Guideline for Audit

Version 2.1

Ontario Regulation 22/04

Electrical Distribution Safety

December 18, 2014

Legal Disclaimer.

This document contains GUIDELINES ONLY to assist members of the industry in interpreting Ontario Regulation 22/04 - Electrical Distribution Safety - made under subsection 113(1) of Part VIII of the Electricity Act, 1998. These guidelines do not have the force of law. Where there is a conflict between these guidelines and any legislation or regulation which may apply, the relevant law prevails.

Retention Periods stated in the guidelines set out the minimum period for which referenced documents are to be retained. Each distributor needs to make its own assessment of the appropriate retention period for specific documents based on its assessment of risk factors and potential liability.

Audit Objectives

1.1 Purpose of Guideline.

This Guideline has been prepared to provide guidance to distributors and auditors engaged by a distributor to satisfy the requirements of Section 13 of Ontario Regulation 22/04 - Electrical Distribution Safety. It is not the intent of this document to tell auditors how to perform their audits, rather it is intended to provide guidance on some of the issues that arise from the requirements of the Regulation.

1.2 What is an audit?

An audit is an independent review and examination of records and activities to assess the adequacy of system controls, to ensure compliance with established policies and procedures, and/or to recommend necessary changes in controls, policies, or procedures to meet objectives.

1.3 What is the purpose of the audit?

The purpose of the audit is to assess the extent of compliance by the distributor with respect to sections 4,5,6,7,and 8 of Ontario Regulation 22/04, to measure whether the distributor has appropriate processes in place to comply with the safety standards set out in the Regulation and to determine whether the distributor correctly follows its processes.

1.4 What are the guiding principles?

1.4.1 There should be no surprises to the distributor arising from the audit;

1.4.2 The audit should confirm that distributors have appropriate systems and processes in place for ensuring that work is carried out in accordance with the Regulation;

1.4.3 Distributors should have a clear understanding of the objectives and scope of the audit;

1.4.4 Distributors' senior management has a clear understanding of the Regulation and that it is communicated to and understood by those responsible for doing work within the scope of the Regulation;

1.4.5 Distributors have competent and qualified people capable of conducting work in accordance with the Regulation.

2.0 Audit Scope

2.1 What is being audited?

The processes used by the distributor and compliance to the processes used, to design, construct, install, use, maintain, protect, repair, extend,

connect and disconnect the electrical installations and electrical equipment forming the distribution system, so as to reduce the probability of exposure to electrical safety hazards. This will be done by examining each distributor's records for:

2.1.1 The existence of equipment standards and records of testing or inspection where applicable, and approval of all equipment used by the distributor;

2.1.2 The existence of plans, standard design drawings or standard design specifications, and records that they have been prepared, reviewed and certified by a professional engineer or the Electrical Safety Authority (ESA);

2.1.3 Proof that inspections are performed on all construction work prior to putting a system into use in accordance with a distributor's construction verification program, or by ESA or a Professional Engineer, including maintaining records of inspection and certificates of inspection approval. This includes like-for- like construction, emergency or regular repairs, regular maintenance work, upgrading work, and new construction. It also includes verification that inspections are completed by: i) a professional engineer, ii) qualified persons identified in the distributor's construction verification program approved by the ESA, or iii) by the ESA;

2.1.4 The existence of operating and maintenance programs for all distribution systems and the parts therein that are adequate for meeting the safety standards of the Regulation.

3.0 Auditor Qualifications

3.1 Who is qualified to provide the audit service?

According to section 13 (2) (a) and (b) of the Regulation, the distributor shall engage an organization that is,

3.1.1 accredited by the Standards Council of Canada (SCC) to register quality management systems whose scope of accreditation includes engineering services, construction and electricity supply; or

3.1.2 acceptable to the Electrical Safety Authority.

3.2 What qualifications must an organization have to be acceptable to the ESA?

Six criteria for acceptance have been established by the ESA:

3.2.1 Independence. For an auditor to qualify to be engaged by the distributor, the organization or individual must be independent of the

work to be audited. Auditors are independent when they can carry out their work freely and objectively. Independence permits auditors to render the impartial and unbiased judgments essential to the proper conduct of audits.

Threats to independence would normally be documented by the auditor on acceptance of the assignment and updated every audit. When threats exist, the auditor should document the steps taken to mitigate the threat. In some case, the only way the threat can be mitigated is by refusing the assignment. The following threats are taken from international and Canadian standards of independence[1] for accountants and management systems auditors[2]:

3.2.1.1 Self-interest threat - exists when an auditor[3] has an interest, or is seen to have an interest, in the outcome of the audit. This would be the case if the auditor had a financial interest in the distributor or if he or she, or a member of his or her immediate family, was employed in a management capacity with the distributor.

3.2.1.2 Self-review threat - exists when the auditor is in effect auditing his or her own work. For example, if the auditor has also acted in a material way in a consulting capacity with the distributor to establish the systems subject to audit.

3.2.1.3 Advocacy threat - exists when the auditor acts as an advocate for the distributor on safety issues (for example before a regulatory body).

3.2.1.4 Familiarity threat - exists when the auditor is seen to be too close to management of the distributor.

3.2.1.5 Intimidation threat - exists when management is in a position to threaten the auditor with loss of business if the auditor does not "go along". This threat would normally only exist when the loss of business would be extremely damaging to the auditor.

