DISTRIBUTION SYSTEM

INSPECTION AND MAINTENANCE PROGRAM

E.L.K Energy Inc.

REV. A - November 2022

1.0 Introduction

This document describes the routine inspection and preventative maintenance program for the E.L.K Energy Inc. (E.L.K.) distribution system in the following service territories:

- Community of Essex
- Community of Harrow
- Community of Kingsville
- Community of Cottam
- Community of Belle River
- Community of Comber

1.1. Purpose

The purpose of the program is to maintain the system in accordance with good utility practice and performance standards to ensure reliability and quality of electrical service, on both a short- and long-term basis.

The patrol inspection is defined as follows:

Patrol or simple visual inspections consists of walking, driving or flying by equipment to identify obvious structural problems and hazards such as leaning power poles, damaged equipment enclosures, and vandalism. In cases where a patrol notices that a problem exists or identifies a condition that warrants a more thorough or rigorous inspection, patrol may then include situations where structures are opened as necessary, and individual pieces of equipment carefully observed and their condition noted and recorded. The specifics of these inspections would be recorded, and a summary document prepared in the distributor's annual reports as part of their rates or licensing submissions.

1.2. Responsibilities

The maintenance and inspection of the distribution system involves multiple departments and resources working together. The Manager, Engineering and Operations is accountable for compliance and adherence to the inspection processes outlined in this inspection plan. Each section of the program identifies the equipment to be maintained, the details of the program maintenance, the position responsible and the resources available to complete the work.

1.3. Qualifications and Training

All personnel shall be qualified and competent at the tasks they are performing and the hazards they may be exposed to, including being qualified under the Occupation of Health and Safety Act. Personnel performing inspections shall be familiar with the equipment and be trained to be able to identify the types of defects that could be discovered during inspections. All personnel performing inspection activities shall be trained to protect both themselves and the public, and to respond to emergencies that may arise as a result of inspection activities.

1.4. Documentation

Accurate and organized documentation of the maintenance and inspection is important to ensure that inspections and maintenance have been completed and follow up items have been addressed. Various forms have been included to assist with consistency and are presented in Appendix B. Record requirements are included under each major section. Inspection forms will only be filled out if a defect is identified during an inspection.

Annual summary reports and inspection deficiency records (as shown in Appendices C and D). shall be prepared and reviewed annually. Annual summary reports shall be submitted to the Ontario Energy Board annually. If requested by the Ontario Energy Board, Inspection deficiency records shall be provided.

1.5. Inspection Schedule

E.L.K.'s distribution assets are to be inspected every 3 years for urban systems and every 6 years for rural systems.

Rural and Urban are defined as per Appendix C of the Distribution System Code:

- **Rural** means those areas that are less populous suburban areas and are outside of a standard metropolitan area. Generally, rural will be defined on a circuit or subcircuit basis by each utility, as areas with a line density of less than 60 customers per kilometer of line. It is recognized that there may be circumstances where the utility might want to treat something as urban though it would otherwise be defined as 'rural' according to this definition.
- **Urban** means areas with higher density and, by definition pose safety and reliability consequences to greater numbers of people.

Since all of E.L.K.'s distribution areas are considered urban, inspections will be scheduled every three (3) years. The utility territory has been divided into three inspection areas. One area will be inspected each year on a three-year continuous schedule. More frequent inspections are currently not required. A description of the areas and the inspection schedule is included in Appendix A.

Customers shall be notified of any planned outages, including outage duration, due to inspection activities and given as much advance notice as possible. Any planned outages shall be minimized where possible.

The following is a list of all of E.L.K.'s distribution assets that will have to be inspected in accordance with the inspection frequency stated above:

(a) Overhead Distribution Assets: Poles, conductors, switches, overhead transformers.

(b) Underground Distribution Assets: Pad-Mount Transformers, Pad-Mount Switches/Switching Cubicles, Underground Cable.

(c) Overhead Switches and Protective Devices

Where a civil infrastructure exists, associated with the assets above, these will also be inspected, where feasible, at the same time as the assets they are associated with.

E.L.K. does not have any Transformer or Distribution Stations.

