



Line Name:

XXXXXXXXXX

RF

01 Attachment 2

Doc. #: XXXXXX

Page: 1 of 8

Date (yy-mm-dd):

Voltage Level (KV):

Address:

Completed by:

## DISTRIBUTION LINE INSPECTION CHECKLIST

### 1. Assessment Criteria

#### 1.1. Repair Priority Code

HIGH	MEDIUM	LOW
< 30 days	< 12 months	> 12 months

#### 1.2. Strategic Priority code

Strategic Priority Code	Description
A	Compliance/Safety: Work scope required to achieve or maintain compliance with applicable codes and standards for safe operation of facilities and regulatory conformance.
B	Reliability: Work scope required to achieve or maintain minimum reliability metrics.
C	Efficiency: Work scope required to improve operating productivity. This includes asset life extension, maintenance cycle offsets, on-line monitoring/diagnostics and asset replacements.
D	Growth & Sustainability: Maximizing grid capacity and the integration of renewable energy sources.

**1.3. Root Cause Analysis**

Vegetation	<ul style="list-style-type: none"> <li>• Trees in right-of-way</li> <li>• <del>Trees out of right of</del></li> <li>• Tree contacting line</li> <li>• Creeping plants</li> </ul>
Poles	<ul style="list-style-type: none"> <li>• Broken/rotten pole</li> <li>• Leaning pole</li> </ul>
Lines and conductors	<ul style="list-style-type: none"> <li>• Clearance issues               <ul style="list-style-type: none"> <li>○ Lines close to buildings</li> <li>○ Low sag</li> <li>○ Long span</li> </ul> </li> <li>• Conductor degradation (multiple splices)</li> </ul>
Insulation	<ul style="list-style-type: none"> <li>• Broken insulation</li> <li>• Contaminated insulation</li> <li>• Arcing insulation</li> </ul>
Hardware	<ul style="list-style-type: none"> <li>• Loose guy wire</li> <li>• Missing guy wire/anchor</li> </ul>
Crossarms	<ul style="list-style-type: none"> <li>• Broken/rotten crossarm</li> </ul>
Equipment (reclosers, switches, fuses, voltage regulators, capacitor bank, etc.) and service transformers	<ul style="list-style-type: none"> <li>• Leaking equipment</li> <li>• Missing arresters</li> </ul>
Wild life	<ul style="list-style-type: none"> <li>• Crossarm nesting</li> </ul>



## 2. Assessment

### 2.1. Clearances and Brushing

Item	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments
<input type="checkbox"/> Improper clearance from roads or other ROWs				
<input type="checkbox"/> Improper vegetation separation				
<input type="checkbox"/> Environmental hazards				
<input checked="" type="checkbox"/> <del>Soil contamination</del>				

### 2.2. Structure and Foundation Condition

Item	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments (% of overall line)
<input type="checkbox"/> Rust and corrosion in steel poles				
<input checked="" type="checkbox"/> <del>Issues with the pole top, weathering, splinters</del>				
<input type="checkbox"/> <del>Signs of pole burning or tracking due to lightning or insulator leakage</del>				
<input checked="" type="checkbox"/> <del>Wood pecker holes, bee hives, squirrel nests</del>				
<input type="checkbox"/> Leaning poles				
<input type="checkbox"/> Erosion at base of pole				
<input type="checkbox"/> Poor condition of pole at base or ground level				
<input type="checkbox"/> Problem with structures supporting gang operated switches, metering equipment, regulators, capacitor banks, etc				
<input checked="" type="checkbox"/> <del>Conduits loose, broken or joints separated</del>				

**2.3. Anchors**

Item	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments
<input type="checkbox"/> Defective or missing guy guard				
<input type="checkbox"/> Loose, corroded or damaged guy wire, or improperly bonded				
<input checked="" type="checkbox"/> Improper anchor				

**2.4. Grounding**

Item	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments (% of overall line)
<input checked="" type="checkbox"/> Violation to standard				
<input checked="" type="checkbox"/> Corroded or defective ground				
<input checked="" type="checkbox"/> Damaged protector				
<input checked="" type="checkbox"/> Rod not properly attached				

**2.5. Insulation**

Item	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments (% of overall line)
<input type="checkbox"/> Poor condition, including contamination and signs of flashing				
<input type="checkbox"/> Improperly aligned				

**2.6. Hardware**

Item	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments
<input type="checkbox"/> Excess hardware that should be salvaged				
<input type="checkbox"/> Inadequate spacing, improper grounding, bonding, and other substandard construction features				
<input checked="" type="checkbox"/> <del>Bolts, nuts, washers or lock nuts missing</del>				
<input type="checkbox"/> Loose bolts				

**2.7. Conductor**

Item	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments
<input type="checkbox"/> Insufficient clearance				
<input type="checkbox"/> Insufficient separation				
<input type="checkbox"/> Conductors sagging				
<input checked="" type="checkbox"/> <del>Conductor insulation damaged or missing</del>				
<input checked="" type="checkbox"/> <del>Corrosion on conductors</del>				
<input checked="" type="checkbox"/> <del>Excessive number or damaged splices</del>				
<input type="checkbox"/> Damaged or loose ties				

**2.8. Crossarms**

Item	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments
<input type="checkbox"/> Damaged, split, twisted, tilted loose				
<input checked="" type="checkbox"/> <del>Brace damaged or loose</del>				

**2.9. Equipment (Transformers, Switches, Streetlights)**

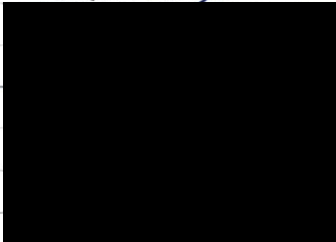
Item	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments
<input checked="" type="checkbox"/> <del>Leaking or sweating</del>				
<input checked="" type="checkbox"/> <del>Abnormal noise</del>				
<input checked="" type="checkbox"/> <del>Bushings</del>				
<input type="checkbox"/> Damaged or missing arrestors				
<input type="checkbox"/> Damaged or missing wildlife protectors				
<input checked="" type="checkbox"/> <del>Out of alignment</del>				
<input checked="" type="checkbox"/> <del>Broken or loose</del>				

**2.10. General Line Assessment**

Additional Comments

### 3. Recommendations

### **3.1. Stage 1 (Immediate to 1 year):**

Item	Scope of Work	% of overall line	Comments
<input type="checkbox"/> Vegetation Management			
<del><input type="checkbox"/> Grounding</del>			
<del><input type="checkbox"/> Anchors gin / missing hardware</del>			
<del><input type="checkbox"/> Insulators</del>			
<input type="checkbox"/> Structural (poles and crossarms)			
<input type="checkbox"/> Equipment with Visible damage			
<input type="checkbox"/> Conductor, Splicing and Spans			
<input type="checkbox"/> Other			

### 3.2. Stage 2 (TBD):

Item	Scope of Work	% of overall line	Comments
<input type="checkbox"/> Voltage conversion			
<input type="checkbox"/> Line Relocation			
<input type="checkbox"/> Installation of reclosers, sectionalizers, lateral fuses, fault indicators, etc.			
<input type="checkbox"/> Other			

### **3.3. General Recommendations**

[illegible]



## DISTRIBUTION LINE INSPECTION CHECKLIST

### 1. Assessment Criteria

#### 1.1. Repair Priority Code

HIGH	MEDIUM	LOW
< 30 days	< 12 months	> 12 months

#### 1.2. Strategic Priority code

Strategic Priority Code	Description
A	Compliance/Safety: Work scope required to achieve or maintain compliance with applicable codes and standards for safe operation of facilities and regulatory conformance.
B	Reliability: Work scope required to achieve or maintain minimum reliability metrics.
C	Efficiency: Work scope required to improve operating productivity. This includes asset life extension, maintenance cycle offsets, on-line monitoring/diagnostics and asset replacements.
D	Growth & Sustainability: Maximizing grid capacity and the integration of renewable energy sources.