Any potential threat to independence should be disclosed by the distributor and will be considered by the ESA in establishing whether an independent audit can be conducted.

3.2.2 Ethical standards. In determining acceptance of an organization or individual that is not accredited by Standards Council of Canada, the ESA should have reasonable assurance that the organization and its

[1] Institute of Chartered Accountants of Ontario, Council Interpretation 204.4 to the Rules of Professional Conduct.
[2] International Organization for Standardization, ISO/IEC CD2 17021, Conformity assessment – General requirements for bodies providing assessment and certification of management systems.
[3] Reference to "auditor" includes members of his or her immediate family – usually spouse and other financially dependent relatives.

auditors comply with applicable ethical requirements. Fundamental ethical principles include:

i. Honesty and Integrity;
ii. Objectivity;
iii. Professional competence and due care;
iv. Confidentiality;
v. Professional behavior.

3.2.3 Auditing competencies. Auditing competencies are the attributes and competencies auditors and assurance providers traditionally demonstrate. These include:

i. Skepticism – enhances the value of evidence by questioning its reliability and validity and in requiring answers to those questions;
ii. Audit Planning – auditors should have the skill to plan each audit by identifying the objectives and scope of work, obtaining background information about the activities to be audited, communicating with all who need to know about the audit, and writing the audit plan or program;
iii. Evidence-gathering and evaluation – the ability to rationalize collected information is a critical element of an auditor's expertise and includes techniques such as sampling, observation, and analyses;
iv. Judgment in assessing significance of collected information and risk – these concepts and their application to evidence-gathering are critical elements in assessing safety;
v. A process and systems approach to obtaining assurance – this approach that is widely used in auditing financial statements translates well into auditing distributors for compliance with the Regulation;
vi. Rigorous documentation practices – is a professional obligation and sound practice for effectively communicating between audit team members and between the audit team and the distributor; and
vii. Report-writing and communication skills – both formal and less formal communication requires a high level of precision on the part of the auditor and comprehension on the part of the reader.

These skills are separate from the technical subject matter skills needed for an audit engagement. Audit competencies are normally developed over years of formal and on-the-job training and reinforced through annual audit-related training. An individual might have both the audit and subject matter competencies. Under these circumstances, one person might conduct audits of small to medium size distributors. For larger distributors and when individuals do not have the combined competencies, teams of two or more members may be required to provide the auditing as well as subject matter competencies needed for

an audit.

3.2.4 Subject matter competencies.
In addition to the generic auditing competencies listed above that are required to conduct an audit, the auditor/team requires subject matter competencies in the areas of engineering services, construction and electricity supply. These competencies include:

i. A reasonable level of knowledge of the electricity distribution industry;
ii. An understanding of the Regulation and implications for the distribution industry;
iii. The ability to recognize whether a distributor is compliant or non-compliant with the Regulation;
iv. An understanding the significance of non-compliance with the Regulation and appropriate actions that a distributor should take to correct the noncompliance;
v. An understanding of how distributors may have taken different approaches, acceptable to the ESA, to comply with the Regulation; and
vi. A reasonable level of knowledge of the technical elements of engineering services, construction and electricity supply set out in the Regulation.

3.2.5 Training. Auditors require appropriate training to acquire and maintain both generic audit and subject matter competencies relevant to auditing a distributor. Skills to audit quality management systems against the requirements of recognized standards would normally be developed through training courses accredited by the Standards Council of Canada or other accredited body such as the Registrar Accreditation Board in the United States. Technical subject matter expertise associated with the distribution industry may be acquired through work experience in the industry as an employee, contractor or engineering consultant to a distributor.

Auditors, both with generic auditing and subject matter competencies, will require knowledge of the Regulation and will need to understand the safety codes, standards and regulations applicable in each situation. Auditors will also need training on the objectives and scope of an audit to understand the purpose and limits of their involvement. It will be important for each audit team to have the appropriate combination of audit skills and subject matter knowledge.

3.2.6 Education, Work Experience and Continuing Professional Development.
The requirements for education, work experience and continuing

professional development that are deemed acceptable by the ESA are set out in the table below:

	Post-secondary Education	**No Post-secondary Education**
Education	University degree or equivalent,	6 years full-time work experience
	plus	**plus**
Work Experience (in a related technical, professional or management position of accountability involving the exercise of judgment; or management system experience in implementation and/or operation of management systems e.g. project manager)	4 years minimum	4 years minimum
	plus	**plus**
Auditing Experience (auditor must be independent of the organizational unit being audited)	30 days minimum of auditing experience over past three years **or** successful completion of 2 shadow audits* and 2 witness** audits of Regulation 22/04 and totaling a minimum of 24 hours.	30 days minimum of auditing experience over past three years **or** successful completion of 2 shadow audits* and 2 witness** audits of Regulation 22/04 and totaling a minimum of 24 hours.
	Good to have	**Good to have**
Professional Development **(**Appropriate continuing development through course participation or industry related association work. For some professional designations respective professional bodies and associations set out requirements.)	15 hours minimum each year.	15 hours minimum each year
Note: The above standards are partly based on National Quality Institute; NQI's Canadian Program for the Certification of QMS Auditors; Program Overview.		

