
Write 3rd Party Notification: No	**Write 3rd Party Notification:** No
Write EC Notification: Yes **FDA=** Pole / Leaning / Adjust **Priority=** E Tag, 3-12 months, depending on exposure	**Write EC Notification:** Yes **FDA=** Pole / Leaning / Replace **Priority=** B Tag, 0-3 months, depending on exposure

Job Aid: Overhead Assessment

STUBBED POLE LEANING TOWARDS SCHOOL	POLE LEANING 3 POT TRANSFORMER IN BUCK POSITION
	
At this Location: Stubbed pole leaning towards school, supported by down guy. Pole Bands are loose due to additional deterioration of the pole.	**At this Location** Pole is leaning less than 10% out of plumb, leaning in direction of offset equipment.
Perform Minor Work: No	**Perform Minor Work:** No
Write 3rd Party Notification: No	**Write 3rd Party Notification:** No
Write EC Notification: Yes **FDA=** Pole / Decayed / Rotten / Replace **Priority=** B Tag, 0-3 months, depending on exposure	**Write EC Notification:** No

Job Aid: Overhead Assessment

POLE LEANING NEAR RAILROAD TRACKS	
	**At this Location:** Severe lean being held up by the primary conductors. Low clearance over an active railroad track. Pole located in a swamp area with standing water.
	Perform Minor Work: No
	Write 3rd Party Notification: No
	Write EC Notification: Yes **FDA=** Pole / Decayed / Rotten / Replace **Priority=** A Tag, follow the emergency process

4. Deformed Pole

General Guidance:

For deformed poles, write EC Notification for Pole / Overloaded / Test, to confirm pole loading.

If the deformity appears as if it will become worse or affect safety or reliability in the next 5 years (considering environmental and configuration factors - soil, wind, pole attachments, equipment, guying) - write EC notification to replace pole.

Common drivers for deformed poles: Improper/lack of guying, third party attachment.

Review clearances to verify no reduced clearance issues, all levels of clearance requirements that could result in contact, fire risk, or public safety.

Minor Work: No

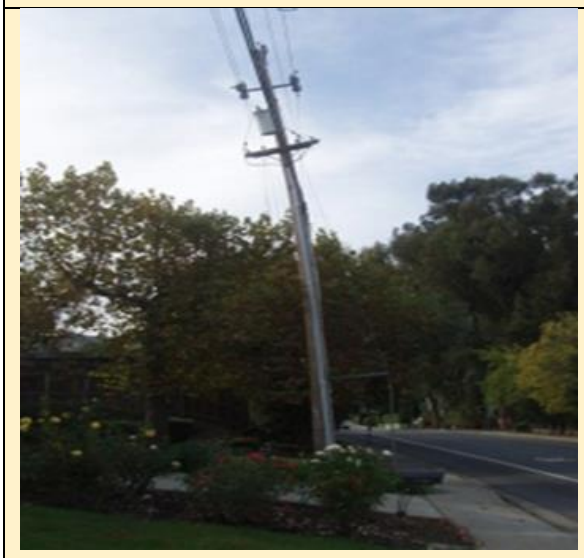
EC Notification: Yes

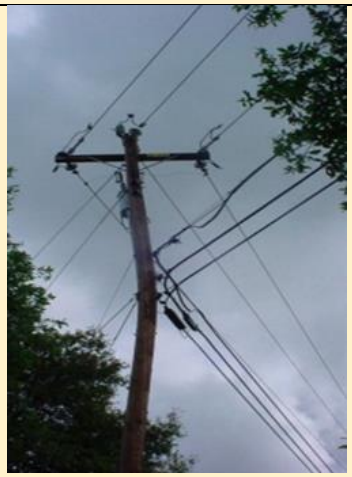
Select the Priority and Due Date based upon compelling abnormal condition that may adversely impact public safety and/or service reliability in the next 5 years.

Related Documents: TD-2305M EDPM Pole Inspection

Job Aid: Overhead Assessment

Examples

POLE BENT 4 FEET OUT OF LINE	
	**At this Location:** Pole bent 4 feet out of line, less than 10% lean, deformed in the middle of the pole, towards vegetation **Perform Minor Work:** No **Write 3rd Party Notification:** No **Write EC Notification:** Yes **FDA=** Pole / Overload / Test **Priority=** B Tag, 0-3 months depending on exposure

INADEQUATE SUPPORT AT COMMUNICATIONS LEVEL	
	**At this Location:** Two guys stabilizing communication level. **Perform Minor Work:** No **Write 3rd Party Notification:** No **Write EC Notification:** Yes **FDA=** Pole / Overload / Replace **Priority=** E Tag, 3-12 months depending on exposure

Job Aid: Overhead Assessment

OVER STRESSED POLE	UNBALANCED LOAD AT TOP
	
At this Location: Pole is twisted, cracked, due to communication. Field comments “overloaded by communications”	**At this Location:** Deformed pole with bowed top in line with conductor.
Perform Minor Work: No	**Perform Minor Work:** No
Write 3rd Party Notification: No	**Write 3rd Party Notification:** No
Write EC Notification: Yes **FDA=** Pole / Overloaded / Replace Pole Test Data Sheet is Required **Priority=** E Tag, 3-12 months, depending on exposure	**Write EC Notification:** Yes **FDA=** Pole / Overloaded / Replace Pole Test Data Sheet is Required **Priority= E** Tag, 3-12 months, depending on exposure

5. Soil Excessively Eroded or Washed Away at Base of Pole

General Guidance: If the inspector notices that a large amount of soil was washed or eroded away at the base of a pole, consider writing an EC notification to investigate whether the pole still meets its designed set depth.

Minor Work: No

EC Notification: Yes

Select the Priority and Due Date based upon compelling abnormal condition that may adversely impact public safety and/or service reliability in the next 5 years.

Related Documents: 015203, page 2, table 1

Example

Soil eroded at base of pole	
	**At this Location:** a large amount of soil was washed or eroded away at the base of a pole, Not leaning.
	Perform Minor Work: No
	Write 3rd Party Notification: No
	Write EC Notification: Yes **FDA=** Pole / Soil Eroded / Graded / Replace **Priority=** E Tag, 12 months depending on exposure

6. Pole Steps

General Guidance: Remove any pole steps less than 8 feet 6 inches above the ground or any other accessible surface; this allows for grading, landscaping, etc.

Minor Work: Yes

EC Notification: Yes, if cannot be completed as minor work.

Select the Priority and Due Date based upon compelling abnormal condition that may adversely impact public safety and/or service reliability in the next 5 years.

Related Documents: 022616 page 2, section 5

7. Mud sill

General Guidance: Repair/replace deteriorated mud sill.

Minor Work: No

EC Notification: Yes, if cannot be completed as minor work.

Related Documents: 030109

8. Buddy Pole

Buddy Pole: A short section of pole, cut above and below the communication facilities, that are not being transferred to the new pole, and supported entirely by connections to the new pole.

Cut-and-kick: The wood pole replacement process where a new pole is placed in the same hole as the old pole and the old pole is temporarily secured to the new pole.

General Guidance: If there is a compelling abnormal condition (e.g., buddy pole not properly supported), then write EC notification. When in doubt call your supervisor or PG&E Lead

Minor Work: No

3rd Party Notification: No

EC Notification: Yes

Select the Priority and Due Date based upon compelling abnormal condition that may adversely impact public safety and/or service reliability in the next 5 years.

Related Documents: TD-2326P-01, TD-2326P-01-JA01

Example

Buddy Pole	
	**At this Location:** Buddy pole is properly supported
	Perform Minor Work: No
	Write 3rd Party Notification: No
	Write EC Notification: No

9. Transmission Poles

General Guidance: At minimum, when performing GO 165 patrols or inspections, Inspectors should perform a “patrol” of the transmission assets in the area being patrolled or inspected in order to identify any **obvious structural problems or hazards** that need to be addressed by the Transmission Organization. Review clearances to verify no reduced clearance issues, all levels of clearance requirements that could result in contact, fire risk, or public safety.

When in doubt call your supervisor or PG&E Lead

- Examples of the types of issues that could be identified:
- Damaged or broken poles
- Broken or decayed crossarms
- Broken insulators
- Damaged tie wire
- Vegetation issues

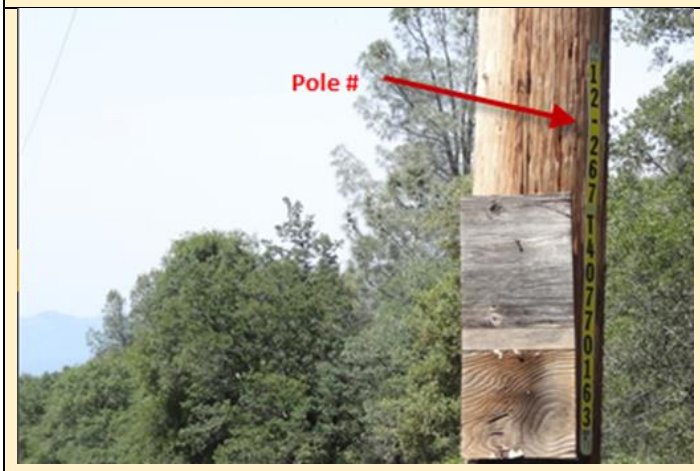
Minor Work: No

If you identify an obvious structural problem or hazard in the field that is NOT an emergency:

Write EC Notification: Yes

- Generate an EC to generate an LC

Example

Take a picture of Transmission pole	
	In the process of creating the EC Notification, include a photo of the Transmission pole number.

10. Transmission Pole with Distribution Underbuilds

Inspect App: Use the Inspect App to document adverse field conditions as follows:

Structure Section: Select Transmission with Distribution Underbuild

Example 1

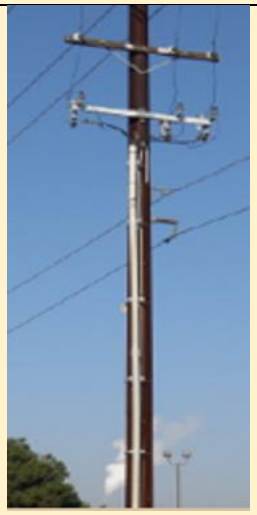
A. ***Checklist item****: Distribution riser on structure*

General Guidance: Steel Transmission Structure with Distribution Underbuilds with **external** riser present. If observed, yes, create EC notification to relocate riser.

Note: Presents of distribution riser on steel transmission pole exposes customer equipment to transmission flashover voltages.

Minor Work: No

EC Notification: Yes

Riser on Steel Transmission Pole	
	
At this Location: Steel Transmission Structure with Distribution underbuild with external riser on steel pole.	
Perform Minor Work: No	
Write 3rd Party Notification: No	
Write EC Notification: Yes **FDA=** Riser / Pothead / Installed in Error / Relocate **Priority=** E Tag, 3-12 months, depending on exposure	

B. Checklist item: Distribution riser on structure

General Guidance: Structure must be steel Transmission Structure with Distribution Underbuild with internal riser within steel pole. If observed, yes, create EC notification to relocate riser.

Note: Presents of distribution riser on steel transmission pole exposes customer equipment to transmission flashover voltages.

Minor Work: No

EC Notification: Yes

Steel Transmission Structure with Distribution Underbuild with internal riser within steel pole	
	**At this Location:** Steel Transmission Structure with Distribution underbuild with internal riser within steel pole
	Perform Minor Work: No
	Write 3rd Party Notification: No
	Write EC Notification: Yes **FDA=** Riser / Pothead / Installed in Error / Relocate **Priority=** E Tag, 3-12 months depending upon exposure

Example 2

A. ***Checklist item****: Distribution transformer serving an external customer installed without a common neutral present*

General Guidance: If observed, yes, create EC notification to relocate the transformer.

Minor Work: No

EC Notification: Yes

Related Documents: 068177, G.O. 95 Rule 33B, 056425 (Note 1 on pg. 1 and sub-note 1 on bottom of pg. 1)

Distribution transformer on steel transmission pole without common neutral.	
	**At this Location:** Distribution transformer on steel transmission pole without common neutral. **Perform Minor Work:** No **Write 3rd Party Notification:** No **Write EC Notification:** Yes **FDA=** Transformer / No Common Neutral / Relocate **Priority=** E Tag, 3-12 months depending upon exposure

Example 3

A. ***Checklist item****: Missing or Broken Distribution Bridging*

General Guidance: If observed, yes, create EC notification to repair or install missing bridging.

Note: If bridging is not installed on a distribution wood cross-arm on a transmission wood pole, then create an EC tag to install bridging.

Minor Work: No

EC Notification: Yes

Select the Priority and Due Date based upon compelling abnormal condition that may adversely impact public safety and/or service reliability in the next 5 years.

