

# **Auditor Debrief**

**November 2, 2017**

# Disclaimer

- The information in this presentation was prepared as discussion points for the auditor meeting. In some cases more information may be required to understand the issue fully as discussed during the meeting. For more information please contact [martin.post@electricalsafety.on.ca](mailto:martin.post@electricalsafety.on.ca) or [jason.hrycyshyn@electricalsafety.on.ca](mailto:jason.hrycyshyn@electricalsafety.on.ca)

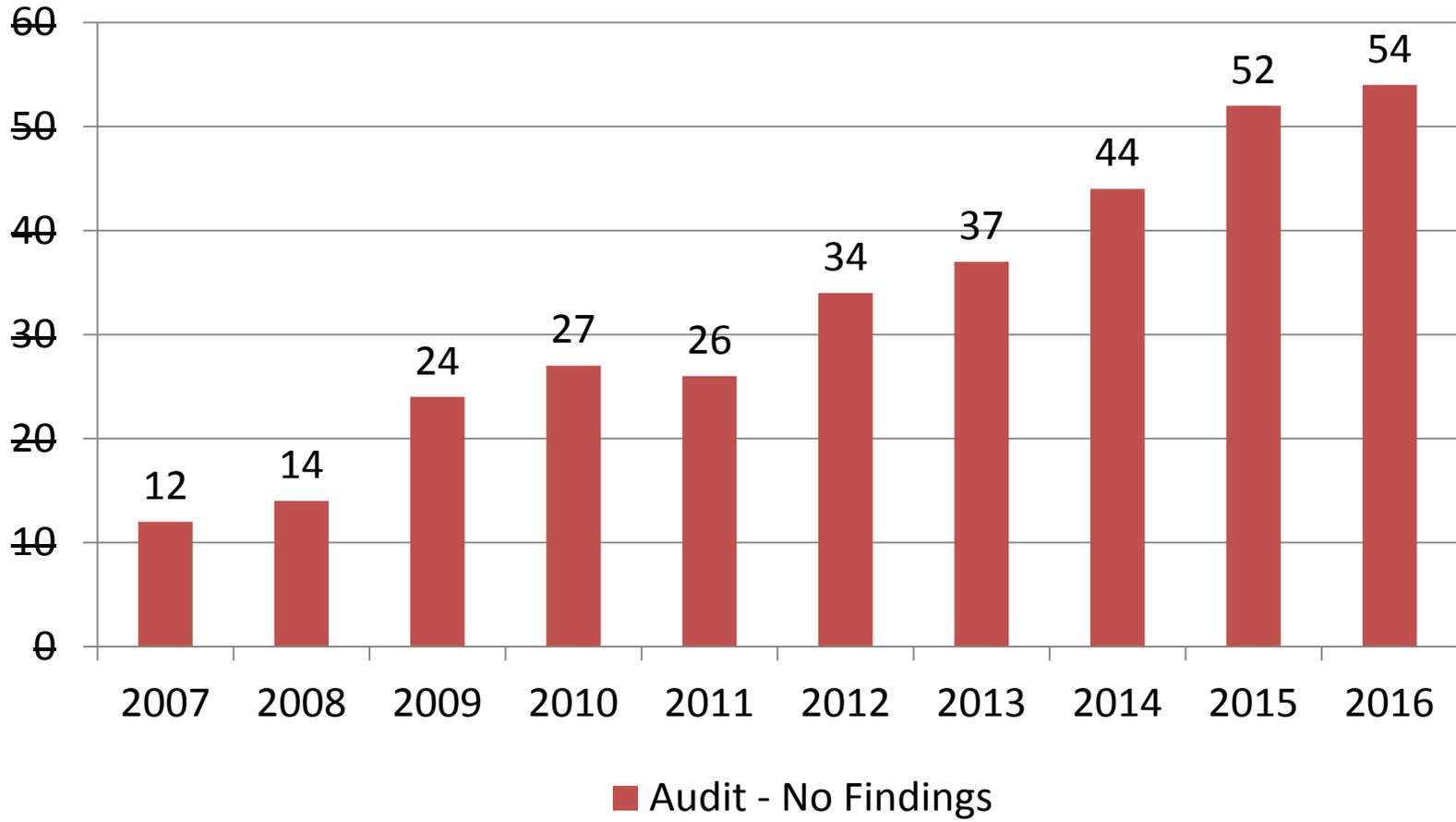
# AGENDA

1. Review of 2016 Audit results
2. Key 2016 Audit Findings
3. 2017 Questions & Issues / Auditor Feedback
4. Focus of 2017 Audits
5. Other Information
  - a) Bulletins
  - b) Other Issues
6. SatiStar Update