***** Shadow Audit – Following an existing Regulation 22/04 qualified Auditor.

****** Witness Audit – Performing an audit under the supervision of an existing Regulation 22/04 qualified Auditor.

3.3 Can Internal Auditors be used?

Internal auditors can be used to complete the audit provided that they are members in good standing of a professional auditing or assurance association and have attained an appropriate professional designation with an appropriate code of ethics. The Institute of Internal Auditors (IIA) and the Canadian Institute of Chartered Accountants (CICA) are two associations that have such codes. The IIA designation Certified Internal Auditor (CIA) is a globally accepted certification designation for internal auditors and remains the standard by which individuals demonstrate their competency and professionalism in the internal auditing field. The CICA has an agreement with the IIA to recognize a CA-CIA designation that trains CA's with the IIA's internal audit standards. The distributor shall confirm acceptance of the use of internal auditors by the ESA prior to engaging the auditor.

ESA will conduct an assessment based on an analysis of auditor subject matter competencies and independence from the business units being audited. This would be done based on information provided by the distributor such as auditor resumes and a hierarchy chart of the organization, identifying the reporting structure of the auditor within the organization.

Internal auditors that have not achieved a recognized professional designation may still assist in the completion of the audit, but must be under the direction of an auditor who meets the standards described in subsections 3.1.1 and 3.1.2.

3.4 How will a distributor find an acceptable auditor?

It will be up to the distributors to find auditors that meet the criteria with either SCC accreditation or that meet the standards laid out by the ESA for acceptance. Some possibilities include contacting the SCC or contacting quality management systems audit firms or engineering consulting firms.

The ESA will maintain a list of acceptable organizations made up of auditors submitted by distributors or independent auditors who have approached the ESA directly. As the ESA approves auditors the list will be made available to all distributors in the form of a bulletin issued to the distributors and posted on the www.ESASafe.com website.

3.5 Unapproved auditors.

Where the distributor proposes to engage an auditor that is not on the ESA approved list, the distributor will provide the ESA with sufficient information on the proposed organization to enable the ESA to determine whether the organization meets the criteria for acceptance. Where a distributor proposes retaining an auditor who is not yet on the approved

list, that organization should be required to meet all the criteria for acceptance in section 3.2 of this guideline. The ESA may request proof that the organization meets the requirements. In any case, the ESA must confirm acceptance of the auditor, prior to the distributor engaging the auditor.

3.6 What kind of proof is the ESA looking for?

The proof should include a summary of how the auditor meets the criteria laid out in section 3.2 of this guideline. This would probably be in the form of Curriculum Vitae, or a similar standard manner in presenting credentials that can be confirmed independently.

4.0 Audit Process

4.1 How does the audit work?

Below is a summary of the steps involved in the audit process.
i) The ESA notifies the distributor when the audit report is due and what period is to be covered by the audit.
ii) The distributor gains approval of an auditor from the ESA.
iii) The distributor engages the auditor approved by the ESA.
iv) The auditor prepares the audit program based on checklist of points to be audited the review of the processes, and the management interviews.
v) The auditor completes the audit of the distributor.
vi) The auditor prepares the audit report and reviews any audit findings with distributor.
vii) The distributor submits the audit report to the ESA along with management response and action plan to the audit findings.
viii) The ESA reviews the audit report, management response and action plan.
ix) The ESA and the distributor meet and review the audit report and any action plans necessary to bring the distributor into compliance with the Regulation.
x) The distributor submits progress report on action plans, if necessary.

4.2 How often does the audit have to be done?

The audit must be completed annually. The ESA will provide the distributors with a schedule for the audit and the date to submit the audit report to the ESA. This schedule will be issued as a bulletin to the distributors each year prior to the next audit period starting and will be posted on www.ESASafe.com.

To provide sufficient time for the ESA to review and respond to each audit report, the distributors will be set into 3 groups with different audit periods and reporting dates. The audit period will be twelve months long and the audit report will be due 3 months after audit period has ended.

4.3 How long does the distributor have to keep records that are audited?

The distributor is expected to retain all records that are required for the completion of the audit for a minimum of one year after the audit has ended. For Audit Report retention, please see section 6.2

4.4 How will the auditor complete the audit?

The auditor will be provided with the checklist of the processes to be audited to assist them in developing the audit plan. This checklist consists of questions designed to identify whether there are appropriate records, documentation, processes and procedures related to critical functional areas of the distribution system, and whether those processes are followed. The checklists have been developed by the ESA and the various working groups formed by the Utility Advisory Council (UAC) to assist the auditor and the distributor.

The auditor will be responsible for developing an audit plan, completing the audit in a timely and efficient manner, and preparing a report summarizing the results of the audit. The auditor may use any standard audit methodologies or practices it deems necessary, including sampling and on-site visits, to verify compliance with the Regulation.

4.5 How long will the audit take to complete?

The length of the audit will vary depending on several factors including the size of the distributor and the level of process documentation the distributor has developed. The estimate is that the simplest audit of a small distributor will take approximately 3 days to complete, assuming good management controls are in place and processes are well developed and documented. Larger distributors and distributors without process documentation will take longer. The auditor should be able to provide the distributor with an estimate of time and cost after the initial meeting.

The time required to plan, conduct and report audit findings to the distributor is an estimate. The estimate includes time for off-site planning and preparation; conducting the audit fieldwork; preparing audit findings on or off-site; and preparing an audit report including review with distributor management and any necessary revision to the report.

