SOUTHERN CALIFORNIA EDISON
TRANSMISSION AND DISTRIBUTION

Transmission Inspection and Maintenance Program (TIMP)

2024— FOURTH QUARTER ISSUE
December 20, 2024

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Revision 0

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Transmission Inspection and Maintenance Program (TIMP)

Revision Summary

2024 Fourth Quarter Issue

Effective Date: December 20, 2024

Overview

The main purpose of this revision summary is to describe new revisions to this manual. (Some or all of the information may have been previously communicated to field personnel by other means.)

Table 1 lists the revisions. Click-able page/sheet numbers link directly to individual revisions or the first of a series of revisions.

Table 2 defines four types of revisions: (1) Admin (Administrative), (2) Technical, (3) New, and (4) Pilot.

Note: **Admin** *and* **Technical** *revisions to existing standards or existing* **Pilot** *projects are identified with change bars* ❙ *in the left margin.* **New** *standards (as well as new pilot projects) do not receive change bars. Editorial revisions, such as corrections to spelling, do not receive change bars.*

A Getting Help section provides contact information.

Table 1: Revisions

Chapter	Page	Description	Type
CG-2	4	Added more conditions for Transmission and Distribution assets	Technical
	5-10	Created new section 2.1: Pin/Cotter Decision Tree Created new section 2.2: Bolt/Nut/Cotter Decision Tree	New

Table 2: Revision Types

Type	Definition
Admin	Administrative revisions do not significantly affect design, construction, maintenance or operation of the electrical distribution, substation, and transmission systems. They do not require Standards Review Team (SRT) or management approval; however, they have been approved by other organizations, as appropriate. They may include updates to material codes, updates to references, updates to standards for clarity, or deletions of outdated information.
Technical	Technical revisions are engineering changes to existing standards. They affect the design, construction, maintenance or operation of the electrical distribution, substation, and transmission systems. They require SRT and management approval.
New	Refers to a new standard. New technical standards require SRT and management approval.
Pilot	A *Pilot* is an in-field evaluation of a piece of equipment or work method, with the intention of approving for standardized use. Pilot standards will have a PILOT watermark so that they are easily identified throughout this manual.

Getting Help

Technical Issues

If you have any comments, corrections, questions, or suggestions concerning manual revisions, please contact Standards Engineering at email: standards.engineering@sce.com.

Address Corrections

Send address changes to:

Southern California Edison
7400 Fenwick Lane
Westminster, CA 92683-5288

ATTN: Standards Engineering

Director of Asset Management Program

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GE–1: General Overview of Distribution Inspection and Maintenance Program

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GE–1: General Overview of Distribution Inspection and Maintenance Program

1.0 Introduction

1.1 Mission Statement

The Transmission Inspection and Maintenance Program (TIMP) seeks to ensure public and worker safety and regulatory compliance by completing Transmission scheduled Inspections and Circuit Patrols as described in the Transmission Operations Maintenance Policies and Procedures (TOM) and Telecom Detailed Inspections and Patrols as described in Sections 4.0 and 5.0 of Transmission Telecom (TTC) Outside Plant Communication Inspection and Maintenance Guidelines. In addition, this program will help to ensure that maintenance is performed as described in Chapter IM-3 of the TOM and Telecom Maintenance and meets or exceeds in the requirements of General Order (G.O.) 95 Rules 31.1 and 31.2, other applicable G.O. 95 and G.O. 128 requirements, Southern California Edison (SCE) standards, and good utility practice.

This manual provides guidance to SCE and contract personnel performing detailed inspections and patrols. This manual also provides guidance for prioritizing G.O. 95 and G.O. 128 infractions and other maintenance activities that need to be properly identified, correctly rated, and recorded.

1.2 Program Overview

The TIMP is an ongoing company-wide program established to maintain the Transmission system and Communication network in accordance with good utility practices and the California Public Utilities Commission's (CPUC) G.O. 95, G.O. 128, and G.O. 165.

In addition to compliance inspections, SCE has established a Transmission Wildfire Inspection Program to address supplemental inspections of structures in High Fire Risk Areas (HFRA). SCE's HFRA encompasses areas designated by the CPUC as Tier 3 (Extreme) and Tier 2 (Elevated) in the High Fire-Threat District. Detailed inspections performed in HFRA are based on risk analysis, operational considerations, and/or compliance.

NOTE

High Fire-Threat District (HFTD) is CPUC's terminology for areas comprised of CPUC's Tier 2 and Tier 3 Fire Threat map, referred to as HFRA by SCE.

SCE has developed and strives to improve its maintenance and inspection programs to help ensure the safety of its workers and the public, as well as to provide reliable service to our customers.

SCE launched Edison Carrier Solutions (ECS) in 1999 to serve as a facilities-based competitive local exchange carrier that leases surplus network fiber optic cable to third party communication carriers.

In 2016, ECS split into two organizations:

- Transmission Telecom - Responsible for supporting the utility communications network by designing, installing, inspecting, and maintaining outside plant (OSP) that enables transmission line protection, monitoring, and remote operation capabilities of electrical equipment inside many SCE substations and service centers.
- ECS - Responsible for managing SCE's fiber and wireless services business.

1.3 Organizational Responsibilities

A. Transmission Resource & Work Management

Transmission Resource & Work Management (TR&WM) is responsible for the accuracy and oversight of the TIMP, including:

- Support with internal and external audits (CPUC audits of G.O. 95/128/165, California Independent System Operator [CAISO], Western Electricity Coordinating Council [WECC]).
- Providing annual informal training.
- Developing performance measures.
- Analyzing and tracking inspection program performance.

B. Transmission Construction and Maintenance

Transmission Construction and Maintenance (TC&M) is responsible for identifying and scheduling resources to achieve program goals and seeking to ensure:

- Patrols and Detail Inspections are completed correctly and timely.
- Discrepancies are identified and rated correctly.
- Rated discrepancies are recorded timely.
- Priority 2 rated discrepancies are reviewed and approved by the Gatekeeper in the Work Management System (WMS).
- Resultant maintenance is scheduled properly.
- Maintenance is completed safely and according to policy.

C. Transmission Telecommunication

Transmission Telecommunication (TTC) group is responsible for inspecting and maintaining SCE's outside plant communications network by identifying and scheduling resources to achieve program goals and seeking to ensure:

- Patrols and Detail Inspections are completed correctly and timely.
- Discrepancies are identified and rated correctly.
- Rated discrepancies are recorded timely.
- Priority 2 rated discrepancies are reviewed and approved by the Gatekeeper.
- Resultant maintenance is scheduled properly.
- Maintenance is completed safely and according to policy.

D. Transmission Road and Right of Way

The Transmission Road and Right of Way (TROW) Program is responsible for coordinating with the Asset Strategy and Planning Organization (ASP) to support the development of a risk prioritization methodology for TROW and to establish annual program scope. Prioritization will consider various risk factors including but not limited to:

- Pole replacements.
- TROW notifications with exceptions and/or upcoming due dates.
- HFRA circuit risk score.
- Circuits impacted by Public Safety Power Shutoff (PSPS).

TROW oversees maintenance activities in accordance with the terms of relevant rights documents, public regulations, ordinances, and corporate standards.

E. Transmission Wildfire Program

The SCE Transmission Wildfire Inspection Program encompasses supplemental inspections of structures in High Fire Risk Areas (HFRA.) The High Fire Risk-based detail inspections are based on risk analysis, operational considerations, and/or compliance. These inspections are performed in addition to compliance program inspections, however, a detailed inspection completed in conjunction with the Transmission Wildfire Program may be counted towards the three-year detailed inspection requirement.

F. Transmission Aerial Inspection Program

The SCE Aerial Inspection Program supports SCE's Wildfire Mitigation Plan (WMP) which supplements SCE's ground-based inspections. The Aerial Inspection Program was created to reduce wildfire risk by assessing assets in HFRA from the air, thus enabling detection of Priority 1 and 2 conditions that are not visible from the ground.

2.0 Definitions

2.1 Annual (Inspection)

Twelve consecutive calendar months starting the first full calendar month after an inspection is performed, plus three full calendar months, not to exceed the end of the calendar year in which the next inspection is due.

2.2 Communication Lines

The continuous set of SCE communication cables, components, and appurtenances, located outside of substations.

2.3 Discrepancy

A noteworthy material or structural deficiency; a condition that does not meet a SCE standard or specification or G.O. 95 and 128 requirements; or a condition if left unresolved (in the opinion of the inspector) presents a hazard to the public or workers; or a condition that will negatively impact system reliability or pose an ignition risk.

2.4 Good Utility Practice

Any of the practices, methods, and acts engaged in or approved by a significant portion of the electric utility industry during the relevant time period. Or, any of the practices, methods, and acts, which in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practices, reliability, safety, and expedition. Good Utility Practices is not intended to be any one of several optimum practices, methods, or acts to the exclusion of all others. Rather, it is acceptable practices, methods, or acts generally in practice in the region.

2.5 Maintenance

As used herein, encompasses inspection, assessment, maintenance, repair, and replacement activities performed with respect to Transmission and Communication Lines.

- Repair: The restoration or reconditioning of equipment, structures, or components.
- Replacement: The installation of new or refurbished equipment, structures, or components.

2.6 Reliability Centered Maintenance

The necessary repair, reinforcement, and/or replacement activities to correct an observed discrepancy, which is the simultaneous use of predictive, periodic, proactive, reactive strategies to achieve a high level of system reliability.

- Predictive: Action based on an assessment of the equipment condition (Conditioned-Based).
- Periodic: Action performed on a predetermined interval.
- Proactive: Action performed to prevent a failure of a class of equipment or component based on a programmatic approach or root-cause analysis.
- Reactive: Action performed as a result of local conditions, a major or unforeseen event. These events include storms, earthquakes, or failure of equipment that affects safety or reliability of the transmission system.

2.7 Safety Hazard

A condition that poses a significant threat to human life or property.

2.8 Transmission Lines

.The continuous set of conductors and/or cables, including structures, switches, and similar components, and associated Rights of Way located outside of substations.

2.9 Work Management System (WMS)

Any database used to collect data, schedule, and monitor pending and completed activities (for example, SAP, CMS, Survey 123).

3.0 Action Prioritization

3.1 Identification of Actionable Items

The condition of transmission and communication assets are evaluated during inspections and patrols to determine and record the necessary corrective action in response to identified discrepancies.

A discrepancy is defined as:

- A condition that conflicts with SCE standards, G.O. 95 or 128 requirements, or
- A condition that, left unchecked (in the opinion of the Inspector), presents a hazard to the public or utility worker, or will negatively impact system reliability.

NOTE

Discrepancies identified during detail inspections and circuit patrols or while performing associated tasks are cross-referenced with a Risk Assessment Matrix and as necessary, conditions are assigned a priority rating according to the TIMP Manual.

- Information required to identify and repair actionable items are contained in the various SCE standards manuals, as well as G.O. 95 and G.O. 128.
- When inspecting structures with both transmission and distribution assets (e.g., combo pole), observe and identify conditions that require immediate attention (e.g., priority 1) for non-transmission assets. If conditions are found at the distribution level, the inspector will notify Distribution (e.g., Troubleman, Distribution Operation Center (DOC)). If conditions are found at the SCE Communication level, the inspector will notify Telecom Control Center (TCC) (949) 587-5500. If conditions are found at the transmission level, the inspector will notify the appropriate Grid Manager or Senior Patrol (if known).

3.2 Risk Assessment and Action Prioritization

Risk assessment and prioritization of repairs efforts for these actionable items requires evaluation of site and equipment specific conditions by the inspector to determine the appropriate priority rating and action time frame.

3.3 Notification Priority Rating with Remediation Time Frames

Transmission and Distribution use a three-priority rating system. This system ranks the potential impact to safety or reliability of a condition. These may be conditions which present a hazard to workers or to the public or conditions which may cause a system failure. The priority ratings also define the maximum corrective action time frames to remediate the condition.

The three priority rating system is as follows:

A. Priority 1 (E1P1) Notifications

Priority 1 notifications are an immediate risk of high potential impact to safety or reliability. These notifications require temporary or permanent corrective action within 72 hours.

1. E1P1 Remediation Time Frames

A temporary or permanent repair is required within 72 hours of the notification date. If a temporary repair is made:

- The E1P1 notification can be completed for the temporary repair, then an E1P2 notification is required for the permanent repair.
- OR the E1P1 notification can remain open and a permanent repair must be made within 21 calendar days of the notification date.