Related Documents: TD-2305M-B009

Wood Crossarm on Wood Transmission pole with Distribution Underbuild Bridging	
	**Bridging Example**

Job Aid: Overhead Assessment

BURNT POLE DUE TO MISSING BRIDGING	
	**At this Location:** Transmission pole with missing bridging on the distribution cross-arm, burnt pole, assess pole
	Perform Minor Work: No
	Write 3rd Party Notification: No
	Write EC Notification: Yes **FDA=** OH Facility / Transmission issue / Create LC **Priority=** B Tag, 0-3 months, depending on exposure

Example 4

A. ***Checklist item****: Inadequate Clearance between Transmission and Distribution Conductors, follow the Clearance Evaluation Job Aid*

General Guidance: If observed, yes, create EC notification to create an LC. Provide detailed supporting comments of the issue. When in doubt call your supervisor or PG&E Lead.

Minor Work: No

EC Notification: Yes

Job Aid: Overhead Assessment

UNSUPPORTED TRANSMISSION LINE WITH DIMINISHED CLEARANCE

At this Location: Unsupported transmission line with diminished clearance to the distribution level seen from the ground or aerial.

Perform Minor Work: No

Write 3rd Party Notification: No

Write EC Notification: Yes

FDA= OH Facility / Transmission Issue / Create LC

Priority= E Tag, 3-12 months, depending on exposure

Riser Molding

1. Broken/Missing Riser Ground

General Guidance: See 'Ground / Ground Molding in this job Aid

Minor Work: None

Related Documents: 027742

2. U-Shape Riser Molding Broken/Damaged or Unsecured

General Guidance – Existing Molding:

Ensure bottom section of ground molding is flush against the pole

IF molding is NOT firmly attached to pole

THEN Perform Minor Work to secure molding to pole by attaching all lags ***OR*** Create EC Notification

Address any gaps identified via minor work or create an EC notification

General Guidance if Installing New Molding or Repairing Existing Molding:

- **Below 8 feet:** Both sides of the molding must be secured to the pole at least every 18 inches (a lag in every hole).
- **Above 8 feet:** Both sides of the molding must be secured to the pole at least every 36 inches

Minor Work: Yes

EC Notification: Yes

Related Documents: 021924

Job Aid: Overhead Assessment

Example

CRACKED RISER BOOT	BROKEN RISER
	
At this Location: Cracked riser boot	**At this Location:** Broken riser
Perform Minor Work: Yes, if possible	**Perform Minor Work:** Yes, if possible
Write 3rd Party Notification: No	**Write 3rd Party Notification:** No
Write EC Notification: Yes, only if minor work cannot be performed **FDA=** Molding / Broken / Damaged **Priority=** F Tag, depending on exposure	**Write EC Notification:** Yes, only if minor work cannot be performed **FDA=** Molding / Broken / Damaged / Replace **Priority=** A Tag, follow emergency process

SmartMeter / SCADA Equipment/Other Equipment on Poles

1. Broken/Damaged SmartMeter Relay/Access Point/Data Collector Unit or SCADA Equipment

General Guidance: If, through visual inspection, an inspector sees broken or damaged SmartMeter, antenna, DCU, or SCADA equipment, create EC notification. Be sure to check the SmartMeter box on the EC Form. If visible, note the operating number and/or serial number of the equipment.

Supervisors will contact SmartMeter and/or Operations to notify them of the issue and determine EC or COE.

Minor Work: No

EC Notification: Yes, unless COE

Related Documents: 072145, 072150, 068190, 054421

Examples

Examples	
	
Antenna	Control Box on Steel Tower

 	
PG&E Weather Station	Control Box on Wood Pole

Streetlights

1. Broken or Damaged Streetlight Pole

General Guidance: While streetlights aren't part of an inspection list, if one is seen with a compelling abnormal condition, then create EC notification.

Minor Work: No

EC Notification: Yes

Related Documents: TD-2309S, TD-2307M

Job Aid: Overhead Assessment

Example

MISSING STREET LIGHT	LEANING AGGREGATE POLE
	
At this Location: Cone indicates location of missing decorative streetlight and pole. Exposed wire is de-energized.	**At this Location:** Leaning aggregate pole more than 10% out of plumb. Pole is broken at base and not stable. Light still working.
Perform Minor Work: Yes, make safe	**Perform Minor Work:** No
Write 3rd Party Notification: No	**Write 3rd Party Notification:** No
Write EC Notification: Yes, only if minor work cannot be performed **FDA=** Decorative Streetlight / Broken/Damaged / Replace **Priority=** E Tag, 6 months, add in field comment section – describe if pole is missing.	**Write EC Notification:** Yes **FDA=** Pole / Broken/Damaged / Replace **Priority=** B Tag, 0-3 months, depending on exposure

2. Day Burner

General Guidance: **Do not** create an EC Notification for a day burner. Call Restoration Dispatch or PBX hotline internal non-emergency 1-415-973-7000 to get a T-Man to respond. This is to ensure correct accounting for streetlight work (depending on the rate that the customer is one, etc.).

Minor Work: Yes, if you have the materials on your truck

EC Notification: No

Related Documents: Utility S2309

3. Missing Streetlight Head

General Guidance: If the inspector notices that a missing streetlight, first, make safe then create EC notification to install a missing streetlight.

Minor Work: No

EC Notification: Yes

Related Documents: Utility S2309

3rd Party Notification

1. Utility – Cable, Phone, and other Electric Utility Partners

General Guidance: If issues are encountered with joint utility or tenant facilities on structures, create a 3rd party utility notification.

Comcast Dispatch - 1-888-824-8219 (for level 1 priorities)

Minor Work: No

EC Notification: No

3rd Party Utility Notification: Yes

References: TD-2014P-01-F01

Example

Communication Line Extremely Sagged	
	**At this Location:** Comm sag 6' above the road, off the road, no potential for vehicle contact. **Perform Minor Work:** No **Write 3rd Party Utility Notification:** Yes **Priority:** Level 2 **Write EC Notification:** No

Job Aid: Overhead Assessment

3rd Party Cable Loose Lashing Long Enough to Whip into Power Lines	
	
Before	**After - Snip Lashing and Tape**
At this Location: 3rd party communication line has a loose lashing **long enough to whip into power lines**. Stand-by situation.	
Perform Minor Work: Yes, if safe to do so	
Write 3rd Party Notification: Yes **Priority=** Level 1	
Write EC Notification: Yes, if minor work cannot be completed **FDA=** Conductor / Loose Lashing / Repair **Priority=** A Tag. Follow the emergency procedure.	
*Contact Lead/Supervisor for guidance	

Job Aid: Overhead Assessment

Abandoned Phone Drop	
	
At this Location: Abandoned Phone Drop	
Perform Minor Work: No	
Write 3rd Party Notification: Yes **Priority=** Level 3	
Write EC Notification: No	

Job Aid: Overhead Assessment

Antennas - Third Party Communication

A. Broken/Damaged Cellular Antenna

General Guidance: If the broken antenna is creating a non-emergency safety or reliability issue, create a third-party notification.

If the antenna is causing an emergency safety or reliability issue, contact your supervisor for instructions. Do not leave the location until it is made safe.

Minor Work: No

EC Notification: No

Third Party Notification: Yes

Related Documents: 027911

B. Third Party Communication Antenna - Inadequate Clearance

General Guidance: Create a third-party notification if a cellular antenna does not have adequate clearance from supply lines or equipment.

If the antenna is causing an emergency safety or reliability issue, contact your supervisor for instructions. Do not leave the location until it is made safe.

Minor Work: No

EC Notification: No

Third Party Notification: Yes

Related Documents: 027911

2. Non - Utility

General Guidance: Unauthorized attachment installed on a PG&E pole such a mailbox, basketball hoops, etc.

Minor Work: Yes, as long as it can be done safely and doesn't create a safety hazard, **DO NOT** remove mirrors on windy roads/driveways, street/stop signs, camera equipment, etc.

EC Notification: No

3rd Party Non-Utility Notification: Yes, comments need to be created and will be attached to the letter to the customer / homeowner.

Example

Unauthorized Attachment	
	**At this Location:** Basketball Hoop Installed on a PG&E pole. **Perform Minor Work:** No **Write 3rd Party Notification:** Yes **Write EC Notification:** No

Job Aid: Overhead Assessment

Trees

1. Trees within 4 Feet of a Primary Line

General Guidance: If you have any questions about the integrity of tree that could impact electric facilities, (causing damage to our facilities, dead or dying, causing conductor height issue, could fall into line etc.), write a Vegetation Notification to remove dead/dying tree.

Broken Limb on Conductor that has potential to cross-phase or has strain: Remove the limb as minor work with a hot stick if it is safe to do so. If minor work cannot be completed, and has potential to cross phase or strain, then create EC Notification A tag Emergency.

Vegetation Touching Bare Conductor or Signs of Burning or Arcing: Create an emergency Priority “A” Vegetation Management Tag and call supervisor or lead for assistance in contacting vegetation management. Wait at the location until relieved.

Vegetation Not Touching Bare Conductor and No Signs of Burning or Arcing: Create a Vegetation Management notification.

Minor Work: Yes

EC Notification: Yes

Related Documents: None

Job Aid: Overhead Assessment

Examples

Large Branch Broken	
	**At this Location:** Large branch broken on cross-arm. Cross-arm in poor condition, immediate response required. **Perform Minor Work:** No **Write 3rd Party Notification:** No **Write Vegetation Notification:** No **Write EC Notification:** Yes **FDA=** Cross-arm / broken / damaged / Replace **FDA=** Tree / clearance / Remove **Priority=** A Tag, follow the emergency process

Job Aid: Overhead Assessment

Dead Tree Branch fell into Primary	
	**At this Location:** Dead tree branch fell into primary **Perform Minor Work:** No **Write 3rd Party Notification:** No **Write Vegetation Notification:** No **Write EC Notification:** Yes **FDA=** Tree / clearance / Remove **Priority=** A Tag, follow the emergency process

Job Aid: Overhead Assessment

Small Branches on Primary and Secondary	Long Tree Bark Hanging on Primary Conductor
	
At this Location: Small branches on primary and secondary. Too small to cause a cross-phase or damage.	**At this Location: L**ong tree bark strands, hanging from bare primary conductor, phase separation on single phase cross-arm far enough not to cause cross-phase
Perform Minor Work: Yes, if possible	**Perform Minor Work:** Yes, if possible
Write 3rd Party Notification: No	**Write 3rd Party Notification:** No
Write EC Notification: No	**Write EC Notification:** Yes, only when minor work not performed. **FDA=** Tree / Clearance / Remove **Priority=** B Tag, 3 months, depending on exposure

2. Tree Attachments

Definition: A Tree Connect is a PG&E asset because the tree which is not owned by PG&E has one or more attachments connected to it.

PG&E Attachments may include:

- Primary Conductor
- Secondary Conductor
- Service Conductor
- Streetlight Conductor
- Hardware
- Anchor
- Guy Assemblies

General Guidance: As you perform a visual inspection of all associated conductor(s) from structure to midspan in all directions or to weather head or termination point in all directions, look for tree attachments (Mapped or Un Mapped).

The Ultimate Goal is to have all Tree Connects mapped, have an Orange Inspection Halo and record the Inspection of each Tree Connect using the Inspection Checklist.

Note: When performing an inspection for a tree connect, tree connects should be recorded as PG&E owned and not customer owned.

Minor Work: No

Related Documents: TD-2999B-044

Common Scenarios: Follow process for each:

(1) Tree Connect is Mapped and has an Orange Inspection Halo (Complete inspection)

(a) Reference: Mapped tree symbol 

(2) Tree Connect is Mapped as a proposed Clearance Pole (Red dotted circle) With No Halo:

(a) Follow Adhoc Inspection Process

(3) Tree Connect is Un-mapped:

(a) Follow Adhoc Inspection Process

(4) Tree Connect is mapped but does not have an Orange Inspection Halo:

(a) Request Halo mailto:SystemInspectionHaloIssues@pge.com

(5) Tree connect is mapped but does not exist in field:

(a) Complete inspection record indicating structure does not exist in field.

