

Transmission Condition Assessment Form

Ground and Aerial Inspections

Effective Date:
2-4-2021

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■ This symbol and purple text indicate that the question/option is for aerial only

Approvals

Department, Title	Name	Date of Approval
Law Department, Senior Attorney	Margarita "Rita" Gevondyan	2/1/2021
Enterprise Risk Management, Senior Manager	Edward P "Ted" Gribble	1/29/2021
AA&DS, Principal Manager	Raymond Fugere	2/1/2021
T&D Apparatus & Linear Strategies, Principal Manager	Thuan Tran	2/1/2021
Compliance & Quality, Principal Manager	Mel Stark	1/29/2021
Transmission, Construction & Technical Support, Manager	Jason Jimenez	2/1/2021
Aerial Inspections, Principal Manager	Alyssa Grigoryan	1/29/2021

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Change Log Revisions

Section	Impacted Group	Rational For Change	Change From	Change To
Structure Information	Ground and Aerial	Adjusting the "NOTE" listed under the question for Aerial; Removing "incorrect grid" Option for Ground	<p>1. Are you able to proceed with this inspection?</p> <p>■Note: Incorrectly Tagged, Missing Photo Angles, Poor Photo Quality, Duplicate Video</p> <p>⚙️Note: Incorrect Number, No Access, Obstructed, Incorrect Grid, Non-Transmission, Pole Removed</p> <p>a. Yes</p> <p>b. No</p> <p>i. Incorrect Structure Number</p> <p>1. Number in the field Note: "Use Collect feature to complete inspection for Number in Field"</p> <p>ii. No Access</p> <p>1. Property Owner</p> <p>2. Responsible Patrolman</p> <p>3. Brush Overgrown</p> <p>4. Helicopter Only</p> <p>iii. Obstructed View</p> <p>iv. ⚙️Incorrect Grid</p> <p>1. Select Correct Grid **Grid Drop Down (ME, MW, E, NC, SJ, O, H)</p> <p>v. Non-Transmission</p> <p>1. Telecommunication</p> <p>2. Foreign</p> <p>3. Distribution</p> <p>vi. Duplicate Record</p> <p>vii. Non-HF</p> <p>viii. Removed Structure (Not in field/active in SAP)</p> <p>ix. ■Incorrectly Tagged (Heli/UAV)</p> <p>x. ■Missing Photo Angles (Heli/UAV)</p> <p>xi. ■Poor Photo Quality (Heli/UAV)</p> <p>xii. ■Duplicate Video(Heli/UAV)</p>	<p>1. Are you able to proceed with this inspection?</p> <p>■Note: Incorrectly Tagged, Missing Photo Angles, Poor Photo Quality, Structure Media Issue, Structure Under Repair</p> <p>⚙️Note: Incorrect Number, No Access, Obstructed, Incorrect Grid, Non-Transmission, Pole Removed</p> <p>a. Yes</p> <p>b. No</p> <p>i. Incorrect Structure Number</p> <p>1. Number in the field Note: "Use Collect feature to complete inspection for Number in Field"</p> <p>ii. No Access</p> <p>1. Property Owner</p> <p>2. Responsible Patrolman</p> <p>3. Brush Overgrown</p> <p>4. Helicopter Only</p> <p>iii. Obstructed View Incorrect Grid Select Correct Grid **Grid Drop Down (ME, MW, E, NC, SJ, O, H)</p> <p>iv. Non-Transmission</p> <p>1. Telecommunication</p> <p>2. Foreign</p> <p>3. Distribution</p> <p>v. Duplicate Record</p> <p>vi. Non-HF</p> <p>vii. Removed Structure (Not in field/active in SAP)</p> <p>viii. ■Incorrectly Tagged (Heli/UAV)</p> <p>ix. ■Missing Photo Angles (Heli/UAV)</p> <p>x. ■Poor Photo Quality (Heli/UAV)</p> <p>xi. ■Structure Media Issue Duplicate Video(Heli/UAV)</p> <p>xii. ■Structure Under Repair (Heli/UAV)</p>

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Section	Impacted Group	Rational For Change	Change From	Change To
Structure Information	Ground and Aerial	Add option to structure type	2. Structure Type Pole <ul style="list-style-type: none"> <input type="checkbox"/> Monopole/Single Pole <input type="checkbox"/> H-Frame <ul style="list-style-type: none"> ■ Add Associated FLOC to other Structures <input type="checkbox"/> 3-Pole <input type="checkbox"/> Guy Stub <input type="checkbox"/> Other (comment) 	2. Structure Type Pole <ul style="list-style-type: none"> <input type="checkbox"/> Monopole/Single Pole <input type="checkbox"/> H-Frame <ul style="list-style-type: none"> ■ Add Associated FLOC to other Structures <input type="checkbox"/> 3-Pole <input type="checkbox"/> Flying Berry Pole <input type="checkbox"/> Guy Stub <input type="checkbox"/> Other (comment)
Data Collection	Aerial	Combine TTC Cable and 3 rd Party Cable options because Aerial is unable to identify communication tag	7. Is there a Buddy Pole? <ul style="list-style-type: none"> a. Yes <ul style="list-style-type: none"> i. What is attached to Buddy Pole? <ol style="list-style-type: none"> 1. TTC Cable 2. 3rd Party Cable 3. Distribution 4. Nothing (Bare Pole) b. No 	7. Is there a Buddy Pole? <ul style="list-style-type: none"> a. Yes <ul style="list-style-type: none"> i. What is attached to Buddy Pole? <ol style="list-style-type: none"> 1. ⚙️TTC Cable 2. ⚙️3rd Party Cable 3. ■Communication 4. Distribution 5. Nothing (Bare Pole) b. No
Data Collection	Ground and Aerial	Combine Arresters and Risers/Potheads options	13. Indicate the Equipment Type(s) and attachments on the Structure <ul style="list-style-type: none"> a. Switch <ul style="list-style-type: none"> i. ⚙️KPF ii. ⚙️Turner iii. ⚙️Cleveland Price b. Arresters c. Risers/Potheads d. RTS 	13. Indicate the Equipment Type(s) and attachments on the Structure <ul style="list-style-type: none"> a. Switch <ul style="list-style-type: none"> i. ⚙️KPF ii. ⚙️Turner iii. ⚙️Cleveland Price Arresters b. Risers/Potheads/Arresters c. RTS
Notification	Ground	Current responses are Yes or No; Adding option for ground to identify duplicate notification number. Aerial will have these options on the Field Specialist form.	Current response options: Yes No	Change response options to: ⚙️Yes No ⚙️Duplicate Indicate Duplicate Notification Number
Notification	Ground & Aerial	Added clarification of arms	33. Do Supporting Members (braces/crossarms/hardware) require notification (excluding guys/guying)?	33. Do Supporting Members (braces/crossarms/arms/hardware) require notification (excluding guys/guying)?