Note: The estimates of time noted above are based on a routine audit and have not factored in time for a distributor or an auditor to become familiar with the first audit. It is probable that the first audit will take longer to complete, but successive audits will benefit from experience.

Below is a table with estimates of the hours required to complete an audit:

	Extent of Development of Processes and Systems		
	Well Developed & Documented	**Somewhat Developed & Documented**	**Absence of Processes & Systems**
Control Environment	**Level of Audit Procedures Required (Estimate of Audit Effort Required in Hours)**		
Strong	**A - (21-30)**	**A - (21-30)**	**B – (24-33)**
Normal	**B - (24-33)**	**B – (24-33)**	**B – (24-33)**
Weak	**B - (24-33)**	**C – (27-36)**	**C – (27-36)**
Please see below for an explanation of the table.			

The above table is based on the assumption that no abnormal inherent risk is evident in the distribution company. This would be considered the case under the following circumstances:

4.5.1 The distributor has a track record of safe installations and performance;

4.5.2 The distributor demonstrates regard for quality and safety; and

4.5.3 Management has demonstrated that it can be trusted to provide accurate information on safety performance.

If the auditor identifies a risk, the level of audit procedures would be adjusted accordingly. For example, under circumstances where the control environment is judged to be normal and the management systems and processes are reasonably well developed, but where the auditor has reason to believe that an abnormal risk exists (i.e. any one of the above favourable conditions does not exist), audit procedures would generally be extended one level, from B to C, with the result being reviewing a larger sample of plans and tests for installation in the field.

4.6 Control Environment

The auditor will undertake an assessment of the internal control environment at the beginning of the audit. The assessment by the auditor will likely be made based on an interview with one or two of the most senior management of the distribution company. The interview would be used to assess such factors as the degree to which senior managers reinforce safety throughout the organization; whether training programs emphasize safety; whether safety is part of performance assessment; and the distributor's track record of finding and fixing safety-related problems.

Examples of a strong control environment would be a code of conduct that emphasizes safety that could be verified by the auditor. Similarly, if the distributor issues communications on safety or provides safety training material, the auditor would ask to review examples. In larger distributors, an auditor would expect to see a formal code of ethics or code of conduct that is widely known.

4.6.1 A **strong control environment** exists when management has strong values about safety, effectively communicates those values to line personnel, ensures that compensation and other reward systems reflect this commitment. There will also usually be strong oversight from a Board that is independent of management, and in larger organizations a formal code of conduct.

4.6.2 A **weak internal control environment** exists when management's values are, or will likely be, interpreted to downplay safety in comparison with other values such as cost reduction or profitability.

4.7 Audit Procedures

4.7.1 **Type A procedures** focus on process design and a test sample of documentation (e.g. 2%, with a minimum sample of one document) for each key element of the system to test that it is actually in place. A test of documentation would involve, for example, seeing an approval marked on a plan, or on a record of inspection. This minimal extent of test is normally referred to as a "walk through" the system.

4.7.2 **Type B procedures** expand the number of tests of documentation to a larger sample (e.g.5%, minimum of 2 to 5 document tests) for each key element of the system.

4.7.3 **Type C procedures** include even larger samples (e.g.10%, minimum of 10 documentation tests) and usually at least 2 tests from the documentation to actual installations in the field. Field tests would normally be necessary only if the auditor has reason to believe the documentation did not accurately reflect actual performance.

For population sizes of 50 or below, it is likely to be more efficient to review 100% rather than worry about sample size. Generally, sampling methodologies relate to large populations of data.

5.0 Audit Checklists

Audit checklists have been developed by the Equipment Approval, Design Approval, Construction Verification, and Audit working groups. They are meant to help both the auditor to address the issues critical for ensuring distributor's compliance with the Regulation and the distributor to prepare for the audit by developing or reviewing and documenting the processes that the audit will cover.

These checklists are meant to provide a sample of possible audit questions, not a complete list, and it is up to the Auditor to prepare an audit plan that audits the distributor's processes and compliance with the Regulation. The final audit plan should be reviewed with the distributor's management.

5.1 The checklists.

Please see the following appendices:
Appendix 1 - Safety standards and When safety standards are met (Sections 4)
Appendix 2 – Approval of electrical equipment (Section 6)
Appendix 3 – Approval of plans, drawings and specifications for installation work (Section 7)
Appendix 4 – Inspection and approval of construction (Section 8)

6.0 Audit Report

6.1 What does the audit report look like?

The audit report prepared by the Auditor will provide an opinion on compliance with the Regulation and will include the following sections:

6.1.1 Cover page

6.1.1.1 Name of the distributor;
6.1.1.2 Name of the Auditor;
6.1.1.3 Date of the audit report.

6.1.2 Scope paragraph including

6.1.2.1 A brief description of the distributor – name of distributor, senior management names, contacts during the audit;
6.1.2.2 A description of the auditor – organization's experience and credentials;
6.1.2.3 Period covered by the audit;
6.1.2.4 Outline the scope of the audit including departments and processes covered in the audit and the dates the audit was performed;
6.1.2.5 Statement of the auditing standards or guidelines under which the audit was performed;
6.1.2.6 Description of the audit process.

6.1.3 Independence Statement

The auditor should make a clear statement that he or she is independent of the distributor, and if possible state the rules of independence that apply.

