



# Auditor Debrief

October 11, 2022



# 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

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# AGENDA

1. Review of 2021 Audit results
2. Key 2021 Audit Findings
3. Changes to the CSA Standards
4. Building Broadband Faster Act, 2021
5. 2022 Questions & Issues / Auditor Feedback
6. Focus of 2022 Audits
7. Other Information
  - a) Bulletins
  - b) Other Issues

# Summary of Audit Findings for 2021

Total of 60 LDC Audit reports (all submitted)

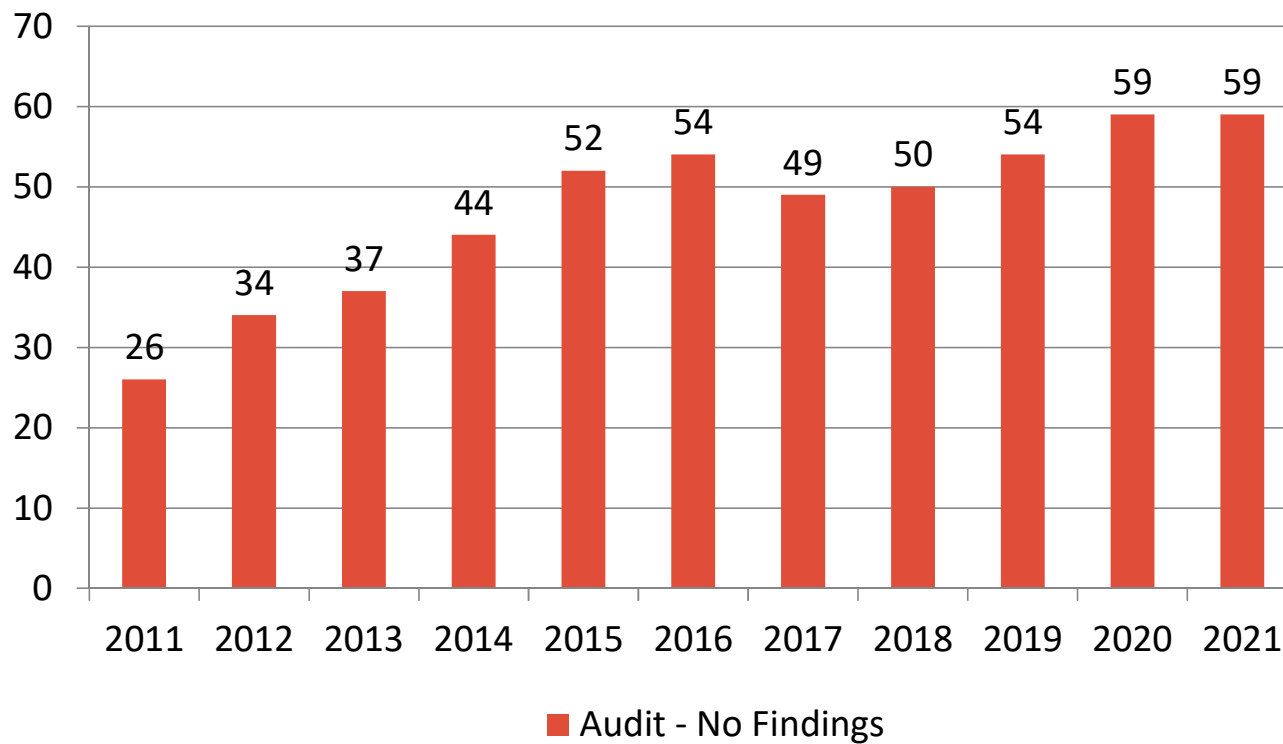
- 44 completed (October 4, 2023).

59 LDCs - Full Compliance ('18-50), ('19-54), ('20-59).

0 LDC - Non-Compliance findings

1 LDC - 1 Needs Improvement only

# Summary of Audit Findings Life to Date



Switch to %  
in the future  
as the  
number of  
Distributors  
decrease this  
number will  
as well.

# Section 4/5 Audit Findings

## Section 4/5 – Safety Standards

Nothing appears to be common.

The N/I related to improvements to current Maintenance practices.

# Section 6 Audit Findings

Section 6 – Approval of electrical equipment

Nothing appears to be common.

# Section 7 Audit Findings

Section 7 – Approval of plans, drawings and specifications for installation work

BBFA – Discussed below, is expected to be an area of focus.



# Section 8 Audit Findings

Section 8 – Inspection and approval of construction

Nothing appears to be common.