1.6. Defects & Reporting

Any defects discovered during inspections and maintenance shall be addressed based on the likelihood and consequence of the failure of the asset. All identified defects shall be reported to the Supervisors, Engineering, Operations & Asset Management, alongside a completed Defect Report. The following table highlights how the assets will be assessed for action based on the severity of defects:

Ranking	Definition	Risk of Asset Failure	Action
1	Insignificant damage to the asset– still operable	Low	**No Action** – capture that the asset is still in working condition.
2	Minor damage to asset – still operable with reduced performance	Low	**Noteworthy** – capture in the next inspection cycle and adjust ranking as needed.
3	Moderate damage to the asset – still operable with degraded performance	Medium	**Non-urgent** – no immediate action required. Perform further inspections and integrate into System Renewal

			process or address at site if possible.
4	Major damage to the asset – almost inoperable, poor performance	High	**Urgent** – Action required. Review Distribution System Code (DSC) and safety procedures to identify whether immediate action is required and integrate into operational fieldwork.
5	Severe damage to the asset – inoperable	Very High/ Already Failed	**Critical** – immediate action required. Asset requires immediate replacement/ fixing.

Monthly Review Meetings

Where defects are identified, they will be addressed by a more detailed inspection, repairs, or replacement. Such activities shall be tracked and documented to ensure follow up work is completed. Tracking of the required actions to address the defects will be completed by the Supervisors of Engineering & Asset Management on a monthly basis. Any assets identified with defects will also be tracked in a central spreadsheet and will be reviewed by Supervisor, Engineering & Asset Management monthly to inform maintenance and investment decisions. Data captured during the inspections shall be reviewed as part of the monthly reviews, and any patterns or issues are reviewed, and actions assigned to address any issues.

As indicated in the previous table, E.L.K. has five (5) action responses:

1. Do Nothing- this is for when an asset is in good working order.
2. Noteworthy – minor issues identified, monitor and include in next inspection cycle.
3. Non-Urgent – moderate damage identified, perform further inspections and integrate at repair/replacement into the maintenance or system renewal capital plan, unless the item can be addressed on site immediately.
4. Urgent – Action required, perform further inspections if needed, determine appropriate action of repair or replace and schedule into capital plans.
5. Immediate – immediate action is required, the asset should be repaired or replaced as soon as possible.

All work that is required to be scheduled is fed E.L.K.'s planning process (as outlined in its most recent DSP), where the scheduling of maintenance and/or capital replacement is performed.

All defects shall be repaired in accordance with good utility practice.

Record Keeping

Once inspection forms are received and assessed, the scanned forms and photos will be labeled and stored in the Inspections folder under subfolders defined by action (i.e., non-urgent, urgent, etc.). In the future, once E.L.K. has installed a GIS system, this information will be recorded and stored on GIS.

1.7. Reference Documents

a) Distribution System Code
b) Distribution System Code, Appendix C – Minimum Inspection Requirements

1.8. Policy Review

The procedures outlined for routine inspection and preventative maintenance program of E.L.K.'s distribution system assets will be reviewed annually by the Engineering and Asset Management department. Any updates or changes will be reflected in the subsequent version of this document.

2.0 Overhead Distribution Inspections

2.1. Inspection Responsibility and Records

Responsibility	Supervisor, Engineering & Asset Management
Resource	Operation Department staff
Records	Completed inspection sheets shall be provided to Supervisor, Engineering and Asset Management for review. Hard copies of inspection forms are scanned and stored in the Inspection folder. Photos depicting asset damage/defect are also uploaded to the folder.

2.2. Inspection Requirements

Poles and pole-mounted equipment will be inspected visually from ground level for defects according to the DSC Appendix C – Minimum Inspection Requirements. Essentially, this requires traveling to every pole in the inspection area.

In addition, infrared scanning of all overhead assets will take place.

Inspection sheets have been made up for the various types of overhead distribution equipment to aid with inspections and provide consistency. Photos of any defects or damage will be taken, where possible, during the inspection and will be attached with the inspection form. The inspection form is included in Appendix B. Inspections will identify the following items.