#### 1.3. Health Assessment and Frequency

	1	2	3	4	5
Health	Very Good	Good	Fair	Poor	Very Poor
Frequency	Very Few or None	Somewhat frequent	Moderate	Very Frequent	All

#### 1.4. Procedure to assess Problems – Use App Kaizala; create a chat for the feeder with all inspectors

- Note locations (create pin), add a picture of extremely improper vegetation. Insert comments such as 'heavy', 'moderate', etc.
- Create pins for suggestions where reclosers, fuses, fault indicators, etc. would improve performance. Include a picture.
- Include structures that are an imminent failure and high risk. Include pin and photo.
- Include structure that are an extreme safety risk to the public (pin and photo).

**1.5. Root Cause Analysis**

Vegetation	<ul style="list-style-type: none"> <li>• Trees in right-of-way</li> <li>• Trees out of right-of-way</li> <li>• Tree contacting line</li> <li>• Creeping plants</li> </ul>
Poles	<ul style="list-style-type: none"> <li>• Broken/rotten pole</li> <li>• Leaning pole</li> </ul>
Lines and conductors	<ul style="list-style-type: none"> <li>• Clearance issues <ul style="list-style-type: none"> <li>○ Lines close to buildings</li> <li>○ Low sag</li> <li>○ Long span</li> </ul> </li> <li>• Conductor degradation (multiple splices)</li> </ul>
Insulation	<ul style="list-style-type: none"> <li>• Broken insulation</li> <li>• Contaminated insulation</li> <li>• Arcing insulation</li> </ul>
Hardware	<ul style="list-style-type: none"> <li>• Loose guy wire</li> <li>• Missing guy wire/anchor</li> </ul>
Crossarms	<ul style="list-style-type: none"> <li>• Broken/rotten crossarm</li> <li>• Leaning crossarm</li> <li>• Missing/loose bracket</li> </ul>
Equipment (reclosers, switches, fuses, voltage regulators, capacitor bank, etc.) and service transformers	<ul style="list-style-type: none"> <li>• Leaking equipment</li> <li>• Missing arresters</li> <li>• Insulation <ul style="list-style-type: none"> <li>○ Broken insulation</li> <li>○ Contaminated insulation</li> </ul> </li> <li>• Arcing insulation</li> </ul>
Wild life	<ul style="list-style-type: none"> <li>• Crossarm nesting</li> <li>• Pole pecking</li> </ul>

## 2. Assessment

## 2.1. Clearances and Brushing

- Improper ROW clearance
- Poor vegetation Management
- Environmental hazards

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

## 2.2. Structure and Foundation

- |   |   |   |
|---|---|---|
| - Animal damage                                 | - Signs of burns or tracking due to lightning | - Issues with weathering or splinters                           |
| - Poor condition at ground level                | - Insulator leakage                           | - Problems with structures supporting                           |
| - Conductors loose, broken or joints separated. | - Leaning structures                          | switches, metering equipment, capacitor banks, regulators, etc. |
|   | - Rust in steel poles                         |   |

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

### 2.3. Anchors

- Defective or missing guy
- Loose, corroded or damaged guy
- Improper anchor

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

## 2.4. Grounding

- Violation to standard
- Corroded or Defective ground wire
- Damaged protector
- Rod no properly attached

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

**2.5. Insulation**

- Contamination and signs of flashing
- Improper alignment

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

**2.6. Hardware**

- Excess hardware
- Loose hardware
- Inadequate spacing, improper grounding, bonding, etc.
- Missing bolts, nuts, washers or lock nuts

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

**2.7. Conductor**

- Insufficient clearance
- Insufficient separation
- Conductor insulation damaged or missing
- Excessive sagging
- Corrosion
- Damaged or loose ties
- Excessive number of damaged splices

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

**2.8. Crossarms**

- Damaged, split, twisted, tilted, loose

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments



**2.9. Equipment (Transformers, Switches, Streetlights)**

- Leaking or sweating
- Damaged or missing arrestors
- Broken or loose
- Abnormal noise
- Damaged or missing wildlife protectors
- Bushings
- Out of alignment

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

**2.10. General Line Assessment****Additional Comments****3. Recommendations****3.1. Stage 1a (Immediate repair):**

Item	Scope of Work	Comments
<input type="checkbox"/> Grounding		
<input checked="" type="checkbox"/> Anchors / hardware		
<input type="checkbox"/> Insulators		
<input type="checkbox"/> Structural (poles and crossarms)		
<input checked="" type="checkbox"/> Conductor, Splicing and Spans		
<input type="checkbox"/> Other		



### **3.2. Stage 1b (Short-Term Reliability Improvement):**

Item	Scope of Work	Comments
<input checked="" type="checkbox"/> Vegetation Management		
<input type="checkbox"/> Installation of fault indicators.		
<input checked="" type="checkbox"/> Installation of lateral fuses.		
<input type="checkbox"/> Perform Fusing check		
<input type="checkbox"/> Other		

### **3.3. Stage 2 (Long-Term Reliability Improvement):**

Item	Scope of Work	Comments
<input checked="" type="checkbox"/> Vegetation Management	<div></div>	
<input type="checkbox"/> Installation of sectionalizers.		
<input type="checkbox"/> Installation of reclosers.		
<input type="checkbox"/> Protection coordination studies.		
<input type="checkbox"/> Other		

### 3.4. General Recommendations

Additional Comments	

## **DISTRIBUTION LINE INSPECTION CHECKLIST**

### **1. Assessment Criteria**

#### **1.1. Repair Priority Code**

HIGH	MEDIUM	LOW
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#### **1.2. Strategic Priority code**

Strategic Priority Code	Description
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D	Growth & Sustainability: Maximizing grid capacity and the integration of renewable energy sources.

#### **1.3. Health Assessment and Frequency**

	1-2	3-4	5-6	7-8	9-10
Health	Very Good	Good	Fair	Poor	Very Poor
Frequency	Very Few or None	Somewhat frequent	Moderate	Very Frequent	All

#### **1.4. Procedure to assess Problems – Use App Kaizala; create a chat for the feeder with all inspectors**

- Note locations (create pin), add a picture of extremely improper vegetation. Insert comments such as 'heavy', 'moderate', etc.
- Create pins for suggestions where reclosers, fuses, fault indicators, etc. would improve performance. Include a picture.
- Include structures that are an imminent failure and high risk. Include pin and photo.
- Include structure that are an extreme safety risk to the public (pin and photo).

**1.5. Root Cause Analysis**

Vegetation	<ul style="list-style-type: none"> <li>• Trees in right-of-way</li> <li>• Trees out of right-of-way</li> <li>• Tree contacting line</li> <li>• Creeping plants</li> </ul>
Poles	<ul style="list-style-type: none"> <li>• Broken/rotten pole</li> <li>• Leaning pole</li> </ul>
Lines and conductors	<ul style="list-style-type: none"> <li>• Clearance issues               <ul style="list-style-type: none"> <li>◦ Lines close to buildings</li> <li>◦ Low sag</li> <li>◦ Long span</li> </ul> </li> <li>• Conductor degradation (multiple splices)</li> </ul>
Insulation	<ul style="list-style-type: none"> <li>• Broken insulation</li> <li>• Contaminated insulation</li> <li>• Arcing insulation</li> </ul>
Hardware	<ul style="list-style-type: none"> <li>• Loose guy wire</li> <li>• Missing guy wire/anchor</li> </ul>
Crossarms	<ul style="list-style-type: none"> <li>• Broken/rotten crossarm</li> <li>• Leaning crossarm</li> <li>• Missing/loose bracket</li> </ul>
Equipment (reclosers, switches, fuses, voltage regulators, capacitor bank, etc.) and service transformers	<ul style="list-style-type: none"> <li>• Leaking equipment</li> <li>• Missing arresters</li> <li>• Insulation               <ul style="list-style-type: none"> <li>◦ Broken insulation</li> <li>◦ Contaminated insulation</li> </ul> </li> <li>• Arcing insulation</li> </ul>
Wild life	<ul style="list-style-type: none"> <li>• Crossarm nesting</li> <li>• Pole pecking</li> </ul>

## 2. Assessment

### 2.1. Clearances and Brushing

- Improper ROW clearance
- Poor vegetation Management

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

### 2.2. Structure and Foundation

- Animal damage
- Poor condition at ground level
- Conductors loose, broken or joints separated.
- Signs of burns or tracking due to lightning or insulator leakage
- Leaning structures
- Rust in steel poles
- Issues with weathering or splinters
- Problems with structures supporting switches, metering equipment, capacitor banks, regulators, etc.