If the permanent repair extends beyond 21 calendar days of the notification date, the following actions are required:

☐ Complete the E1P1 notification for the temporary repair made

☐ Create an E1P2 notification for the permanent repair

Exceptions to the requirement to complete the E1P1 notification and create an E1P2 notification if a permanent repair extends beyond 21 calendar days:

Claims and Storms

- The associated E1P1 notification may be kept open longer than 21 days for a permanent repair to be made if necessary.
- In each such instance, it shall be documented in the WMS that the E1P1 is being left open to ensure proper tracking for the purpose of Claim and/or Storm accounting.

B. Priority 2 (E1P2) Notifications

Priority 2 notifications are for conditions which pose a risk of moderate potential impact to safety or reliability. These notifications require action anywhere from the same day up to 36 months of the notification date, depending on the condition and the location.

For Priority 2 notifications, the Gatekeeper will review issue notifications, using the appropriate standards that are in place, and has the ability to reassess time frames, if necessary, to allow for the condition to be remediated within the required compliance time frames:

1. E1P2 Remediation Time Frames

   - Same day Find & Fix notifications require all notification dates to be the same.
   - Conditions that create a fire risk located in CPUC Tier 3 Extreme Fire Threat Area (overhead only) require corrective action within 6 months of the notification date.
   - Conditions that create a fire risk located in CPUC Tier 2 Elevated Fire Threat Area / Non-CPUC High Fire Risk Area (HFRA) (SOB322) (overhead only) require corrective action within 12 months of the notification date.
   - Conditions that compromise worker safety require corrective action within 12 months of the notification date.
   - All other conditions require corrective action within 36 months of the notification date.

2. Exceptions To Remediation Time Frames

   A notification for a condition that is in a HFRA, but is identified as a non-high fire threat as determined by Gatekeeper review or a special program (that is, Intrusive Pole Inspection) may have a remediation time frame of up to 36 months.

To be classified as a Non-Fire Threat Notification, the two following conditions must be met:

- The High Fire Flag on the notification needs to be removed AND
- The following text needs to appear in the Long Text of the notification "NonFireRiskNotification", with text describing why the condition is not a fire risk. OR
- The following text needs to appear in the Long Text of the notification "NonElevatedFireRiskNotification", with text describing why the condition is not an Elevated fire risk.

Notifications created on the assets below can exceed 6 or 12 months in high fire areas, but cannot exceed 36 months:

- Underground assets
- Apparatus assets
- Apparatus Notifications must have the Main Work Center of Apparatus

3. E1P2 Gatekeeper Review Exceptions

   The following Priority 2 notifications are not reviewed by a Gatekeeper due to their automation:

   - Same day Find & Fix
   - Notify Customer/Communication Infrastructure Provider (CIP)
   - Intrusive Pole Inspection (IPI)
   - Pole Loading Failures

C. Priority 3 (E1P3) Notifications

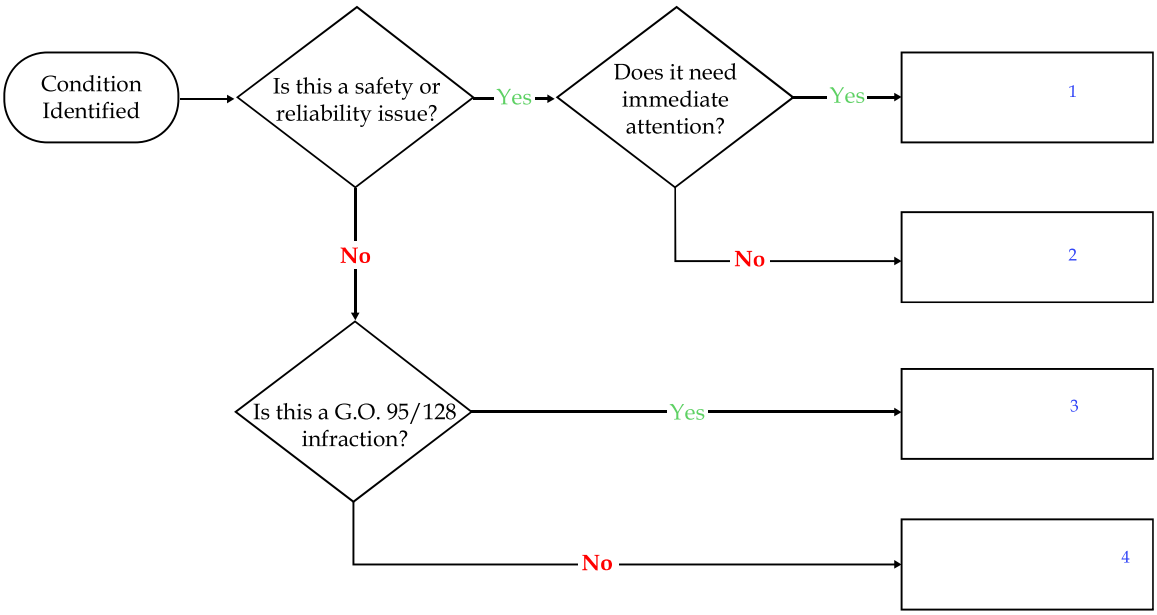
Priority 3 notifications are for conditions which pose a risk of low potential impact to safety or reliability, G.O. 95 or 128 infractions, Transmission find and fix issues, and programmatic replacement work.

1. E1P3 Remediation Time Frames

   Corrective actions necessary within these remediation time frames appear below:

   - Conditions on overhead assets found on or after June 30, 2019 require corrective action within 5 years of the notification date.
   - Conditions on overhead assets found prior to June 30, 2019 do not require corrective action within a specified time frame.
   - Conditions on non-overhead assets do not require corrective action within a specified time frame.

Figure 1–1: Assigning Priority Levels Flowchart



Upon identifying a condition, the questions shown above should be answered to determine its prioritization.

Once a condition has been determined to be a Priority 2, the inspector performs a risk assessment to properly establish a reasonable time frame within zero (0) to 36 months.This is done by assessing the condition through determination of the safety and reliability factors in accordance with Table 1–2

Note(s):

1. Site shall be made safe immediately (temporary or permanent.)
2. Conditions are risks of at least moderate potential impact to safety and reliability.
3. G.O.95 infraction and apparatus flag replacement program.
4. Condition to be monitored during inspection cycles. Condition changes will be appropriately prioritized.

Table 1–1: Risk Assessment Matrix — Things to Consider when Assessing a Condition

NOTE Each problem or condition is independent from each other.

Determine Safety Factors

Factors to Consider when Assessing the Safety Risk		
Public Worker Safety	Property	Environmental
•Near a school/park •In front of a mall •Rear property line •Behind a commercial strip center •In a vacant field •Minor pedestrian traffic •Major intersection •Impossible climbing space	•In a parking lot •In an agricultural area •In a vacant field	•In the desert •In coastal areas •Mountainous •Urban/Rural •Time of season –High wind –Rainy –High heat –Snow •Protective habitats •Hazardous spills •In a high fire risk area
It is important to note that no one factor weighs more than another. Only after you have considered all your surroundings, People/Property/Environment, can you make a true assessment of the risk.		

Identifying the Safety Risk Impact Levels	
No/Slight Safety Impact	Any Condition which has *LITTLE/NO* safety risk to public or worker safety/Property/Environment.
Minor Safety Impact	Any Condition which has *MINOR* safety risk to public or worker safety/Property/Environment.
Moderate Safety Impact	Any Condition which has *MODERATE* safety risk to public or worker safety/Property/Environment.
High Safety Impact	Any Condition which has *HIGH* safety risk to public or worker safety/Property/Environment.

Table 1–1: Risk Assessment Matrix — Things to Consider when Assessing a Condition ***(Continued)***

NOTE

Each problem or condition is independent from another.

Determine Reliability Factors

CONSTRUCTION TYPE

- ☐ What is the component the condition is associated to?
- ☐ What is the construction type of the component?
- ☐ Is there any electrical equipment associated to the component?
- ☐ Where is the condition located on the component?
- ☐ What is the stress factor?
  - — Weight: High/Medium/Low
  - — Span length: Long/Medium/Short

CIRCUIT TYPE/LOCATION

- ☐ What is the highest voltage “Directly’ associated to the component?
- ☐ What is the highest voltage “Indirectly” associated to component?
- ☐ What is the load factor: High/Medium/Low?
- ☐ Is component located behind any fusing?

Table 1–2: Risk Assessment Matrix

Reliability (Failure Risk)		No / Slight Impact	Minor Impact	Moderate Impact	High Impact
	Component Failure Could Lead To System Failure[1,2]	Priority 2 Action Required 13-36 Months	Priority 2 Action Required 4-12 Months	Priority 2 Action Required 0-3 Months	Priority 1 Action Required Immediately
	Component Has Failed No Significant Risk to System	Priority 3/ No Action Required[3,4,6]	Priority 2 Action Required 13-36 Months	Priority 2 Action Required 4-12 Months[5]	Priority 2 Action Required 0-3 Months
	Potiential Component Failure	Priority 3/ No Action Required[3,4,6]	Priority 3/ No Action Required[3,4,6]	Priority 2 Action Required 13-36 Months	Priority 2 Action Required 4-12 Months[5]
	Safety (People/Property/Environment)				

Note(s):

1. System Failure is when the system no longer operates. (An interruption of service caused by damaged equipment preventing the system to perform).
2. Component Failure is when a piece of equipment can no longer perform the function it was designed for, but the system continues to operate.
3. Only 95/128 Infractions Recorded.
4. Action required within 60 months for overhead discrepancies identified after June 30th, 2019.
5. For Overhead (OH) Only: HFRA Tier 3 Extreme due in 6 months. HFRA Tier 2 Elevated/Non-CPUC HFRA/BL 322 due in 12 months.
6. Priority 3 remediation time frames:
   - Overhead notifications prior to June 30th, 2019 do not require a due date.
   - Overhead notifications created on or after June 30th, 2019 have up to a 5-year due date.
   - Underground notifications do not currently require due dates.

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IN–1: Overhead Detail Inspections

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IN–1: Overhead Detail Inspections

1.0 Transmission

Assessments are broken down and defined by category as follows:

1.1 Detailed

A careful visual assessment performed in close proximity to or while upon a structure for the purpose of identifying, prioritizing, and recording discrepancies. This activity includes performing minor or temporary repairs during the inspection and special technical evaluation as needed.

1.2 Patrol (Emergency)

A simple visual assessment performed at ground level or via aircraft, often following a circuit interruption, to identify damaged facilities.

1.3 Patrol (Routine)

A visual assessment performed at ground level or via aircraft, for the purpose of identifying, prioritizing, and recording obvious discrepancies.

2.0 Transmission Aerial Inspection Program

Program aerial inspections are broken down and defined as follows:

2.1 Aerial Inspections

Performed annually mainly via drones to support with 360-degree inspections as well as some use of helicopters to identify potential ignition risk conditions in HFRA locations, create Priority 1 and 2 notifications on findings, and additional findings to support with data collection.

3.0 Transmission Wildfire Program

Program visual assessments and inspections are broken down and defined as follows:

3.1 High Fire Risk-Based Detail Inspections

A careful visual assessment performed in close proximity to, or while upon a structure for the purpose of identifying, prioritizing, and recording discrepancies on risky assets located in HFRA locations. High Fire Risk-Based detail inspections are conducted using a survey tool with prompted questions and data capture.

3.2 Transmission IR / Corona Program

In 2019, SCE started a program to perform infrared and corona inspections of its overhead transmission system. SCE performs these inspections on a case-by-case basis in HFRA locations to detect conditions that pose a fire, safety, and/ or reliability risk, but are not visible to the human eye. SCE then monitors internal compliance and effectiveness through reports tracking progress and inspection findings.

4.0 Transmission Telecom

4.1 Detailed

A careful visual assessment of communication lines to identify discrepancies and safety hazards.

4.2 Emergency Inspection

An unscheduled basic visual assessment of communication lines performed at ground level or via aircraft to identify damaged or vulnerable facilities.

IN–2: Inspections and Patrols

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IN–2: Inspections and Patrols

1.0 Transmission

1.1 Detailed Inspection

Detailed Inspection is a close-proximity assessment based on risk analysis, operational considerations, and compliance to identify broken, missing or worn conductors, insulators, or hardware.