Section	Impacted Group	Rational For Change	Change From	Change To
Notification	Ground and Aerial	Adjust language due to audit finding	<p>44. Do visible Bonds/Bonding require notification? Examples: Signs of damage, missing/loose connections, etc.</p> <p>a. Yes</p> <ol style="list-style-type: none"> i. Damage ii. Missing/Loose Connections iii. Unable to Determine <ol style="list-style-type: none"> 1. No Access 2. Property Owner 3. Obstructed 4. Brush Overgrown *Notification Build Out Required <p>b. No</p>	<p>44. Do visible Bonds/Bonding and/or copper grounding require notification? Examples: Signs of damage, missing/loose connections, etc.</p> <p>a. Yes</p> <ol style="list-style-type: none"> i. Damage ii. Missing/Loose Connections iii. Unable to Determine <ol style="list-style-type: none"> 1. No Access 2. Property Owner 3. Obstructed 4. Brush Overgrown *Notification Build Out Required <p>b. No</p> <p>c. Duplicate</p> <ol style="list-style-type: none"> i. Duplicate Notification Number
Notification	Ground and Aerial	Added option for aerial to indicate covered equipment. Added P2, P3, and Duplicate option for Ground.	<p>45. Do Jumpers require notification? <i>Note: Inadequate shape/clearance, needs I-string/stiffener/weights, missing/damaged spacers, loose connections</i></p> <p>a. Yes</p> <ol style="list-style-type: none"> i. Inadequate Shape/Clearance ii. Needs I-string/stiffener/weights iii. Missing/damaged spacers iv. Loose connections *Notification Build Out Required <p>b. No</p>	<p>45. Do Jumpers require notification? <i>Note: Inadequate shape/clearance, needs I-string/stiffener/weights, missing/damaged spacers, loose connections</i></p> <p>a. Yes</p> <ol style="list-style-type: none"> i. Inadequate Shape/Clearance ii. Needs I-string/stiffener/weights iii. Missing/damaged spacers iv. Loose connections *Notification Build Out Required <p>b. No</p> <p>c. Duplicate</p> <ol style="list-style-type: none"> i. Duplicate Notification Number d. Covered Equipment *Notification Build Out NOT Required

Section	Impacted Group	Rational For Change	Change From	Change To
Notification	Ground and Aerial	Added option for aerial to indicate covered equipment. Added P2, P3, and Duplicate option for Ground.	<p>47. Does Line Hardware require notification? <i>Examples: Signs of corrosion/loss of material, wear/tear/grooving, slotted holes, burn/flash/arc marks, missing/damaged cotter keys/nuts/bolts, etc.</i></p> <p>a. Yes</p> <ul style="list-style-type: none"> i. Corrosion/loss of material ii. Wear/tear/grooving iii. Slotted holes iv. Burn/flash/arc marks v. Missing/damaged cotter keys/nuts/bolts *Notification Build Out Required <p>b. No</p>	<p>47. Does Line Hardware require notification? <i>Examples: Signs of corrosion/loss of material, wear/tear/grooving, slotted holes, burn/flash/arc marks, missing/damaged cotter keys/nuts/bolts, etc.</i></p> <p>a. Yes</p> <ul style="list-style-type: none"> i. Corrosion/loss of material ii. Wear/tear/grooving iii. Slotted holes iv. Burn/flash/arc marks v. Missing/damaged cotter keys/nuts/bolts *Notification Build Out Required <p>b. No</p> <p>c.  Duplicate</p> <ul style="list-style-type: none"> i. Duplicate Notification Number <p>d.  Covered Equipment *Notification Build Out NOT Required</p>