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

### 2.3. Anchors

- Defective or missing guy
- Loose, corroded or damaged guy
- Improper anchor

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

### 2.4. Grounding

- Violation to standard
- General condition of ground wire

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments



**2.5. Insulation**

- Contamination and signs of flashing
- Improper alignment

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

**2.6. Hardware**

- Excess hardware
- Inadequate spacing, improper grounding, bonding, etc.
- Missing bolts, nuts, washers or lock nuts

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

**2.7. Conductor**

- Insufficient clearance
- Insufficient separation
- Tree wire insulation damaged or missing
- Excessive sagging
- Corrosion
- Damaged or loose ties
- Excessive number of damaged splices

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

**2.8. Crossarms**

- Damaged, split, twisted, tilted, loose

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments



**2.9. Equipment (Transformers, Switches, Streetlights)**

- Leaking or sweating
- Damaged or missing arrestors
- Broken or loose
- Abnormal noise
- Damaged or missing wildlife protectors
- Bushings
- Out of alignment

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

**2.10. General Line Assessment****Additional Comments****3. Recommendations****3.1. Stage 1a (Immediate repair):**

Item	Scope of Work	Comments
<input type="checkbox"/> Grounding		
<input type="checkbox"/> Anchors / hardware		
<input checked="" type="checkbox"/> Insulators		
<input type="checkbox"/> Structural (poles and crossarms)		
<input type="checkbox"/> Conductor, Splicing and Spans		
<input type="checkbox"/> Other		

**3.2. Stage 1b (Short-Term Reliability Improvement):**

Item	Scope of Work	Comments
<input checked="" type="checkbox"/> Vegetation Management		
<input type="checkbox"/> Installation of fault indicators.		
<input type="checkbox"/> Installation of lateral fuses.		
<input checked="" type="checkbox"/> Perform Fusing check		
<input type="checkbox"/> Other		

**3.3. Stage 2 (Long-Term Reliability Improvement):**

Item	Scope of Work	Comments
<input type="checkbox"/> Vegetation Management		
<input type="checkbox"/> Installation of sectionalizers.		
<input checked="" type="checkbox"/> Installation of reclosers.		
<input type="checkbox"/> Protection coordination studies.		
<input type="checkbox"/> Other		

**3.4. General Recommendations****Additional Comments**

Clearance/Brushing:

Structure/Foundation:

Anchors/Guy:

Grounding:

Insulators:

Hardware:

Conductors:

Crossarms:

Equipment:

Other:

## **DISTRIBUTION LINE INSPECTION CHECKLIST**

### **1. Assessment Criteria**

#### **1.1. Repair Priority Code**

HIGH	MEDIUM	LOW
< 30 days	< 12 months	> 12 months

#### **1.2. Strategic Priority code**

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#### **1.3. Health Assessment and Frequency**

	1-2	3-4	5-6	7-8	9-10
<b>Health</b>	Very Good	Good	Fair	Poor	Very Poor
<b>Frequency</b>	Very Few or None	Somewhat frequent	Moderate	Very Frequent	All

#### **1.4. Procedure to assess Problems – Use App Kaizala; create a chat for the feeder with all inspectors**

- Note locations (create pin), add a picture of extremely improper vegetation. Insert comments such as 'heavy', 'moderate', etc.
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- Include structure that are an extreme safety risk to the public (pin and photo).

**1.5. Root Cause Analysis**

Vegetation	<ul style="list-style-type: none"> <li>• Trees in right-of-way</li> <li>• Trees out of right-of-way</li> <li>• Tree contacting line</li> <li>• Creeping plants</li> </ul>
Poles	<ul style="list-style-type: none"> <li>• Broken/rotten pole</li> <li>• Leaning pole</li> </ul>
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Insulation	<ul style="list-style-type: none"> <li>• Broken insulation</li> <li>• Contaminated insulation</li> <li>• Arcing insulation</li> </ul>
Hardware	<ul style="list-style-type: none"> <li>• Loose guy wire</li> <li>• Missing guy wire/anchor</li> </ul>
Crossarms	<ul style="list-style-type: none"> <li>• Broken/rotten crossarm</li> <li>• Leaning crossarm</li> <li>• Missing/loose bracket</li> </ul>
Equipment (reclosers, switches, fuses, voltage regulators, capacitor bank, etc.) and service transformers	<ul style="list-style-type: none"> <li>• Leaking equipment</li> <li>• Missing arresters</li> <li>• Insulation               <ul style="list-style-type: none"> <li>○ Broken insulation</li> <li>○ Contaminated insulation</li> </ul> </li> <li>• Arcing insulation</li> </ul>
Wild life	<ul style="list-style-type: none"> <li>• Crossarm nesting</li> <li>• Pole pecking</li> </ul>



## 2. Assessment

### 2.1. Clearances and Brushing

- Improper ROW clearance
- Poor vegetation Management

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

### 2.2. Structure and Foundation

- Animal damage
- Poor condition at ground level
- Conductors loose, broken or joints separated.
- Signs of burns or tracking due to lightning or insulator leakage
- Leaning structures
- Rust in steel poles
- Issues with weathering or splinters
- Problems with structures supporting switches, metering equipment, capacitor banks, regulators, etc.

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

### 2.3. Anchors

- Defective or missing guy
- Loose, corroded or damaged guy
- Improper anchor

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

### 2.4. Grounding

- Violation to standard
- General condition of ground wire

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments



**2.5. Insulation**

- Contamination and signs of flashing
- Improper alignment

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

**2.6. Hardware**

- Excess hardware
- Inadequate spacing, improper grounding, bonding, etc.
- Missing bolts, nuts, washers or lock nuts

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

**2.7. Conductor**

- Insufficient clearance
- Insufficient separation
- Tree wire insulation damaged or missing
- Excessive sagging
- Corrosion
- Damaged or loose ties
- Excessive number of damaged splices

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

**2.8. Crossarms**

- Damaged, split, twisted, tilted, loose

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

**2.9. Equipment (Transformers, Switches, Streetlights)**

- Leaking or sweating
- Damaged or missing arrestors
- Broken or loose
- Abnormal noise
- Damaged or missing wildlife protectors
- Bushings
- Out of alignment

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

**2.10. General Line Assessment****Additional Comments****3. Recommendations****3.1. Stage 1a (Immediate repair):**

Item	Scope of Work	Comments
<input type="checkbox"/> Grounding		
<input type="checkbox"/> Anchors / hardware		
<input type="checkbox"/> Insulators		
<input checked="" type="checkbox"/> Structural (poles and crossarms)		
<input checked="" type="checkbox"/> Conductor, Splicing and Spans		
<input type="checkbox"/> Other		

**3.2. Stage 1b (Short-Term Reliability Improvement):**

Item	Scope of Work	Comments
<input checked="" type="checkbox"/> Vegetation Management		
<input type="checkbox"/> Installation of fault indicators.		
<input type="checkbox"/> Installation of lateral fuses.		
<input type="checkbox"/> Perform Fusing check		
<input type="checkbox"/> Other		

**3.3. Stage 2 (Long-Term Reliability Improvement):**

Item	Scope of Work	Comments
<input checked="" type="checkbox"/> Vegetation Management		
<input checked="" type="checkbox"/> Installation of sectionalizers.		
<input type="checkbox"/> Installation of reclosers.		
<input type="checkbox"/> Protection coordination studies.		
<input type="checkbox"/> Other		

**3.4. General Recommendations****Additional Comments**

Clearance/Brushing:

Structure/Foundation:

Anchors/Guy:

Grounding:

Insulators:

Hardware:

Conductors:

Crossarms:

Equipment:

Other:

## **DISTRIBUTION LINE INSPECTION CHECKLIST**

### **1. Assessment Criteria**

#### **1.1. Repair Priority Code**

HIGH	MEDIUM	LOW
< 30 days	< 12 months	> 12 months

#### **1.2. Strategic Priority code**

Strategic Priority Code	Description
A	Compliance/Safety: Work scope required to achieve or maintain compliance with applicable codes and standards for safe operation of facilities and regulatory conformance.
B	Reliability: Work scope required to achieve or maintain minimum reliability metrics.
C	Efficiency: Work scope required to improve operating productivity. This includes asset life extension, maintenance cycle offsets, on-line monitoring/diagnostics and asset replacements.
D	Growth & Sustainability: Maximizing grid capacity and the integration of renewable energy sources.