6.1.4 Opinion paragraph

6.1.4.1 A statement by the auditor that in his or her opinion, the distributor is in compliance with the safety requirements of the Regulation; OR
6.1.4.2 If the audit identified "Non-conformance", an opinion that the distributor was in compliance EXCEPT FOR the non-conformance point(s). This is termed a "qualified opinion".
6.1.4.3 If there are many non-conformance matters of a serious nature, the auditor would issue a so-called "adverse opinion" that the

distributor did not comply with the Regulation.

6.1.5 Key Audit Findings

A summary report of "non-conformance" and "needs improvement" issues identified by the auditor. This report should list the "non-conformance" and "needs improvement" issues separately, and include an auditor's opinion on the significance of each finding. This will assist the ESA in focusing on any higher priority "non-conformance" issues. The completed checklists should also be included with the report and submitted to the ESA.

6.1.6 Recommendation

This will have the auditor's recommendations on all findings during the audit, including any items not identified as non-conformance but identified as "needs improvement".

6.1.7 Management's response

This part of the report will consist of management's response to the audit findings. It should include action plans for non-conformance and need-improvement findings with a timetable to rectify the situation.

6.1.8 Signatures.

In addition, the auditor must sign the report and an officer or director of the distributor must sign the Management response.

6.2 Information requests.

The ESA may request further information from the auditor (or from the distributor for the management's response) to assist in understanding the findings of the audit for a period of two years following the completion of the audit.

6.3 Audit Report Follow-up process

6.3.1 What happens with the report?

The ESA will respond directly to the distributor for each audit report it receives. An audit report review meeting between the ESA and the distributor may be part of the follow-up process. The audit findings listed in the report will be reviewed, and any items that require action will be addressed. This will take the form of an action plan prepared by the distributor to address the issues identified, with appropriate resolutions and timelines to resolve the items, agreed to by the distributor and the ESA. The severity of the issues will dictate the distributor's action plan timeline and any follow-up requirements. If it is a major finding, immediate action will be required to rectify the situation. Less

critical issues will be treated with an appropriate action plan timetable.

6.3.2 Progress Reports

The distributor may be required to submit a progress report to the ESA after the audit report review meeting. This report will provide information to the ESA on the distributor's progress in addressing the issues identified in the audit and action plan.

6.3.3 What information should the Management Response include?

The Management Response should address all issues identified as Non-conformance or Needs-improvement. The reason that Needs-improvement issues should also be addressed is because it may indicate that the process is not being followed by some staff, or that the process has gaps that need to be identified and corrected. An Action Plan should be developed for each issue describing the corrective action, the timetable to complete and the person responsible to ensure that the issue is corrected. A sample template of an Action Plan identifying the basic information is included below.

NC / NI	Problem Description	Resolution	Person Responsible	Date to be Completed
NC	Section 6 – Equipment not approved	Establish process to approve equipment and compete review and approval of all equipment	John Doe	September 30, 20xx
NI	Section 8 - Some Records of inspection and certificates not completed correctly or incomplete	Refresher training for staff to ensure documents are completed correctly	Jane Smith	July 15, 20xx

Section 4	Systems/Procedures & Audit Evidence	Audit Results	N/A	C	NI	NC
	Objective: to determine whether the distribution system and the electrical installations and electrical equipment forming part of such systems are designed, constructed, installed, protected, used, maintained, repaired, extended, connected and disconnected so as to reduce the probability of exposure to electrical hazards, and to determine whether the safety standards in Section 4 of the Regulation have been met. *(clause 3.1.5 of Technical Guidelines – Design)*					
4 (3)	Does the distributor have a maintenance program to inspect electrical installations operating at or below 750 volts that are not a direct part of a distribution system (i.e. ancillary equipment) that includes the following: a) Inspection of electrical equipment to ensure proper operating condition; b) A regular schedule for maintenance exists and is followed. - Confirm the maintenance program exists and that the distributor follows the program. (e.g. records or logs of inspection; maintenance checklists.)					

Section 4	Systems/Procedures & Audit Evidence	Audit Results	N/A	C	NI	NC
4(4)	Does the distributor have a maintenance program to inspect all overhead distribution lines, including secondary distribution lines, that includes the following: a) Inspection of electrical equipment to ensure proper operating condition; b) A regular schedule for maintenance exists and is followed. - Confirm the maintenance program exists and that the distributor follows the program. (e.g. records or logs of inspection; maintenance checklists.)					
4(5)	Does the distributor have a maintenance program to inspect all underground distribution lines, including secondary distribution lines, that includes the following: a) Inspection or testing of electrical equipment to ensure proper operating condition; b) A regular schedule for maintenance exists and is followed. -Confirm the maintenance program exists and that the distributor follows the program. (e.g. records or logs of inspection; maintenance checklists.)					
4(6)	Does the distributor have a maintenance program to inspect all distribution stations, that includes the following: a) Inspection or testing of electrical equipment to ensure proper operating condition; b) A regular schedule for maintenance exists and is followed. - Confirm the maintenance program exists and that the distributor follows the program. (e.g. records or logs of inspection; maintenance checklists.)					