Section	Impacted Group	Rational For Change	Change From	Change To
Notification	Ground and Aerial	New Question		<p>51. Does Communication Cable and/or Equipment (Non-SCE) require a notification?</p> <p>a. Yes</p> <ul style="list-style-type: none"> i. Inadequate clearance between communication equipment or structures and SCE electrical equipment or structures ii. Excessive sag of communication cables iii. Loose lashing wire iv. Broken or separated messenger wire v. Broken, damaged or severely strained communication guy wires vi. Excessive bowing or bending of pole from potential overloading at communication equipment attachment points vii. Improperly secured communication conductor or equipment viii. Vegetation straining communication messenger or guy wire and/or causing structural integrity issues ix. Unauthorized Attachment x. Other <p>*Notification Build Out Required</p> <p>b. No</p> <p>c. Unable to Determine</p> <p>d. ★ Duplicate</p> <ul style="list-style-type: none"> i. Duplicate Notification Number

Section	Impacted Group	Rational For Change	Change From	Change To
Notification	Aerial	Added option to indicate covered cotter key	<p>54. ■Do Visible Cotter Keys Require Notification?</p> <ul style="list-style-type: none"> a. Yes <ul style="list-style-type: none"> i. Cotter Key Missing ii. Cotter Key Backing Out *Notification Build Out Required b. No c. Unable to Determine 	<p>54. ■Do Visible Cotter Keys Require Notification?</p> <ul style="list-style-type: none"> a. Yes <ul style="list-style-type: none"> i. Cotter Key Missing ii. Cotter Key Backing Out *Notification Build Out Required b. No c. Unable to Determine d. Covered Cotter Keys *Notification Build Out NOT Required
Notification	Aerial	Added option to indicate covered pins	<p>55. ■Do Pins Require Notification?</p> <ul style="list-style-type: none"> a. Yes <ul style="list-style-type: none"> i. Pin Backing Out ii. Significant Corrosion iii. Misaligned Insulator *Notification Build Out Required b. No c. Unable to Determine 	<p>55. ■Do Pins Require Notification?</p> <ul style="list-style-type: none"> a. Yes <ul style="list-style-type: none"> i. Pin Backing Out ii. Significant Corrosion iii. Misaligned Insulator *Notification Build Out Required b. No c. Unable to Determine d. Covered Pins *Notification Build Out NOT Required

Section	Impacted Group	Rational For Change	Change From	Change To
Vegetation	Ground and Aerial	Adjusted verbiage for clarity	<p>59. Is the removal of Trees/Foliage required to prevent contact with Transmission Conductors? <i>Examples: Vines, branches, or foliage presenting an overhang or other imminent threat, Immediate danger concerning palm fronds falling or blowing into conductors, Vegetation arcing or in contact with energized conductor</i></p> <p>a. Yes</p> <ul style="list-style-type: none"> i. Greater than 10 feet ii. 6 feet to 10 feet iii. Between 2 feet and 6 feet iv. 2 feet or less <p><input type="checkbox"/> Vines, branches, or foliage presenting an overhang or other imminent threat</p> <p><input type="checkbox"/> Immediate danger concerning palm fronds falling or blowing into conductors</p> <p><input type="checkbox"/> Vegetation arcing or in contact with energized conductor</p> <p><input type="checkbox"/> Trees or palm fronds encroaching on structure or underbuild *Notification Build Out Required</p> <p>b. No</p>	<p>59. Is vegetation trimming or removal required to prevent contact above and/or below transmission conductor or equipment? <i>Examples: Vines, branches, or foliage presenting an overhang or other imminent threat, Immediate danger concerning palm fronds falling or blowing into conductors, Vegetation arcing or in contact with energized conductor</i></p> <p>a. Yes</p> <ul style="list-style-type: none"> i. Greater than 10 feet ii. 6 feet to 10 feet iii. Between 2 feet and 6 feet iv. 2 feet or less <p><input type="checkbox"/> Vines, branches, or foliage presenting an overhang or other imminent threat</p> <p><input type="checkbox"/> Immediate danger concerning palm fronds falling or blowing into conductors</p> <p><input type="checkbox"/> Vegetation arcing or in contact with energized conductor</p> <p><input checked="" type="checkbox"/> Vegetation or trees (10ft or greater) encroaching on structure or underbuild</p> <p><input type="checkbox"/> Trees or palm fronds encroaching on structure or underbuild *Notification Build Out Required</p> <p>b. No</p> <p><input checked="" type="checkbox"/> Duplicate</p> <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Duplicate Notification Number

Survey Questions

General Inspection Information

1. Inspection Date
2. Inspection Method
 - a. Ground
 - b. Helicopter (Ground Inspections)
 - c. HEC
 - d. Aerial Footage
 - e. ■ Helicopter (Aerial)
 - f. ■ UAV/Drone
 - g. ■ Climb
3. Accounting Type
4. User ID
5. Inspector First Name
6. Inspector Last Name
7. Inspector SCE User ID
8. Grid Name
9. Circuit
10. ☆ Is circuit information correct?
 - a. Yes
 - b. No
 - i. Circuit List Drop Down
 - ii. Circuit Not Listed (check box)
 - iii. Open Comment Field
11. Voltage
12. FLOC
13. ☆ Is the Structure Number correct on structure?
 - a. Yes
 - b. No
 - i. Select "Are you able to proceed with this inspection" - No "Incorrect Structure Number"
 - c. NA (Tower)
14. Mile Tower Number
15. SCE High Fire Designation
16. SCE High Fire Sub Area
17. Latitude
18. Longitude
19. Object Type

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Structure Information

1. Are you able to proceed with this inspection?

★Note: Incorrect Number, No Access, Obstructed, Incorrect Grid, Non-Transmission, Pole Removed

■Note: Incorrectly Tagged, Missing Photo Angles, Poor Photo Quality, Structure Media Issue, Structure Under Repair