#### **1.3. Health Assessment and Frequency**

	1	2	3	4	5
Health	Very Good	Good	Fair	Poor	Very Poor
Frequency	Very Few or None	Somewhat frequent	Moderate	Very Frequent	All

#### **1.4. Procedure to assess Problems – Use App Kaizala; create a chat for the feeder with all inspectors**

- Note locations (create pin), add a picture of extremely improper vegetation. Insert comments such as 'heavy', 'moderate', etc.
- Create pins for suggestions where reclosers, fuses, fault indicators, etc. would improve performance. Include a picture.
- Include structures that are an imminent failure and high risk. Include pin and photo.
- Include structure that are an extreme safety risk to the public (pin and photo).



**1.5. Root Cause Analysis**

Vegetation	<ul style="list-style-type: none"> <li>• Trees in right-of-way</li> <li>• Trees out of right-of-way</li> <li>• Tree contacting line</li> <li>• Creeping plants</li> </ul>
Poles	<ul style="list-style-type: none"> <li>• Broken/rotten pole</li> <li>• Leaning pole</li> </ul>
Lines and conductors	<ul style="list-style-type: none"> <li>• Clearance issues <ul style="list-style-type: none"> <li>○ Lines close to buildings</li> <li>○ Low sag</li> <li>○ Long span</li> </ul> </li> <li>• Conductor degradation (multiple splices)</li> </ul>
Insulation	<ul style="list-style-type: none"> <li>• Broken insulation</li> <li>• Contaminated insulation</li> <li>• Arcing insulation</li> </ul>
Hardware	<ul style="list-style-type: none"> <li>• Loose guy wire</li> <li>• Missing guy wire/anchor</li> </ul>
Crossarms	<ul style="list-style-type: none"> <li>• Broken/rotten crossarm</li> <li>• Leaning crossarm</li> <li>• Missing/loose bracket</li> </ul>
Equipment (reclosers, switches, fuses, voltage regulators, capacitor bank, etc.) and service transformers	<ul style="list-style-type: none"> <li>• Leaking equipment</li> <li>• Missing arresters</li> <li>• Insulation <ul style="list-style-type: none"> <li>○ Broken insulation</li> <li>○ Contaminated insulation</li> </ul> </li> <li>• Arcing insulation</li> </ul>
Wild life	<ul style="list-style-type: none"> <li>• Crossarm nesting</li> <li>• Pole pecking</li> </ul>



## 2. Assessment

### 2.1. Clearances and Brushing

- Improper ROW clearance
- Poor vegetation Management
- Environmental hazards

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

### 2.2. Structure and Foundation

- Animal damage
- Poor condition at ground level
- Conductors loose, broken or joints separated.
- Signs of burns or tracking due to lightning or insulator leakage
- Leaning structures
- Rust in steel poles
- Issues with weathering or splinters
- Problems with structures supporting switches, metering equipment, capacitor banks, regulators, etc.

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

### 2.3. Anchors

- Defective or missing guy
- Loose, corroded or damaged guy
- Improper anchor

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

### 2.4. Grounding

- Violation to standard
- Corroded or Defective ground wire
- Damaged protector
- Rod no properly attached

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

**2.5. Insulation**

- Contamination and signs of flashing
- Improper alignment

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

**2.6. Hardware**

- Excess hardware
- Loose hardware
- Inadequate spacing, improper grounding, bonding, etc.
- Missing bolts, nuts, washers or lock nuts

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

**2.7. Conductor**

- Insufficient clearance
- Insufficient separation
- Conductor insulation damaged or missing
- Excessive sagging
- Corrosion
- Damaged or loose ties
- Excessive number of damaged splices

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

**2.8. Crossarms**

- Damaged, split, twisted, tilted, loose

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

**2.9. Equipment (Transformers, Switches, Streetlights)**

- Leaking or sweating
- Damaged or missing arrestors
- Broken or loose
- Abnormal noise
- Damaged or missing wildlife protectors
- Bushings
- Out of alignment

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments


**2.10. General Line Assessment**

Additional Comments

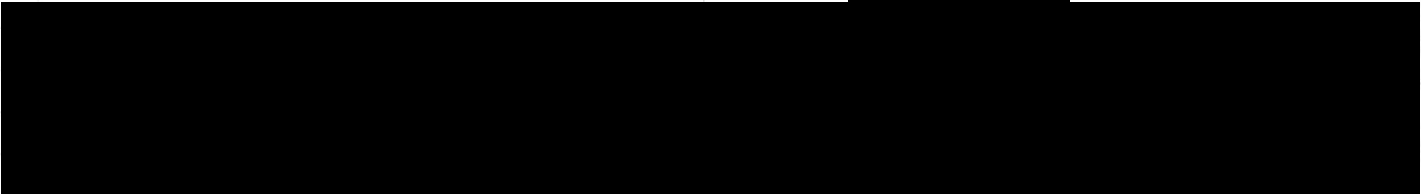
**3. Recommendations****3.1. Stage 1a (Immediate repair):**

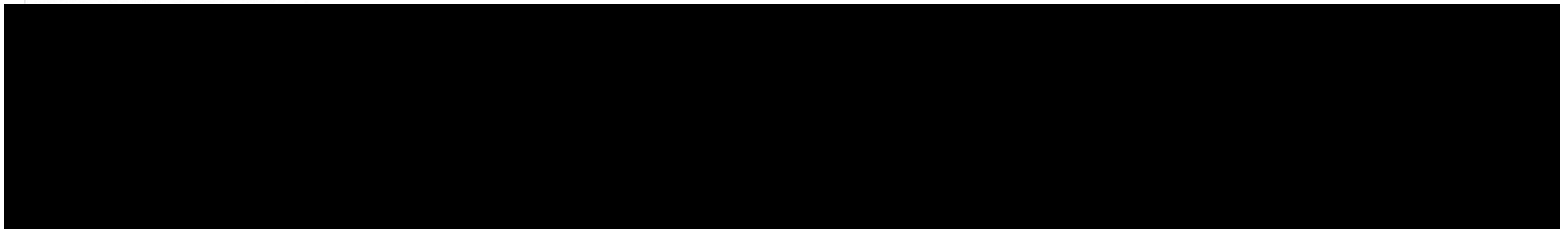
Item	Scope of Work	Comments
<input type="checkbox"/> Grounding		
<input type="checkbox"/> Anchors / hardware		
<input type="checkbox"/> Insulators		
<input type="checkbox"/> Structural (poles and crossarms)		
<input type="checkbox"/> Conductor, Splicing and Spans		
<input checked="" type="checkbox"/> Other		

**3.2. Stage 1b (Short-Term Reliability Improvement):**

Item	Scope of Work	Comments
<input type="checkbox"/> Vegetation Management		
<input type="checkbox"/> Installation of fault indicators.		
<input type="checkbox"/> Installation of lateral fuses.		
<input type="checkbox"/> Perform Fusing check		
<input type="checkbox"/> Other		

**3.3. Stage 2 (Long-Term Reliability Improvement):**

Item	Scope of Work	Comments
<input type="checkbox"/> Vegetation Management		
<input type="checkbox"/> Installation of sectionalizers.		
<input type="checkbox"/> Installation of reclosers.		
<input type="checkbox"/> Protection coordination studies.		
<input checked="" type="checkbox"/> Other		

**3.4. General Recommendations****Additional Comments**


## **DISTRIBUTION LINE INSPECTION CHECKLIST**

### **1. Assessment Criteria**

#### **1.1. Repair Priority Code**

HIGH	MEDIUM	LOW
< 30 days	< 12 months	> 12 months

#### **1.2. Strategic Priority code**

Strategic Priority Code	Description
A	Compliance/Safety: Work scope required to achieve or maintain compliance with applicable codes and standards for safe operation of facilities and regulatory conformance.
B	Reliability: Work scope required to achieve or maintain minimum reliability metrics.
C	Efficiency: Work scope required to improve operating productivity. This includes asset life extension, maintenance cycle offsets, on-line monitoring/diagnostics and asset replacements.
D	Growth & Sustainability: Maximizing grid capacity and the integration of renewable energy sources.