The assessment is performed and completed by a Senior Patrolman or qualified lineman. Based on initial findings, the responsible person, in consultation with a Grid Manager and/or Engineer, determines whether a supplemental technical evaluation is needed.

1.2 High Fire Risk-Based Detailed Inspection

A High Fire Risk-Based Detailed Inspection is a close-proximity assessment based on risk analysis, operational considerations, and compliance. The annual scope is identified based on risk models and structure inspection locations may vary from year to year by prioritizing the highest risk assets.

High Fire Risk-Based inspections are conducted using a tool with prompted questions, data capture, and are in addition to compliance program inspections.

The inspections are performed and completed by a Senior Patrolman or qualified lineman. High Fire Risk Based inspections completed may be counted towards the 3-year detailed inspection compliance requirement.

1.3 Routine Patrol Inspection

A Routine Patrol Inspection is performed annually by a Senior Patrolman or qualified lineman to identify, prioritize, and record observed discrepancies and safety hazards. Minor repairs may also be performed at the public level.

Specifically, it is a simple visual inspection of applicable utility equipment and structures, and it is designed to identify obvious structural problems and hazards.

The inspection is conducted from the ground-level by truck, foot, snow cat, or aerially by aircraft. Aircraft are also used in certain rural or mountainous areas where ground-level access is restricted or considered unsafe.

Patrol inspections may be carried out in conjunction with other work activities.

1.4 Emergency Patrols

Emergency Patrols are typically performed following a circuit interruption or system event, to identify affected facilities and safety hazards and to perform initial damage assessments.

The results are reported to the responsible manager and/or Grid Control Center (GCC) and recorded.

1.5 Transmission Aerial Inspection

Transmission Aerial Inspections are annual aerial inspections performed mainly via drones to support with 360-degree inspections, and include some use of helicopters.The inspection identifies potential ignition risk conditions in HFRA locations, creates Priority 1 and 2 notifications on findings, and additional findings to support with data collection.

1.6 Skyline Patrols

Skyline Patrols are performed on overhead line sections at ground-level or aerially prior to the due date until the entire patrol is completed. Patrols may be performed completely via aircraft on alternating years.

Lines that pass through two or more grids may be assigned to one Patrolman as a single patrol at the Manager's discretion.

Patrols are typically conducted from a vehicle on existing roads or trails, they may be conducted on foot or by aircraft where vehicular access is limited or restricted. It is not required to leave the vehicle while performing a visual inspection, provided a thorough and proper evaluation of all cables, conductors, structures, footings, and rights of way is performed; and no Priority 1 discrepancies are evident.

Skyline Patrols that are performed in multiple line corridors should be scheduled to provide an equitable level of effort and ensure an optimal coverage of the entire right of way is conducted. A functional assessment of each overhead switch will be scheduled and performed when practical, but within three to five years.

2.0 Telecom

2.1 Detailed Inspection

Detail Inspections identify obvious worker and public safety hazards involving SCE communication or electric lines, or another company's communication or electric lines.

The inspections also help identify visible structural or line discrepancies involving SCE communication lines that are not readily identifiable by patrol. Detailed Inspection is also used to confirm mapping information (such as - type of cables; multiple circuits on the same structure and unique circuit identifier) (Record Corrections).

2.2 Emergency Inspection

An Emergency Inspection is typically performed following a circuit interruption or system event to identify obvious public safety hazards involving SCE communication or electric lines, or another company's communication or electric lines.

The inspection also identifies damaged SCE communication lines and/or supports.

3.0 Intrusive Inspection

This type of inspection involves boring of holes at different levels to identify degradation. These inspections are categorized as either: "Partial Dig", "Full Treatment", or "Sound and Bore" (for poles set in asphalt or concrete) and performed on a 15-year cycle for poles that have been in-service for 20 years. Inspections are typically performed by contract personnel. Visual and Intrusive test results are recorded and submitted to the responsible program administrator for review and input into the WMS.

4.0 Detailed Inspection Responsibilities

CAUTION

Priority 1 discrepancies and safety hazards are to be addressed immediately.

If temporary repairs to stabilize a Priority 1 condition are made, the notification can then be reassessed by management and changed to a Priority 2.

4.1 Overhead

- ☐ Evaluate conductors, structures, footings/foundations, ROW, vegetation, and above ground portion of cables.
- ☐ Identify and record the location of conditions affecting line operations (consider conductor size, span length and ambient temperature when assessing clearances).
- ☐ Determine the gravity of an observed condition and necessary corrective action.
- ☐ Prioritize and record discrepancies and address safety hazards using current SAP notification procedures in the WMS.
- ☐ Report hazardous conditions (public or system) immediately to the appropriate manager and/or the GCC.
- ☐ Priority 1 discrepancies and safety hazards are to be addressed immediately.
- ☐ If temporary repairs are made, to stabilize a Priority 1 condition, a lower Priority rating may be assigned.
- ☐ Verify the following structure information is legible and correctly placed:
  - — Line name, Identification numbers, Signage (if required), Aerial markings (if present), Switch numbers (if present).
- ☐ When a discrepancy is identified, provide a minimum of 4 pictures in accordance with inspection program requirements.

Conditions for transmission and distribution assets (e.g., combo pole), include but are not limited to:

- ☐ Vegetation contacting or nearly contacting energized lines (e.g., expected to imminently fail and contact energized lines, contact or arcing with bare-wire conductors is highly probable to occur in a high wind event due to vegetation proximity to power lines, appears contact has occurred with primary electric facilities, appears strain or abrasion has occurred with secondary bare open wire)
- ☐ Broken, damaged, burned or rotted crossarm
- ☐ Energized conductor with inadequate clearances, bare conductor contacting communication, burned jumpers/connectors, or burned wire
- ☐ SCE Communication (e.g., broken lashing wire with slack to reach into power space, attachments/repairs poorly secured with tape/rope, broken and hanging strands, down guys, primary/secondary slack and jumpers capable of contacting communication facilities, Transmission/primary/secondary broken down guys hanging in communication space, foreign objects with potential to cause arcing, shorts or conduct electricity across insulators)
- ☐ Third Party Communication cable with inadequate clearances, cable drop contacting bare power, cable lashing broken
- ☐ Loose, broken, damaged, or missing insulator and cut out
- ☐ Broken, damaged riser in public level
- ☐ Broken, damaged guy in proximity to energized conductor

- ☐ Leaking oil from the equipment
- ☐ Excessive corrosion (e.g., loss of material/holes in equipment)

4.2 Underground

- ☐ Thoroughly assess the line's visible underground components, (vault lids, manhole covers, risers, cables, potheads, arresters) and condition of the vault or manhole.
- ☐ Open vaults with known water intrusion or unusual condition, pumping as needed, and cable and grounds heat-scanned for anomalies (as experience dictates or as recommended by Engineering).
- ☐ Prioritize and record discrepancies (with the correct Maintenance Activity Type (MAT) code) and safety hazards using current work management procedures.
- ☐ Verify that each vault and manhole are numbered correctly, associated circuit names are accurate, and cables tags are present and legible.
- ☐ Verify that structures are accurately depicted in the circuit map.

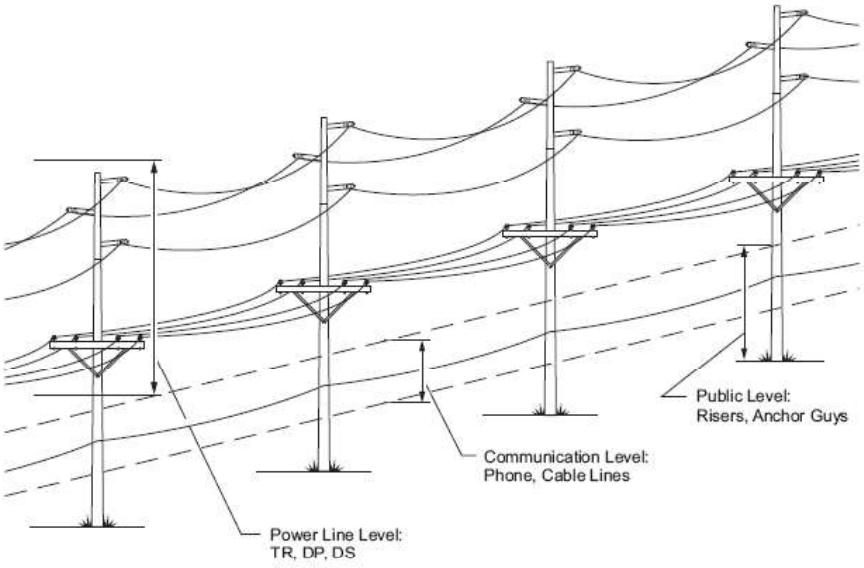
5.0 Maintenance Work Levels

5.1 Maintenance Activities On OH Structures

Maintenance Activities on OH structures are performed at three different levels (Figure 2–1):

- Public Level
  - — This segment extends from the ground line up to eight feet (< 8'), or the reasonable limit of a worker's reach.
- Communication Level
  - — Located between the public and power line levels, this segment typically encompasses communication cables, equipment, and wireless antennas.
- Power Line Level
  - — This segment is located above the communication level, or, where structures support only transmission conductors, and includes everything above the public level.

Figure 2–1: Maintenance Work Levels



Note(s):

1. Public Level—More public exposure and little employee exposure.
2. Communications Level—Phone and cable lines, mid-level climbing, little risk to public/communication worker/SCE employee exposure.
3. Power Line Level—TR (Transmission), DP (Distribution Primary), and DS (Distribution Secondary).

6.0 Preventative Measures

Prior to the various seasonal weather changes, supplemental evaluations may be performed to identify vulnerable lines, structures, and ROW locations that could impact the system.

- Results are reported to the responsible supervisor or manager.
- Record keeping for supplemental inspections is by exception only and recorded in the Work Management System.

6.1 Minimizing System Impact

Preventative measures enacted to minimize system impact might include:

- Checking / cleaning drainage systems (culverts and over-side drains)
- Checking access roads for signs of erosion
- Checking /repairing drainage around poles and towers
- Checking for potential ponding on access roads
- Checking for signs of soil slippage above or below structures
- Identifying dead, dying, or diseased trees in or near ROW

7.0 Record Keeping

7.1 Transmission Maintenance Records

Transmission Maintenance records must include:

- Responsible person
- Inspection Date
- Transmission facility
- Identified discrepancies (if any)
- Priority rating (if any)
- Description of corrective action
- Corrective action completion date

7.2 Record Administration and Retention

Records are administered and retained in accordance with SCE policy or 6 years, whichever is greater, in a WMS.

IN–3: Support Programs

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IN–3: Support Programs

1.0 Purpose

Certain Maintenance related programs are administered separately in cooperation with the Transmission department.

1.1 Pole Program Management (PPM)

Pole Program Management (PPM) group administers the Pole Replacement Program. PPM in cooperation with other Transmission and Distribution stake holders, manages the replacement of deteriorated poles that have been identified through intrusive and visual inspections, failed loading, and/or identified by other groups in alignment with remediation time frame requirements.

1.2 Transmission Right of Way (TROW) Structure (Pole) Brushing

The area of responsibility for Transmission vegetation clearing are divided by land ownership. The Transmission Right of Way (TROW) organization is responsible for clearing vegetation on Federal, State, and City Lands (that is, Forest, Parks). For all Private Owned parcels, vegetation clearing is the responsibility of Land Management and SCE Fee Owned locations are managed by Vegetation Management. All vegetation clearing work remediation activities are considered a fire threat and should align with CPUC general order requirements for any discrepancies identified in HFRA locations (that is, Tier 3 requires 6-months and Tier 2 requires 12-months.)

- Inspection
  - — During routine, detail, and risk-based inspections any overgrown vegetation shall be identified by the Transmission Inspector, who shall create a notification to remediate the conditions.
  - — Notifications are required if vegetation is encroaching on the structure's climbing space and/or is not cleared within 10ft.-20ft. around the structure.
- Maintenance
  - — Transmission Vegetation Brushing notifications are gate-kept by TROW personnel and routed for remediations through TROW contract resources.
- Record Keeping
  - — Completed Transmission Vegetation Brushing notifications and final documents (that is, pictures, permits, and clearances) are retained in FMP360 field tool and closed in SCE's WMS (that is, SAP).