2.2.1. Poles

a) Bent, cracked or broken poles,
b) Excessive surface wear or scaling,
c) Loose, cracked or broken cross arms or brackets,
d) Woodpecker or insect damage, bird nests,
e) Pole number in place,
f) Loose or unattached guy wires or stubs,
g) Guy guards in place,
h) Guy insulators in place and in good condition,
i) Pole leaning in need of guying,
j) Ground rods not exposed at grade,
k) Undermining or washout of base of pole,
l) Cable guards and warning signs in place on riser pole.
m) Loose or missing hardware,
n) Floating insulators – not attached to pins,
o) Conductor not attached to insulator,
p) Tie wires unravelled,
q) Broken, cracked or flashed insulators,

r) Ground wire broken or removed,
s) Lightning arrester blown or lead not connected,
t) Unapproved attachments or use of pole.

2.2.2. Conductors

a) Substandard clearance,
b) Broken or frayed conductors,
c) Birdcaging,
d) Excessive or inadequate sag,
e) Leaning or broken trees close to line,
f) Trees that can be climbed near line,
g) Frayed or missing secondary insulation.

2.2.3. Distribution Transformers

a) Condition of paint and presence of corrosion,
b) Evidence of oil leaks,
c) Evidence of lid displacement,
d) Evidence of cracked or broken bushings,
e) Lightning arrester in place and leads intact,
f) Ground wire in place and in good condition,
g) Bird nests,
h) Vine or brush growth interference,
i) Phase indicators and nomenclature in place,
j) Accessibility for maintenance or repair.

2.2.4. Fused Cutouts

a) Mounting and hardware are in place and secure, no loose bolts,
b) Evidence of broken or cracked insulators,
c) Conductor connections in good condition,
d) Confirm grounding in place,
e) Nomenclature in place.

2.2.5. Regulators

There are no voltage regulators on the E.L.K. distribution system currently. This section is reserved for future use if such equipment is installed.

2.2.6. Capacitors

There are no capacitors on the E.L.K. distribution system currently. This section is reserved for future use if such equipment is installed.

3.0 Underground Distribution Inspections

3.1. Inspection Responsibility and Records

Responsibility	Supervisor, Engineering & Asset Management
Resources	Operation Department staff
Records	Completed inspection sheets shall be provided to Supervisor, Engineering & Asset Management for review. Hard copies of inspection forms are scanned and stored in the Inspection folder. Photos depicting asset damage/defect are also uploaded to the folder.

3.2. Inspection

Pad-mounted equipment will be inspected visually for defects according to the DSC Appendix C – Minimum Inspection Requirements. This requires travelling to every pad mounted transformer and switch in the inspection area.

Inspection sheets have been made up for the various types of equipment to aid with inspections and provide consistency. Photos of any defects or damage will be taken during the inspection and will be attached with the inspection form. The inspection form is included in Appendix B. Inspections will identify the following items.

3.2.1. Padmount Transformers

3.2.2. Visual Inspection

a) Rusting or damage to enclosure,
b) Evidence of damage or vandalism,
c) Shifting or movement on foundation,
d) Warning signs and nomenclature in place,
e) Locks and penta-head bolts in place,
f) Evidence of oil leaks,
g) Cooling or accessibility limited by vegetation,
h) Evidence of settling, cracking or damage to foundation,
i) Missing or damaged traffic bollards.

3.2.3. Padmount Switches/Switching Cubicles

3.2.4. Visual Inspection

a) Rusting or damage to enclosure,
b) Evidence of damage or vandalism,
c) Shifting or movement on foundation,
d) Warning signs and nomenclature in place,
e) Locks and penta-head bolts in place,
f) Evidence of oil leaks,
g) Cooling or accessibility limited by vegetation,
h) Evidence of settling, cracking or damage to foundation,
i) Missing or damaged traffic bollards.

3.2.5. Underground Cables

3.2.6. Visual Inspection

Typically, as cables are underground and not visible without excavation, it is not possible to inspect underground cables. However, visual inspections will be carried out to check for:

a) Exposed and/or damaged cable.
b) Changes in the grade that may indicate the cable has been brought closer to the surface.

4.0 Overhead Switches & Protective Devices

4.1. Inspection Responsibility and Records

Responsibility	Supervisor, Engineering & Asset Management
Resources	Operation Department staff
Records	Completed inspection sheets shall be provided to Supervisor, Engineering and Asset Management for review. Hard copies of inspection forms are scanned and stored in the Inspection folder. Photos depicting asset damage/defect are also uploaded to the folder.