Tree Attachments Found in the Field Procedure

Identification by System Inspections:

- Assess the tree condition per Vegetation Management (VM) guidance provided in Job Aid, "Utility Bulletin TD-2999B-044, Guidance on Tree Health Priority Job Aid".
- If tree is **"Green"** and considered to be in **Good Condition**, **NO EC is required**.
  - If open EC exists for location and field conditions are **NOT compelling** or **NOT a regulatory condition**, process cancellation request in accordance with TD-2305M-JA13, "EC Job Aid: Create, Complete, Cancel EC Notifications".
- **If an immediate hazard exists**, Create an **Emergency "A" Tag**.
  - The location cannot be made safe to the public without additional Qualified Company Representative (QCR) support, the first responder ***MUST*** standby until relieved by the additional QCRs ***OR*** until the hazard has been made safe

Category	Priority	MAT	Wort Type Code	Tree Mortality
Emergency	A	17B	501	Dead or Dying **OR** Green

  - Under **Item Details**, the **Facility Type / Damage / Action (FDA)** of notification should be:
    - Tree/Vine / Decayed/Rotten / Install CL Pole
  - Notification **Cause** should be:

- Tree Contact

Object	Damage	Cause	Activity
Tree / Vine	Decayed / Rotten	Tree Contact	Install CL Pole

- If tree is **"Dead or Dying" or "Green**" and considered to **NOT be in Good Condition**, Create **EC Replacement Tag**, based on field conditions:

Category	Priority	MAT	Wort Type Code	Tree Mortality
EC	B or E	07C	311C	Dead or Dying **OR** Green

  - **EC "B" or "E" Tags:**
    - Under **Item Details**, the **Facility Type / Damage / Action (FDA)** of notification should
      - Tree/Vine **/** Decayed/Rotten **/** Install CL Pole

Object	Damage	Activity
Tree / Vine	Decayed / Rotten	Install CL Pole

      - If open EC exists for location and field conditions warrant an expedited Priority, update Pending EC as appropriate.
- If tree condition cannot be adequately assessed, Create an **EC Assessment Tag** for VM Review:

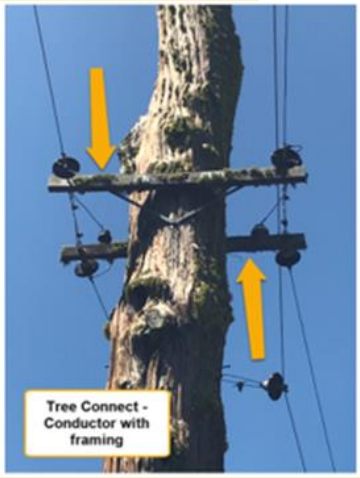
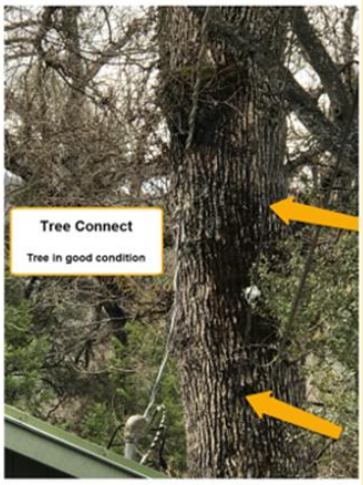
Category	Priority	MAT	Wort Type Code	Tree Mortality
EC	B	07A	311A	Dead or Dying **OR** Green

  - **The EC Assessment Tag MUST ONLY have the designated FDA for Tree Assessment.**
  - Under **Item Details**, the **Facility Type / Damage / Action (FDA)** of notification should be:
    - Tree/Vine / Tree Connect / Assessment

Object	Damage	Activity
Tree / Vine	Tree Connect	Assessment

Job Aid: Overhead Assessment

Examples

TREE CONNECTS
    
At this Location: Tier 3 area, tree connect on dead/dying tree; attachments are solid.
Perform Minor Work: No
Write 3rd Party Notification: No
Write Veg Form:
Write EC Notification: Yes **FDA=** Tree/Vine / Decayed/Rotten / Install Clearance Pole **Priority=** E Tag, 3-6 months, depending on exposure

Job Aid: Overhead Assessment

TREE CONNECT ON DEAD/DYING TREE

At this Location: Tier 2 area, tree connect on dead/dying tree with multiple woodpecker holes and damaged primary insulators

Perform Minor Work: No

Write 3rd Party Notification: No

Write Vegetation Notification: No

Write EC Notification: Yes

FDA= Tree/Vine / Decayed/Rotten / Install Clearance Pole

Priority= A Tag, follow the emergency process

3. Trees Causing Strain or Abrasion to a Secondary Conductor or Service

General Guidance:

If vegetation is:

A. Causing damage to the conductor insulation due to friction (Note: scuffing and polishing is NOT damaged) **OR**

B. Causing strain on the conductor that is adversely affecting other supply facilities.

Note: The inspector should clear the vegetation or move the conductor as minor work if possible. Inspectors should leave the trimmings at the location; use door hanger to notify customer.

If the inspector cannot clear the vegetation or move the conductor:

- For service drops: Create an EC notification
- For secondary conductor spans serving 2 or more customers: Write a Vegetation Management notification with priority based on severity.

Note: Vegetation Management considers secondary as conductor that feeds more than one physical address (per Rule 16); i.e., multiple "service" conductors feeding the **same customer/property are considered service**, not secondary; Inspector will need to **create an EC** in this scenario.

If the inspector sees a hazardous vegetation issue on communication facilities, create a third- party notification.

Minor Work: Yes

EC Notification: Yes

Related Documents: None

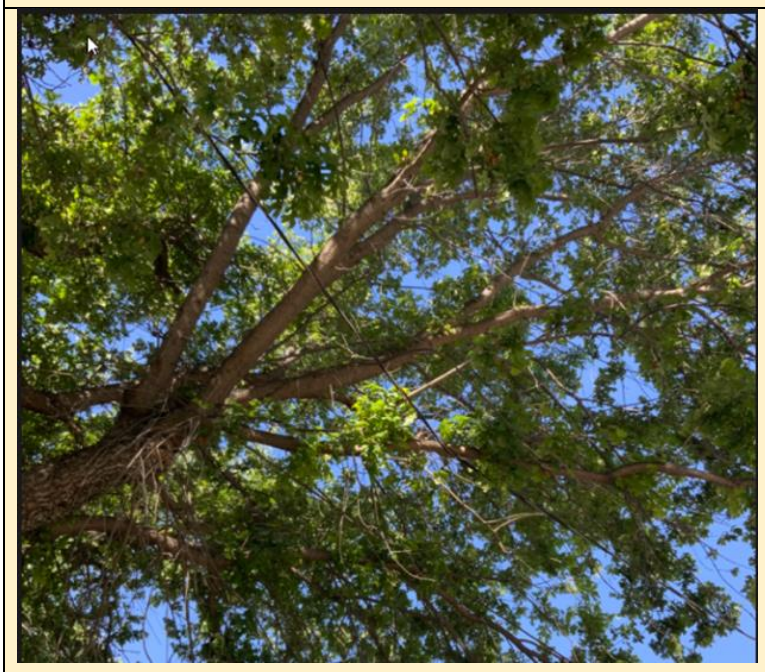
Examples

PHONE TREE CONDITION	
	**At this Location:** Tree putting strain on the pole, due to communication line
	Perform Minor Work: No
	Write 3rd Party Notification: Yes
	Write EC Notification: No

Job Aid: Overhead Assessment

SECONDARY HARD AGAINST TREE	SECONDARY OVERGROWN REDUCING CONDUCTOR CLEARANCES
	
At this Location: Secondary conductor resting on tree/vegetation. Tree causing strain on open wire secondary, **feeding more than one customer**.	
Perform Minor Work: No	
Write 3rd Party Notification: No	
Write Vegetation Notification: Yes **FDA=** Tree / Strain or Abrasion Secondary / Trim **Priority=** E Tag, 3-12 months depending on exposure	
Write EC Notification: No	

Job Aid: Overhead Assessment

Tree Strain on Service Drop	
	**At this Location:** Tree strain on service drop
	Perform Minor Work: No
	Write 3rd Party Notification: No
	Write Vegetation Notification: No
	Write EC Notification: Yes **FDA=** Tree / Vine / Overgrown / Trim **Priority=** E Tag, 3-12 months depending on exposure

4. Trees Overgrown, NOT Causing Strain or Abrasion to a Secondary Conductor or Service

General Guidance: If trees are in contact with bare open wire secondary or bare open wire service **not** causing strain or abrasion, write an EC tag or complete under minor work “trimming” if safe to do so. If trees are in contact with a covered service conductor not causing strain or abrasion, no EC tag is necessary

Minor Work: Yes, if safe to do so

EC Notification: Yes

Related Documents: None

Job Aid: Overhead Assessment

Examples

TREE GROWING INTO BARE OPEN WIRE SECONDARY OR BARE OPEN WIRE SERVICE, NO STRAIN OR ABRASION	
	
At this Location: Tree grown around bare open wire secondary, no strain or abrasion. Spreader bracket already installed.	
Perform Minor Work: No	
Write 3rd Party Notification: No	
Write Vegetation Notification: No	
Write EC Notification: Yes **FDA=** Tree / Vine / Overgrown / Trim **FDA=** Conductor/ Sag / Clearance / Replace **Priority=** E Tag, 3-12m depending on exposure	

Job Aid: Overhead Assessment

TREE GROWING AROUND SERVICE, NO STRAIN OR ABRASION	
	**At this Location:** Tree grown around service, no strain or abrasion.
	Perform Minor Work: No
	Write 3rd Party Notification: No
	Write Vegetation Notification: No
	Write EC Notification: No

Wildlife Protection

1. Existing Migratory Bird Protection Damaged

General Guidance: Evaluate locations where bird protection has previously been installed to assess if it is adequate or is missing or broken. If not adequate or needs repair, create EC notification to repair or install.

When in doubt reach out to Supervisor / Lead to reach out to avian specialist.

Note: If there is a nest at the location, write EC Notification to install bird protection if nest is already abandoned.

Minor Work: No

Related Documents: Utility S2321, 061149

Reference: 066209 – Repair of Damaged Pole Tops

Per 066209:

Active Nests:

- Active Nests are ones with eggs or young in them.
- Do not disturb active nests unless they present an immediate safety or operating hazard.

  Contact Lead / Supervisor or the avian program management personnel or the Bird Hotline at (415) 973-9453 for assistance with an active nest removal or relocation.

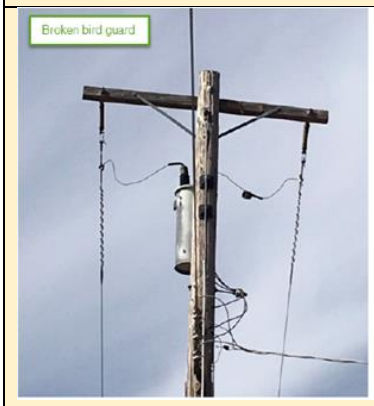
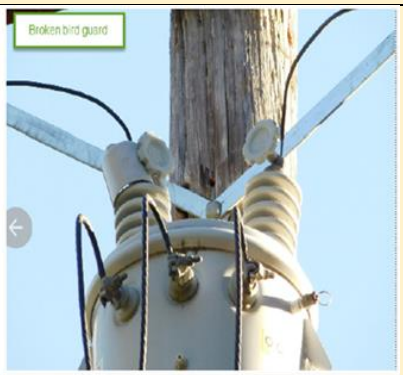
Inactive Nests:

- Inactive nests are those nests without viable eggs or young.
- Inactive nests, except eagle nests or T&E (threatened and endangered) species' nests, can be removed; however, do not keep an inactive nest without notifying avian program management personnel or governmental agencies. Nests may be difficult to identify.

  If there is any uncertainty about the type of nest, contact Lead / Supervisor or the avian program management personnel or the Bird Hotline at (415) 973-9453 for assistance with an active nest removal or relocation.

Examples

BIRD NEST ON TRANSFORMER	
	**At this Location:** Bird Nest on transformer, abandoned, touching high side jumper. **Perform Minor Work:** No **Write 3rd Party Notification:** No **Write EC Notification:** Yes **FDA=** Overhead facility / Bird Nest / Remove **FDA=** Bird protection / Bird Protection Deteriorated / Install **Priority=** A tag, Follow emergency procedure

BROKEN INSULATOR COVERS	
 	**At this Location:** Broken insulator covers **Perform Minor Work:** No **Write 3rd Party Notification:** No **Write EC Notification:** Yes **FDA=** Bird protection / Bird protection deteriorated / Replace **Priority=** E Tag, 3-12 months depending on exposure

2. Exiting Wildlife Protection Damaged

General Guidance: Inspector should create EC notification to replace damaged or missing existing wildlife protection installed in the field (e.g., Cattle Guard, Squirrel Guard).

Minor Work: No

EC Notification: Yes

FDA: Animal Mitigation / Broken / Damaged / Replace

Related Documents: 061149

Note: For these kinds of conditions, use:

Clearance Evaluation Job Aid

This section is developed based on:

- TD-2305M-JA12 – Overhead Clearance Evaluation
- 022158 – Clearance Tables CPUC GO95
- 022187-Vertical Separation of Overhead Transmission, Distribution, and Telephone Circuits

to assist Electric Distribution Compliance Inspectors, PG&E Employees, and Contractors in assessing and evaluating conductor clearance issues they visually identify in the field. While this section does not show all examples of allowed clearances, please review the references above for GO95 conductor clearance tables or contact your lead / supervisor for guidance.