1.3 Vegetation Management (VM)

The Vegetation Management (VM) department is responsible for all line-clearing activities occurring within each transmission grid. VM Managers and Senior Specialists in cooperation with Senior Patrolmen are responsible for preventing outages caused by trees located below or adjacent to Transmission Lines. Vegetation-to-line clearances are established to comply with requirements set forth in G.O. 95, Rule 35 and 37, California Public Resources Code 4293, and NERC Reliability Standard FAC-003 documented in SCE's Transmission Vegetation Management Plan (TVMP).

- Inspections include assessments of trees and vegetation near transmission lines which are conducted by VM contract personnel, in accordance with the VM Department's annual work plan. VM Managers in the Resource Planning and Performance

Management (RPPM) group are responsible for approval of deviations to annual work plan. Senior Patrolmen or qualified linemen may also identify new inventory trees requiring maintenance during Routine Patrols.

- Maintenance (tree trimming and removals) is accomplished by mechanical means (no herbicides) in accordance with the terms and conditions of a pre-established contract. It is typically performed by contract personnel. Supplemental and/or emergency trims and removals may also be initiated by VM Managers or Senior Specialists and may be performed by Senior Patrolmen or qualified linemen as needed.
- Verify that the tree-to-line clearance being maintained are sufficient per Table 3–1 below.

Table 3–1: Actionable Tree-To-Line Clearances

Nominal Voltage	Distance that Triggers Work	
	High Fire Risk Area	Non-High Fire Risk Area
500 kV	18’	18’
230 kV	18’	10’
161 kV	18’	8’
115 kV	18’	7’
69 kV	9’	3’

1.4 Assessment and Inspections

The Assessment and Inspections Program is responsible for Visual and Intrusive Inspections.

Visual Inspection is a 360-degree visual assessment of the pole that may include a sound (echo) test at or near the ground line. It is performed on a 10-year cycle or more frequently if necessary. Inspections typically performed by may be performed by contract personnel under this program.

Intrusive Inspection involves boring of holes at different levels to identify degradation. These inspections are categorized as either: "Partial Dig", "Full Treatment", or "Sound and Bore" (for poles set in asphalt or concrete), "RPIN" (for poles reinspected that are restored previously), "Thru-Bore" (for poles that are manufactured using the thru-boring process) and performed on a 10-year cycle. Inspections are typically performed by contract personnel. Visual and Intrusive test results are recorded and submitted to the responsible program administrator for review and input into the WMS.

1.5 Maintenance and Inspection Program Oversight

Maintenance and Inspection Program Oversight (M&IPO) is responsible for oversight and improvement of the TIMP, including:

- Resolving all internal and external audit issues and date requests
- Strategic direction of the Transmission M&I program and governance of policies, including frequency, inspection criteria, corrective action time frames, and documentation of inspection and repair requirements.
- Providing technical advisory staff
- Providing oversight of annual training (formal and informal)
- Providing oversight and tracking of program performance and compliance metrics

1.6 Information Technology (IT) System Support and Administration

IT System Support and Administration is responsible for identifying and allocating resources to achieve TIMP goals by ensuring recording devices and the WMS are functioning properly.

1.7 Compliance and Quality

Compliance and Quality is responsible for administering an effective quality assurance program, assessing compliance with regulatory requirements, and supporting continuous improvement of the TIMP.

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IN–4: Inspection Frequencies

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IN–4: Inspection Frequencies

1.0 Transmission

Table 4–1: Transmission Inspection Frequencies

Facility/Equipment	Detailed Inspection	Patrol (Routine)	Patrol (Emergency)	Insulator Wash
Transmission Overhead Lines	36 months[a/]	Annually[b/]	As Needed	As Needed [a/]
Idle[c/] Overhead Lines	As Needed	36 months	As Needed	As Needed[d/]
Underground Lines and Vaults	36 months[e/ g/]	Annually[e/ f/]	As Needed	N/A
Idle[c/] Underground Lines/Vaults	As Needed	36 months[g/]	N/A	N/A

[a/] The decision to wash or not wash is determined by Grid Supervision and is based on general knowledge and experience of a geographical area combined with the particular local conditions. Generally, polymer insulators do not require routine washing.

[b/] Performed by air on alternate years (if-necessary). Includes areas designated by the CPUC as Tier 3 and Tier 2 High Fire-Threat District and areas designated by SCE as High Fire Area.

[c/] Lines and Line segments are considered idle after being declared "Out of Service."

[d/] Lines and Line segments declared "Out of Service" are not subject to insulator washing.

[e/] Includes inspection of "pressurized piped cables" three to four times annually to check valves, pumps, and alarms, record pressure readings; and verify the cathodic protection is operational.

[f/] Only those lines and line elements visible above ground level.

[g/] Includes vault or enclosure entry.

Note(s):

1. Lattice towers in high-wind areas are subjected to additional Maintenance, including but not limited to ascending/descending towers, ringing steel members, and tightening hardware. May perform supplemental inspections in areas designated by the CPUC as Tier 2 and Tier 3 High Fire-Threat District and areas designated by SCE as High Fire Area.

2.0 Transmission Telecom

Table 4–2: Transmission Telecom Inspection Frequencies

Facility/Equipment	Detailed Inspection	Patrol (Routine)	Patrol (Emergency)
Tier 3 - Extreme HFA OH Communication Circuits[a/]	5 Years	Annually[b/]	As Needed
Tier 2 - Elevate HFA Non-CPUC HFRA (BL-322) OH Communication Circuits[a/]	10 Years	Annually[b/]	As Needed
Non-High Fire Area OH Communication Circuits[a/]	15 Years	Annually[b/]	As Needed
Idle[c/] OH Communication Circuits	N/A	Annually	N/A
Underground Comm. Lines[d/]	N/A	N/A	As Needed
Idle[c/] Underground Comm. Lines	N/A	N/A	N/A

[a/] Excludes open wire communication circuits.

[b/] Performed by air on alternate years (if-necessary). Includes areas designated by the CPUC as Tier 3 and Tier 2 High Fire-Threat District and areas designated by SCE as High Fire Area.

[c/] Lines and Line segments are considered idle after being declared "Out of Service."

[d/] Excludes subsurface structures containing energized electric facilities.

Note(s):

1. Only those lines and line elements visible above ground level.
2. Includes inspection of "pressurized piped cables" three to four times annually to check valves, pumps, and alarms, record pressure readings; and verify the cathodic protection is operational.
3. Includes vault or enclosure entry.
4. Lattice towers in high-wind areas are subject to additional Maintenance, including but not limited to ascending/descending towers, ringing steel members, and tightening hardware. May perform supplemental inspections in areas designated by the CPUC as Tier 2 and Tier 3 High Fire-Threat District and areas designated by SCE as High Fire Area.
5. The decision to wash or not wash is determined by Grid Supervision and is based on general knowledge and experience of a geographical area combined with the particular local conditions. Generally, polymer insulators do not require routine washing.
6. Lines and Line segments declared "Out of Service" are not subject to insulator washing. Encompasses SCE open wire communication, control and alarm circuits.

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IN–5: Inspection and Maintenance Guidelines

1.0 Transmission Overhead Inspection and Maintenance Guideline

1. Structures (Top to Bottom review)
   - ☐ Condition of arms
   - ☐ High voltage signs (where applicable)
   - ☐ Loose, bent, or missing lattice steel on towers
   - ☐ Loose or missing bolts, fills, or steps
   - ☐ Damaged, pitted, or flaking galvanizing
   - ☐ Bird guards and/or climbing discouragers including requirements for same
   - ☐ Condition of poles, and cross-arm bonds and covers
   - ☐ Condition of Transmission facilities on structures
   - ☐ Condition of FOWG (SkyWrap) if applicable including splice boxes
   - ☐ Unauthorized foreign attachments
   - ☐ Base of pole or tower footings stable and secure
   - ☐ Tower footings / leg extensions are clear of brush and trees
   - ☐ Tower footings have proper concrete projections for site conditions
   - ☐ Corrosion of grillage footings, stub angles
   - ☐ Tower site has proper drainage and erosion control measures as required for site
   - ☐ Jumper loops have proper clearances and attachments with swing string insulators and weights including spacers on bundle conductors
   - ☐ Bird nests or other foreign material (active or abandoned)
   - ☐ Danger signs and anti-climbing barrier on towers
   - ☐ Graffiti
   - ☐ Climbing steps are correct and comply with specifications
   - ☐ Visibility strips correctly installed and in good condition
   - ☐ Line names, Mile/Tower numbers, switch numbers, crossing markers installed correctly & legible on towers
   - ☐ Line names, switch numbers, crossing markers installed correctly & legible on poles & other structures
   - ☐ Wood poles that have been repaired or reinforced with wood stubs
2. Insulators / Hardware
   - ☐ Loose, broken, cracked, and/or shot
   - ☐ Proper size, proper quantity, (that is, skirt orientation toward or away from the tower on dead end strings)
   - ☐ Torn weather-sheds or exposed core rod on polymer insulators
   - ☐ Polymer insulators for signs of excessive tracking, pollution, or corona damage
   - ☐ Porcelain pothead insulators chipped or broken
   - ☐ Swollen / leaking pothead
   - ☐ Proper installation / application of corona rings on polymer units
   - ☐ Jumpers with inadequate shape/clearance, missing I-string / stiffener / weights, missing or damaged spacers, and loose connections

- ☐ Dampers with signs of damage, drooping, missing weights, or broken strands at attachment
- ☐ OHGW for damaged or flashed over insulators (applies to 500 kV circuits)
- ☐ OHGW for proper grounding scheme (applies to 500 kV circuits)
- ☐ Suspension insulators hanging plumb (including OHGW where applicable)
- ☐ Condition of load bearing hardware (signs of wear, or incorrect installation)
- ☐ Vibration dampers, armor rod, and spacers
- ☐ Signs of abnormal wear, vandalism, or broken / damaged strands
- ☐ Hardware in contact with animal nest
- ☐ Fault return conductors installed (LWS Poles) correctly, grounds installed correctly and securely
- ☐ Conductor splices for signs of abnormal conditions or broken / damaged strands of aluminum
- ☐ Contamination
- ☐ Loose insulator bonds
- ☐ Old or new flashovers
- ☐ Cotter keys damaged, missing, or loose/ do not belong to structure / pins not visible
- ☐ Cotter keys and pins in wind or vibration problem areas

3. Guys
   - ☐ Signs of damage
   - ☐ Correct breaker placement (where required)
   - ☐ Clearances from conductors and jumper loops and over railroads, roads, highways, sidewalks, and paths
   - ☐ Clearances through Transmission circuits and from non-SCE metallic objects
   - ☐ Possibility of conductors or jumper loops swinging into guy during wind or washing
   - ☐ Anchor rod eyes are 6" out of ground / not buried
   - ☐ Guy covers installed and in good condition
   - ☐ Rust conditions of anchors, guys and fittings
   - ☐ Proper tension
   - ☐ Pole attachments are tight, and so on
   - ☐ Presence of broken attachments supports
   - ☐ Burn, flash, arc marks on guys
   - ☐ Too many attachments on down guys
4. Risers
   - ☐ Riser in contact with animal nest
   - ☐ Riser swollen or broken
   - ☐ Cables in riser exposed
5. Conductors
   - ☐ Signs of bird-caging, broken strands, corrosion, burn / flash / arc mark on wires or splices
   - ☐ Automatic / quickie span splice
   - ☐ Uneven sag or uneven sub-conductors in bundle circuits
   - ☐ Condition of spacers for bundled conductors in spans ahead and back
   - ☐ Spans ahead and back for signs of conductor damage

- ☐ Damage from gunshot or other causes
- ☐ Non-compression jumper loop connections are secure and comply with Forestry regulations.
- ☐ Clearances from other phases or circuits, and from ground or grounded objects
- ☐ Splices for signs of overheating (compound oozing from splice) ahead and back
- ☐ Signs of damaged strands / hardware/ dampers / attachments points, or loose hard tails on shield wire/optical/ ground wire
- ☐ Signs of damaged strands / hardware / attachments points, or loose hard tails on Fault Return Conductor (FRC)