#### **1.3. Health Assessment and Frequency**

	1	2	3	4	5
Health	Very Good	Good	Fair	Poor	Very Poor
Frequency	Very Few or None	Somewhat frequent	Moderate	Very Frequent	All

#### **1.4. Procedure to assess Problems – Use App Kaizala; create a chat for the feeder with all inspectors**

- Note locations (create pin), add a picture of extremely improper vegetation. Insert comments such as 'heavy', 'moderate', etc.
- Create pins for suggestions where reclosers, fuses, fault indicators, etc. would improve performance. Include a picture.
- Include structures that are an imminent failure and high risk. Include pin and photo.
- Include structure that are an extreme safety risk to the public (pin and photo).



**1.5. Root Cause Analysis**

Vegetation	<ul style="list-style-type: none"> <li>• Trees in right-of-way</li> <li>• Trees out of right-of-way</li> <li>• Tree contacting line</li> <li>• Creeping plants</li> </ul>
Poles	<ul style="list-style-type: none"> <li>• Broken/rotten pole</li> <li>• Leaning pole</li> </ul>
Lines and conductors	<ul style="list-style-type: none"> <li>• Clearance issues <ul style="list-style-type: none"> <li>○ Lines close to buildings</li> <li>○ Low sag</li> <li>○ Long span</li> </ul> </li> <li>• Conductor degradation (multiple splices)</li> </ul>
Insulation	<ul style="list-style-type: none"> <li>• Broken insulation</li> <li>• Contaminated insulation</li> <li>• Arcing insulation</li> </ul>
Hardware	<ul style="list-style-type: none"> <li>• Loose guy wire</li> <li>• Missing guy wire/anchor</li> </ul>
Crossarms	<ul style="list-style-type: none"> <li>• Broken/rotten crossarm</li> <li>• Leaning crossarm</li> <li>• Missing/loose bracket</li> </ul>
Equipment (reclosers, switches, fuses, voltage regulators, capacitor bank, etc.) and service transformers	<ul style="list-style-type: none"> <li>• Leaking equipment</li> <li>• Missing arresters</li> <li>• Insulation <ul style="list-style-type: none"> <li>○ Broken insulation</li> <li>○ Contaminated insulation</li> </ul> </li> <li>• Arcing insulation</li> </ul>
Wild life	<ul style="list-style-type: none"> <li>• Crossarm nesting</li> <li>• Pole pecking</li> </ul>

## 2. Assessment

### 2.1. Clearances and Brushing

- Improper ROW clearance
- Poor vegetation Management
- Environmental hazards

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

### 2.2. Structure and Foundation

- Animal damage
- Poor condition at ground level
- Conductors loose, broken or joints separated.
- Signs of burns or tracking due to lightning or insulator leakage
- Leaning structures
- Rust in steel poles
- Issues with weathering or splinters
- Problems with structures supporting switches, metering equipment, capacitor banks, regulators, etc.

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

### 2.3. Anchors

- Defective or missing guy
- Loose, corroded or damaged guy
- Improper anchor

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

### 2.4. Grounding

- Violation to standard
- Corroded or Defective ground wire
- Damaged protector
- Rod no properly attached

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

**2.5. Insulation**

- Contamination and signs of flashing
- Improper alignment

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

**2.6. Hardware**

- Excess hardware
- Loose hardware
- Inadequate spacing, improper grounding, bonding, etc.
- Missing bolts, nuts, washers or lock nuts

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

**2.7. Conductor**

- Insufficient clearance
- Insufficient separation
- Conductor insulation damaged or missing
- Excessive sagging
- Corrosion
- Damaged or loose ties
- Excessive number of damaged splices

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

**2.8. Crossarms**

- Damaged, split, twisted, tilted, loose

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

**2.9. Equipment (Transformers, Switches, Streetlights)**

- Leaking or sweating
- Damaged or missing arrestors
- Broken or loose
- Abnormal noise
- Damaged or missing wildlife protectors
- Bushings
- Out of alignment

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

**2.10. General Line Assessment**

Additional Comments

**3. Recommendations****3.1. Stage 1a (Immediate repair):**

Item	Scope of Work	Comments
<input type="checkbox"/> Grounding		
<input type="checkbox"/> Anchors / hardware		
<input type="checkbox"/> Insulators		
<input checked="" type="checkbox"/> Structural (poles and crossarms)		
<input type="checkbox"/> Conductor, Splicing and Spans		
<input type="checkbox"/> Other		



**3.2. Stage 1b (Short-Term Reliability Improvement):**

Item	Scope of Work	Comments
<input type="checkbox"/> Vegetation Management		
<input type="checkbox"/> Installation of fault indicators.		
<input type="checkbox"/> Installation of lateral fuses.		
<input checked="" type="checkbox"/> Perform Fusing check		
<input type="checkbox"/> Other		

**3.3. Stage 2 (Long-Term Reliability Improvement):**

Item	Scope of Work	Comments
<input type="checkbox"/> Vegetation Management		
<input checked="" type="checkbox"/> Installation of sectionalizers.		
<input checked="" type="checkbox"/> Installation of reclosers.		
<input type="checkbox"/> Protection coordination studies.		
<input type="checkbox"/> Other		

**3.4. General Recommendations****Additional Comments**

## **DISTRIBUTION LINE INSPECTION CHECKLIST**

### **1. Assessment Criteria**

#### **1.1. Repair Priority Code**

HIGH	MEDIUM	LOW
< 30 days	< 12 months	> 12 months

#### **1.2. Strategic Priority code**

Strategic Priority Code	Description
A	Compliance/Safety: Work scope required to achieve or maintain compliance with applicable codes and standards for safe operation of facilities and regulatory conformance.
B	Reliability: Work scope required to achieve or maintain minimum reliability metrics.
C	Efficiency: Work scope required to improve operating productivity. This includes asset life extension, maintenance cycle offsets, on-line monitoring/diagnostics and asset replacements.
D	Growth & Sustainability: Maximizing grid capacity and the integration of renewable energy sources.

#### **1.3. Health Assessment and Frequency**

	1	2	3	4	5
Health	Very Good	Good	Fair	Poor	Very Poor
Frequency	Very Few or None	Somewhat frequent	Moderate	Very Frequent	All

#### **1.4. Procedure to assess Problems – Use App Kaizala; create a chat for the feeder with all inspectors**

- Note locations (create pin), add a picture of extremely improper vegetation. Insert comments such as 'heavy', 'moderate', etc.
- Create pins for suggestions where reclosers, fuses, fault indicators, etc. would improve performance. Include a picture.
- Include structures that are an imminent failure and high risk. Include pin and photo.
- Include structure that are an extreme safety risk to the public (pin and photo).