N/A – Not Applicable C – Complies NI – Needs Improvement NC - Non-conformance

Section 6	Systems/Procedures & Audit Evidence	Audit Results	N/A	C	NI	NC
	Objective: to determine whether the distributor uses option 1(a) or 1(b) to approve electrical equipment that is part of a distribution system. If equipment is approved under 1(b), then equipment is to be tested and inspected (Section 2 below) in accordance with procedures that are adequate for that purpose.					
	Does the distributor maintain a list of approved equipment? *(clause 2.7.8 of Technical Guidelines – Equipment Approval section)*					
	Does the distributor have a process to update the approved equipment list?					
	Electrical equipment approved using Process 1(a) *(clause 2.2 of Technical Guidelines – Equipment Approval section)*					
1 (a)	Does the distributor have a process for specifying that equipment ordered from a vendor(s) must meet Rule 2-024 of the Electrical Safety Code? *(clause 2.2.1 of Technical Guidelines – Equipment Approval section)* - Confirm the process and review a sample of records to confirm the distributor uses its chosen process. (e.g. purchase orders specifying standards for electrical equipment; or on plans/drawings / specifications for installations) - Review a sample of records to confirm that the equipment is on the distributors approved equipment list.					

Section 6	Systems/Procedures & Audit Evidence	Audit Results	N/A	C	NI	NC
	Does the distributor have a process for checking that equipment supplied from a vendor(s) meets Rule 2-024 of the Electrical Safety Code? *(clause 2.2.3 of Technical Guidelines – Equipment Approval section)* - Confirm the process and review records to confirm the distributor uses its process for checking that equipment supplied from a vendor(s) meets Rule 2-024 of the Electrical Safety Code. (e.g. field evaluation labels and documents; certification agency labels; or on plans/drawings/specifications for installations)					
	Does the distributor have a process for dealing with vendor non-compliance? - Confirm the process and review records to confirm the distributor uses it's process for dealing with vendor non-compliance. (e.g. process for field evaluations; rejection of shipment; etc.)					
	Electrical equipment approved using Process 1(b) *(clause 2.7 of Technical Guidelines – Equipment Approval section)*					

N/A – Not Applicable **C – Complies** **NI – Needs Improvement** **NC - Non-conformance**

Section 6	Systems/Procedures & Audit Evidence	Audit Results	N/A	C	NI	NC
1 (b)	Does the distributor use electrical equipment that complies with: • applicable industry standards recognized by ESA, including an assurance that the equipment presents no undue hazard to persons or property; or • distributor developed equipment specifications approved by a professional engineer for a specific use on the distribution system including an assurance that the equipment presents no undue hazard to persons or property; or • Good Utility Practice where equipment (other than new major equipment) are approved by a competent person for specific use on the distribution system including an assurance that the equipment presents no undue hazard to persons or property. - Review a sample of records to confirm the distributor uses approved electrical equipment. - Confirm testing records are maintained and available for major equipment approved for use under the rule of the distributor, where required					
	Does the distributor have a process for specifying that equipment ordered from vendors must meet the chosen standards? - Confirm the process and review records to confirm the distributor uses its process. (e.g. statement on purchase orders, reference to the standard through the manufacturer's model number and technical data, engineering specifications; etc.)					

N/A – Not Applicable C – Complies NI – Needs Improvement NC - Non-conformance

Section 6	Systems/Procedures & Audit Evidence	Audit Results	N/A	C	NI	NC
	Does the distributor have a process for checking that equipment supplied from a vendor meets the chosen standards? - Confirm the process and review records to confirm the distributor uses its process for checking that equipment supplied from a vendor meets the chosen standard. Does the distributor have a process for dealing with vendor non-compliance? - Confirm the process and review records to confirm the distributor uses it's process for dealing with vendor non-compliance. (e.g. process for field evaluations; rejection of shipment; etc.)					
2	**If electrical equipment is approved under 1(b),** Does the distributor have a process for ensuring adequate inspection and testing of the electrical equipment? - Review records to confirm that the distributor follows its chosen process for inspection and testing.					
	What is the distributor's process for determining that the inspecting and testing is adequate for the purpose? - Confirm the process and confirm that there are records of analysis and conclusion demonstrating that the inspection and testing is adequate for the purpose. (e.g. the distributor relies on a manufacturer's declaration or witness testing, third party, or its own testing)					
	Does the distributor have a process for dealing with vendor non-compliance of equipment inspection and testing?? • Confirm the process and review records to confirm the distributor uses it's process for dealing with vendor non-compliance. (e.g. process for field evaluations; rejection of shipment; etc.)compliance. (e.g. process for field evaluations; rejection of shipment; etc.)					

N/A – Not Applicable C – Complies NI – Needs Improvement NC - Non-conformance

Section 7	Systems/Procedures & Audit Evidence	Audit Results	N/A	C	NI	NC
	Objective: to determine whether the distributor ensures that work prior to installation is based on 1(a) plans prepared by a professional engineer and/or based on 1(b) the distributor's standard design drawings or standard design specifications; and that the plans, standard design drawings and standard design specifications have been reviewed and approved by 2(a) a professional engineer or by 2(b) the Authority					
	Does the distributor have a process to ensure that approved designs are used for all installation work except replacement of one piece of electrical equipment by another piece of the same voltage and characteristics, work under emergency conditions, and legacy construction?					
	Does the distributor have a process to authorize third party attachments? *(clause 3.1.3 of Technical Guidelines – Design)* - Does the process require the distributor to confirm that the proposed third party attachments do not adversely affect the safety of the distribution system?					
	Does the distributor have up-to-date copies of internal specifications or applicable standards identified in Ontario Regulation 22/04, Section 5 accessible to the approving professional engineer?					
	Does distributor have a process for ensuring that professional engineer memberships are valid at time of signature or certification of plans? - If distributor does not have a process for confirmation, confirm that professional engineer memberships are current.					
	Does the distributor have a process to identify the competencies required of any designated competent persons? *(clause 3.3.1 of Technical Guidelines – Design)*					