6. Surroundings/Environmental Conditions
   - ☐ Trees - Establish clearances needed and make comparisons on the pole or tower to judge clearances
   - ☐ Brush and potential fire hazard to lines
   - ☐ Water or wind erosion near structures, anchors, and so on
   - ☐ Slides or wind-caused dirt or sand piled over tower footings or above treatment line on poles
7. Construction or Other Activities
   - ☐ Houses or structures under lines or on right-of-way
   - ☐ New roads or pipeline construction near or approaching rights of way
   - ☐ Excavations under lines, on right-of-way, or near structures
   - ☐ Evidence of additional utility or communication/CATV facilities
   - ☐ Indications that work is planned by others near the right-of-way (survey stakes, equipment parked nearby, and so on)
   - ☐ Investigate housing tracts near lines
   - ☐ Investigate highway or street construction work that may encroach on or cross rights-of-way
   - ☐ Take note of activities that cause dust or smoke contamination to insulators (crop dusting, harvesting, or planting of crops, fires near lines, industrial plants, and so on)
8. Access Roads
   - ☐ Water or wind erosion, rocks or slides which impair access to facilities
   - ☐ Water drains from tower site and does not pool at site or at individual footings
   - ☐ Access road grades are proper and water bars are installed and operational when required
   - ☐ Access roads are graded clear of brush and vegetation
   - ☐ Trees that intrude on the traveled way
   - ☐ Overhanging brush
   - ☐ Farm or ranch roads that cut off access
   - ☐ Gates locked and in good condition
   - ☐ Fences and gates grounded properly
   - ☐ Culverts or over-side drains are clear of weeds and debris, properly located, connected, and anchored
   - ☐ Grass, weeds, or other combustible material causing a fire hazard on the road

2.0 Transmission Underground InspeReview the following guidelines for:

1. Terminations
   - ☐ Cracks and chips in the porcelain
   - ☐ Tracking or tears in polymer terminations
   - ☐ Cable jacketing for deterioration
   - ☐ Leaking oil
   - ☐ Loose electrical connection
   - ☐ Any indication of flashover
2. Riser Poles
   - ☐ Cable slippage
   - ☐ Cable support grip deterioration
   - ☐ PVC riser damage or deterioration
   - ☐ Loose pole hardware
3. Arresters
   - ☐ Cracks or chips in the porcelain
   - ☐ Tracking or tears in polymer arresters
   - ☐ Indication of flashover or burning around the exhaust ports
   - ☐ Loose electrical connections
   - ☐ Grounds properly installed
4. Vaults (External)
   - ☐ Missing or damaged bolts in cover
   - ☐ Ownership markings and vault number
   - ☐ Traffic damage or subsidence around vault or over trench
   - ☐ Water or leaks from ducts, lids or covers
   - ☐ Proper signage for vaults containing shield arresters

5. Vaults (Internal)
   - ☐ Duct plugs are installed (where necessary) and in good working order
   - ☐ Water, sand, dirt, mud, signs of vermin, debris, and so on, inside structure
   - ☐ Corroding racks, hooks, ground lugs and vault grounds
   - ☐ Concrete spalling and rebar rusting
   - ☐ Cable slippage, movement or strain (monitor/record as needed)
   - ☐ Cable properly tagged and consistent with circuit map
   - ☐ Scan splices for:

     Excessive heat
     - — Deteriorating arc proofing tape
     - — Splitting or deteriorating insulating tape
     - — Splitting or deteriorating jacketing tape
     - — Splitting or deteriorating heat shrink jacketing
     - — Deteriorating cable clamps
     - — Loose bond connections

The above lists are to be used as guides only and inspection should not be limited to the lists.

3.0 Transmission Telecom Overhead Detailed Inspection Guidelines

1. Structures (Top to Bottom review)
   - ☐ General condition
   - ☐ Pole (Leaning / Damaged / Broken)
   - ☐ Arms and Braces (Broken/ Missing/Worn)
   - ☐ Hardware / Pole steps (Broken/ Missing/Worn)
   - ☐ Transmission lines / equipment (if present)
   - ☐ Transmission lines (if present)

NOTE OPGW and SkyWrap is to be performed by Transmission Patrolmen.

2. Guying (Span and Down)
   - ☐ General condition / tension
   - ☐ Breaker placement (if required)
   - ☐ Clearances (Conductors / Streets / Railroads / Sidewalks)
   - ☐ Anchor rod eyes (6" above ground line)
   - ☐ Guy guards (Broken/ Missing/Worn)
3. Cables
   - ☐ Sag
   - ☐ Lashing - Broken/Missing/Worn (if present)
   - ☐ Suspension clamps - Broken/Missing/Worn (if present)
   - ☐ Banked cable - secured
   - ☐ Clearances - energized lines, non-SCE circuits, vegetation, power grounds
   - ☐ Splices and cable bonds - Broken/Missing/Worn (if present)
4. Surroundings/Natural Conditions
   - ☐ Brush or potential fire hazard to lines
   - ☐ Water or wind erosion near structure and/or anchor
5. Nearby Construction Or Activities That Affect the Line
   - ☐ New structures or grading near lines
   - ☐ Unauthorized attachment to cable or span guy
6. Riser (Wood and Steel Poles)
   - ☐ Cable slippage
   - ☐ Cable support grip deterioration
   - ☐ Riser and hardware - Broken/Missing/Worn/Loose

CG–TOC: Condition Guides

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CG–1: Transmission Underground Priority Condition Guidelines

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CG–1: Transmission Underground Priority Condition Guidelines

1.0 Underground Cables and Accessories

Table 1–1: Underground Cables and Accessories Priority Condition Guide

Priority	Description	Concentric Wires	Moisture/Semi-conducting Shield	Splices/Terminations	Cable Temperature
1	Initiate corrective action and ensure the site location is made safe. **Contact Transmission Engineering for guidance.**	Any evidence of failure (that is, broken or parted wire).	• Any moisture evidence within cable jacketing, or breach of jacket or splice visible. • Any evidence of failure.	• Any splice or concentric connections temperature reading that exceeds maximum allowable under established guidelines. • Any evidence of failure.	• Any cable temperature reading that exceeds maximum allowable under established guidelines. • Any evidence of failure.
2	• Repair or replace up to 36 months.	Any heavy corrosion or degradation of concentric wires and/or connections (broken or missing) that could compromise performance.	No Criteria	• Cable slipping • Fireproofing tape damaged. • Flat spot or change evident in surface of splice. - **Contact Transmission Engineering**	No Criteria
3	Re-evaluate during next Routine Patrol Cycle.	No Criteria	No Criteria	No Criteria	No Criteria

Table Note: See Chapter SM in Transmission Operations and Maintenance Policies and Procedures Manual (TOM)

2.0 Underground Structures

Table 1–2: Underground Structures Priority Condition Guide

Priority	Description	Plumb/Level/	Concrete	Water	Shield Grounds	Racks
1	Initiate corrective action. **Contact Transmission Engineering and T/D Structural Asset Engineering**	Pavement in street has collapsed causing traffic hazard.	• Structure roof or walls in immediate danger of collapse, showing evidence of structural compromise (load cracks, flexing concrete, and so forth) • Casting frame/plug broken, causing traffic or pedestrian hazard.	No Criteria	4/0 cu TW Cable attached to shields or arresters broken and/or damaged.	Cable or equipment rack support failure.
2	Repair or replace up to 36 months.	Structure settlement has caused pavement failure in traffic area.	• In heavy traffic areas – roof has over 20% delamination in any precast section. • Casting frame and plug have exposed rebar and or failure cracking. • In light traffic areas – 30% or more of roof is delaminated and with exposed rebar at multiple corners and in neck area. • Casting frame and plug have exposed rebar and or failure cracking. • Wall concrete deteriorated with spalling, exposed rebar.	Actively weeping cracks with salt buildup or stalactites.	Compression or bolted connections loose or show evidence of heavy corrosion.	Cable racks and other equipment supports hanging in concrete, separated from rebar.
		• Pavement still drivable but deteriorated. • Structure is below grade, buried by dirt or water channeling.	• In light traffic areas – structure roof has spalling concrete at neck and/or joints, exposed rebar at any roof joint or de-laminations in 10% or more of any roof section. Concrete spalls have come off of walls at over 5 ft. of any corner surface with accompanying areas of delamination – 25% or more in any section. • In light traffic areas - Casting frame and plug show cracking or minor spalling. • In no-traffic areas – heavily deteriorated structure has spalling concrete and de-laminations on 30%-plus of any wall and roof section or over 15 ft. of exposed rebar in roof section. Spalling concrete in danger of falling on equipment.	Soil and debris entering.	No Criteria	No Criteria
3	Re-evaluate during next Routine Patrol Cycle.	No Criteria	• Pop-outs due to zinc inserts; stalactites from roof cracks; cracks no larger than 1/8 in. in wet and/or hot environment; openings (spells) at wall or roof corners up to 3/8 in., deep near outside corners only; for each structure section no more than 3 linear ft. total of exposed rebar at precast structure corner joints or corners at deep recesses. • De-laminations evidenced by hollow concrete sound in no more than: 15% of any wall section; 20% of any roof section in non-traffic area; and 5% of any roof sections in areas not subject to continuous truck traffic. • Minor cracking in casting frame and plug in light traffic area.	No Criteria	No Criteria	• Cable racks may have rust buildup but no rust through (test with hammer and chisel). • No bolts corroded through. (Corroded through thru-bolts or racks which still can support cable or equipment should be replaced.)

3.0 Underground Components Priority Condition Guides

Table 1–3: Underground Components (Arresters, Conduit/Risers, Potheads) Priority Condition Guide

Priority	Description	Arresters – UG (Concentric)	Arresters - OH	Conduit / Risers	Potheads
1	Initiate corrective action. **Contact Transmission Engineering.**	Any failure.	• Connectors ≥150°C infrared signature. • Any Failure.	• Damaged conduit with exposed cable at public level. • Cable/jacketing damaged, potheads or arresters, failure imminent. • Any evidence of cable or equipment failure.	• Connectors ≥150°C infrared signature. • Any Failure.
2	**Contact Transmission Engineering.**	• Visible risk of interruption and/or reduced clearance. • Disconnected from grounds/concentric wires.	• Connectors >75°C and <150°C infrared signature. • Disconnected from grounds/concentric wires.	• Critical attachment damaged, BMW[a/]. • Cable slipping through cable support grips. • Damaged conduit or exposed encasement.	• Connectors >75˚C and <150°C infrared signature. • Grounds/concentric wires disconnected. • CDL[b/] or leaking. (Failure not expected.)
	Repair or replace up to 36 months.	• Corroded, missing or broken hardware. No visible risk of interruption or reduced clearance. • Visible risk of interruption and/or reduced clearance. • Disconnected from grounds/concentric wires.	• Connectors ≤ 75°C infrared signature. • Corroded, missing or broken hardware.	• Cable attachments CDL.[b/]	• Connectors ≤ 75˚C infrared signature. • Corroded, missing or broken hardware.
3	Re-evaluate during next Routine Patrol Cycle.	No Criteria	No Criteria	No Criteria	No Criteria

[a/] BMW - Broken/Missing/Worn-out. Does not perform function and requires replacement/repair.

[b/] CDL - Cracked, damaged, loose. Performs function, may be repairable.

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CG–2: Transmission Overhead Priority Condition Guides

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CG–2: Transmission Overhead Priority Condition Guides

1.0 Overhead Conductors

Table 2–1: Overhead Conductors Priority Condition Guide

Priority	Description	Poles	Towers	Skyline – OHGW (Overhead Ground Wire) FOGW (Fiber Optic GW/sky-wrap) OPGW (Optical Ground Wire)
1	Initiate corrective action.	• Splices and connectors ≥150°C infrared signature. • Conductor in contact with other conductors, structures or where contact is imminent. • Metallic debris (Mylar balloons/kite, tie-wires, and so forth) and flashover imminent. • Vegetation arcing or heavy contact. • More than 33% Aluminum conductor strands or ANY damage to steel core. • Contact Transmission Engineering as necessary.	• Splices and connectors ≥150°C infrared signature, Contact Transmission Engineering. • Conductor in contact with other conductors, structures or where contact is imminent. • Metallic debris (Mylar balloons/kite, tie-wires, and so forth) and flashover imminent. • Vegetation arcing or contact. • More than 33% Aluminum conductor strands or ANY damage to steel core.	• OHGW attachments, hardware, insulation BMW [a/], conductor contact imminent. • FOGW spinning wire BMW, conductor contact imminent, ≥ 3 Strands. • OPGW cable BMW, conductor contact imminent.
2	• Non-HFRA Repair or replace up to 36 months. • Tier 2 (Elevated) HFRA/ Non-CPUC High Fire Risk Area (HFRA)/BL 322 repair or replace within 12 months. • Tier 3 (Extreme) HFRA repair or replace within 6 months.	• Conductor damage, < 25% of outer strand layer damaged (Patch rod or Line Guard), or 33% of Aluminum strands damaged (repair sleeve, if steel core NOT damaged). • Conductor > 10% reduction in radial or vertical clearance [b/]. • Vegetation encroachment. • Splices CDL showing signs of abnormal condition. • Uneven sag in high wind area.	• Splices and connectors > 75°C and < 150°C infrared signature. Contact Transmission Engineering. • Splices and connectors ≤ 75°C infrared signature, create Priority 2 notification. • Conductor damage, < 25% of outer strand layer damaged (Patch rod or Line Guard), or 33% of Aluminum strands damaged (repair sleeve if steel core NOT damaged). • Conductor > 10% reduction in radial or vertical clearance[b/]. • Vegetation encroachment. • Splices CDL[c/] showing signs of abnormal condition (filler compound oozing from splice, conductor slipping). • Uneven sag in high wind area.	• OHGW, FOGW, OPGW attachments, hardware, Insulation CDL.[c/] • Splices CDL, or ≤ 2 strands broken/worn. • Reduction in radial clearance from conductors or structures. • OHGW has damaged or flashed insulators (500 kV only). • Dampers, armor rods CDL, ground wire wearing. • OHGW grounding scheme incorrect (500 kV only).
3	Remedy within 60 months (for conditions found after June 30th, 2019).	• Uneven sag, not high wind area.	• Uneven sag, not high wind area.	• OHGW insulators (500 kV only) not plumb.

a/ BMW - Broken/Missing/Worn-out. Does not perform function and requires replacement/repair.
b/ Clearance or Height - In all cases, clearance or height means G.O. 95 rule minimum values.
c/ CDL - Cracked, damaged, loose. Performs functions, may be repairable.