- a. Yes
- b. No
 - i. Incorrect Structure Number
 - 1. Number in the field
Note: "Use Collect feature to complete inspection for Number in Field"
 - ii. No Access
 - 1. Property Owner
 - 2. Responsible Patrolman
 - 3. Brush Overgrown
 - 4. Helicopter Only
 - iii. Obstructed View
 - iv. Non-Transmission
 - 1. Telecommunication
 - 2. Foreign
 - 3. Distribution
 - v. Duplicate Record
 - vi. Non-HF
 - vii. Removed Structure (Not in field/active in SAP)
 - viii. ■Incorrectly Tagged (Heli/UAV)
 - ix. ■Missing Photo Angles (Heli/UAV)
 - x. ■Poor Photo Quality (Heli/UAV)
 - xi. ■Structure Media Issue
 - xii. ■Structure Under Repair

2. Structure Type

Steel Lattice/Tower

- a. Lattice Tower
- b. Lattice H-Frame/Pole
- c. Aesthetic/A-Frame
- d. Portal Tower
- e. Other (comment)

Pole

- a. Monopole/Single Pole
- b. H-Frame
 - a. ■Add Associated FLOC to other Structures
- c. 3-Pole
- d. Flying Berry Pole

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- e. Guy Stub
 - a. ■Note: Disallow the following questions from showing up: "Do visible bonds/bonding require a notification" and "Is the removal of tree/foliage required to prevent contact with transmission conductors"
- f. Other (comment)

Main Pole Material Type:

- a. Wood
- b. Light Weight Steel (LWS)
- c. Engineered Tubular Steel Pole (TSP)
- d. Composite
- e. Concrete
- f. Hybrid (Concrete/Steel)
- g. ★ Other (comment)

★ *Supporting Members Material Type:*

- a. Wood
- b. Light Weight Steel (LWS)
- c. Composite
- d. Concrete
- e. Hybrid (Concrete/Steel)
- f. Steel Crossarm
- g. Post Insulators Only
- h. Other/Guyed Deadend/Jumper Pole (comment)

3. Structure Attachments

- Bulk Transmission (220kV and up)
- Sub-Transmission (33kV-161kV)
- Distribution (<33kV)
- Telecommunication
- ★Transmission Pilot Wire/Open Wire
- ★Foreign Electrical Utility

4. Transmission Attachment Details

- Single Circuit
- Double Circuit
- Multi Circuit (3 or more)
- Bundled Conductor
- Transposition Structure (■Phase rotation occurs on the same structure)
- Bird Nest/Wildlife Debris at or above Bulk/Sub-Trans facilities, including equipment
- Transmission Down Guy
- Transmission Span Guy
- Equipment (switches, arrestors, pothead/risers, etc.)
- Suspension Structure
- Deadend Structure

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- Post Type Structure
- Porcelain/■Glass Insulators
- Polymer Insulators
- Tough Glass Insulators
- Dampers
- Overhead Shield/Optical/Ground Wire (OPGW/OHGW)
- Fault Return Conductor (FRC)
- Transmission Riser
- Fault Indicator
- Line Hose/Bird Deterrent/Bird Guard
- Transmission Crossarm/X-Brace
- Antenna/Microwave
- Solar
- FAA Lights
- Wind Turbine
- Distribution 4th Wire/Neutral
- Distribution Riser
- Shared Crossarm
- Distribution Span/Down Guy
- Telecomm Conductive Wire/Messenger/Lashing Wire (non-ADSS)
- Telecomm Riser
- Telecomm Span/Down Guy
- Crossarm/X-Brace Material Type
 - Wood
 - Steel
 - Composite

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Data Collection

5. Is there a FLOC number on the structure?
 - a. Yes
 - b. No
 - c. Unable to Determine
6. Construction Type
 - a. Suspension
 - b. Post Type
 - c. Dead End
 - d. N/A
7. Is there a Buddy Pole?
 - a. Yes
 - i. What is attached to Buddy Pole?
 1. 🌟TTC Cable
 2. 🌟3rd Party Cable
 3. ■ Communication
 4. Distribution
 5. Nothing (Bare Pole)
 - b. No
8. 🌟Describe the area surrounding the structure within 100 feet?
 - a. Concrete and/or Pavement
 - b. Sand, Gravel/Rock, or Water
 - c. Residential or Commercial Area/Structures
 - d. Vegetation
9. 🌟Is the Structure within an Enclosed Area?
Example: Behind private fencing/gate, in backyard, in orchards, etc.
 - a. Yes
 - ii. Behind Private Fence/Gate
 - iii. In Backyard
 - iv. In Orchards
 - v. Customer Facilities
 - b. No
10. 🌟Type of Footing
 - a. Foundation/Concrete
 - b. Direct Bury (Wood/LWS)
 - c. Grillage
 - d. Cassion
 - e. Other - Specify (open text field)
 - f. Unable to Determine
 - i. No Access
 - ii. Property Owner
 - iii. Obstructed
 - iv. Brush Overgrown
11. 🌟Does foundation have a ground to the structure?

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- a. Yes
 - b. No
 - c. Unable to Determine
12. ★ Identify the appearance of the Footings/Foundations
- a. Erosion
 - b. Buried Footing (excluding direct bury)
 - c. Corrosion of the Steel at the Structure Base
 - d. Exposed decay pocket at ground line where part of shell is gone
 - e. Cracked/Broken Concrete
 - f. Footings/Foundation is in good condition

Priority 3 Needed

if 'Equipment (switches, arrestors, pothead/risers, etc.)'...