Section 7	Systems/Procedures & Audit Evidence	Audit Results	N/A	C	NI	NC
	Does the distributor have a process to ensure that all designated competent persons have the required competencies? (e.g. training programs). *(clause 3.3.1 of Technical Guidelines – Design)*					
1(a)	For plans prepared by a professional engineer, determine whether the distributor uses option **2(a)** to have **plans reviewed and approved by a professional engineer**, or uses option **2(b)** to have **plans reviewed and approved by the Authority**. Does process call for plans to be prepared by a professional engineer? - Review sample of plans to confirm that a professional engineer signs plans.					
1(b)	Does process call for standard design drawings and standard design specifications to be assembled by a professional engineer? - Review sample to confirm that a professional engineer completed the assembly of standard design drawings and standard design specifications.					
	Does process call for standard design drawings and standard design specifications to be assembled by an engineering technologist certified by the Ontario Association of Certified Engineering Technicians and Technologists (OACETT)? - Review sample to confirm that a certified engineering technologist completed the assembly of standard design drawings and standard design specifications. *(clause 3.3.1 of Technical Guidelines – Design)*					
	Does process call for standard design drawings and standard design specifications to be assembled by a “competent” person? - Review sample to confirm that a “competent” person completed the assembly of standard design drawings and standard design specifications.					

N/A – Not Applicable C – Complies NI – Needs Improvement NC - Non-conformance

Section 7	Systems/Procedures & Audit Evidence	Audit Results	N/A	C	NI	NC
2 (a)	**For plans, standard design drawings and standard design specifications reviewed & approved by a professional engineer:** Does process call for plans, standard design drawings and standard design specifications to be reviewed by and approved by a professional engineer? - Do plans, standard design drawings and standard design specifications show they have been reviewed by a professional engineer e.g. signature on 'reviewed by' line? - Do plans, standard design drawings and standard design specifications show they have been approved by a professional engineer e.g. signature on 'approved by' line?					
3	Does process require that a professional engineer certify plans, standard design drawings and standard design specifications? - Review sample to confirm that a professional engineer has certified them?					
6	Does the distributor have a process in place to record and track plans, standard design drawings or standard design specifications, certificates of approval, and revisions of all documents? *(clause 3.4.5 of Technical Guidelines – Design)*					
	Does the distributor have a process in place to ensure that as-built drawings identify any relevant changes made during construction?					
	Does process call for plans, standard design drawings and standard design specifications and certificates to be retained and made available to ESA on request? *(clause 3.8.2 of Technical Guidelines – Design)*					
	Does the process call for plans, standard design drawings and standard design specifications and certificates to be retained for a minimum of one year after the annual audit following completion of the construction?					

N/A – Not Applicable C – Complies NI – Needs Improvement NC - Non-conformance

Section 7	Systems/Procedures & Audit Evidence	Audit Results	N/A	C	NI	NC
	- Examine records to confirm that plans, standard design drawings and standard design specifications and certificates have been retained; - Determine whether all ESA requests for plans, standard design drawings and standard design specifications and certificates have been granted.					
2(b)	**For plans, standard design drawings and standard design specifications reviewed and approved by the Authority:** Does process call for plans, standard design drawings and standard design specifications to be reviewed and approved by ESA? *(clause 3.6 of Technical Guidelines – Design)* - Review sample to confirm plans, standard design drawings and standard design specifications have been reviewed and approved by ESA.					
5	Does process require that there be a certification by ESA? - Review sample to confirm plans, standard design drawings and standard design specifications have been certified ESA.					

N/A – Not Applicable C – Complies NI – Needs Improvement NC - Non-conformance

Section 8	Systems/Procedures & Audit Evidence	Audit Results	N/A	C	NI	NC
1	Objective: to determine whether the distributor ensures that construction of a system has been inspected and approved under the options **2(a) by a professional engineer**, **2(b) by qualified persons** identified in the distributor's construction verification program, or by **2(c) the Authority**.					
	Does distributor have a Construction Verification Program? • Has the Authority approved the program? • When was the program approved? • Is the list of qualified persons up-to-date? Has the program changed since approval from the Authority? Was the program approved again? *(clause 4.4 of Technical Guidelines – Construction Verification)*					
	Does the distributor have a process to ensure that all installation work is based on approved and certified plans, standard design drawings or standard design specifications, except replacement of one piece of electrical equipment by another piece of the same voltage and characteristics, work under emergency conditions and legacy construction? - Confirm that plans are dated before construction start dates; - Confirm that the distributor addressed any occurrences of non-compliance that were noted on the record of inspection, per the processes outlined in the Construction Verification Program.					
	Does distributor have a process to ensure that construction is inspected and approved before putting into use? • When was the inspection and approval process implemented? • Is the process monitored to ensure it is applied to all distribution system construction? • Does the inspection and approval process cover all construction?					