Note(s):
1. If there is a difference of temperatures detected between the conductor and connector, please notify Transmission Engineering for further evaluation.

2.0 Hardware and Equipment

Table 2–2: Hardware and Equipment Priority Condition Guide

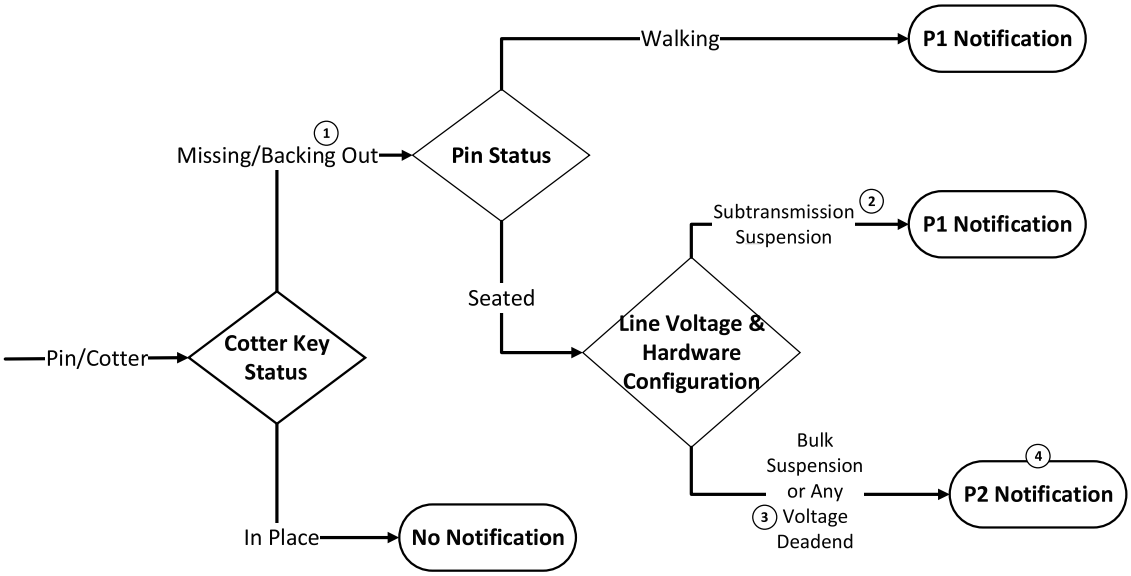
Priority	Description	Hardware	Towers	Insulators	Switches	Light Weight Steel Pole Ground Wires (Fault Return Conductor)
1	Initiate corrective action.	• Load bearing hardware or shoes BMW; failure imminent. • Incorrect hardware installed, failure imminent. • Load bearing hardware or shoes CDL	• Load bearing hardware or shoes BMW; failure imminent. • Incorrect hardware installed, failure imminent. • Load bearing hardware or shoes CDL	• >25% soiled bells or sheds • >25% broken bells or damaged sheds. • Severe cracks and exposed fiberglass rod • Severe tracking exposing fiberglass rod. • Metal fittings with more than 20% loss in steel. • For Colter Key priority ratings, refer to Section 2.1 • For Bolt Nut Cotter (BNC) priority ratings, refer to Section 2.2	• Switch damaged; failure imminent. • Contacts and connectors ≥150°C infrared signature. • Lock missing.	• Imminent danger of contacting power line or sagging into public level. • Load bearing connections at structure CDL • Load bearing connections at structure BMW
2	• Tier 2 (Elevated) HFRA/ Non-CPUC High Fire Risk Area (HFRA)/BL 322 repair or replace within 12 months. • Tier 3 (Extreme) HFRA repair or replace within 6 months. For non fire risk conditions, refer to Chapter GE–1, Paragraph 3.3 B. 2 . Exceptions To Remediation Time Frames.	• Incorrect hardware installed. • Hardware showing signs of wear under abnormal conditions (high wind area and so forth), approaching end of expected service life. • Quadrant/suspension clamps showing signs of abnormal wear.	• Incorrect hardware installed. • Spacers BMW, damaging conductor. • Dampers BMW, damaging conductor. • Hardware showing signs of wear under abnormal conditions (high wind area), approaching end of expected service life. • Compression dead ends or quadrant suspension clamps showing signs of abnormal wear. • Dampers CDL, not damaging conductor. • Spacers CDL	• >20% soiled bells or sheds • >20% broken bells or damaged sheds. Radial cracking and hubbed on porcelain bells. • Polymer is dried, brittle, and/or cracking • Excessive tracking and burn marks near the seals (greater than 0.004 inches in depth) • Metal fittings show signs of steel loss, severe pitting and/or near the seals • Cotter key is walking out • Missing Corona ring • For Colter Key priority ratings, refer to Section 2.1 • For Bolt Nut Cotter (BNC) priority ratings, refer to Section 2.2	• Switch out of adjustment, inoperable. • RTS rod not covered w/PVC through communication level. • Whiskers BMW. • Handle broken or low enough for public to access. • Contacts and connectors < 150°C infrared signature. • Switch out of adjustment, operable. • Whiskers CDL, not seating properly in receivers.	• Clearances impaired, may contact messengers or other facilities. • Non-load bearing connections at structure BMW [a/]. • Non-load bearing connections at structure CDL.[b/]
3	Remedy within 60 months. (for conditions found after June 30th, 2019)	• Discoloration. • Hardware showing signs of normal wear under normal conditions. Approaching end of expected service life.	• Discoloration. • Hardware showing signs of normal wear under normal conditions. Approaching end of expected service life.	• >15% soiled bells or sheds • >15% broken bells or damaged sheds • Surface cracking on sheds or sheath. • Burnt surface near the seals. • Uniform whitening on entire insulator. • Metal fittings show slight pitting. • Rust and signs of movement. • Corona ring loose or broken. • For Bolt Nut Cotter (BNC) priority 3 ratings, refer to Section 2.2	• Switch rods, related hardware CDL (UV, salt exposure and so forth).	No Criteria

[a/] BMW - Broken/Missing/Worn-out. Does not perform function and requires replacement/repair
[b/] CDL - Cracked/Damaged/Loose. Performs functions, may be repairable

2.1 Pin/Cotter: Decision Tree

Provides detailed steps to properly classify a cotter and pin status condition when missing/backing out/walking/seated for Subtransmission Suspension, Bulk Transmission Suspension and/or Any Voltage Deadend.

Figure 2–1: Pin and Cotter Decision Tree



Note(s):

1. Cotter key is considered backing out, if the cotter key hump is partially within the clevis hole (i.e., does not fully extend beyond the clevis pin hole) or (for non-hump cotter keys the legs do not extend beyond the clevis pin hole).
2. All suspension shield wire, OPGW and other pin applications (i.e. FRC, down guys, switch assemblies, post insulator bases, etc.) should be treated like Subtransmission Suspension.
3. Deadend shield wire and OPGW should be treated like Any Voltage Deadend.
4. P2 notifications created for any Deadend or Bulk Suspension should be given a 3-month timeframe for complete

Figure 2–2: P1 (Pin/Cotter: Missing Cotter Key > Walking Pin > P1)

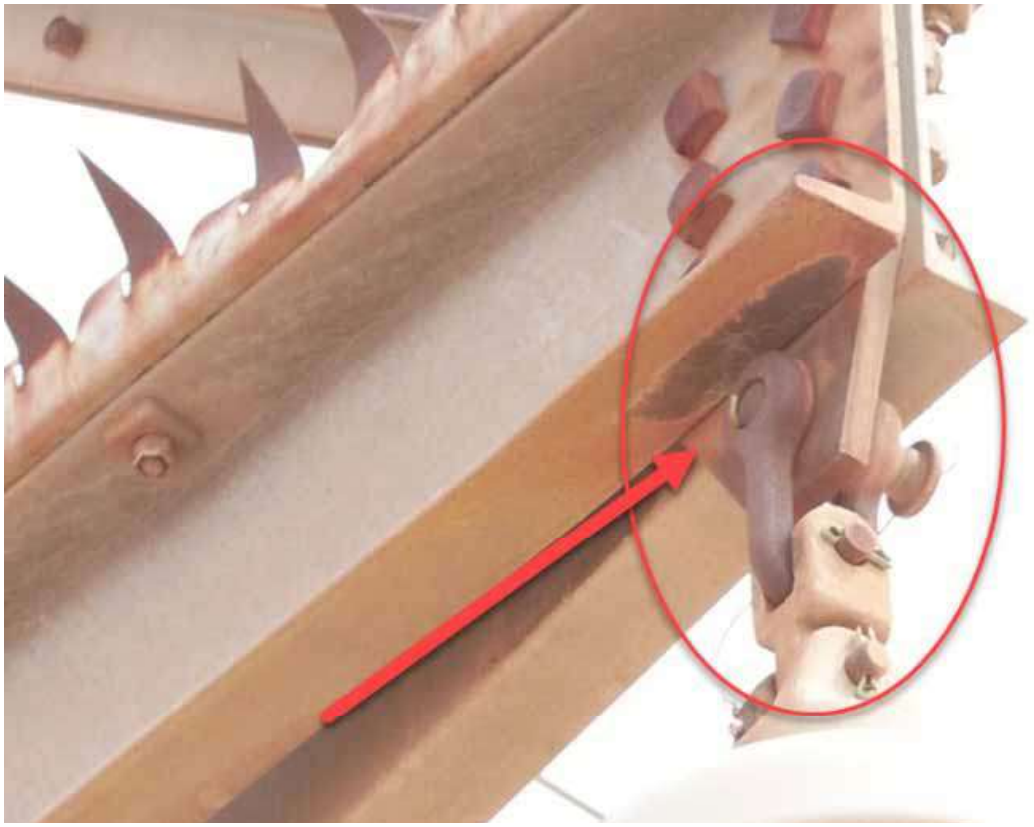
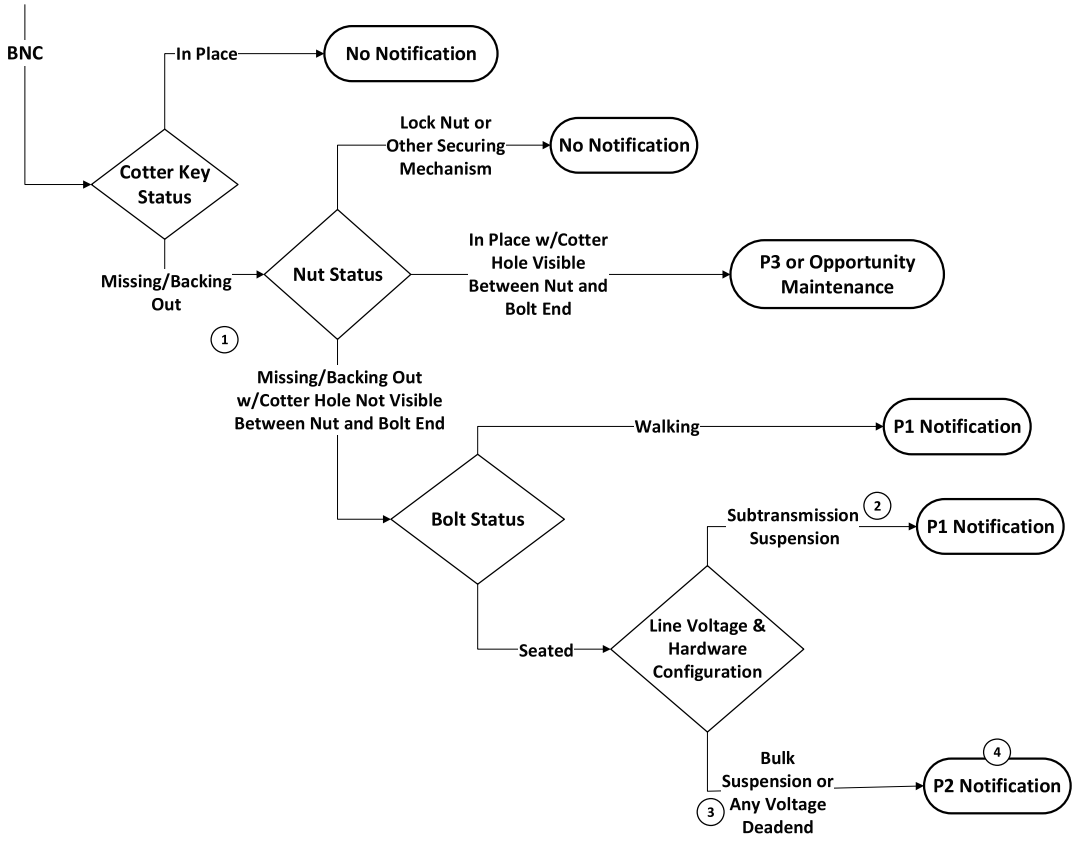


