

Auditor Debrief

November 3, 2016

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 or jason.hrycyshyn@electricalsafety.on.ca

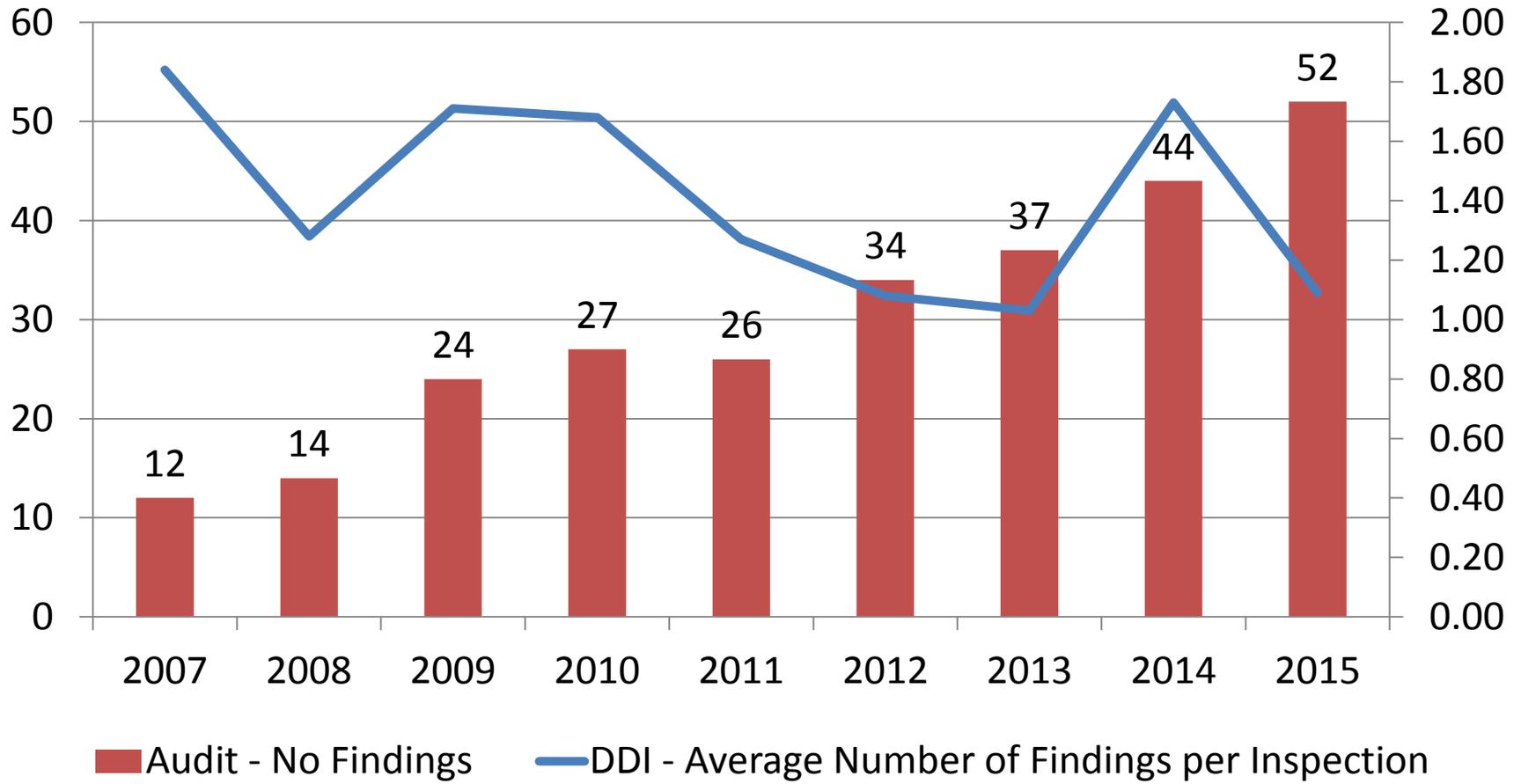
AGENDA

1. Review of 2015 Audit results
2. 2015 Audit Findings
3. 2016 Questions & Issues / Auditor Feedback
4. Focus of 2016 Audits
5. Other Information
 - a) Bulletins
 - b) Other Issues
6. SatiStar Update