# Summary of Audit Findings for 2016

- 54 LDCs - Full Compliance ('16-52)
- 13 LDCs - Needs Improvement only
- 10 LDCs with only one finding (NI or NC)
- 7 LDCs with two or more findings (NC & NI)
- 3 LDCs had more than 1 Non-compliance

# Summary of Audit Findings Life to Date



# Section 4/5 Audit Findings

## Section 4/5 – Safety Standards

- Maintenance records inconsistently completed/no prioritization of findings
- Underground vaults and manholes are not included in the inspection program and no data was provided

# Section 6 Audit Findings

- Unapproved equipment used
  - material used for filling holes in wooden poles caused by woodpeckers was not approved
- Distributor could not find some transformer test data sheets for transformers installed on the system in the audit period.
- Unable to validate if approved equipment is used
  - The distributor did not have an approved equipment list available for checking and crosschecking material ordered on the system. The contractor did not provide product numbers for material used in new construction.

# Section 7 Audit Findings

- Approved Standards not referenced on plans, layouts

# Section 8 Audit Findings

- Records of Inspection and Certificates not completed
- Records of Inspection for meter changes had inconsistencies. (Depending on the person completing the form, different boxes were checked or not checked)
- Due to organizational change, the distributor needs to modify their CVP
- Need to be more consistent in completing the CVP- C3 form particularly in responding to trouble call.
- Reflect field changes in the as built drawing
- The operations clerk did the sign offs electronically but is not identified in the CVP as a qualified person.
- Records of inspection need to be completed at the time of energization either full or partial. All jobs did not have records of inspection.

# Auditor Question

- Q. Tablets using the Mcare software are more often used to complete work records for activities such as meter removals and installations. A “no undue hazards” statement can be generated, but the work can be completed without clicking on the NUH statement. Is this acceptable? **Should a NUH statement be mandatory before signing off on an assignment?**
- A. Yes, A No Undue Hazard statement is required as a form of Certificate where no Record of Inspection and Certificate are otherwise completed. However, the requirement for programming an electronic process is not enforceable under the Reg. The LDC can determine how the NUH is recorded, but it must be available for the auditor, in the same way a RoI or Certificate are required.

# Auditor Question

- Q. One LDC records trouble calls in electronic format. The control room generates a trouble report and inserts the operations person's name. Once the trouble call is completed the record disappears - there is no longer a trouble call record. The LDC sees no value in retaining a record unless equipment has been replaced or a major repair carried out. Is that an acceptable practice? A work order is issued when wiring or equipment is replaced.
- A. Assuming all Regulation 22/04 records (RoI, Certificate) are retained/ accessible for the audit, then it is acceptable. However, if any work, even minor repairs , are completed then the records should be completed and retained, including a Record of Inspection/Certificate or a statement of No Undue Hazard.

# Auditor Question

- Q. One LDC records overhead and underground inspections in tablets. Results are downloaded to an electronic mapping system. Does that satisfy Section 4 for inspection records?
- A. The recorded details of inspections should be available for audit purposes. This includes information such as who conducted the inspection, date/time and location of inspection, and outcome of the inspection.

# Auditor Question

- Q. Lack of partial certificates of inspection has been an ongoing concern. One LDC incorporates partial energizations at different work stages into its project plans. Partial certificates of inspection are included in the documentation at each stage, assigned to the construction personnel. Should this become a requirement?
- A. Completed Certificates are required prior to energization, either in stages or a one-stage project.

# Auditor Question

Q. I encountered the following third party attachments.

- Underground dips from LDC's overhead system for third party attachers,
- Power supply box (2'x2'x1') and disconnect switch attached to LDC's overhead system for third party attachers (Bell/Rogers/Cogeco),
- Power supply box (2'x2'x1') and disconnect switch attached to LDC's overhead system for natural gas utilities' (Enbridge/Union Gas) rectifiers.