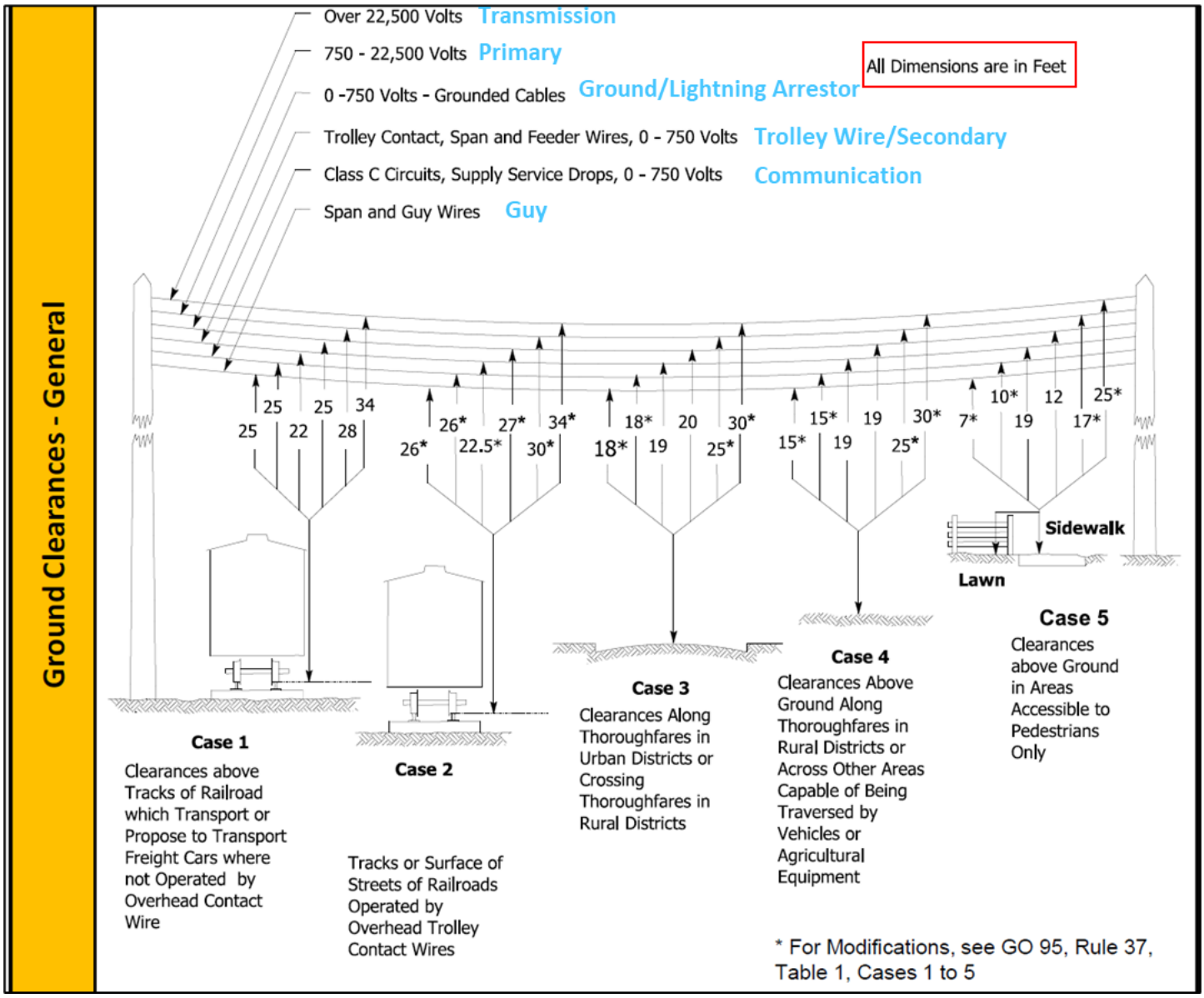
This section addresses common conductor clearances such as:

- Wire/Ground minimum allowed clearance (ft)
- Service Drop minimum allowed clearance (ft)
    - Residential
    - Commercial
- Wire/Wire minimum allowed clearance (ft)
    - On same pole
    - On crossing poles
- Wire/Building minimum allowed clearance (ft)

Job Aid: Overhead Assessment

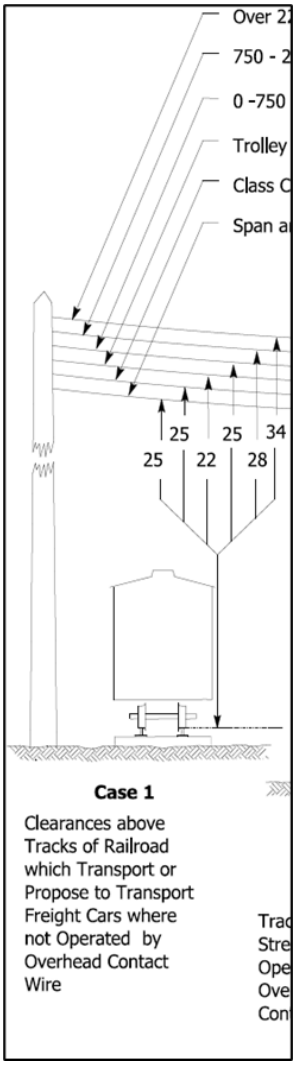
Ground Clearances

Guidance Document References:
TD-2305M – EDPM 2011 Manual
Engineering Document 022158 – Clearance Tables CPUC General Order 95