Summary of Audit Findings for 2015

- 52 LDCs - Full Compliance ('14-44)
- 22 LDCs - Needs Improvement only
- 15 LDCs with only one finding
- 7 LDCs with more than two or more findings
- 3 LDCs had 1 Non-compliance
- 2 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
- Missed scheduled inspections of distribution equipment

Section 6 Audit Findings

- Unapproved equipment used
- Procedure for review and approval for use of equipment returned from field not followed

Section 7 Audit Findings

- **No Certificate of Deviation Approval**
 - accepted a verbal confirmation from a P. Eng regarding a deviation from an approved plan.
- **Certificates of approval not completed for relay settings (DIB-13-12 Distribution System Control Component Setting.)**
- **Approved Standards not referenced on plans, layouts**

Section 8 Audit Findings

- Records of Inspection and Certificates not completed at time of energization
- Maintenance work and emergency work Records of Inspection are not being correctly completed in accordance with the C.V.P.
- Partial Certificates not regularly provided for lines and equipment energized in stages.
- Records of Inspection for secondary service inspections had incomplete checklists on the form.
- Records of Inspection for third party attachments are not being completed in a timely fashion
- Records of Inspection completed incorrectly by checking off multiple boxes on the Record of Inspection form

Auditor Question

Q. How should auditors respond when LDC's attempt to over-manage an audit?

- Discuss with the client.
- Notify ESA. Document.
- If needed, tell them you cannot complete audit. Document.

Auditor Question

Q. LDC-1 was taken over by LDC-2. LDC-2 operated under its own license during a 4-month period and therefore needed to be audit for that period of time. The takeover had already been completed at time of the audit but no LDC-1 records were made available for auditing. How should an auditor respond?

A. See Auditing after Acquisition slides

Auditing after acquisition

- When an LDC is acquired by another LDC it is important to ensure that Regulation 22/04 is still complied with by the new, larger entity
- Focus is on ensuring acquired distribution assets are incorporated into maintenance schedules/processes, acquired standards or inventory/equipment is approved for use, and personnel are trained in processes, standards, etc.
- Some sampling of previous LDC records may be useful to identify incomplete work, but should not be the focus

Auditing after acquisition

- Section 4/5 – acquired assets in the field are covered by appropriate maintenance processes;
- Section 6 – any inventory (in stores or on trucks) is reviewed and either confirmed that it is already on the approved equipment list of Buyco or any unique assets are formally approved by Buyco or disposed of;
- Section 7 – appropriate training for absorbed personnel in the Buyco standards & standards approval process is provided to design personnel & unapproved standards/plans are disposed of;
- Section 8 – relevant staff from Soldco to be trained in the Buyco CVP and approved standards. As well, the CVP should be reviewed and updated if necessary to incorporate any new staff positions to be listed as qualified/competent.
- If these can't be verified, document in the audit report

Auditor Question

- Q. OEB Appendix C specifies that “vegetation” must be patrolled at least every 3 years in urban areas and 6 years in rural areas. Appendix C, Note 10 defines “vegetation” as “encroachment on distribution lines”. How should auditors respond when they notice overgrown distribution lines?
- A. Ask for records (when completed and when scheduled); try to assess the potential for hazards (tree climbing is a primary concern)

Auditor Question

- Q. How should an auditor respond when partial certificates of inspection are not provided for lines and equipment energized in stages? Should this be shown as a noncompliance or a need for improvement?
- A. Failure to follow the approved CVP can be either a N/C or N/I. It is a judgment call by the Auditor as to the recurrence and severity of the audit finding.

Auditor Question

Q. When an LDC has contracted with a manufacturer for refurbishment of transformers, can the refurbished transformers be considered as 'new'? If so, under what conditions?

A. No, refurbished equipment can not be treated as 'new'. Refer to bulletin [DB 05/14](#)

Auditor Question

Q. Some LDCs would like keep the equipment from the field for spare parts. I believe a competent person should approve and catalogue the parts to be used with a statement "no undue hazard".

A. Section 2 of the Regulation states that Section 6 applies with respect to distribution systems that are designed or come into existence on or after February 11, 2004. **Therefore the equipment used must be approved to meet the Regulation.** The distributor may approve used or pre-regulation equipment under *Good Utility Practice*.