4.2. Inspection

Overhead switches require inspection and maintenance beyond what can be accomplished with a visual survey from ground. Qualified line journeyman Power Lineperson shall be required to inspect and maintain the switches with the use of a bucket truck. Operation of the switch is required during maintenance, which may affect customer supply and/or feeder configuration. Prior to the work being carried out, planning and scheduling of this work is necessary along with any required customer notifications. Inspections and maintenance will identify and carry out the following items:

4.2.1. Visual Inspection

a) Mounting and hardware are in place and secure, no loose bolts,
b) Evidence of broken or cracked insulators,
c) Conductor connections in good condition,
d) Confirm grounding in place, including flex ground to operating handle,
e) Clear level area for personnel operating switch,
f) Nomenclature in place.

4.2.2. Verify Operation

a) Switch and operate handle move without restriction,
b) Interrupters or arc chutes operate correctly,
c) Contacts are aligned and free of corrosion, pitting or damage,
d) Inspect moving parts for operation and wear.

4.2.3. Routine Maintenance

a) Clean contact surfaces – either with emery cloth or by opening and closing the switch several times,
b) Lubricate all control components,
c) Replace defective or worn parts as required

5.0 Tree Trimming

5.1.1. Schedule

Tree trimming around overhead lines to maintain clearances will be completed on a three-year cycle. The service territory has been divided into three areas. Tree trimming of one area will be completed each calendar year. See Appendix A for further details on the schedule.

5.1.2. Inspection Responsibility and Records

Responsibility	Supervisor, Engineering & Asset Management
Resources	Tree Trimming Contractors: DeerRun Excavator and Goodreau
Records	Tree trimming report shall be provided to Supervisor, Engineering and Asset Management.

5.1.3. Requirements and Clearances

All trees and woody growth adjacent to a line shall be trimmed so that the minimum clearance to the nearest conductor horizontally at maximum swing and vertically at maximum sag shall be as per the following table.

Tree Trimming Clearances	
Line Type	Clearance
Secondary (less than 750V)	1 m
Primary (above 750V)	4m

All dead branches above lines shall be trimmed and/or removed.

Primary lines supplying primary customers shall be cleared up to the ownership demarcation point. If privately owned primary lines require trimming, the details shall be forwarded to the Supervisor, Engineering and Asset Management who will arrange for written notice to be sent the customer.

Secondary services shall be cleared to the service termination on the building, or up to the ownership demarcation point.

Property owners shall be contacted prior to trimming trees on private property. Customer concerns shall be handled by the Supervisor.

Where specified clearances cannot be accomplished or where it would be considered inappropriate to trim to such clearances the situation shall be resolved by the Supervisor. Possible resolutions include alternate (reduced) clearances, tree removal and/or line relocation.

Tree trimming will be completed by contractors, with quality and completion of the work inspected by Operation's staff.

Appendix A - Inspection/Tree Trimming Areas and Schedule

Inspection & Tree Trimming Areas		
Area #1	Town of Kingsville	Community of Kingsville Community of Cottam
Area #2	Town of Essex	Community of Essex Community of Harrow
Area #3	Town of Lakeshore	Community of Belle River Community of Comber

Tree Trimming Schedule										
Area	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
#1	X			X			X			X
#2		X			X			X		
#3			X			X			X	

Inspection Schedule										
Area	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
#1		X			X			X		
#2			X			X			X	
#3	X			X			X			X

Due to any unforeseen circumstances, such as resource constraints, emergency response and repairs etc, there may be cases where, in rare circumstances, it is not possible for the complete area to be inspected in a given year, the missing sections shall be prioritized follow up the next year. Any reasons for incomplete inspections shall be documented.

Appendix B - Inspection Forms

E.L.K Energy Inc.
Distribution System Asset Inspection Form - Poles

Asset Deficiency

Date: Inspector Name:

Area: Asset ID #:

Address:

Inspection Checklist

Damage Scale -

1 – Insignificant damage – asset still operable
2 – Minor damage – asset operable with reduced performance
3 – Moderate damage – asset operable with significantly degraded performance
4 – Major damage – asset almost inoperable, poor performance
5 – Severe damage – asset inoperable, requires immediate replacement