**1.5. Root Cause Analysis**

Vegetation	<ul style="list-style-type: none"> <li>• Trees in right-of-way</li> <li>• Trees out of right-of-way</li> <li>• Tree contacting line</li> <li>• Creeping plants</li> </ul>
Poles	<ul style="list-style-type: none"> <li>• Broken/rotten pole</li> <li>• Leaning pole</li> </ul>
Lines and conductors	<ul style="list-style-type: none"> <li>• Clearance issues               <ul style="list-style-type: none"> <li>○ Lines close to buildings</li> <li>○ Low sag</li> <li>○ Long span</li> </ul> </li> <li>• Conductor degradation (multiple splices)</li> </ul>
Insulation	<ul style="list-style-type: none"> <li>• Broken insulation</li> <li>• Contaminated insulation</li> <li>• Arcing insulation</li> </ul>
Hardware	<ul style="list-style-type: none"> <li>• Loose guy wire</li> <li>• Missing guy wire/anchor</li> </ul>
Crossarms	<ul style="list-style-type: none"> <li>• Broken/rotten crossarm</li> <li>• Leaning crossarm</li> <li>• Missing/loose bracket</li> </ul>
Equipment (reclosers, switches, fuses, voltage regulators, capacitor bank, etc.) and service transformers	<ul style="list-style-type: none"> <li>• Leaking equipment</li> <li>• Missing arresters</li> <li>• Insulation               <ul style="list-style-type: none"> <li>○ Broken insulation</li> <li>○ Contaminated insulation</li> </ul> </li> <li>• Arcing insulation</li> </ul>
Wild life	<ul style="list-style-type: none"> <li>• Crossarm nesting</li> <li>• Pole pecking</li> </ul>

## 2. Assessment

### 2.1. Clearances and Brushing

- Improper ROW clearance
- Poor vegetation Management
- Environmental hazards

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

### 2.2. Structure and Foundation

- Animal damage
- Poor condition at ground level
- Conductors loose, broken or joints separated.
- Signs of burns or tracking due to lightning or insulator leakage
- Leaning structures
- Rust in steel poles
- Issues with weathering or splinters
- Problems with structures supporting switches, metering equipment, capacitor banks, regulators, etc.

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

### 2.3. Anchors

- Defective or missing guy
- Loose, corroded or damaged guy
- Improper anchor

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

### 2.4. Grounding

- Violation to standard
- Corroded or Defective ground wire
- Damaged protector
- Rod no properly attached

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments



**2.5. Insulation**

- Contamination and signs of flashing
- Improper alignment

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

**2.6. Hardware**

- Excess hardware
- Loose hardware
- Inadequate spacing, improper grounding, bonding, etc.
- Missing bolts, nuts, washers or lock nuts

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

**2.7. Conductor**

- Insufficient clearance
- Insufficient separation
- Conductor insulation damaged or missing
- Excessive sagging
- Corrosion
- Damaged or loose ties
- Excessive number of damaged splices

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

**2.8. Crossarms**

- Damaged, split, twisted, tilted, loose

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

**2.9. Equipment (Transformers, Switches, Streetlights)**

- Leaking or sweating
- Damaged or missing arrestors
- Broken or loose
- Abnormal noise
- Damaged or missing wildlife protectors
- Bushings
- Out of alignment

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

**2.10. General Line Assessment**

Additional Comments

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**3. Recommendations****3.1. Stage 1a (Immediate repair):**

Item	Scope of Work	Comments
<input type="checkbox"/> Grounding		
<input checked="" type="checkbox"/> Anchors / hardware		
<input type="checkbox"/> Insulators		
<input checked="" type="checkbox"/> Structural (poles and crossarms)		
<input checked="" type="checkbox"/> Conductor, Splicing and Spans		
<input type="checkbox"/> Other		

**3.2. Stage 1b (Short-Term Reliability Improvement):**

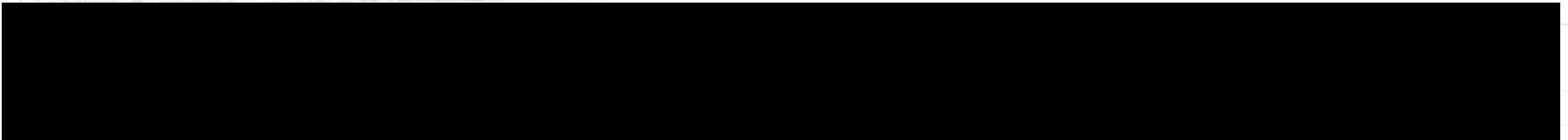
Item	Scope of Work	Comments
<input checked="" type="checkbox"/> Vegetation Management		
<input type="checkbox"/> Installation of fault indicators.		
<input checked="" type="checkbox"/> Installation of lateral fuses.		
<input checked="" type="checkbox"/> Perform Fusing check		
<input type="checkbox"/> Other		

**3.3. Stage 2 (Long-Term Reliability Improvement):**

Item	Scope of Work	Comments
<input checked="" type="checkbox"/> Vegetation Management		
<input type="checkbox"/> Installation of sectionalizers.		
<input type="checkbox"/> Installation of reclosers.		
<input type="checkbox"/> Protection coordination studies.		
<input type="checkbox"/> Other		

**3.4. General Recommendations**

Additional Comments



## **DISTRIBUTION LINE INSPECTION CHECKLIST**

### **1. Assessment Criteria**

#### **1.1. Repair Priority Code**

HIGH	MEDIUM	LOW
< 30 days	< 12 months	> 12 months

#### **1.2. Strategic Priority code**

Strategic Priority Code	Description
A	Compliance/Safety: Work scope required to achieve or maintain compliance with applicable codes and standards for safe operation of facilities and regulatory conformance.
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C	Efficiency: Work scope required to improve operating productivity. This includes asset life extension, maintenance cycle offsets, on-line monitoring/diagnostics and asset replacements.
D	Growth & Sustainability: Maximizing grid capacity and the integration of renewable energy sources.

#### **1.3. Health Assessment and Frequency**

	1	2	3	4	5
<b>Health</b>	Very Good	Good	Fair	Poor	Very Poor
<b>Frequency</b>	Very Few or None	Somewhat frequent	Moderate	Very Frequent	All

#### **1.4. Procedure to assess Problems – Use App Kaizala; create a chat for the feeder with all inspectors**

- Note locations (create pin), add a picture of extremely improper vegetation. Insert comments such as 'heavy', 'moderate', etc.
- Create pins for suggestions where reclosers, fuses, fault indicators, etc. would improve performance. Include a picture.
- Include structures that are an imminent failure and high risk. Include pin and photo.
- Include structure that are an extreme safety risk to the public (pin and photo).



**1.5. Root Cause Analysis**

Vegetation	<ul style="list-style-type: none"> <li>• Trees in right-of-way</li> <li>• Trees out of right-of-way</li> <li>• Tree contacting line</li> <li>• Creeping plants</li> </ul>
Poles	<ul style="list-style-type: none"> <li>• Broken/rotten pole</li> <li>• Leaning pole</li> </ul>
Lines and conductors	<ul style="list-style-type: none"> <li>• Clearance issues <ul style="list-style-type: none"> <li>○ Lines close to buildings</li> <li>○ Low sag</li> <li>○ Long span</li> </ul> </li> <li>• Conductor degradation (multiple splices)</li> </ul>
Insulation	<ul style="list-style-type: none"> <li>• Broken insulation</li> <li>• Contaminated insulation</li> <li>• Arcing insulation</li> </ul>
Hardware	<ul style="list-style-type: none"> <li>• Loose guy wire</li> <li>• Missing guy wire/anchor</li> </ul>
Crossarms	<ul style="list-style-type: none"> <li>• Broken/rotten crossarm</li> <li>• Leaning crossarm</li> <li>• Missing/loose bracket</li> </ul>
Equipment (reclosers, switches, fuses, voltage regulators, capacitor bank, etc.) and service transformers	<ul style="list-style-type: none"> <li>• Leaking equipment</li> <li>• Missing arresters</li> <li>• Insulation <ul style="list-style-type: none"> <li>○ Broken insulation</li> <li>○ Contaminated insulation</li> </ul> </li> <li>• Arcing insulation</li> </ul>
Wild life	<ul style="list-style-type: none"> <li>• Crossarm nesting</li> <li>• Pole pecking</li> </ul>

## 2. Assessment

### 2.1. Clearances and Brushing

- Improper ROW clearance
- Poor vegetation Management
- Environmental hazards

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

### 2.2. Structure and Foundation

- Animal damage
- Poor condition at ground level
- Conductors loose, broken or joints separated.
- Signs of burns or tracking due to lightning or insulator leakage
- Leaning structures
- Rust in steel poles
- Issues with weathering or splinters
- Problems with structures supporting switches, metering equipment, capacitor banks, regulators, etc.