13. Indicate the Equipment Type(s) and attachments on the Structure
- a. Switch
 - i. ★ KPF
 - ii. ★ Turner
 - iii. ★ Cleveland Price
 - b. Risers/Potheads/Arresters
 - c. RTS
14. How many Transmission Lightning Arresters are installed on this structure?
- a. 10+,9,8,7,6,5,4,3,2,1,0
15. Do the insulators connect to the structure using a hook?
- a. Yes
 - b. No
16. ■ Are All Cotter Keys Visible?
- a. Yes
 - i. Cotter Key(s) Missing (Notification Required)
 - ii. Cotter Key(s) Do Not Belong to Structure
 - iii. Cotter Key(s) is blurry/does not zoom/obstructed
 - 1. Where Are Cotter Keys Not Visible?
 - a. Cold-Side
 - b. Within Insulator String
 - c. Hot-Side
 - d. Shield Wire Hardware
 - e. Structure Hardware
 - b. No
17. ■ Are All Pins Visible?
- a. Yes
 - i. Pin(s) Not Applicable to the Structure
 - b. No
 - i. Where Are Cotter Keys Not Visible?
 - 1. Cold-Side
 - 2. Within Insulator String

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- 3. Hot-Side
- 4. Shield Wire Hardware
- 5. Structure Hardware

18. How many LEVELS are Crossarms installed on Transmission voltages?
Example: Crossarms on top, middle and bottom phases equals 3 levels
- a. 10+,9,8,7,6,5,4,3,2,1,0
19. Is Transmission Line hose/Bird Deterrent present?
- a. Yes
 - i. Line Hose
 - ii. Bird Deterrent
 - iii. Bird Guard
 - b. No

if 'Bulk Transmission (220kV and up)'...

20. If Shield Wires are on a 500kV Structure, is the Shield Wire:
- Note: Pertains to circuits built to 500kV standards and energized at 220kV
- a. Grounded to the tower (may or may not have an insulator)
 - b. Insulated and Continuous
 - c. Insulated and Open
 - d. N/A (220kV tower)
 - e. N/A (OPGW)

21. ★ Indicate the type(s) of Conductor Splice present on the Span

Note: Only in span to the North or West

- a. Wrap
- b. Twist/Mac
- c. Quickie
- d. Compression
- e. Implosive
- f. Not Present

How many?

if 'Deadend/Jumper Structure'...

22. Indicate the type(s) of Splice present on the Jumper Loop (includes Parallel Grove Clamps)?
- a. Wrap
 - b. Twist/Mac
 - c. Quickie
 - d. Compression
 - e. Implosive
 - f. Parallel Grove / Bolted Clamp
 - g. Not Present
 - h. Unable to Determine

How many?

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if Conductor splice present on span/jumpers

23. ☆ What is the distance of Line Splices from point of support?
- a. Bulk (if Bulk Transmission (220kV and up))
 - i. At least 100 feet from pint of support? (Y/N)
 - b. Sub Trans (if Main Pole Material Type)
 - i. Wood
 - 1. At least 3 feet from point of support? (Y/N)
 - ii. LWS
 - 1. At least 20 feet from point of support? (Y/N)

if 'Transmission Down Guy'...

24. How many Transmission DOWN guys are installed?
- a. User selects from: 10+,9,8,7,6,5,4,3,2,1,0

if 'Transmission Span Guy'...

25. How many Transmission SPAN guys are installed?
- a. User selects from: 10+,9,8,7,6,5,4,3,2,1,0

if Span Guy

26. Are Span/Arm Guys installed parallel to the line conductor?
- a. Yes
 - i. How many?
 - b. No

if 'Distribution (<33kV)'

27. Do Guys pass near/through Distribution circuits?
- a. Yes
 - b. No

If down guy or span guy

28. Do Guys have insulation between structure and ground?
Examples: Johnny balls, strain insulators, fish rods, etc.
- a. Yes
 - i. Strain Insulators/Johnny Balls
 - ii. Fish Rods
 - b. No

If down guy or span guy

29. Indicate Guy Type and Attachments
- a. Preformed
 - b. Automatic/Quickie
 - *Notification Build Out Required
 - c. ■ Automatic Quickie Bypassed with Preformed
 - d. ■ 3-Bolt Clamp
 - e. Other (comment)

if 'Distribution (<33kV)

30. ★ Is the 4th Wire bonded to the structure?

- a. Yes
- b. No
- c. Unable to Determine

Notification

Main Structure & Supporting Members:

Bird Nest/Wildlife Debris at or above Bulk/Sub-Trans facilities, including equipment

31. Does bird nest/wildlife debris require notification?

Examples: Fire hazard, reduced electrical clearances, above energized facilities, on or near equipment, blocking view, etc.

- a. Yes
 - i. Fire Hazard
 - ii. Reduced Electrical Clearances
 - iii. Above Energized Facilities
 - iv. On or Near Equipment
 - v. Blocking View

*Notification Build Out Required
- b. No
- c. ★ Duplicate
 - i. ★ Duplicate Notification Number

Default

32. Does Main Structure require notification (cross arm/arm/x-braces)?

Examples: Signs of damage, loss of material, burn/flash/arc marks, bowing, leaning, or out of plum, etc.