N/A – Not Applicable C – Complies NI – Needs Improvement NC - Non-conformance

Section 8	Systems/Procedures & Audit Evidence	Audit Results	N/A	C	NI	NC
	Does the distributor have a process to ensure that for work completed under emergency conditions or like-for-like or legacy construction that a competent person has inspected and confirmed a safe condition in accordance with the construction verification program?					
	Inspection by Professional Engineer *(clause 4.2 of Technical Guidelines – Construction Verification)*					
2 (a)	Does process call for inspection by a professional engineer?					
3	Does the process require the professional engineer to issue a record of inspection? - Review sample of records of inspection for applicable construction work; - Confirm that inspections precede date of system use for applicable construction work; •					
	Does the completed record of inspection indicate: • An Approved Plan or Standard Design has been followed and applied; • Approved equipment has been used; • The date of inspection; • Identification of location and portion of distribution system being inspected; • Any non-conformances have been rectified by the distributor; • A stamp, signature, or initial of the inspector.					
4	Does the process require the professional engineer to confirm that safety standards are met before providing a certificate of approval?					
	Does distributor have certificates available for all applicable construction work?					

N/A – Not Applicable C – Complies NI – Needs Improvement NC - Non-conformance

Section 8	Systems/Procedures & Audit Evidence	Audit Results	N/A	C	NI	NC
	Does the completed certificate indicate: • Identification of location and portion of distribution system being certified; • Safety standards have been met; • The date of certification; • A stamp, signature, or initial of the certifier; - Confirm that certificates issued prior to system use for applicable construction work.					
7	Does the process require the distributor to maintain and have available for the Authority the certificates and records of inspection? • Who is responsible for maintaining certificates and records of inspection? • Do the certificates and records cover all applicable construction?					
	Inspection by Qualified Persons *(clause 4.4 of Technical Guidelines – Construction Verification)*					
2 (b)	Does process call for inspection by a qualified person in construction verification program? • Confirm that inspector(s) is identified and has successfully completed the verification program.					
5	Does the process require the qualified person to issue a record of inspection? -Review sample of records of inspection for applicable construction work; -Confirm that inspections were completed using the methods and techniques described in the construction verification program; -Confirm that inspections precede date of system use for applicable construction work;					

N/A – Not Applicable C – Complies NI – Needs Improvement NC - Non-conformance

Section 8	Systems/Procedures & Audit Evidence	Audit Results	N/A	C	NI	NC
	Does the completed record of inspection indicate: • An Approved Plan or Standard Design has been followed and applied; • Approved equipment has been used; • The date of inspection; • Identification of location and portion of distribution system being inspected; • Any non-conformances have been rectified in accordance with the distributor's Construction Verification program; • A stamp, signature, or initial of the qualified person					
6	Does the process require the qualified person to confirm that safety standards are met before providing a certificate of approval?					
	Does distributor have certificates available for all applicable construction work?					
	Does the completed certificate indicate: • Identification of location and portion of distribution system being certified; • Safety standards have been met; • The date of certification; • A stamp, signature, or initial of the certifier; - Confirm that certificates issued prior to system use for applicable construction work.					
7	Does the process require the distributor to maintain and have available for the Authority the certificates and records of inspection? • Who is responsible for maintaining certificates and records of inspection? • Do the certificates and records cover all applicable construction?					

N/A – Not Applicable C – Complies NI – Needs Improvement NC - Non-conformance

Section 8	Systems/Procedures & Audit Evidence	Audit Results	N/A	C	NI	NC
	Inspection by the Authority *(clause 4.7 of Technical Guidelines – Construction Verification)*					
2 (c)	Does process call for inspection by the Authority?					
8	Does the process require the Authority to issue a record of inspection? - Review sample of records of inspection for applicable construction work; - Confirm that inspections precede date of system use for applicable construction work;					
	Does the completed record of inspection indicate: • An Approved Plan or Standard Design has been followed and applied; • Approved equipment has been used; • The date of inspection; • Identification of location and portion of distribution system being inspected; • Any non-conformances have been rectified by the distributor; • No undue safety hazards are present; • A stamp, signature, or initial of the inspector.					
8	Does the process require the Authority to confirm that safety standards are met before providing a certificate of approval? Does distributor have certificates available for all applicable construction work?					

N/A – Not Applicable C – Complies NI – Needs Improvement NC - Non-conformance

Section 8	Systems/Procedures & Audit Evidence	Audit Results	N/A	C	NI	NC
	Does the completed certificate indicate: • Identification of location and portion of distribution system being certified; • Safety standards have been met; • The date of certification; • A stamp, signature, or initial of the certifier; - Confirm that certificates issued prior to system use for applicable construction work.					

N/A – Not Applicable C – Complies NI – Needs Improvement NC - Non-conformance

Declaration of Auditor Compliance

The Declaration of Compliance is submitted by *name of approved Auditor*.

I *name of approved Auditor* hereby state that *name of Auditor* has successfully completed the required number of shadow and witness audits totaling the minimum number of required hours as defined by ESA.

I shall provide ESA with this Declaration of Auditor Compliance to ESA.

I shall provide ESA with such additional information relating to the review and validation process as is considered necessary by ESA to support this Declaration of Auditor Compliance.

_____
Signature

_____
Title or Professional Designation

_____
Date

Summary of Revisions

September 15, 2008 – Version 2.0
Section 3.3 Can Internal Auditors be used?
Section 6.3.3 What information should the Management Response include?

December 18, 2014 – Version 2.1
Section 3.2.6 Edited Audit Experience section of chart
Appendix 6 Declaration of Auditor Compliance added.