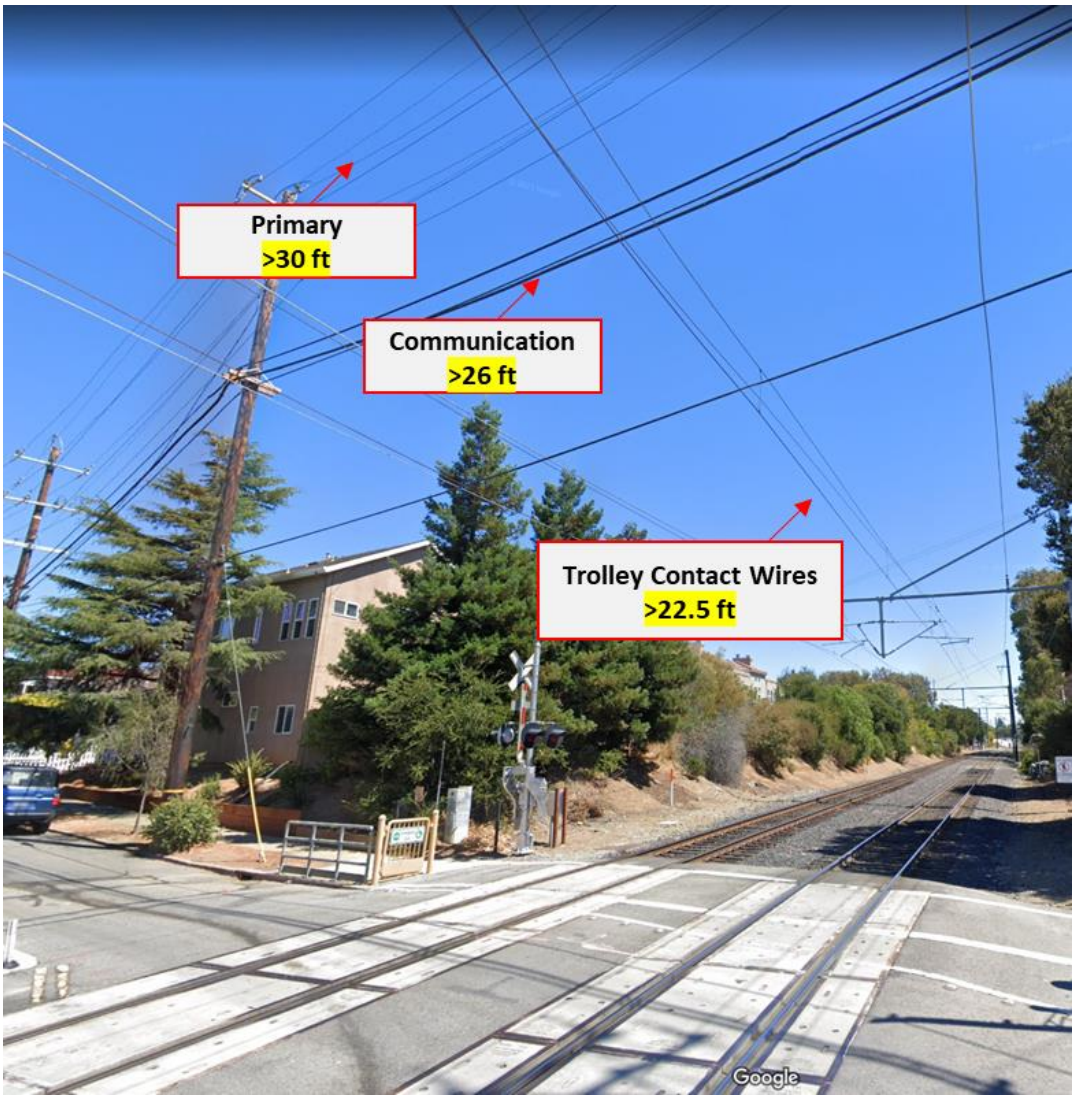


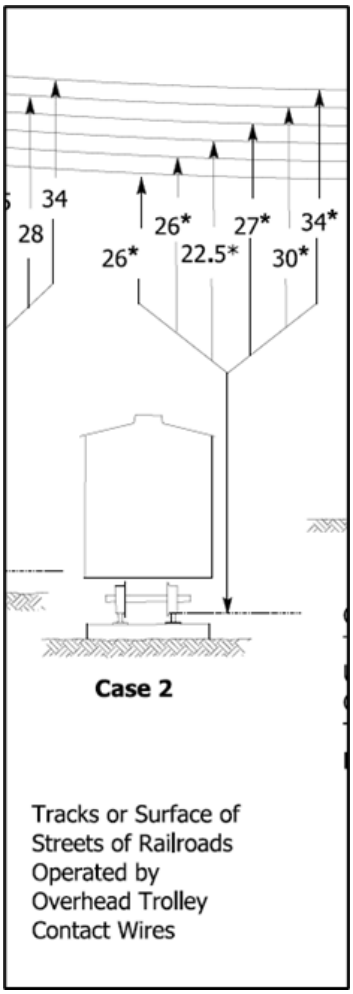
Job Aid: Overhead Assessment

Case 1: Non-Contact Railroad

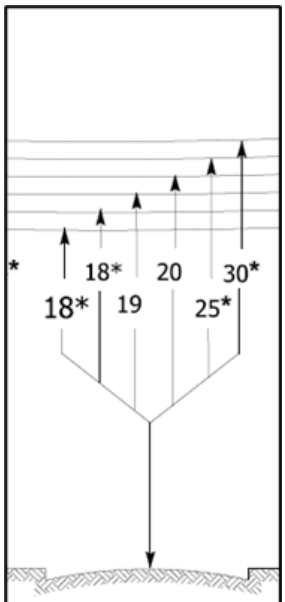


Case 2: Contact Railroad





Case 3: Along or Crossing an Urban Road

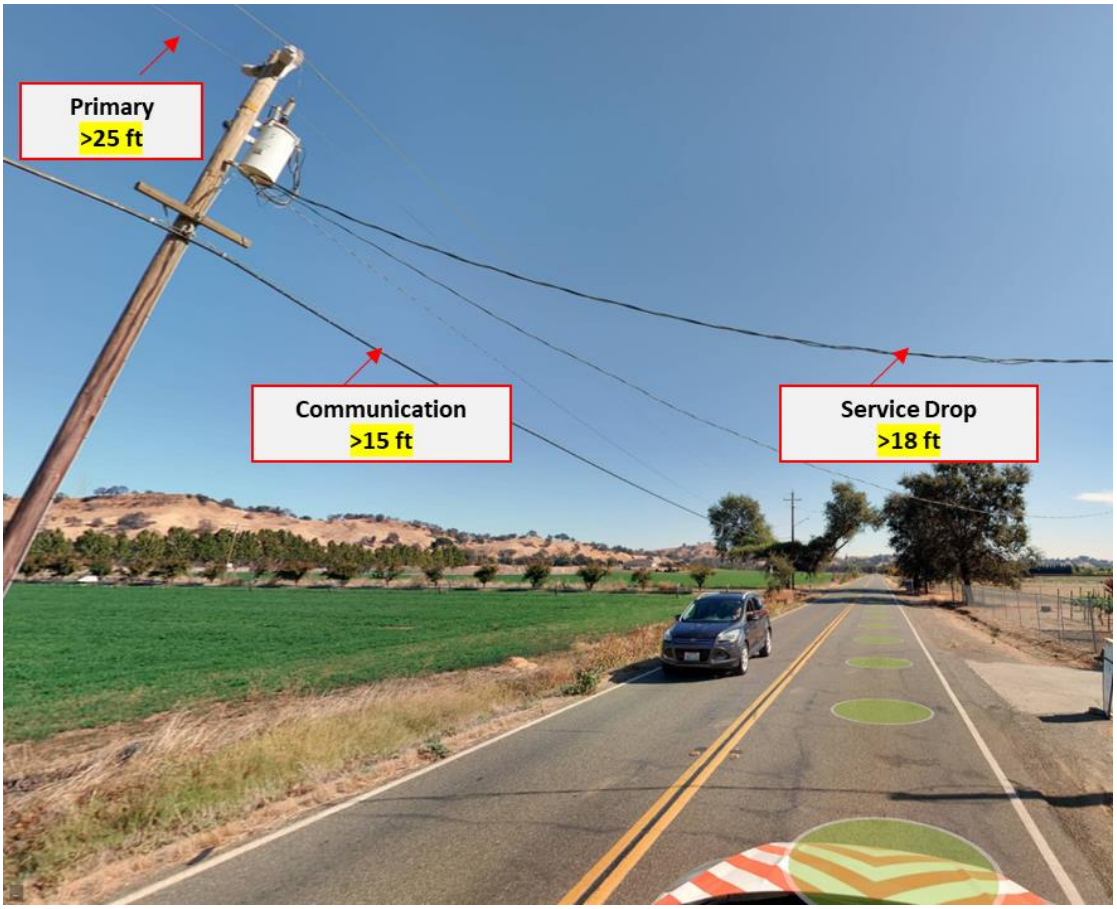


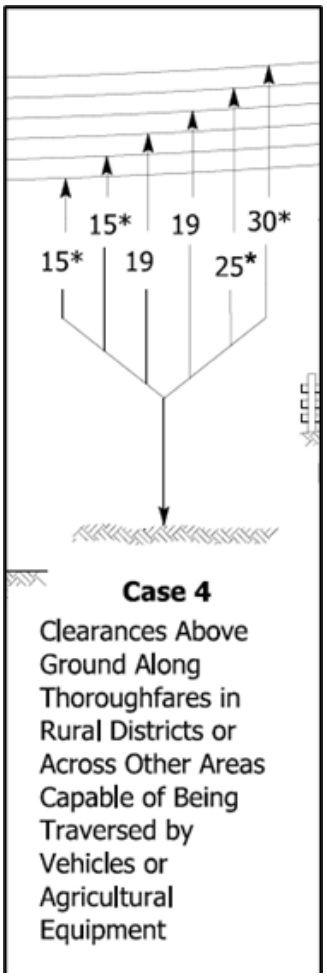
Case 3

Clearances Along Thoroughfares in Urban Districts or Crossing Thoroughfares in Rural Districts

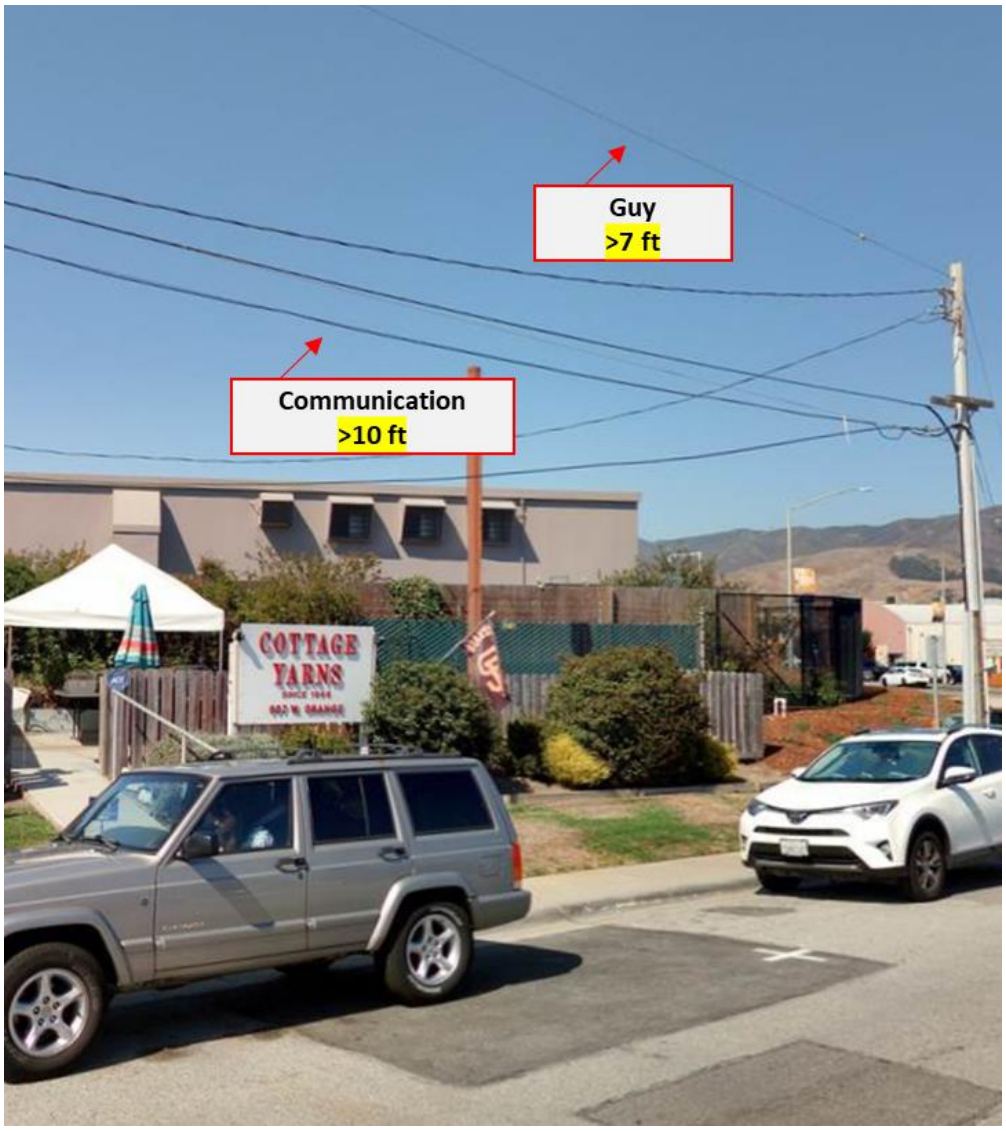
Case 4: Along or Crossing a Rural Road

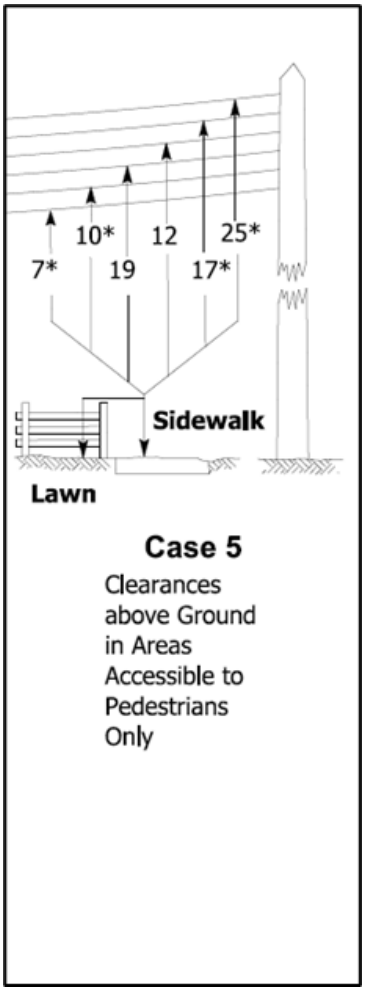
NOTE: Due to the fisheye lens and the online street view, the poles appear to be leaning but are not.