Figure 2–3: P2 (Pin Cotter: Backing Out Cotter Key > Seated Pin > Deadend Assembly > P2)

2.2 Bolt/Nut/Cotter: Decision Tree

Provides detailed steps to properly classify a bolt nut cotter condition when missing/backing out/walking/seated for Subtransmission Suspension, Bulk Transmission Suspension and/or Any Voltage Deadend.

Figure 2–4: Bolt, Nut and Cotter Decision Tree



Note(s):

1. Cotter key is considered backing out, if the cotter key hump is partially within the clevis hole (i.e., does not fully extend beyond the clevis pin hole) or (clarify for non-hump cotter keys).
2. All Suspension shield wire and OPGW should be treated like Subtransmission Suspension.
3. Deadend shield wire and OPGW should be treated like Any Voltage Deadend.
4. P2 notifications created for any Deadend or Bulk Suspension should be given a 3-month timeframe for completion.

Figure 2–5: P2 (BNC: Cotter Key Mission > Backing Out with Cotter Hole Not Visable > Bolt Seated > Deadend > P2)

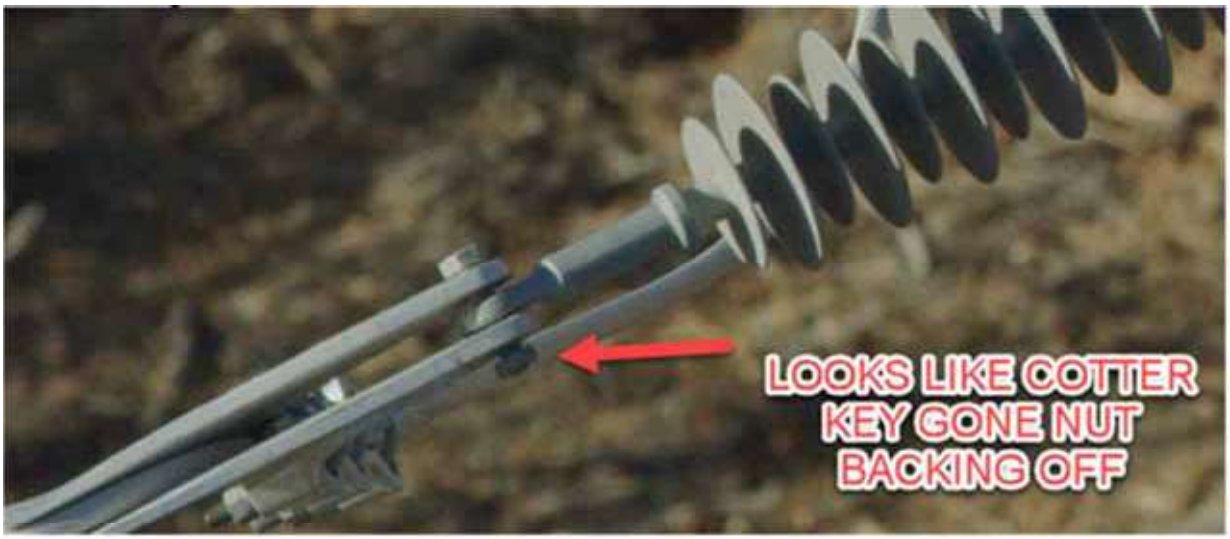
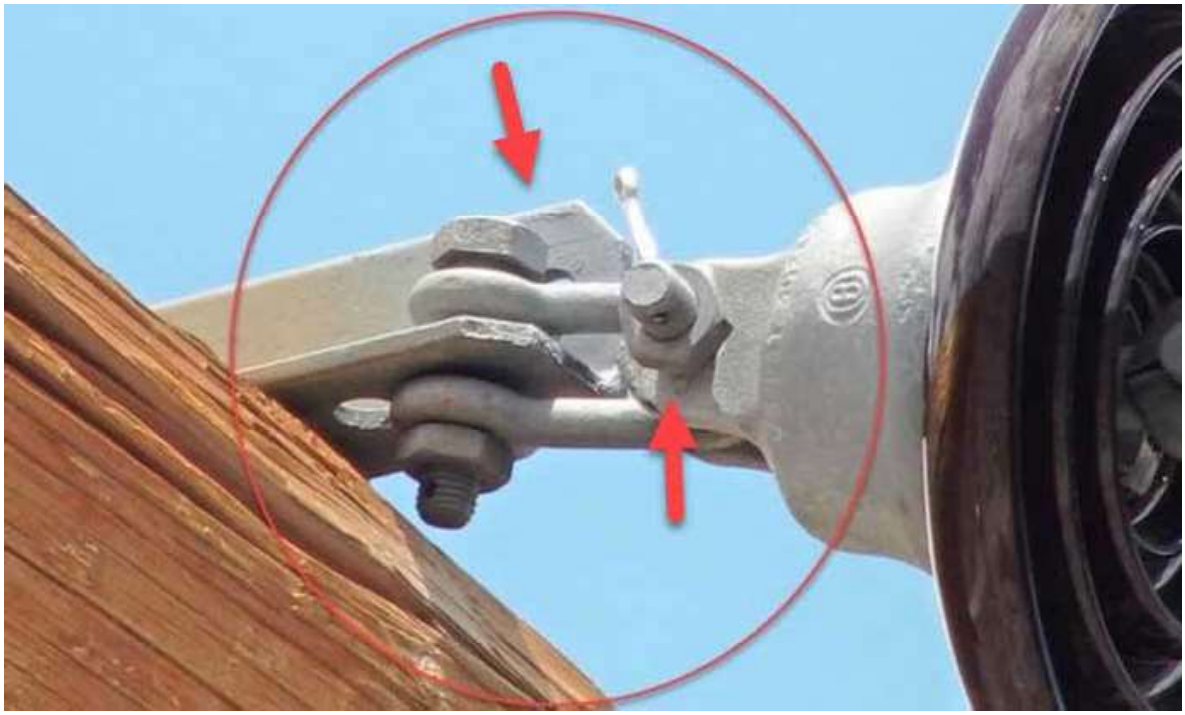


Figure 2–6: P3 (BNC: Cottery Key Missing > Nut Backing w/ Hole Still Visable > P3)

Figure 2–7: No Notification (BNC: Cotter Key Missing/Backing Out > Nut in Place > No Notification)



3.0 Wood Poles Intrusive and Visual Inspection

1. For detailed description of criteria please reference MS 454, Inspection and Treatment of Wood Poles in service.
2. This section is for reference only. Intrusive pole inspections are exclusively performed by the Intrusive Pole Inspection Program (IPI).

4.0 Risers, Guys, Grounds Equipment

Table 2–3: Risers, Guys, Grounds, and Equipment Priority Condition Guide

Priority	Description	Public Level	Communications Level	Power Line Level
1	Initiate corrective action.	• Riser broken (cable exposed or damaged). • Guys/Anchor rods, BMW[a/], pole leaning. • Guy guard, BMW, urban areas. • Ground molding BMW (wire exposed). • Loose guy in proximity and potential of contacting conductor.	SCE communication arm/bracket, BMW — **Contact SCE Carrier Solutions**	• Major equipment bracket, BMW. • Span guy, BMW, pole leaning.
2	• Non HFRA Repair or replace up to 36 months. • Tier 2 (Elevated) HFRA/ Non-CPUC High Fire Risk Area (HFRA)/BL 322 repair or replace within 12 months. • Tier 3 (Extreme) HFRA — repair or replace within 6 months. For non fire risk conditions, refer to Chapter GE–1, Paragraph 3.3 B. 2. Exceptions To Remediation Time Frames.	• Guys/Anchor rods, BMW, pole not leaning. • Riser, BMW, uncoupled/gap (cable not exposed). • Pole steps too low, or accessible to public. • Guy guard, BMW, rural areas. • Illegal attachments. • Ground molding, CDL (wire not exposed). • Ground wire, BMW. • Multiple loose/missing riser straps. • Uncapped SCE riser sweep. • Guy insulators improper install, BMW. • Visibility strip, BMW.	• Climbing space obstruction.[b/ c/] • Communications clearance to power line. • RTS switch rod cover, BMW. • Riser, CDL[d/] (conductor exposed). • Ground wire, BMW.	• Animal/bird nest near circuitry/equipment. • Braces, BMW. • Tap, BMW. • Span guy, BMW. • Bond wire, BMW. • Riser, BMW (conductor exposed). • Ground wire, BMW. • Guy insulators improper install, BMW.
3	Remedy within 60 months. (for conditions found after June 30th, 2019)	• Riser, CDL, coupling missing or broken, no gap (cable not exposed).	• SCE communication arm/bracket CDL — Contact SCE Carrier Solutions. • Riser, CDL (cable not exposed). • Ground molding, BMW. • Riser strap loose, uncoupled/gap. • Pole Steps, BMW.	• Equipment bracket/braces, CDL. • Span guy, CDL. • “High Voltage” signs BMW. • Idle hardware (bolts, racks, and so forth). • Riser, CDL (cable not exposed). • Bond wire, CDL. • Ground wire exposed. • Pole steps BMW. • Climbing space obstruction.

[a/] BMW - Broken/Missing/Worn-out. Does not perform function and requires replacement/repair.

[b/] Climbing space obstruction caused by SCE.

[c/] Immediately initiate Notice of Hazardous Condition Procedure.

[d/] CDL - Cracked/Damaged/Loose. Performs functions, may be repairable

5.0 Crossarms, Timbers, Spar Arms, and X-Braces

Table 2–4: Crossarms, Timbers, Spar Arms and X-Braces Priority Condition Guide

Priority	Description	Bowed/Fracture/Canting	Split/Insect/Decay Damage (SIDD)	Burning/Tracking
1	Initiate corrective action.	• Complete fracture. • Canting, thru-bolt pulled out. • Wood Crossarms: — Partial fracture causes >5 in deflection. • Timbers/Spar Arms: — Arm bowed >5 in and splintering.	• SIDD [a/] at thru-bolt hole, arm has moved. • SIDD at insulator bolt hole, arm separated.	Crossarm tracking, cross section reduced by ≥50%.
2	• Non HFRA Repair or replace up to 36 months. • Tier 2 (Elevated) HFRA/ Non-CPUC High Fire Risk Area (HFRA)/BL 322 — repair or replace within 12 months. • Tier 3 (Extreme) HFRA — repair or replace within 6 months.	• X-Brace BMW [b/]. • Canting, thru-bolt pulling out. • Wood Crossarms: — Partial fracture causes <5 in deflection. • Timbers/Spar Arms: — Arm bowed >5 in, not splintering. — Crossarm CDL [c/] — X-Brace CDL.	• SIDD at thru-bolt hole, no movement. • SIDD at critical attachment, bolt pulling through. • Multiple crossarms, bolt at SIDD pulled through one of two arms, no damage to other crossarm(s). • SIDD at attachment or insulator bolt hole, bolt not pulling through. • SIDD ≤2 in. of attachment or insulator bolt hole. • Multiple crossarms, bolt at SIDD has not pulled through. No damage on second or third arm.	• Crossarm burned, tracking, cross section reduced by 25% to 50%. • X-Brace missing, burned, tracking, cross section reduced by 25% to 50%. • Crossarm tracking. • X-Brace tracking.
3	Remedy within 60 months. (for conditions found after June 30th, 2019).	No Criteria	• SIDD, ≥2 in. of attachment or insulator bolt holes. • Crossarm SIDD, contained by split bolt.	No Criteria

[a/] SIDD - Split and/or insect and/or decay damage.