	Yes	No	Damage Scale				
Bent, cracked, or broken	☐	☐	1	2	3	4	5
Excessive surface wear or scaling	☐	☐	1	2	3	4	5
Loose, cracked or broken cross arms or brackets	☐	☐	1	2	3	4	5
Woodpecker or insect damage, bird nests	☐	☐	1	2	3	4	5
Pole number in place	☐	☐	1	2	3	4	5
Loose or unattached guy wires or stubs	☐	☐	1	2	3	4	5
Guy guards in place	☐	☐	1	2	3	4	5
Guy insulators in place and in good condition	☐	☐	1	2	3	4	5
Pole leaning in need of guying	☐	☐	1	2	3	4	5
Ground rods not exposed at grade	☐	☐	1	2	3	4	5
Undermining or washout of base of pole	☐	☐	1	2	3	4	5
Cable guards and warning signs in place on riser pole	☐	☐	1	2	3	4	5
Loose or missing hardware	☐	☐	1	2	3	4	5
Floating insulators – not attached to pins	☐	☐	1	2	3	4	5
Conductor not attached to insulator	☐	☐	1	2	3	4	5
Tie wires unravelled	☐	☐	1	2	3	4	5
Ground wire broken or removed	☐	☐	1	2	3	4	5
Lightning arrester blown or lead not connected	☐	☐	1	2	3	4	5
Unapproved attachments or use of pole	☐	☐	1	2	3	4	5
Photos of damage included	☐	☐	1	2	3	4	5

Description of Deficiencies/Damage

_____

_____

Action Timing: Immediate ☐ 30 Days ☐ Planned ☐

Asset Remedial Action

Date: _____

Description of Remedial Action:

_____

_____

Note: Electric distribution system equipment left in safe condition, presenting no undue hazard to the public.

_____ _____

Name **Signature**

Return distribution System Asset Inspection Form to Engineering Upon Completion of Work.

E.L.K Energy Inc.
Distribution System Asset Inspection Form – Padmount Transformers

Asset Deficiency

Date: Inspector Name:

Area: Asset ID #:

Address:

Inspection Checklist

Damage Scale -

1	2	3	4	5
Insignificant damage – asset still operable	Minor damage – asset operable with reduced performance	Moderate damage – asset operable with significantly degraded performance	Major damage – asset almost inoperable, poor performance	Severe damage – asset inoperable, requires immediate replacement

	Yes	No	Damage Scale				
Rusting or damage to enclosure	☐	☐	1	2	3	4	5
Evidence of damage or vandalism	☐	☐	1	2	3	4	5
Shifting or movement on foundation	☐	☐	1	2	3	4	5
Evidence of settling, cracking or damage to foundation	☐	☐	1	2	3	4	5
Warning signs and nomenclature in place	☐	☐	1	2	3	4	5
Locks and penta-head bolts in place	☐	☐	1	2	3	4	5
Evidence of oil leaks	☐	☐	1	2	3	4	5
Cooling or accessibility limited by vegetation	☐	☐	1	2	3	4	5
Missing or damaged traffic bollards	☐	☐	1	2	3	4	5
Photos of damage included	☐	☐	1	2	3	4	5

Description of Deficiencies/Damage

_____

_____

Action Timing: Immediate ☐ 30 Days ☐ Planned ☐

Asset Remedial Action

Date: _____

Description of Remedial Action:

_____

_____

Note: Electric distribution system equipment left in safe condition, presenting no undue hazard to the public.

_____ _____

Name **Signature**

Return distribution System Asset Inspection Form to Engineering Upon Completion of Work.

E.L.K Energy Inc.
Distribution System Asset Inspection Form – Padmount Switches/ Switching Cubicle

Asset Deficiency

Date: Inspector Name:

Area: Asset ID #:

Address:

Inspection Checklist

Damage Scale -

1 – **Insignificant damage** – asset still operable

2 – **Minor damage** – asset operable with reduced performance

3 – **Moderate damage** – asset operable with significantly degraded performance

4 – **Major damage** – asset almost inoperable, poor performance

5 – **Severe damage** – asset inoperable, requires immediate replacement

	Yes	No	Damage Scale				
Rusting or damage to enclosure	☐	☐	1	2	3	4	5
Evidence of damage or vandalism	☐	☐	1	2	3	4	5
Shifting or movement on foundation	☐	☐	1	2	3	4	5
Evidence of settling, cracking or damage to foundation	☐	☐	1	2	3	4	5
Warning signs and nomenclature in place	☐	☐	1	2	3	4	5
Locks and penta-head bolts in place	☐	☐	1	2	3	4	5
Evidence of oil leaks	☐	☐	1	2	3	4	5
Cooling or accessibility limited by vegetation	☐	☐	1	2	3	4	5
Missing or damaged traffic bollards	☐	☐	1	2	3	4	5
Photos of damage included	☐	☐	1	2	3	4	5