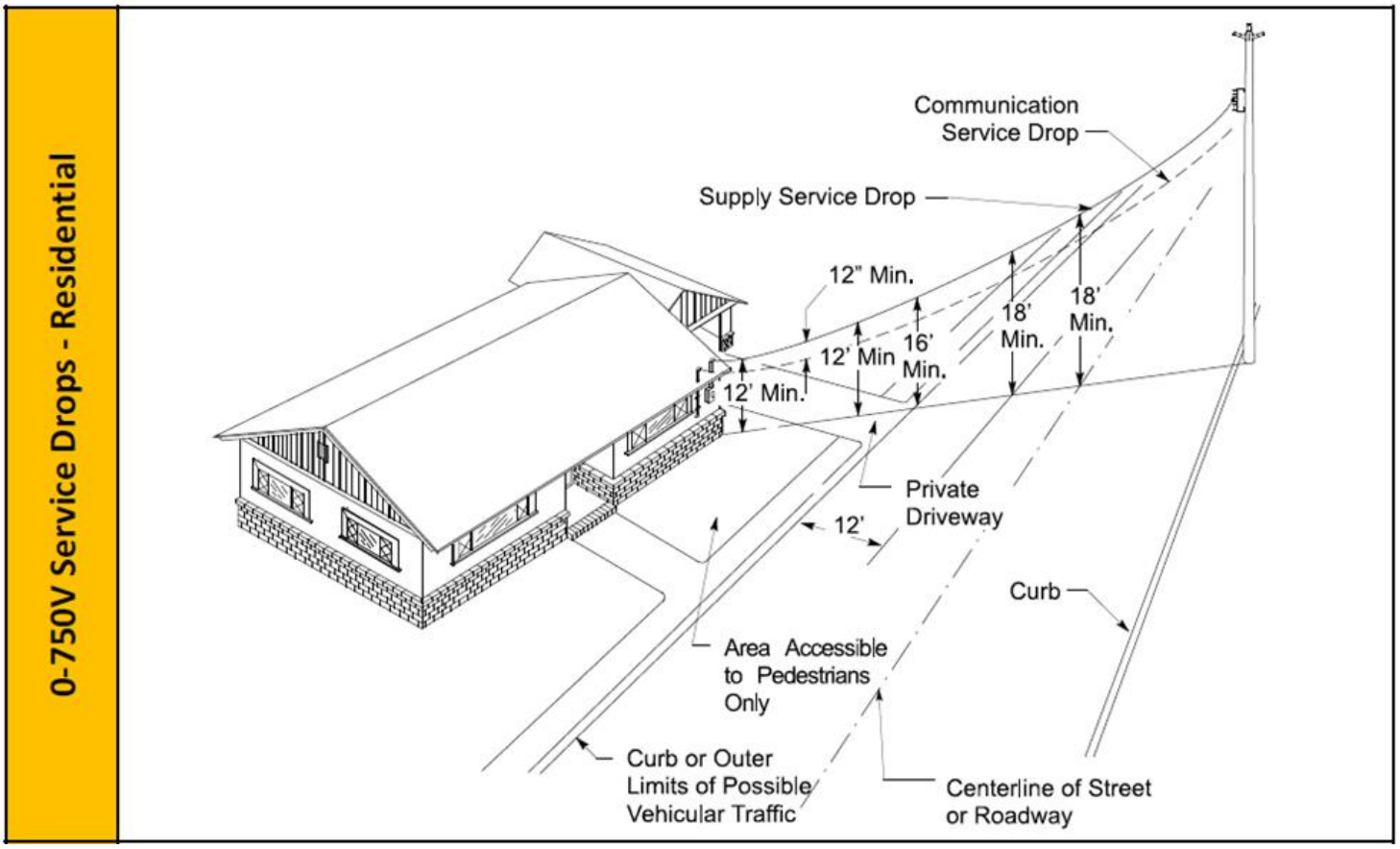
Case 5: Pedestrian Access - Sidewalk





Job Aid: Overhead Assessment

0-750V Service Drops – Residential



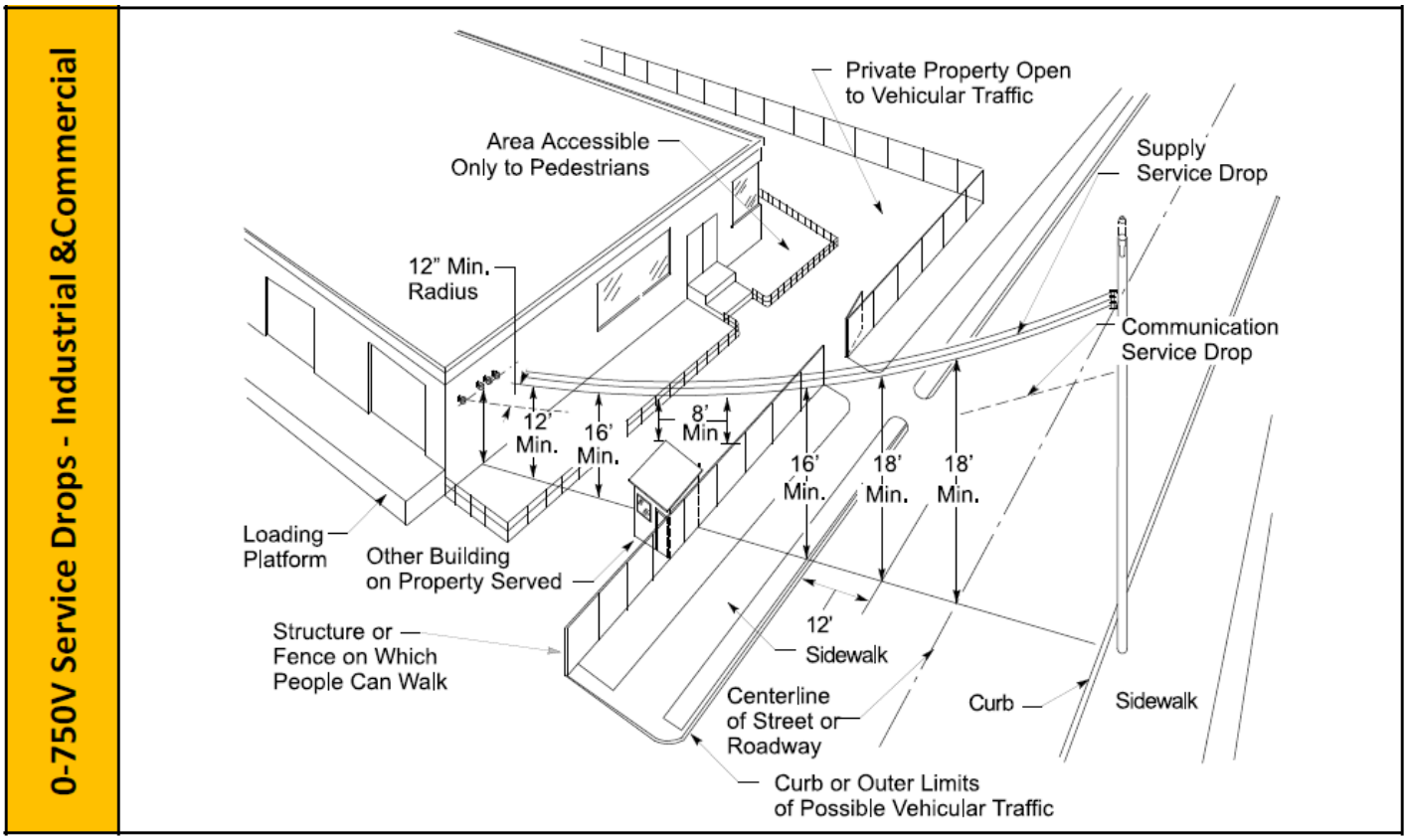
Job Aid: Overhead Assessment

Service Drop – Residential

NOTE: Due to the fisheye lens and the online street view, the poles appear to be leaning but are not.