[b/] BMW = Broken, Missing, Worn Out. Does not perform function and requires replacement/repair.

[c/] CDL = Cracked/Damaged/Loose. Performs functions, may be repairable.

Note(s):

1. Decay can include various kinds of rot and/or fungi.
2. Insects can include various kinds of termites, carpenter ants, and carpenter bees.

6.0 Tubular Steel Poles (TSP) and Footings

Table 2–5: Tubular Steel Poles (TSP) and Footings Priority Condition Guide

Priority	Descriptions	Pole	Attachments	Footings
1	Initiate corrective action. Notify Transmission Engineering.	Pole, critical attachment point or arm vang damaged, failure imminent.	Arm(s) bent, racked around, critical attachment damaged, failure imminent.	Footing and/or footing bolts (nuts) compromised/damaged, structural failure imminent.
2	• Non HFRA Repair or replace up to 36 months. • Tier 2 (Elevated) HFRA/ Non-CPUC High Fire Risk Area (HFRA)/BL 322 – repair or replace within 12 months. • Tier 3 (Extreme) HFRA – repair or replace within 6 months. For non fire risk conditions, refer to Chapter GE–1, Paragraph 3.3 B. 2. Exceptions To Remediation Time Frames.	• Pole showing advanced corrosion to pole or base plate. • Pole damaged or dented from foreign contact. • Critical attachment point damaged, failure not expected. • Pole deforming • Minor corrosion on pole or base plate. • Steps BMW[a/]. • Cable attachments CDL[b/].	Non-critical attachments, arms/equipment deflecting, failure not expected. Non-critical attachments, CDL.	• Significant/moderate spalling. • Footing movement and/or structure leaning. • Footing bolts (nuts) loose, missing or showing corrosion. • Footing projection out of ground, too high (scour) or too low (buried) for site conditions.
3	Remedy within 60 months (for conditions found after June 30th, 2019).	• High voltage signs BMW. • Steps CDL.	No Criteria	No Criteria

[a/] BMW - Bent, missing, or worn out.

[b/] CDL - Cracked damaged or loose. Performs functions, may be repairable.

Note(s):

1. Critical Attachment - Examples: arm vang, X arm, insulator attachment, or equipment attachment.
2. Transmission Engineering Assessment is required for both Priority 1 and Priority 2.

7.0 Light Weight Steel Poles (LWS)

Table 2–6: Light Weight Steel Poles (LWS) Priority Condition Guide

Priority	Description	Pole	Attachments	Footing/Set Depth
1	Initiate corrective action.	Pole damage causing unstable structure, failure imminent. Contact Transmission Engineering for assessment.	• Steel/composite arm racked, bent, broken, failure imminent.	Footing/set depth no longer supports pole, failure imminent.
2	• Non HFRA – Repair or replace up to 36 months. • Tier 3 (Extreme) HFRA – repair or replace within 6 months. • Tier 2 (Elevated) HFRA/ Non-CPUC High Fire Risk Area (HFRA)/BL 322 – repair or replace within 12 months.	• Pole showing corrosion to pole or base. • Caving/deflection of surface caused by/at point of critical attachment. **Contact Transmission Engineering for assessment** • Pole slip joint has settled, not jacked together properly during installation, conductors sagging, pole leaning, guys slack. • Pole grounding/fault return scheme not properly installed. • Connector(s) from fault return conductor BMW.	• Steel/composite arm bent, cracked, deflecting. • Steel, composite arm showing signs of advanced corrosion or UV degradation.	Depth in soil >10% shallow and heavy equipment (transformer, long span/2+ circuits, and so forth). • Leaning >1 ft per 10 ft height.
3	Remedy within 60 months (for conditions found after June 30th, 2019).	• High voltage signs BMW. • Scraping/striking damage compromising galvanized coating or protective coating.	No Criteria	No Criteria

Note(s):
1. Critical Attachment - Examples: guy fixture, X-arm thru-bolt, insulator thru-bolt, or equipment thru-bolt.
2. High Stress Area - Examples: For poles with guy, at guy attachment; for other Transmission poles, GL up to 1/3 total height above ground; for H-frame poles, at "X"-brace attachments.

8.0 Towers and Footings

Table 2–7: Towers and Footings Priority Condition Guide

Priority	Descriptions	Structure	Attachments	Footing/Stub Angle Concrete or Grillage
1	Initiate corrective action. Contact Transmission Engineering. For non fire risk conditions, refer to Chapter GE–1, Paragraph 3.3 B. 2. Exceptions To Remediation Time Frames.	Leg steel bent, deflecting, compromising structure integrity, failure imminent.	• Fiber Cable risers, boxes, or equipment damaged; exposed to public – **Contact Carrier Solutions**. • Bird guard CDL[a/], in danger of contacting conductor.	• Cracking evident in concrete footing compromising structural integrity. • Damage, rust and/or corrosion evident to footing/stub angles compromising structural integrity.
2	• Non HFRA - Repair or replace up to 36 months. • Tier 2 (Elevated) HFRA/ Non-CPUC High Fire Risk Area (HFRA)/BL 322 — repair or replace within 12 months. • Tier 3 (Extreme) HFRA — repair or replace within 6 months. For non fire risk conditions, refer to Chapter GE–1, Paragraph 3.3 B. 2. Exceptions To Remediation Time Frames.	• Leg steel deflection, integrity of structure not compromised. • Lacing, other bracing BMW[b/].	• Climbing barrier/discourager BMW. • Splice boxes for fiber cable damaged, cable, equipment not exposed — **Contact Transmission Telecom.** • Danger signs BMW. • Bird guard BMW. • Steps, bolts CDL • Fills missing. • Damaged, pitting, or flaking galvanizing. • Climbing barrier/discourager CDL. • Bird guard CDL, no danger of falling or contacting conductors.	• Footing projection out of ground too high (scour) or too low (buried) for site conditions. • Significant flaking or rust damage to grillage footings, stub angles; and related bolts, plates and hardware. • Concrete footings spalling/cracking • Footings showing signs of movement, undercut by erosion. • Grillage footings/stub angles rusting.
3	Remedy within 60 months (for conditions found after June 30th, 2019).	• Missing “High-Voltage” Sign.	No Criteria	No Criteria

[a/] CDL - Cracked/damaged/loose - Performs function but may be repairable.

[b/] BMW - Broken/missing/worn out. Does not perform function and requires repair/replacement

9.0 Rights of Way and Access

Table 2–8: Rights of Way and Access Priority Condition Guide

Priority	Description	Access Roads/Pads	Vegetation	Drainage	Crib Walls
1	Initiate corrective action.	• Structure pad washed out. • Structure in immediate danger of failure. • Access road to structure in immediate danger of failure. • Access to structure/equipment obstructed, requires immediate attention. • Access road/pad washed out.	• No criteria	Water ponding at structure site, structure threatened. Erosion impacting overhead structure, causing immediate threat. **Contact Transmission Engineering.**	Soil at/around structure sliding, crib wall giving way, unable to support slide, structure threatened. **Contact Transmission Engineering.**
2	Repair or replace up to 36 months. For non fire risk conditions, refer to Chapter GE–1, Paragraph 3.3 B. 2. Exceptions To Remediation Time Frames.	• Access road/pad washing out. • Stability of structure pad may be compromised in the near future. • Turning radius insufficient in corners, road camber insufficient for proper drainage. • Access to structure/equipment impaired, no immediate threat to structure or equipment.	• Trees/shrubs other vegetation on or near structures/footings impairing access or affecting same. • Trees/shrubs other vegetation on or near structures/footings not yet impairing access or affecting same. • Climbing space obstruction due to ivy/vines on pole.	• Water ponding at structure site causing unstable condition, structure at risk but not immediately threatened. • Over-side drains/culverts blocked, undermined, or BMW.[a/] • Over-side drains/culverts CDL.[b/]	• Soil at/around structure sliding, crib wall containing slide, but beginning to deflect or lean, structure not threatened. • Evidence of crib wall wear (rust, rot, insect infestation and so forth). • Evidence of fire damage to crib wall. • Erosion around wall beginning to compromise same.
3	Re-evaluate during next Routine Patrol Cycle.	• Access road/pad eroding. • Access to structure/equipment not impaired; no immediate threat to structure or equipment.	No Criteria	• Water/runoff being directed onto easement or SCE property by third party. No erosion problem.	No Criteria.

[a/] BMW = Broken/Missing/Worn Out. Does not perform function and requires replacement or repair.

[b/] CDL = Cracked/Damaged/Loose. Performs function, may be repairable

NOTE

Gates, fences, and bollards are the responsibility of Real Properties.

CG–3: Notification of Third Party-Caused Condition

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CG–3: Notification of Third Party-Caused Condition

1.0 Notification of Third Party-Caused Conditions

Once condition(s) caused by a 3rd party are identified in the field, the 3rd party must be notified using the form and contact information provided in Table 3–1 below.

The following condition(s) were identified by Southern California Edison (SCE) during the normal course of business. You or your tenant may have created a safety and/or reliability condition that could adversely affect our system. We are providing you with this notification so you can take the appropriate action.

Table 3–1: Notification Form and Contact Information

Utility: Attention: Department:	WO #
Address:	Phone No.:
Location of SCE Facilities:	SCE FIM Map No.:
	Pole/Equip No.

CONDITIONS CAUSED BY THIRD-PARTY UTILITY
Condition:
Condition Comments:

SCE CONTACT INFORMATION
Sent By: Title: Telephone Number: Address (Street, City, Zip):
Addition Remarks:

Table 3–2: Non-SCE Emergency Phone Numbers

Member Code	Company Name	Emergency Telephone Numbers
A	CITY OF GLENDALE	[PHONE NUMBERS REMOVED]
AMT	ATC OUTDOOR DAS, LLC.	
ATC	VERIZON WIRELESS (AIRTOUCH)	
ATS/MCI	MCI/METRO ATS/ MCI COMMUNICATIONS	
ATT/TCG	AT&T COMMUNICATIONS/ AT&T LOCAL SERVICES	
B	CITY OF BURBANK	
BVE	BEAR VALLEY ELECTRIC SERVICE INC.	
CCI	CA-CLEC LLC	
COB	CITY OF BANNING	
D	CITY OF ANAHEIM	
EXT	EXTENET SYSTEMS (CALIFORNIA) LLC	
F	CITY OF COLTON	
FON	SPRINT COMMUNICATIONS CO. L.P.	
FTR	FRONTIER COMMUNICATIONS	
H/T	AT&T CALIFORNIA	
ICG	M-POWER/TELEPACIFIC	
J	CITY OF RIVERSIDE	
LAC	AT&T MOBILITY	
LLW	CITY OF LOMPOC	
M	CITY OF LOS ANGELES DEPARTMENT OF WATER AND POWER	
MA	CITY OF AZUSA	
MCI	MCI TELECOMMUNICATIONS	
MOB	MOBILITIE, LLC.	
MP	CITY OF PASADENA	
NG	NEXTG NETWORKS	
NPN	NEWPATH NETWORKS	
NXT	XO COMMUNICATIONS (NEXTLINK)	
PBM	T-MOBILE, USA	
SPR	SPRINT PCS	
STL	SONIC TELECOM, LLC.	
TCA	TELEPORT COMMUNICATIONS AMERICA, LLC.	
TWN/TWS	TIME WARNER CABLE	
V	CITY OF VERNON	