I am not sure if these attachment of the supply boxes would come under "Materially Insignificance Installations". Can you please review the above scenarios' and advise how to approach.

A. ESA's goal with the Materially Insignificant direction was to have a P.Eng deem something as materially insignificant and not ESA. Now if that P.Eng works for the LDC then it would mean that the LDC accepts this. If the P.Eng works for someone other than the LDC then the LDC still has to accept that P.Engs work and allow it on their system, if the LDC chooses not to accept then it is not allowed.

For Example: P.Eng works for Bell and says that Power Supply Boxes are materially insignificant and presents this to the LDC. The LDC can agree and use the P.Eng's work as documentation that it has done their due diligence to prove this is materially insignificant... or it can say "No" and the Power Supply Boxes would not be materially insignificant in that LDC's service territory.

# Observation, Needs Improvement, Non-Compliance

- Observations are not included in the Audit Guideline as a “finding category”; they have evolved over the years, where the Auditor can relay information not related to compliance.
- Needs Improvements (NI) are meant to capture where the LDC may be inconsistently following a process or there is a gap in the process for complying but they are still getting it mostly right.
- Non-Compliances (NC) are occurrences of obviously not complying with the Regulation; an NI that remains unaddressed after being identified in a previous audit; or an egregious safety issue.
- There is an established “escalation process” for compliance issues, and it starts at Needs Improvement and moves to Non-Compliance. We have made this clear to the LDCs over the years and they understand it.

# Focus of 2017 Audits

- “Delta – Wye” conversions
  - Auditors can try to determine if the LDCs have reviewed the bulletin regarding the safety issues and prepared a plan to address the issue. Note this addresses more than just the “Delta – Wye” conversion work.
- Damaged Customer Services in emergency conditions
  - Auditors can try to determine if the LDCs have reviewed the bulletin and prepared a plan to address the issue
- Amendments to Regulation
  - Auditors can confirm if Regulation amendments have been incorporated (CSA standard changes) in Design Standards
  - LDC not incorporating new CSA standards in 2017 should be assessed a Needs Improvement, to be escalated to Non-compliance if not addressed in 2018

# Bulletins published

[DB-02-17 Mitigation of pole top fires](#)

[DB-04-17 Meter Base Mounted Transfer Devices](#)

[DB-05-17 Factors to Consider for Damaged Customer's Services During Emergencies](#)

[DB-07-17 LDC/ESA Communications for Code Side Safety Concerns](#)

# Other Issues

1. Delta – Wye (and similar)
2. Energy storage & generation
3. Audit of Compliance Assessment process for LDC Scorecard
4. Review of all guidelines by UAC/working groups
5. Substation standard CAN/CSA-C22.3 No.61936-1

# Regulation Amendments

- Section 5 Safety Standards updated
  - Section 5(1) OESC section reference
    - 86-402 becomes 86-404
  - Section 5(2) overhead standard
    - C22.3 No. 1-01 becomes C22.3 No. 1-15
  - Section 5(3) underground standard
    - C22.3 No. 7-94 becomes C22.3 No. 7-15
  - Section 5(4) Distribution stations
    - NESC C2-1997 becomes NESC C2-2017

# Regulation Amendments

- Regulation amendments came into effect on October 1, 2017
- Projects in design phase before October 1 can be completed under previous standards or new standards;
- Projects started (design) after October 1 meet new standards
- LDC not incorporating new standards in 2017 should be assessed a Needs Improvement, to be escalated to Non-compliance if not addressed in 2018

# Regulation Amendments

- Other sections amended
  - Section 10 (1) & 10(2) Proximity to Distribution Lines amended to reflect same CSA standard update
  - Section 12 Reporting Serious Electrical Incidents
    - Added obligation to assist ESA investigation of serious incident [12(3.1)]
    - Added definition of ‘Force Majeure’ and ‘meter’
    - Expanded reportable scope to include meters (under 750V)

# LDC Mergers and Acquisitions

Alectra merger complete

# LDC Mergers and Acquisitions

1<sup>st</sup> Alectra audit

- Approved Alectra CVP, processes for design approval, equipment approval
- Staff trained in processes

# SatiStar

- ESA engaged SatiStar to conduct an independent review of the audit process used to assess compliance with the requirements of O.Reg 22/04, and to provide recommendations for improving them.
- Implementation of any recommendations are still pending.

- Any Questions?