Description of Deficiencies/Damage

_____

_____

Action Timing: Immediate ☐ 30 Days ☐ Planned ☐

Asset Remedial Action

Date: _____

Description of Remedial Action:

_____

_____

Note: Electric distribution system equipment left in safe condition, presenting no undue hazard to the public.

_____ _____

Name **Signature**

Return distribution System Asset Inspection Form to Engineering Upon Completion of Work.

E.L.K Energy Inc.
Distribution System Asset Inspection Form – Overhead Switches & Protective Devices

Asset Deficiency

Date: Inspector Name:

Area: Asset ID #:

Address:

Inspection Checklist

Damage Scale -

1 – Insignificant damage – asset still operable
2 – Minor damage – asset operable with reduced performance
3 – Moderate damage – asset operable with significantly degraded performance
4 – Major damage – asset almost inoperable, poor performance
5 – Severe damage – asset inoperable, requires immediate replacement

	Yes	No	Damage Scale				
Mounting and hardware are in place and secure	☐	☐	1	2	3	4	5
Loose bolts	☐	☐	1	2	3	4	5
Evidence of broken or cracked insulators	☐	☐	1	2	3	4	5
Conductor connections in good condition	☐	☐	1	2	3	4	5
Confirm grounding in place (flex ground, operating handle)	☐	☐	1	2	3	4	5
Clear level area for personnel operating switch	☐	☐	1	2	3	4	5
Nomenclature in place	☐	☐	1	2	3	4	5
Photos of damage included	☐	☐	1	2	3	4	5

Description of Deficiencies/Damage

_____

_____

Action Timing: Immediate ☐ 30 Days ☐ Planned ☐

Asset Remedial Action

Date: _____

Description of Remedial Action:

_____

_____

Note: Electric distribution system equipment left in safe condition, presenting no undue hazard to the public.

_____ _____

Name **Signature**

Return distribution System Asset Inspection Form to Engineering Upon Completion of Work.

E.L.K Energy Inc.
Distribution System Asset Inspection Form – Fused Cutouts

Asset Deficiency

Date: Inspector Name:

Area: Asset ID #:

Address:

Inspection Checklist

Damage Scale -

1 – Insignificant damage – asset still operable
2 – Minor damage – asset operable with reduced performance
3 – Moderate damage – asset operable with significantly degraded performance
4 – Major damage – asset almost inoperable, poor performance
5 – Severe damage – asset inoperable, requires immediate replacement

	Yes	No	Damage Scale				
Mounting and hardware are in place and secure	☐	☐	1	2	3	4	5
Loose bolts	☐	☐	1	2	3	4	5
Evidence of broken or cracked insulators	☐	☐	1	2	3	4	5
Conductor connections in good condition	☐	☐	1	2	3	4	5
Grounding in place	☐	☐	1	2	3	4	5
Nomenclature in place	☐	☐	1	2	3	4	5
Photos of damage included	☐	☐	1	2	3	4	5

Description of Deficiencies/Damage

_____

_____

Action Timing: Immediate ☐ 30 Days ☐ Planned ☐

Asset Remedial Action

Date: _____

Description of Remedial Action:

_____

_____

Note: Electric distribution system equipment left in safe condition, presenting no undue hazard to the public.

_____ _____

Name **Signature**

Return distribution System Asset Inspection Form to Engineering Upon Completion of Work.