Sections 2.7.2, 2.7.5 and 2.7.6 of the Technical Guideline provide additional information on how to satisfy the Regulation for major and non-major equipment approval under *Good Utility Practice*.

Auditor Question

- Q. Some LDCs' showed all the standards in a box on plans or attach with the plans. I found one LDC had a note, "All the work is in accordance with the latest edition of LDC's Stds. & Construction Manual. The plans were approved by a consultant and displayed professional engineer seal. I believe this is acceptable.
- A. If the standards are referenced and the P.Eng is signing off on the entire package that is acceptable. It can be seen as a "Plan" approved by that P.Eng at that point.

Auditor Question

- Q. Visual Inspection of Cable Chambers; according to Appendix C (page 7) of OEB's Distribution System Code, visual inspection of the cable chambers may be difficult due to the presence of energized cables. Therefore, the cable chambers should be inspected during normal utility work which would require the utility to de-energize the equipment. In other words, the equipment should not de-energized simply to comply with the scheduled inspection routine. Any thoughts on this?
- A. ESA is in alignment with the OEB Appendix C. ESA would like the Auditor to see if there are any records and a system in place to have information while doing normal utility work reported back up as inspection reports to satisfy the Regulation. If there is no system (i.e. no expectation) for staff to record this data and there is no evidence this is ever done than that would qualify as a "Needs Improvement" item on an Audit, if it falls within the scope of Section 2 (Feb. 11, 2004). If it is out of the scope of Section 2 then an "Observation" would be an appropriate place to identify the finding.

Auditor Question

Q. DB-01-15 (In-Field Equipment Refurbishment) One LDC had an underground 1/0 cable refurbished with silicone injection. The LDC was not aware of the [DB-01-15](#).

I was able to review where; the time sheets and the Purchase Order that the work was done by the contractor. The LDC inspects the terminations at the dip pole and the transformer. There was no formal process or time lines for this work. The project was done under the Capital Plan. Any thoughts?

A. [DB-01-15](#) identifies that Records of Inspection and Certificates shall be completed (Section 8), in order to comply with Regulation 22/04. In addition, the material need to be approved (Section 6) and the instructions to do the work should be approved (Section 7). ESA does not recognize that the Records of Inspection and Certificates can be filled out after energization, therefore this needs to occur in order to comply with Regulation 22/04.

Focus of 2016 Audits

Same as previous years:

- Auditors are requested to focus on the LDC's maintenance results (compliance with the Ontario Energy Board's Distribution System Code – App. C).
- In particular chambers (also known as vaults), and similar underground infrastructure is highlighted.
- Process for energizing projects in stages
 - should include the use of partial certificates
 - staff should be trained on the process
- Contractors not listed on CVP as qualified/competent signing off

Bulletins published

- DB-01-16 Mitigation of Pole Top Fires
 - Proactive measures to mitigate pole top fires
- DB-02-16 Certificate of Deviation – Certified Lists
 - how an LDC may demonstrate compliance with Regulation 22/04, with respect to deviations from required standards.
- DB-03-16 Life Saving Equipment Damage From Temporary Overvoltage
 - a process for LDC's to effectively communicate to their customers of the potential for damage from a temporary overvoltage event

Bulletins published

- DB-04-16 EV Charging Stations - Reg. 22/04, 570/05 and OESC Requirements
 - provides direction with respect to EV Charging Stations and was created to compliment the Ontario Energy Board (OEB) Bulletin issued July 7, 2016 regarding Electrical Vehicle Charging.
- DB-05-16 Connection Authorizations
 - how an LDC demonstrates compliance with the Ontario Electrical Safety Code (OESC) Rule 2-012 connection authorization. (replaces DIB-04-12)
- DB-06-16 Regulation 22/04 or Ontario Electrical Safety Code?
 - Update to DSB 05/07

Other Issues

1. ESA will be looking for Working Group volunteers in order to create Best Practices around the issue of Utility Owned Generators and Storage.
2. ESA will be looking for Working Group volunteers in order to create Best Practices around the issue of transformer connections to customers.

LDC Mergers

Mergers and Acquisitions

- Haldimand Country Hydro Inc acquisition by Hydro One – license transferred to Hydro One.
- Woodstock Hydro acquisition by Hydro One – license transferred to Hydro One.
- Powerstream, Horizon, Enersource merger & acquisition of Hydro One Brampton – licenses still exist.

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?