Job Aid: Overhead Assessment

0-750V Service Drops – Industrial and Commercial

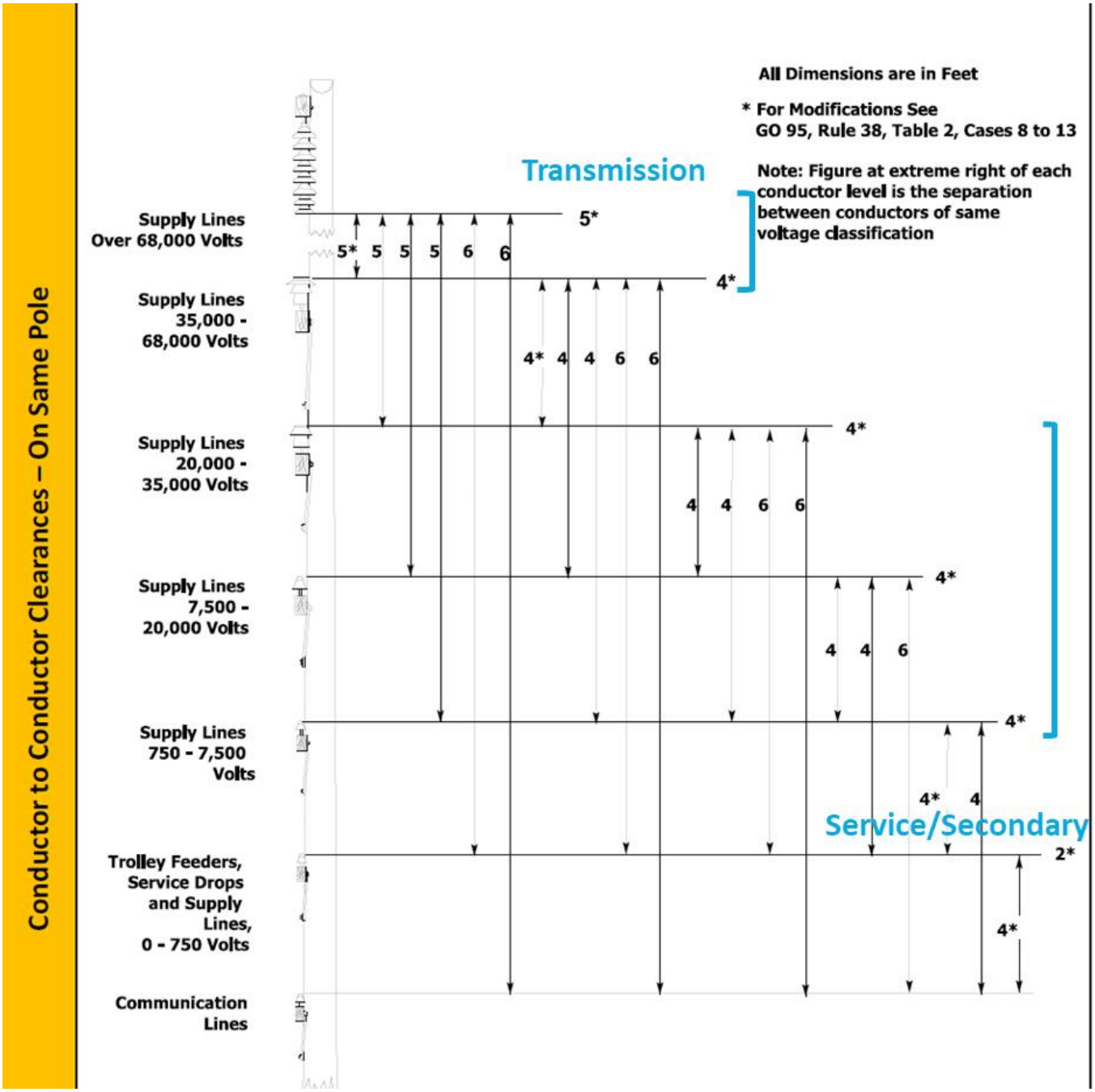


Job Aid: Overhead Assessment

Service Drop – Commercial

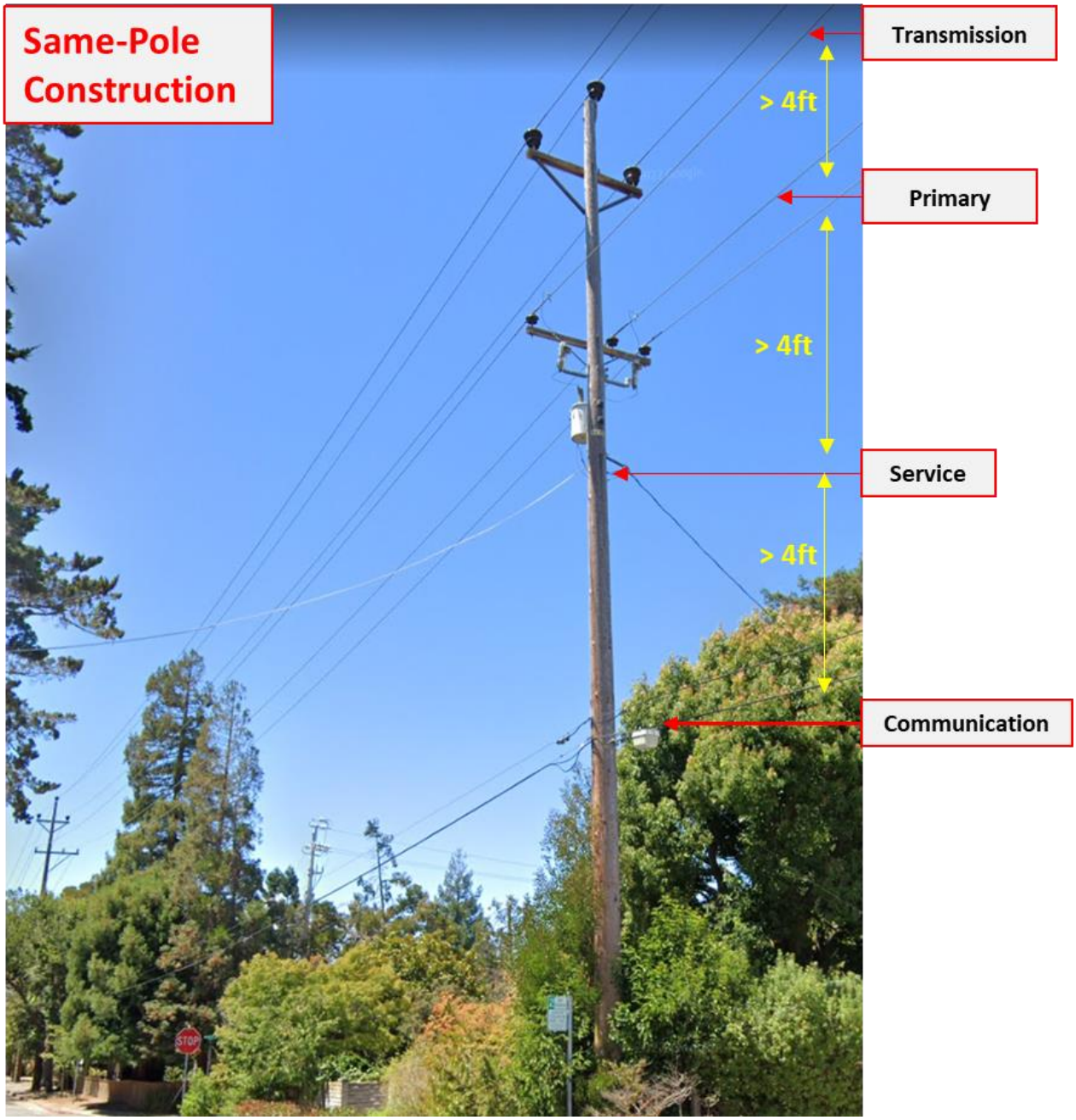
Job Aid: Overhead Assessment

Conductor to Conductor Clearance – On Same Pole



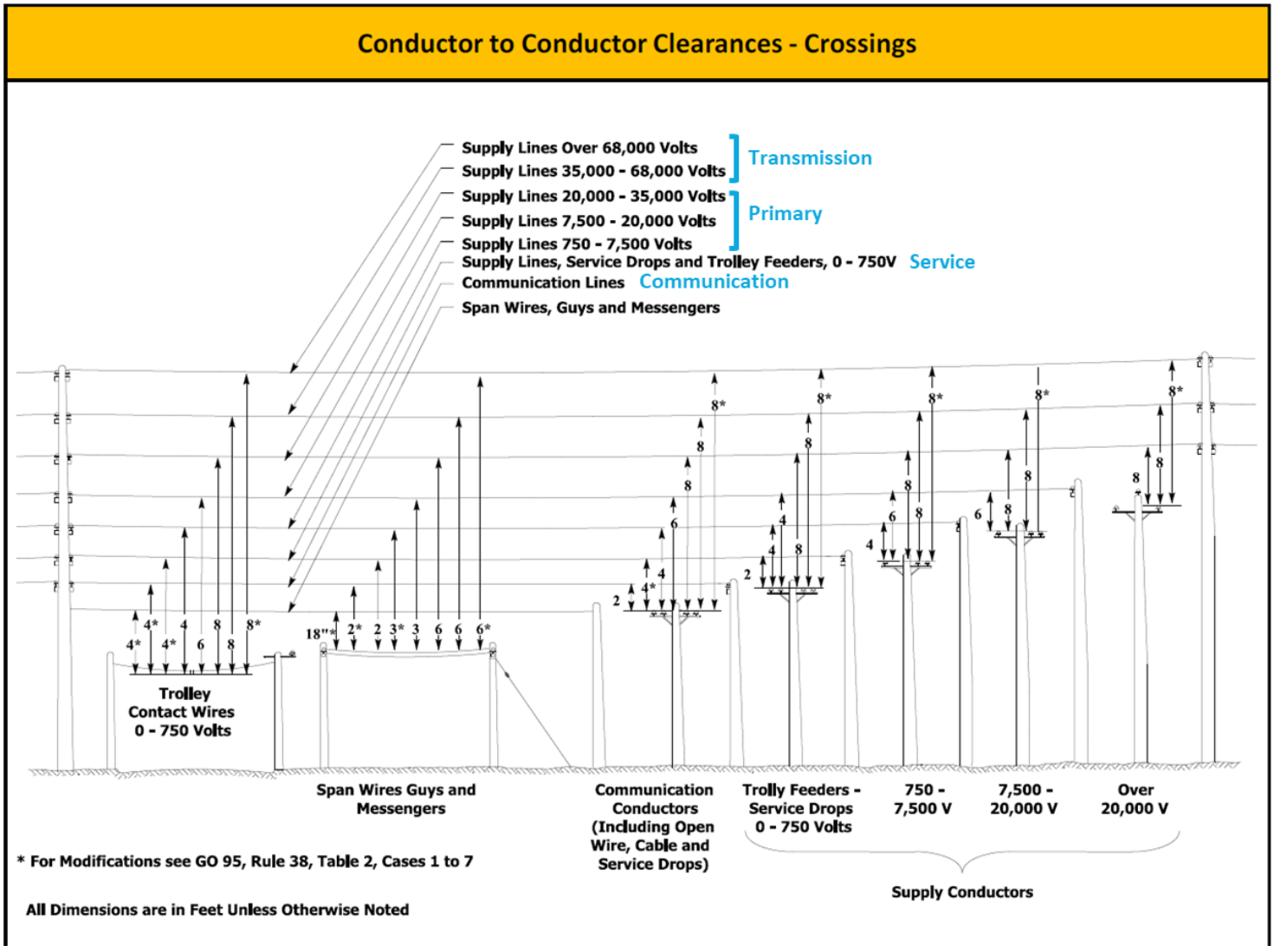
Job Aid: Overhead Assessment

Same Pole Conductor Clearances



Job Aid: Overhead Assessment

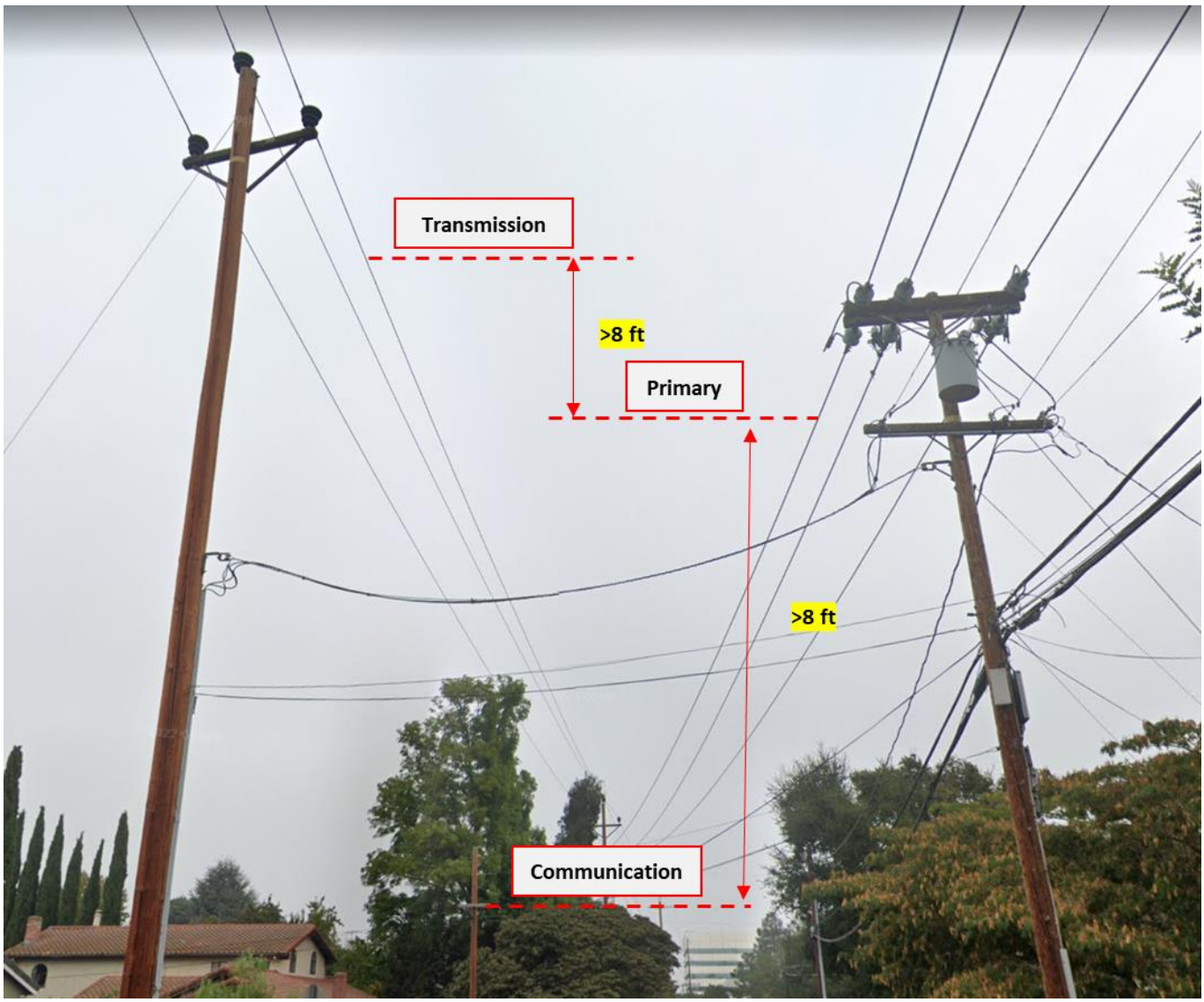
Conductor to Conductor Clearance on Crossing Poles



- 300kV plus transmission circuits require 156 inches of clearance to the primary.

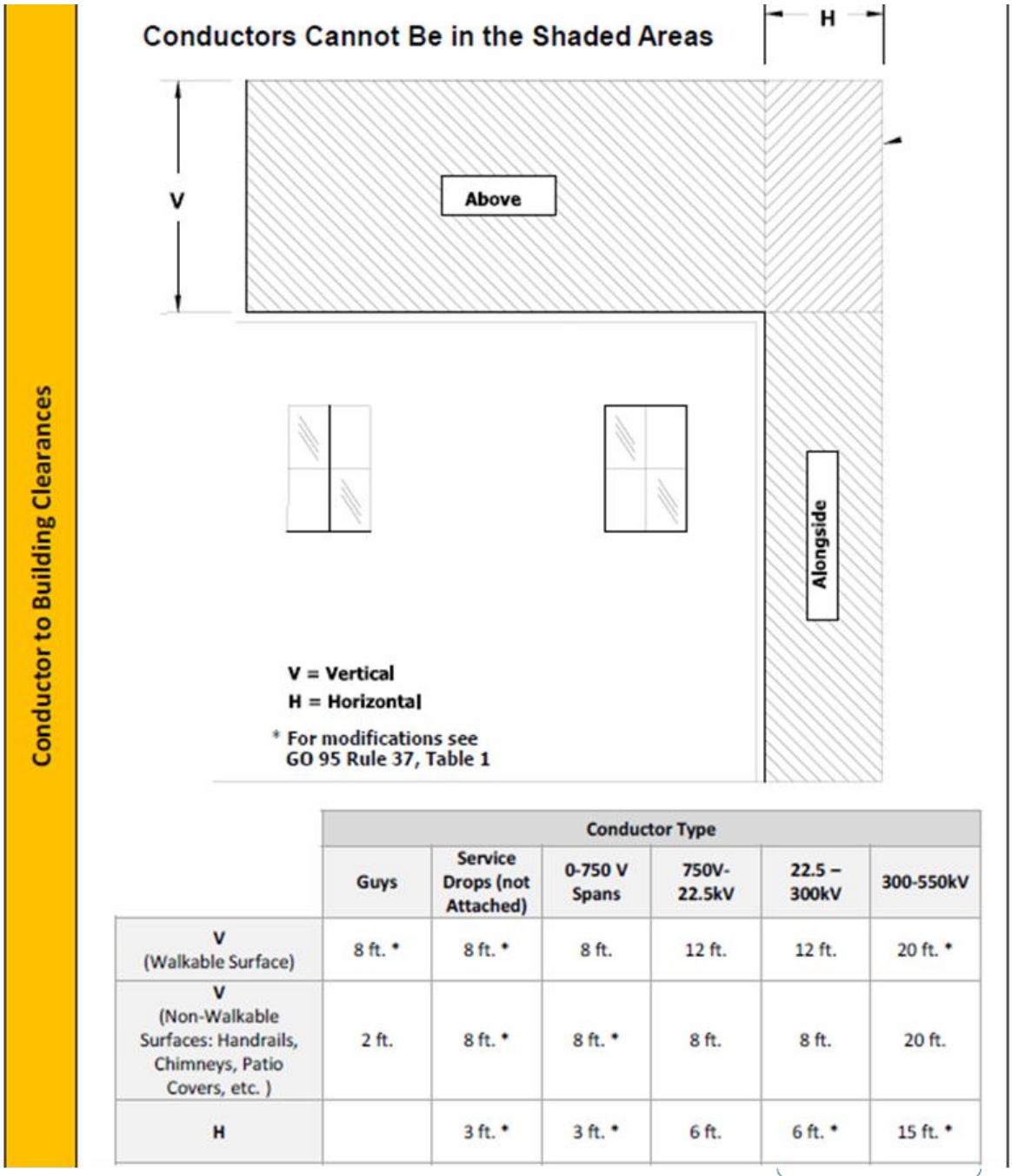
Job Aid: Overhead Assessment

Crossing Poles Clearances



Job Aid: Overhead Assessment

Conductor to Building Clearances



	Conductor Type					
	Guys	Service Drops (not Attached)	0-750 V Spans	750V-22.5kV	22.5 – 300kV	300-550kV
V (Walkable Surface)	8 ft. *	8 ft. *	8 ft.	12 ft.	12 ft.	20 ft. *
V (Non-Walkable Surfaces: Handrails, Chimneys, Patio Covers, etc.)	2 ft.	8 ft. *	8 ft. *	8 ft.	8 ft.	20 ft.
H		3 ft. *	3 ft. *	6 ft.	6 ft. *	15 ft. *

Service Secondary Primary Transmission

Job Aid: Overhead Assessment

Above Building Clearance

Job Aid: Overhead Assessment

Alongside Building Clearance

Job Aid: Overhead Assessment

FDA - Distribution OH Facility Damage Action Table

Table 1 (New FDAs in RED)

Overhead Facility	Damage	Action	Default Priority
Anchor	Broken/Damaged	Repair	E
		Replace	E
	Corroded	Repair	E
		Replace	E
	Missing	Install	F
	Soil/Eroded/Graded	Adjust	F
		Replace	F
Animal Mitigation	Broken/Damaged	Replace	E
	Mitigation Missing	Install	E
Bird Protection	Bird Protection Deteriorated	Replace	E
		Install	E
Bonding	Broken	Repair	E
	Broken	Replace	E
Booster/Regulator	Broken/Damaged	Repair	E
		Replace	E
	Burnt	Repair	E
	Excessive Operation	Overhaul	E
	Leaks/Seeps/Weeps	Clean	E
		Repair	E
		Replace	E
Buddy Pole	Improperly Supported	Repair	E
Capacitor	Broken/Damaged	Repair	E
		Replace	E
	Burnt	Repair	E
		Replace	E
	Leaks/Seeps/Weeps	Clean	B
		Repair	E
		Replace	E
CB Pole	Broken/Damaged	Replace	F
	Burnt	Replace	E
	Decayed/Rotten	Replace	F
Climbing Space	Obstructed	Adjust	F

Conductor	Broken/Damaged	Repair	E
		Replace	E
	Burnt	Repair	E
		Replace	E
	Clearance Impaired	Adjust	E
		Install Cl Pole	E
		RayChem	E
	Floater	Repair	E
	Idle Facility	Remove	E
	Improper Connection	Adjust	E
	Overloaded	Test	E
	Sag/Clearance	Adjust	E
		Install Spreader Bracket	E
		Replace	E
	Loose Lashing	Repair	E
	Broken Splice	Replace	B
	Splice Tied In	Replace	E
Connector	Burnt	Replace	E
	Corroded	Repair	E
		Replace	E
	Incorrectly Installed	Replace	E
	Temp Differential	Replace	E
	Insulation Deteriorated	Repair	E
Crossarm	Broken/Damaged	Repair	E
		Replace	E
	Burnt	Repair	E
		Replace	E
	Decayed/Rotten	Repair	E
		Replace	E
Cutout	Broken/Damaged	Repair	E
		Replace	E
	Clearance Impaired	Adjust	E
	Flashed	Repair	E
		Replace	E
Decorative Streetlight	Broken/Damaged	Replace	E
	Missing	Install	E