- a. Yes
 - Steel:
 - i. Corrosion
 - ii. Bent/Broken
 - iii. Missing Members or Bolts
 - iv. Connections
 - v. Bowing
 - vi. Leaning
 - vii. Out of Plum
 - Wood:
 - i. Rot
 - ii. Bending/Splitting/Twisting
 - iii. Woodpecker
 - iv. Bowing
 - v. Leaning
 - vi. Out of Plum

★ This symbol and blue text indicate that the question/option is for ground only

■ This symbol and purple text indicate that the question/option is for aerial only

Composite:

- i. Unraveling of Fibers

Concrete:

- i. Spalling/Cracks

*Notification build out required

b. No

c.  Duplicate

- i. Duplicate Notification Number

default (should not show for Tower)

33. Do Supporting Members (braces/crossarms/arms/hardware) require notification (excluding guys/guying)?

Examples: Signs of damage, loss of material, braces worn, burn/flash/arc marks, etc.

a. Yes

Steel:

- i. Corrosion
- ii. Bent/Broken
- iii. Missing Members or Bolts
- iv. Connections

Wood:

- i. Rot
- ii. Bending/Splitting/Twisting
- iii. Woodpecker
- iv. Bowing
- v. Leaning
- vi. Out of Plum

Composite:

- i. Unraveling of Fibers

Concrete:

- i. Spalling/Cracks

*Notification build out required

b. No

c.  Duplicate

- i. Duplicate Notification Number

If 'Steel Lattice/Tower' or 'TSP' or 'LWS'...

34.  Does Structure Base require notification due to clearance (<5ft) from non-SCE metallic objects? Examples: Conductive objects, metallic fencing, gates, etc.

a. Yes

- i. Conductive Objects
- ii. Metallic Fencing

 This symbol and blue text indicate that the question/option is for ground only

 This symbol and purple text indicate that the question/option is for aerial only

- iii. Gates
- iv. Other (comment)
 - *Notification build out required
- b. No
- c. Unable to Determine
 - ii. No Access
 - iii. Property Owner
 - iv. Obstructed
 - v. Brush Overgrown
- d.  Duplicate
 - i. Duplicate Notification Number

Guys/Guying

if 'Transmission Down Guy'...

35. Do DOWN guys/guying require notification (excluding anchors)?

Examples: Signs of corrosion/fraying, slack, broken/loose attachments/supports, inadequate clearances during wind events, burn/flash/arc marks

- a. Yes
 - i. Corrosion/Fraying
 - ii. Slack
 - iii. Broken/Loose Attachments Supports
 - iv. Inadequate Clearances During Wind Events
 - v. Burn/flash/arc marks

*Notification Build Out Required
- b. No
- c. Unable to Determine
 - i. No Access
 - ii. Property Owner
 - iii. Obstructed
 - iv. Brush Overgrown
- d.  Duplicate
 - i. Duplicate Notification Number

if 'Transmission Span Guy'...

36. Do SPAN guys/guying require notification (excluding anchors)?

Examples: Signs of corrosion/fraying, slack, broken/loose attachments/supports, inadequate clearances during wind events, burn/flash/arc marks

- a. Yes
 - i. Corrosion/Fraying
 - ii. Slack
 - iii. Broken/Loose Attachments Supports
 - iv. Inadequate Clearances During Wind Events
 - v. Burn/flash/arc marks

 This symbol and blue text indicate that the question/option is for ground only

 This symbol and purple text indicate that the question/option is for aerial only

*Notification Build Out Required

- b. No
- c. Unable to Determine
 - i. No Access
 - ii. Property Owner
 - iii. Obstructed
 - iv. Brush Overgrown
- d.  Duplicate
 - i. Duplicate Notification Number

if 'Transmission Down Guy'...

37.  Do Anchors require notification?

Examples: Signs of damage, corrosion, buried, too many attachments, etc.

- a. Yes
 - i. Damage
 - ii. Corrosion
 - iii. Buried
 - iv. Too Many Attachments

*Notification Build Out Required

- b. No
- c. Unable to Determine
 - i. No Access
 - ii. Property Owner
 - iii. Obstructed
 - iv. Brush Overgrown
- d. Duplicate
 - i. Duplicate Notification Number

if 'Down Guy' or 'Span Guy' or 'Steel Lattice/Tower' or 'TSP' or 'LWS'..."

38. ★ Do Guys/Anchors require notification due to Clearance (<5ft) from non-SCE metallic objects?

Example: conductive/metallic fencing/gates, other conductive objects

- a. Yes
 - i. Is the Object in Direct Contact with Guys/Anchors?
*Notification Build Out Required
- b. No
- c. Unable to Determine
 - v. No Access
 - vi. Property Owner
 - vii. Obstructed
 - viii. Brush Overgrown
- d. Duplicate
 - i. Duplicate Notification Number

Equipment

if Equipment (switches, arrestors, pothead/risers, etc.)

39. Does Equipment require notification?

Examples: Switch blades not fully closed/open, whisker/arrestor/riser/pothead issues, etc.

- a. Yes
 - i. Loose/Corroded Hardware
 - ii. Cotter Keys/Bolts Missing/Loose
 - iii. Excessive Wear on Structure Attachments and Yoke Plates
 - iv. In contact with Animal Nest
 - v. Porcelain Pothead Insulators Chipped or Broken
 - vi. Pothead swollen/leaking
 - vii. Blades not fully engaged

*Notification Build Out Required
- b. No
- c. ★ Duplicate
 - i. Duplicate Notification Number

if 'Transmission Riser'...

40. ★ Does the Riser require a notification?