E.L.K Energy Inc.
Distribution System Asset Inspection Form – Distribution Transformers

Asset Deficiency

Date: Inspector Name:

Area: Asset ID #:

Address:

Inspection Checklist

Damage Scale -

1	2	3	4	5
Insignificant damage – asset still operable	Minor damage – asset operable with reduced performance	Moderate damage – asset operable with significantly degraded performance	Major damage – asset almost inoperable, poor performance	Severe damage – asset inoperable, requires immediate replacement

	Yes	No	Damage Scale				
Condition of paint and presence of corrosion	☐	☐	1	2	3	4	5
Evidence of oil leaks	☐	☐	1	2	3	4	5
Evidence of lid displacement	☐	☐	1	2	3	4	5
Evidence of cracked or broken bushings	☐	☐	1	2	3	4	5
Lightning arrester in place and leads intact	☐	☐	1	2	3	4	5
Ground wire in place and in good condition	☐	☐	1	2	3	4	5
Bird nests	☐	☐	1	2	3	4	5
Vine or brush growth interference	☐	☐	1	2	3	4	5
Phase indicators and nomenclature in place	☐	☐	1	2	3	4	5
Accessibility for maintenance or repair	☐	☐	1	2	3	4	5
Photos of damage included	☐	☐	1	2	3	4	5

Description of Deficiencies/Damage

_____

_____

Action Timing: Immediate ☐ 30 Days ☐ Planned ☐

Asset Remedial Action

Date: _____

Description of Remedial Action:

_____

_____

Note: Electric distribution system equipment left in safe condition, presenting no undue hazard to the public.

_____ _____

Name **Signature**

Return distribution System Asset Inspection Form to Engineering Upon Completion of Work.

E.L.K Energy Inc.
Distribution System Asset Inspection Form – Conductors

Asset Deficiency

Date: Inspector Name:

Area: Asset ID #:

Address:

Inspection Checklist

Damage Scale -

1 – Insignificant damage – asset still operable
2 – Minor damage – asset operable with reduced performance
3 – Moderate damage – asset operable with significantly degraded performance
4 – Major damage – asset almost inoperable, poor performance
5 – Severe damage – asset inoperable, requires immediate replacement

	Yes	No	Damage Scale				
Substandard clearance	☐	☐	1	2	3	4	5
Broken or frayed conductors	☐	☐	1	2	3	4	5
Birdcaging	☐	☐	1	2	3	4	5
Excessive or inadequate sag	☐	☐	1	2	3	4	5
Leaning or broken trees close to line	☐	☐	1	2	3	4	5
Trees that can be climbed near line	☐	☐	1	2	3	4	5
Frayed or missing secondary insulation	☐	☐	1	2	3	4	5
Photos of damage included	☐	☐	1	2	3	4	5

Description of Deficiencies/Damage

_____

_____

Action Timing: Immediate ☐ 30 Days ☐ Planned ☐

Asset Remedial Action

Date: _____

Description of Remedial Action:

_____

_____

Note: Electric distribution system equipment left in safe condition, presenting no undue hazard to the public.

_____ _____

Name **Signature**

Return distribution System Asset Inspection Form to Engineering Upon Completion of Work.

This annual inspection report provides a summary of the inspections scheduled and carried out during the year as well as the target dates for completion of inspections which were not completed as planned. Major equipment categories are not reported separately however, all categories of equipment within the area or circuits shall be inspected. Civil infrastructure is intended to be inspected as part of the inspection of the distribution system or while doing normal routine utility work.

Distributor:	E.L.K. Energy Inc.		**Inspection Area:**		
Reviewed by	**Name:**		**Position/Title:**		
Date:	**Signature:**				
Category		**Percentage of Distribution System Scheduled for Inspection (%)**	**Percentage of Distribution System Actually Inspection (%)**	**Reason inspections were not Completed**	**Date missed inspections will be Completed**
Overhead Distribution Poles Conductors Distribution Transformers Fused Cutouts Regulators Capacitors	**Urban**				
Underground Distribution Padmount Transformers Padmount Switches Switching Cubicles Underground Cables	**Urban**				
Overhead Switches Protective Devices	**Urban**				

Appendix D - Inspection Deficiency Record

E.L.K. will record the deficiencies and corrective action for all major equipment classifications for the area or circuit. E.L.K. will retain this information and make it available to Ontario Energy Board upon request. Corrective Action Priorities align with the deficiency 1 - 5 definitions highlighted in section 1.6.

Inspection Area _____ **Date _____**

Circuit _____ **Inspected By _____**

Grid _____ **Page ____ of ____**

Location	Equipment ID No.	Equipment Classification	Repair Required/ Problem	Corrective Action Priority (1-5)	Assigned to or Work Order No.	Date Repair Completed or Scheduled
Number of Deficiencies for the Circuit/Area						