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

### 2.3. Anchors

- Defective or missing guy
- Loose, corroded or damaged guy
- Improper anchor

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

### 2.4. Grounding

- Violation to standard
- Corroded or Defective ground wire
- Damaged protector
- Rod no properly attached

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

**2.5. Insulation**

- Contamination and signs of flashing
- Improper alignment

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

**2.6. Hardware**

- Excess hardware
- Loose hardware
- Inadequate spacing, improper grounding, bonding, etc.
- Missing bolts, nuts, washers or lock nuts

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

**2.7. Conductor**

- Insufficient clearance
- Insufficient separation
- Conductor insulation damaged or missing
- Excessive sagging
- Corrosion
- Damaged or loose ties
- Excessive number of damaged splices

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

**2.8. Crossarms**

- Damaged, split, twisted, tilted, loose

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

**2.9. Equipment (Transformers, Switches, Streetlights)**

- Leaking or sweating
- Damaged or missing arrestors
- Broken or loose
- Abnormal noise
- Damaged or missing wildlife protectors
- Bushings
- Out of alignment

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

**2.10. General Line Assessment****Additional Comments****3. Recommendations****3.1. Stage 1a (Immediate repair):**

Item	Scope of Work	Comments
<input type="checkbox"/> Grounding		
<input checked="" type="checkbox"/> Anchors / hardware		
<input checked="" type="checkbox"/> Insulators		
<input type="checkbox"/> Structural (poles and crossarms)		
<input checked="" type="checkbox"/> Conductor, Splicing and Spans		
<input type="checkbox"/> Other		



### **3.2. Stage 1b (Short-Term Reliability Improvement):**

Item	Scope of Work	Comments
<input checked="" type="checkbox"/> Vegetation Management		
<input type="checkbox"/> Installation of fault indicators.		
<input checked="" type="checkbox"/> Installation of lateral fuses.		
<input type="checkbox"/> Perform Fusing check		
<input type="checkbox"/> Other		

### **3.3. Stage 2 (Long-Term Reliability Improvement):**

Item	Scope of Work	Comments
<input type="checkbox"/> Vegetation Management	<div></div>	
<input checked="" type="checkbox"/> Installation of sectionalizers.		
<input type="checkbox"/> Installation of reclosers.		
<input type="checkbox"/> Protection coordination studies.		
<input type="checkbox"/> Other		

### **3.4. General Recommendations**

**Additional Comments**

[REDACTED]

## **DISTRIBUTION LINE INSPECTION CHECKLIST**

### **1. Assessment Criteria**

#### **1.1. Repair Priority Code**

HIGH	MEDIUM	LOW
< 30 days	< 12 months	> 12 months

#### **1.2. Strategic Priority code**

Strategic Priority Code	Description
A	Compliance/Safety: Work scope required to achieve or maintain compliance with applicable codes and standards for safe operation of facilities and regulatory conformance.
B	Reliability: Work scope required to achieve or maintain minimum reliability metrics.
C	Efficiency: Work scope required to improve operating productivity. This includes asset life extension, maintenance cycle offsets, on-line monitoring/diagnostics and asset replacements.
D	Growth & Sustainability: Maximizing grid capacity and the integration of renewable energy sources.

#### **1.3. Health Assessment and Frequency**

	1-2	3-4	5-6	7-8	9-10
Health	Very Good	Good	Fair	Poor	Very Poor
Frequency	Very Few or None	Somewhat frequent	Moderate	Very Frequent	All

#### **1.4. Procedure to assess Problems – Use App Kaizala; create a chat for the feeder with all inspectors**

- Note locations (create pin), add a picture of extremely improper vegetation. Insert comments such as 'heavy', 'moderate', etc.
- Create pins for suggestions where reclosers, fuses, fault indicators, etc. would improve performance. Include a picture.
- Include structures that are an imminent failure and high risk. Include pin and photo.
- Include structure that are an extreme safety risk to the public (pin and photo).

**1.5. Root Cause Analysis**

Vegetation	<ul style="list-style-type: none"> <li>• Trees in right-of-way</li> <li>• Trees out of right-of-way</li> <li>• Tree contacting line</li> <li>• Creeping plants</li> </ul>
Poles	<ul style="list-style-type: none"> <li>• Broken/rotten pole</li> <li>• Leaning pole</li> </ul>
Lines and conductors	<ul style="list-style-type: none"> <li>• Clearance issues <ul style="list-style-type: none"> <li>○ Lines close to buildings</li> <li>○ Low sag</li> <li>○ Long span</li> </ul> </li> <li>• Conductor degradation (multiple splices)</li> </ul>
Insulation	<ul style="list-style-type: none"> <li>• Broken insulation</li> <li>• Contaminated insulation</li> <li>• Arcing insulation</li> </ul>
Hardware	<ul style="list-style-type: none"> <li>• Loose guy wire</li> <li>• Missing guy wire/anchor</li> </ul>
Crossarms	<ul style="list-style-type: none"> <li>• Broken/rotten crossarm</li> <li>• Leaning crossarm</li> <li>• Missing/loose bracket</li> </ul>
Equipment (reclosers, switches, fuses, voltage regulators, capacitor bank, etc.) and service transformers	<ul style="list-style-type: none"> <li>• Leaking equipment</li> <li>• Missing arresters</li> <li>• Insulation <ul style="list-style-type: none"> <li>○ Broken insulation</li> <li>○ Contaminated insulation</li> </ul> </li> <li>• Arcing insulation</li> </ul>
Wild life	<ul style="list-style-type: none"> <li>• Crossarm nesting</li> <li>• Pole pecking</li> </ul>

## 2. Assessment

### 2.1. Clearances and Brushing

- Improper ROW clearance
- Poor vegetation Management

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

### 2.2. Structure and Foundation

- Animal damage
- Poor condition at ground level
- Conductors loose, broken or joints separated.
- Signs of burns or tracking due to lightning or insulator leakage
- Leaning structures
- Rust in steel poles
- Issues with weathering or splinters
- Problems with structures supporting switches, metering equipment, capacitor banks, regulators, etc.

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

### 2.3. Anchors

- Defective or missing guy
- Loose, corroded or damaged guy
- Improper anchor

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

### 2.4. Grounding

- Violation to standard
- General condition of ground wire

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments



**2.5. Insulation**

- Contamination and signs of flashing
- Improper alignment

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

**2.6. Hardware**

- Excess hardware
- Inadequate spacing, improper grounding, bonding, etc.
- Missing bolts, nuts, washers or lock nuts

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

**2.7. Conductor**

- Insufficient clearance
- Insufficient separation
- Tree wire insulation damaged or missing
- Excessive sagging
- Corrosion
- Damaged or loose ties
- Excessive number of damaged splices

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

**2.8. Crossarms**

- Damaged, split, twisted, tilted, loose

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

## **2.9. Equipment (Transformers, Switches, Streetlights)**

- Leaking or sweating
- Damaged or missing arrestors
- Broken or loose
- Abnormal noise
- Damaged or missing wildlife protectors
- Bushings
- Out of alignment

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

## 2.10. General Line Assessment


Patient Information	Additional Comments
<div>[REDACTED]</div>	<div>[REDACTED]</div>

### 3. Recommendations

### **3.1. Stage 1a (Immediate repair):**

Item	Scope of Work	Comments
<input type="checkbox"/> Grounding		
<input type="checkbox"/> Anchors / hardware		
<input type="checkbox"/> Insulators		
<input type="checkbox"/> Structural (poles and crossarms)		
<input checked="" type="checkbox"/> Conductor, Splicing and Spans		
<input type="checkbox"/> Other		