Examples: In contact with animal nest, Riser swollen, Riser broken, Non-Schedule 80 Riser installed, Cables in Riser exposed

- a. Yes
 - i. In Contact with Animal Nest
 - ii. Riser Swollen
 - iii. Riser Broken
 - iv. Cables in Riser Exposed
 - v. Unable to Determine
 - 1. No Access
 - 2. Property Owner
 - 3. Obstructed
 - 4. Brush Overgrown

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■ This symbol and purple text indicate that the question/option is for aerial only

*Notification Build Out Required

- b. No
- c. Duplicate
 - i. Duplicate Notification Number

if Equipment (switches, arrestors, pothead/risers, etc.)

41. Do the Equipment Brackets or Braces require a notification?

Examples: Worn, missing, loose, broken

- a. Yes
 - i. Braces Worn
 - ii. Braces Missing
 - iii. Braces Loose
 - iv. Braces Broken

*Notification Build Out Required

- b. No
- c.  Duplicate
 - i. Duplicate Notification Number

Insulators/Hardware/Wires/Misc:

default

42. Do Insulators require notification?

Examples: Polymer: Tracking, missing/loose corona rings, ripped sheds, burn/flash/arc marks, excessive pollution/contamination, chalking

Porcelain/glass: Broken chipped bells, missing/loose corona rings (500kV only), burn/flash/arc marks, excessive pollution/contamination, deadend bell skirts facing up, severe rust on insulator caps, out of plumb (in line with span), missing/loose cotter keys, wear on structure (slotting holes), hook shows visible wear/loss of material

- a. Yes
 - Polymer:
 - i. Tracking
 - ii. Missing/Loose Corona Rings
 - iii. Ripped Sheds
 - iv. Burn/Flash/Arc Marks
 - v. Excessive Pollution/Contamination

Porcelain/Glass:

- i. Broken/chipped bells
- ii. Missing/loose corona rings (500kV only)
- iii. Burn/flash/arc marks
- iv. Excessive pollution/contamination
- v. Deadend bell skirts facing up, etc.)

*Notification Build Out Required

- b. No
- c.  Duplicate
 - i. Duplicate Notification Number

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if 'Do the insulators connect to the structure using a hook?'...

43. Does the Hook or the structure where it attaches require a notification?

- a. Yes
 - *Notification Build Out Required
- b. No
- c. Unable to Determine
- d.  Duplicate
 - i. Duplicate Notification Number

if 'Wood' or 'Composite' Poles & Supporting Members...

44. Do visible Bonds/Bonding and/or copper grounding require notification?

Examples: Signs of damage, missing/loose connections, etc.

- a. Yes
 - i. Damage
 - ii. Missing/Loose Connections
 - iii. Unable to Determine
 - 1. No Access
 - 2. Property Owner
 - 3. Obstructed
 - 4. Brush Overgrown

*Notification Build Out Required
- b. No
- c.  Duplicate
 - i. Duplicate Notification Number

if 'Deadend Structure'...

45. Do Jumpers require notification?

Note: Inadequate shape/clearance, needs I-string/stiffener/weights, missing/damaged spacers, loose connections

- c. Yes
 - v. Inadequate Shape/Clearance
 - vi. Needs I-string/stiffener/weights
 - vii. Missing/damaged spacers
 - viii. Loose connections

*Notification Build Out Required
- d. No
- e.  Duplicate
 - i. Duplicate Notification Number
- f.  Covered Equipment
 - *Notification Build Out NOT Required

if 'Dampers'...

46. Do Dampers require notification?

Examples: Signs of damage, drooping, missing weights, broken strands at attachment

- a. Yes
 - i. Damage
 - ii. Drooping
 - iii. Missing weights
 - iv. Broken strands at attachment

*Notification Build Out Required
- b. No
- c.  Duplicate
 - i. Duplicate Notification Number

Default

47. Does Line Hardware require notification?

Examples: Signs of corrosion/loss of material, wear/tear/grooving, slotted holes, burn/flash/arc marks, missing/damaged cotter keys/nuts/bolts, etc.

- a. Yes
 - i. Corrosion/loss of material
 - ii. Wear/tear/grooving
 - iii. Slotted holes
 - iv. Burn/flash/arc marks
 - v. Missing/damaged cotter keys/nuts/bolts

*Notification Build Out Required
- b. No
- c.  Duplicate
 - i. Duplicate Notification Number
- d.  Covered Equipment
 - *Notification Build Out NOT Required

Default

48. Do Wires or Splices require notification?

Examples: Signs of birdcaging, broken strands, span splices is automatic/quickie, corrosion, burn/flash/arc marks, etc.

- a. Yes
 - i. Birdcaging
 - ii. Broken strands
 - iii. Span splice is automatic/quickie
 - iv. Corrosion
 - v. Burn/flash/arc marks

*Notification Build Out Required
- b. No
- c.  Duplicate
 - i. Duplicate Notification Number

if 'Suspension Structure'...

49. ⚡ Does Suspension Insulator plum require a notification?

Examples: Out of plum, no uplift, float

- a. Yes
 - i. Out of plum
 - ii. No Uplift
 - iii. Float

*Notification Build Out Required
- b. No
- c. Duplicate
 - i. Duplicate Notification Number

if 'SCE Telecommunication' or 'Transmission Pilot Wire/Open Wire

50. ⚡ Does Pilot Wire/Open Wire require notification?

Examples: Broken, Corroded, Hardware, etc.