Dead-End Cover (DCOV)	Broken / Damaged	Replace	F
	Broken / Damaged	Repair	F
Fault Indicators	Broken/Damaged	Replace	E
Fuse	Flashed	Repair	E
	Flashed	Replace	E
	Clearance Impaired	Adjust	E
	Broken	Repair	E
	Broken	Replace	E
Ground	Broken/Damaged	Repair	B
		Replace	B
	Exposed	Repair	F
	Missing	Install	E
Guy	Broken/Damaged	Repair	E
		Replace	E
	Clearance Impaired	Adjust	F
	Corroded	Repair	E
		Replace	E
	Loose	Adjust	F
	Missing	Install	F
	Overgrown	Trim	E
	Strain/Abrasion	Adjust	F
		Remove	F
Guy Marker	Missing	Install	F
		Replace	F
Hardware/Framing	Bird Prot. Required	Install	E
	Birdcage	Install	E
	Broken/Damaged	Repair	E
		Replace	E
		Remove	E
	Loose	Adjust	E
	Missing	Install	E
High Sign	Missing	Install	F
	Broken	Replace	F
Insulator	Broken/Damaged	Replace	E
	Flashed	Replace	E
	Primary Squatter	Repair	E
		Replace	E
	Secondary Squatter	Repair	E

		Replace	E
Jumper	Burnt	Replace	E
	Clearance Impaired	Adjust	E
		Replace	E
LAPP Insulator	Broken/Damaged	Replace	E
Lightning Arrester	Broken/Damaged	Repair	E
		Replace	E
	Flashed	Repair	E
		Replace	E
Marking	Broken/Damaged	Replace	F
	Missing	Install	F
Molding	Broken/Damaged	Repair	F
		Replace	F
	Loose	Adjust	F
	Missing	Install	F
OH Facility	Bird Prot. Required	Install	E
	Customer Related	Access	B
		Appointment	B
		Refusal	B
	Graffiti	Paint	E
	Idle Facilities	De-Energ	E
		Remove	F
		Transfer	F
	Limited Access	Inspect	B
		Patrol	E
		Remove	E
	Obstructed	Inspect	B
		Remove	E
		Replace	B
	Transmission Issue	Create LC	B
	Bird Nest	Remove	E
Operating Number	Broken / Damaged	Replace	E
	Missing	Install	E
Pole	Broken/Damaged	Pole Stub	E
		Re-Frame	E
		Repair	E
		Replace	E
	Burnt	Pole Stub	E

		Repair	E
		Replace	E
	Clearance Impaired	Repair	E
		Replace	E
	Decayed/Rotten	Pole Stub	E
		Pole Top Repair	E
		Repair	E
		Replace	E
	Idle Facilities	Remove	F
	Leaning	Adjust	E
		Replace	E
	No Safe Access	Inspect	B
	Overloaded	Replace	E
		Test	E
	Woodpecker Damage	Assessment	E
	Woodpecker Damage	Repair	E
	Woodpecker Damage	Replace	E
	Soil Eroded	Replace	E
Pole Step	Clearance Impaired	Remove	F
Recloser/Sectionalizer	Broken/Damaged	Repair	E
		Replace	E
	Excessive Operation	Overhaul	E
	Flashed	Repair	E
		Replace	E
	Leaks/Seeps/Weeps	Clean	E
		Repair	E
		Replace	E
Relinquished Pole	Decayed / Rotten	Remove	E
Riser/Pothead	Broken/Damaged	Repair	E
		Replace	F
	Flashed	Repair	E
		Replace	F
	Installed in Error	Relocate	E
RTVI	Interference	Repair	E
		Replace	E

SCADA/PDAC	Broken/Damaged	Repair	F
		Replace	F
	Leeks/Seeps/Weeps	Repair	F
		Replace	F
		Test	B
~~**Secondary Service Conductor (SEC_SVC Conductor)**~~	~~Splice Installed~~	~~Replace~~	~~F~~
Steel Lattice Pole	Guarding Missing	Install	E
Steel Lattice Tower	Broken/Damaged	Replace	E
Streetlight	Broken/Damaged	Repair	E
		Replace	E
	Missing	Install	E
Switch	Broken/Damaged	Repair	E
		Replace	E
Tree Wire	Exposed	Repair	F
Tie Wire	Broken/Damaged	Replace	E
	Loose	Replace	E
	Improperly Installed	Replace	E
	Corroded	Replace	E
Trans_Dist Pole	Bridging Broken	Repair	E
	Bridging Missing	Install	E
Transformer	Broken/Damaged	Repair	E
		Replace	F
	Corroded	Replace	E
	Flashed	Repair	E
		Replace	E
	Idle Facilities	Remove	F
	Leeks/Seeps/Weeps	Clean	B
		Repair	F
		Replace	E
		Re-Check	B
	No Common Neutral	Relocate	E
	Overloaded	Test	E
	Parallel	Replace	E

Tree/Vine	Clearance Impaired	Remove	E
		Trim	E
	Decayed/Rotten	Install Cl Pole	E
	Overgrown	Remove	E
		Trim	E
Trip Saver	Broken/Damaged	Repair	E
		Replace	E
Under-Arm Bus	Broken/Damaged	Repair	F
Vis-Strips	Broken / Damaged	Replace	F

Adhoc Inspection Process

General Guidance: The Adhoc Inspection Process can be used for any unmapped distribution structure i.e., a structure without an SAP number.

Warning: Once Adhoc inspection process is submitted, there is **NOT** a process to cancel if a mistake is made. The cancellation must be done manually by a distribution asset strategist by emailing DistributionAssetStrategist@pge.com.

In the Inspect App:

Come across a Distribution Structure / Tree Connect that is unmapped within the map and have already started the work order:

1. Investigate to ensure that the structure is not located somewhere else on the map
    a) If mapped but in the wrong location:
        - Perform the inspection on the map structure and create a map change to move the structure to the correct location.
    b) If confirmed unmapped
        - On map screen long touch screen at the exact location that the structure exists to drop a pin.
        - Actions Button
            - Start Adhoc Inspections Button
                - Complete “Add-Pole” Map correction form
                - Complete Inspection Form

Note: Customer owned pole should only be selected when the pole being inspected is customer owned with PG&E equipment.

Glossary

[California Power Line Fire Prevention Field Guide]

Open Wire Secondary

Field condition of open wire secondary built on a cross-arm

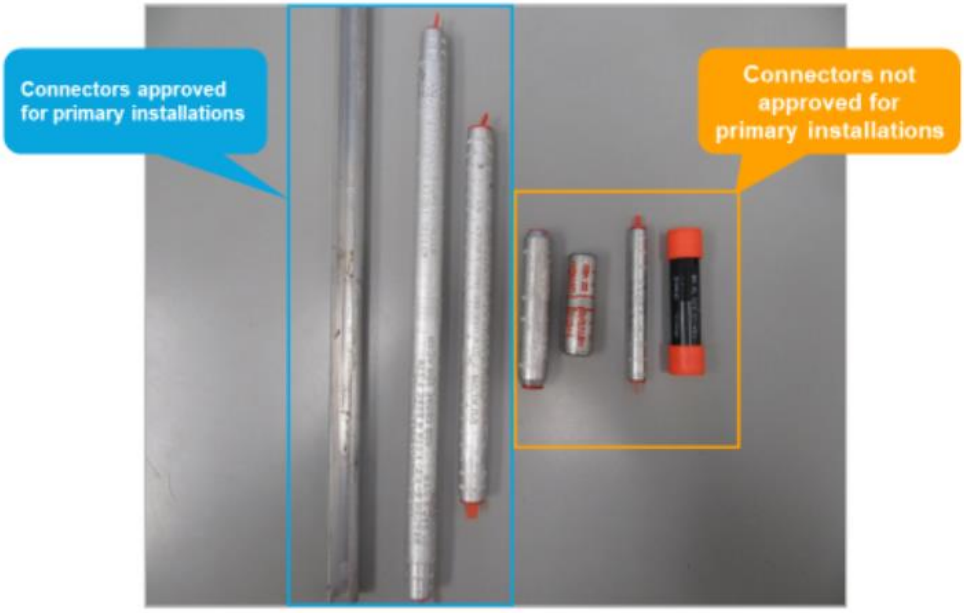
Vibration Damper

Bird protection

Center phase cover installed on conductor

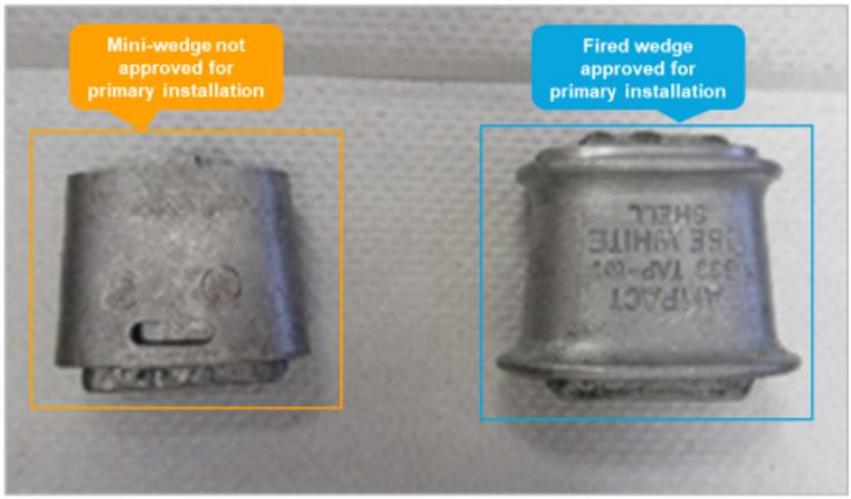
Flying Bells

Connectors / Splices



Example slide 132: Approved and Unapproved connectors for primary

Wedge Connectors



Example slide 132: Approved and Unapproved connectors for primary.

Needed Pictures

Here are questions that may be asked in the checklist

1. Pole
   - Top 1/3rd
   - Middle 1/3rd
   - Bottom 1/3rd
   - Entire Pole

Examples	
	
Top 1/3rd	Middle 1/3rd
	
Bottom 1/3rd	Entire Pole

2. Pole Age
   - Manufacture plate
   - Install nail

	
Manufacturing Plate	Install Nail Date

3. PTT Records (if available)
   - Most recent Intrusive Test year
   - Confirm no “S” Stubbable Pole or “N” Non-Stubbable Pole
   - Confirm if Tag needs to be upgraded (arrow)

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<tr>
<td> 
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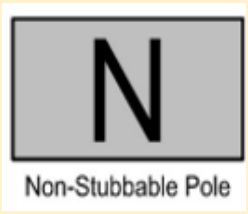
<td>  </td>
<td> 
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</tr>
<tr>
<td>Intrusive Test Oval Plate – Partial Dig</td>
<td>S Tag PTT Plate – Pole needs to be stubbed</td>
<td>N Tag PTT Plate – Pole cannot be stubbed and needs to be replaced</td>
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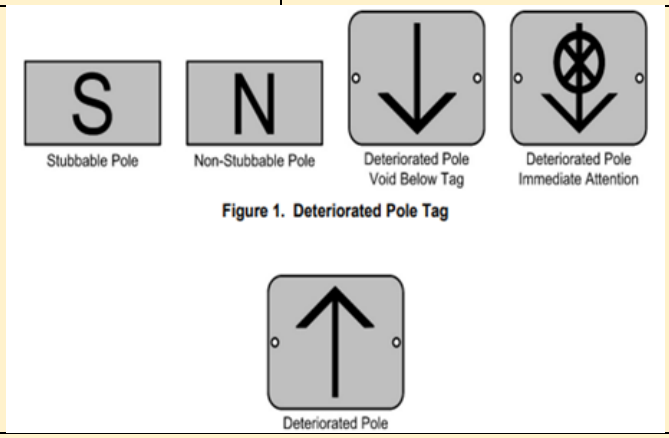
<tr>
<td>  </td>
<td colspan="2"> 
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<tr>
<td>Intrusive Test Circle Plate – Full Dig</td>
<td colspan="2">Legend</td>
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</table>

4. Anchor
   - Close up Unobstructed View of anchor(s)
   - May need to unearth anchor, if possible
   - If anchor is buried, still provide picture

Missing / Burided Anchors was a Common Inspection QC finding		
		
Bottom 1/3rd Picture	Before: Vegetation Growth	After: Cleared Vegetation