**3.2. Stage 1b (Short-Term Reliability Improvement):**

Item	Scope of Work	Comments
<input checked="" type="checkbox"/> Vegetation Management		
<input type="checkbox"/> Installation of fault indicators.		
<input type="checkbox"/> Installation of lateral fuses.		
<input checked="" type="checkbox"/> Perform Fusing check		
<input checked="" type="checkbox"/> Other		

**3.3. Stage 2 (Long-Term Reliability Improvement):**

Item	Scope of Work	Comments
<input checked="" type="checkbox"/> Vegetation Management		
<input type="checkbox"/> Installation of sectionalizers.		
<input type="checkbox"/> Installation of reclosers.		
<input type="checkbox"/> Protection coordination studies.		
<input type="checkbox"/> Other		

**3.4. General Recommendations****Additional Comments**

Clearance/Brushing:

Structure/Foundation:

Anchors/Guy:

Grounding:

Insulators:

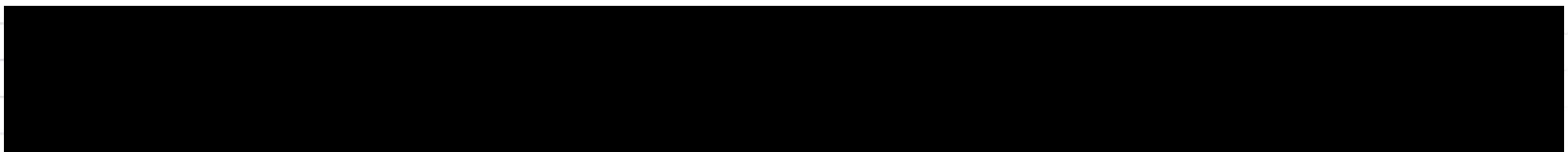
Hardware:

Conductors:

Crossarms:

Equipment:

Other:



## **DISTRIBUTION LINE INSPECTION CHECKLIST**

### **1. Assessment Criteria**

#### **1.1. Repair Priority Code**

HIGH	MEDIUM	LOW
< 30 days	< 12 months	> 12 months

#### **1.2. Strategic Priority code**

Strategic Priority Code	Description
A	Compliance/Safety: Work scope required to achieve or maintain compliance with applicable codes and standards for safe operation of facilities and regulatory conformance.
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D	Growth & Sustainability: Maximizing grid capacity and the integration of renewable energy sources.

#### **1.3. Health Assessment and Frequency**

	1-2	3-4	5-6	7-8	9-10
Health	Very Good	Good	Fair	Poor	Very Poor
Frequency	Very Few or None	Somewhat frequent	Moderate	Very Frequent	All

#### **1.4. Procedure to assess Problems – Use App Kaizala; create a chat for the feeder with all inspectors**

- Note locations (create pin), add a picture of extremely improper vegetation. Insert comments such as 'heavy', 'moderate', etc.
- Create pins for suggestions where reclosers, fuses, fault indicators, etc. would improve performance. Include a picture.
- Include structures that are an imminent failure and high risk. Include pin and photo.
- Include structure that are an extreme safety risk to the public (pin and photo).



**1.5. Root Cause Analysis**

Vegetation	<ul style="list-style-type: none"> <li>• Trees in right-of-way</li> <li>• Trees out of right-of-way</li> <li>• Tree contacting line</li> <li>• Creeping plants</li> </ul>
Poles	<ul style="list-style-type: none"> <li>• Broken/rotten pole</li> <li>• Leaning pole</li> </ul>
Lines and conductors	<ul style="list-style-type: none"> <li>• Clearance issues               <ul style="list-style-type: none"> <li>◦ Lines close to buildings</li> <li>◦ Low sag</li> <li>◦ Long span</li> </ul> </li> <li>• Conductor degradation (multiple splices)</li> </ul>
Insulation	<ul style="list-style-type: none"> <li>• Broken insulation</li> <li>• Contaminated insulation</li> <li>• Arcing insulation</li> </ul>
Hardware	<ul style="list-style-type: none"> <li>• Loose guy wire</li> <li>• Missing guy wire/anchor</li> </ul>
Crossarms	<ul style="list-style-type: none"> <li>• Broken/rotten crossarm</li> <li>• Leaning crossarm</li> <li>• Missing/loose bracket</li> </ul>
Equipment (reclosers, switches, fuses, voltage regulators, capacitor bank, etc.) and service transformers	<ul style="list-style-type: none"> <li>• Leaking equipment</li> <li>• Missing arresters</li> <li>• Insulation               <ul style="list-style-type: none"> <li>◦ Broken insulation</li> <li>◦ Contaminated insulation</li> </ul> </li> <li>• Arcing insulation</li> </ul>
Wild life	<ul style="list-style-type: none"> <li>• Crossarm nesting</li> <li>• Pole pecking</li> </ul>

## 2. Assessment

### 2.1. Clearances and Brushing

- Improper ROW clearance
- Poor vegetation Management

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

### 2.2. Structure and Foundation

- Animal damage
- Poor condition at ground level
- Conductors loose, broken or joints separated.
- Signs of burns or tracking due to lightning or insulator leakage
- Leaning structures
- Rust in steel poles
- Issues with weathering or splinters
- Problems with structures supporting switches, metering equipment, capacitor banks, regulators, etc.

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

### 2.3. Anchors

- Defective or missing guy
- Loose, corroded or damaged guy
- Improper anchor

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

### 2.4. Grounding

- Violation to standard
- General condition of ground wire

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

**2.5. Insulation**

- Contamination and signs of flashing
- Improper alignment

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

**2.6. Hardware**

- Excess hardware
- Inadequate spacing, improper grounding, bonding, etc.
- Missing bolts, nuts, washers or lock nuts

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

**2.7. Conductor**

- Insufficient clearance
- Insufficient separation
- Tree wire insulation damaged or missing
- Excessive sagging
- Corrosion
- Damaged or loose ties
- Excessive number of damaged splices

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

**2.8. Crossarms**

- Damaged, split, twisted, tilted, loose

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

**2.9. Equipment (Transformers, Switches, Streetlights)**

- Leaking or sweating
- Damaged or missing arrestors
- Broken or loose
- Abnormal noise
- Damaged or missing wildlife protectors
- Bushings
- Out of alignment

Assessment (good, fair, poor)	Health (1-5)	Frequency (1-5)	S&L Report (yes/no)	Repair Priority	Strategic Priority	Comments

**2.10. General Line Assessment****Additional Comments****3. Recommendations****3.1. Stage 1a (Immediate repair):**

Item	Scope of Work	Comments
<input type="checkbox"/> Grounding		
<input type="checkbox"/> Anchors / hardware		
<input type="checkbox"/> Insulators		
<input type="checkbox"/> Structural (poles and crossarms)		
<input checked="" type="checkbox"/> Conductor, Splicing and Spans		
<input type="checkbox"/> Other		



**3.2. Stage 1b (Short-Term Reliability Improvement):**

Item	Scope of Work	Comments
<input checked="" type="checkbox"/> Vegetation Management		
<input type="checkbox"/> Installation of fault indicators.		
<input type="checkbox"/> Installation of lateral fuses.		
<input checked="" type="checkbox"/> Perform Fusing check		
<input type="checkbox"/> Other		

**3.3. Stage 2 (Long-Term Reliability Improvement):**

Item	Scope of Work	Comments
<input checked="" type="checkbox"/> Vegetation Management		
<input type="checkbox"/> Installation of sectionalizers.		
<input checked="" type="checkbox"/> Installation of reclosers.		
<input type="checkbox"/> Protection coordination studies.		
<input type="checkbox"/> Other		

**3.4. General Recommendations**

Additional Comments	
Clearance/Brushing:	
Structure/Foundation:	
Anchors/Guy:	
Grounding:	
Insulators:	
Hardware:	
Conductors:	
Crossarms:	
Equipment:	
Other:	