- a. Yes
 - i. Broken
 - ii. Corroded
 - iii. Hardware Issues

*Notification Build Out Required
- b. No
- c. Duplicate
 - i. Duplicate Notification Number

if Telecommunication...

51. Does Communication Cable and/or Equipment (Non-SCE) require a notification?

- a. Yes
 - i. Inadequate clearance between communication equipment or structures and SCE electrical equipment or structures
 - ii. Excessive sag of communication cables
 - iii. Loose lashing wire
 - iv. Broken or separated messenger wire
 - v. Broken, damaged or severely strained communication guy wires
 - vi. Excessive bowing or bending of pole from potential overloading at communication equipment attachment points
 - vii. Improperly secured communication conductor or equipment
 - viii. Vegetation straining communication messenger or guy wire and/or causing structural integrity issues
 - ix. Unauthorized Attachment
 - x. Other

*Notification Build Out Required
- b. No
- c. Unable to Determine
- d. ⚡ Duplicate
 - i. Duplicate Notification Number

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■ This symbol and purple text indicate that the question/option is for aerial only

if "Bundled Conductor"

52. Does Conductor Spacers require a notification?

Examples: Uneven sag or uneven sub-conductors in bundle circuits, Poor condition of spacers for bundled conductors (in spans ahead and back), etc.

- a. Yes
 - i. Poor condition of spacers for bundled conductors (in spans ahead and back)
 - ii. Other

*Notification Build Out Required

- b. No
- c. Duplicate
 - i. Duplicate Notification Number

if 'Is Transmission Line hose/Bird Deterrent present?'

53. Does Transmission Bird Avian Guard/Deterrent require a notification?

Examples: Incorrectly installed, damaged

- a. Yes
 - i. Incorrectly Installed
 - ii. Damaged
 - iii. Missing

*Notification Build Out Required

- b. No
- c. Duplicate
 - i. Duplicate Notification Number

if 'Are All Cotter Keys Visible?'

54. Do Visible Cotter Keys Require Notification?

- a. Yes
 - i. Cotter Key Missing
 - ii. Cotter Key Backing Out

*Notification Build Out Required

- b. No
- c. Unable to Determine
- d. Covered Cotter Keys

*Notification Build Out NOT Required

55. Do Pins Require Notification?

- a. Yes
 - i. Pin Backing Out
 - ii. Significant Corrosion
 - iii. Misaligned Insulator

*Notification Build Out Required

- e. No
- f. Unable to Determine
- g. Covered Pins

*Notification Build Out NOT Required

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Grounding/Other

if 'Overhead Shield/Optical/Ground Wire (OPGW/OHGW)'...

56. Does Shield Wire require notification?

Examples: Signs of damaged strands, hardware, dampers, attachment points, loose tails, etc.

- a. Yes
 - i. Damaged strands
 - ii. Hardware
 - iii. Dampers
 - iv. Attachment Points
 - v. Loose Tails

*Notification Build Out Required
- b. No
- c.  Duplicate
 - i. Duplicate Notification Number

if 'Fault Return Conductor (FRC)'...

57. Does FRC require notification?

Examples: Signs of damaged strands, hardware, attachment points, loose tails, etc.

- a. Yes
 - i. Damaged Strands
 - ii. Hardware
 - iii. Attachment Points
 - iv. Loose Tails

*Notification Build Out Required
- b. No
- c. Duplicate
 - i. Duplicate Notification Number

Footings/Foundations:

58.  Does the Footing/Base require a P3 notification?

Examples: Erosion, Corrosion of the steel at the structure base, Exposed decay pocket at ground line where part of shell is gone

- a. Yes
 - i. Erosion
 - ii. Burried Footing (excluding direct bury)
 - iii. Corrosion of the Steel at the Structure Base
 - iv. Exposed decay pocket at ground line where part of shell is gone
 - v. Unable to Determine
 - 5. No Access
 - 6. Property Owner
 - 7. Obstructed
 - 8. Brush Overgrown

*Notification Build Out Required
- b. No
- c. Unable to Determine
 - i. No Access
 - ii. Property Owner

 This symbol and blue text indicate that the question/option is for ground only

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- iii. Obstructed
- iv. Brush Overgrown
- h. Duplicate
 - i. Duplicate Notification Number

Vegetation Management

59. Is vegetation trimming or removal required to prevent contact above and/or below transmission conductor or equipment?

Examples: Vines, branches, or foliage presenting an overhang or other imminent threat, Immediate danger concerning palm fronds falling or blowing into conductors, Vegetation arcing or in contact with energized conductor

- a. Yes
 - Vines, branches, or foliage presenting an overhang or other imminent threat
 - Immediate danger concerning palm fronds falling or blowing into conductors
 - Vegetation arcing or in contact with energized conductor
 - Vegetation or trees (10ft or greater) encroaching on structure or underbuild

*Notification Build Out Required

- b. No
- c.  Duplicate
 - i. Duplicate Notification Number

Transmission ROW

60.  Is a notification required for brush clearing?

Examples: Access Road to Structure (do we need to take it out from both or just aerial), Pole/Footing Base, Anchors

Note: Anchors should be treated like structure bases for weed abatement/clearing

- a. Yes
 - i. Access Road to Structure
 - ii. Pole/Footing Base
 - iii. Anchors

*Notification Build Out NOT Required in GIS, will be created on backend

- b. No

Priority 1

61. Was a Priority 1 Notification identified during this inspection?

- a. Yes
 - i. Notification Number
- b. No

Inspection Form End

62. Work Status