# Audit Findings

ESA is interested to hear if the Auditors are in agreement or surprised by the level of compliance.

Is there anything we should consider doing differently?

# CSA STANDARDS - REGULATION 22/04

## HIGHLIGHTING CHANGES IN CSA STANDARDS

C22.3 No.1	Overhead
C22.3 No.7	Underground
C22.3 No.9	Distributed Energy Resources
C22.3 No.11	Maintenance

No.1 and No.7 – Amendments to address Climate Change.

Concerns with non-linear analysis, when accounting adjacent structures as fixed structures.

# CSA STANDARDS - REGULATION 22/04

## C22.3 No.1 Overhead

# CSA STANDARDS - REGULATION 22/04

## 2022 Version is an Amendment to the 2020 version

This is known as the “Climate Change” amendment.

1. Flooding;
2. Weather Loading;
3. Vegetation (Fires / Wild Fires);
4. Permafrost (mostly Transmission);
5. Ice Mitigation.

### GENERAL

- “... and should make allowance for future weather projections in order to improve system reliability and resiliency”. Note: Weather and Climate are used interchangeably in this standard.

# CSA STANDARDS - REGULATION 22/04

## 2022 Version is an Amendment to the 2020 version

- Language strengthened in the General Section to reduce the probability of vegetation and supply interaction. Such as “in areas and/or periods where there is concern of wildfire, the line **shall** require fire hazard reductions measures”.
- Environment Canada helped update the weather maps. Wind speeds (gusts and 10 minute), temperatures and snow depth.
- Requirement to consider Ice Removal Management Systems in certain areas.
- Vertical separations of exposed supply equipment above flood hazard zones to allow patrol and rescue boats and their passengers to travel safely underneath.

# CSA STANDARDS - REGULATION 22/04

## C22.3 No.7 Underground

# CSA STANDARDS - REGULATION 22/04

## 2022 Version is an Amendment to the 2020 version

This is known as the “Climate Change” amendment.

1. Flooding;
2. Ground Movement.

### GENERAL

- The General Requirements section of the Standard will include that Underground systems “**should make allowance for future weather projections in order to improve system reliability and resiliency**”. Note: Weather and Climate are used interchangeably in this standard.



# CSA STANDARDS - REGULATION 22/04

## 2022 Version is an Amendment to the 2020 version

- Pad-mounted installations should be selected over submersible.
- Consideration should be given to locating supply installations outside of flood hazard zones.
- Slack is required at terminations, it would likely be a non-compliance if damage occurred due to ground movement (settling, freeze/thaw cycles, etc...). New material in Annex 'A' explain.
- Where equipment is subject to submersion in water, the equipment enclosure shall be made of corrosion resistant material that will maintain the structural integrity over the life of the equipment .

# CSA STANDARDS - REGULATION 22/04

## 2022 Version is an Amendment to the 2020 version

- Above-ground duct attached to supply enclosures shall account for ground movement.
  - Such as with an expansion joint.
- Flood protection for pad-mounted equipment shall be provided in flood hazard zones to continue service during floods. Where the flood protection is required for pad-mounted equipment that will be in or under water, it shall functionally survive for the duration of the event.
  - Note: During the flood, it is not expected that the equipment is to be accessible. The means of flood protection are not required to be reusable after use in a flood.

# CSA STANDARDS - REGULATION 22/04

## C22.3 No.11 Maintenance

# CSA STANDARDS - REGULATION 22/04

ESA is in preliminary talks with the OEB regarding C22. 3 No.11.

OEB is reviewing the standard and ESA plans to harmonize the maintenance requirements with the OEB.

# CSA STANDARDS - REGULATION 22/04

## OEB DSC Appendix C – Minimum Inspection Requirements

### Summary of Distributor Requirements

Inspections consist of patrols or simple visual inspections to identify obvious structural problems and hazards. In cases where a patrol notices that a problem exists, it is to carefully observe and record the equipment's condition.

Inspections are on a “Time-based Approach” and dependent on:

1. Location (Rural vs Urban); and
2. Type (Distribution Stations, Poles, Vegetation, etc...).

# CSA STANDARDS - REGULATION 22/04

**Maintenance** – actions taken to keep an asset in, or restore it to, a specified condition

**General Inspection** – identification of risks and hazards for planned corrective action

**Detailed Inspection** – a thorough review of the asset to identify state of deterioration, which may include visual review, measurements, testing, or taking samples, and may prompt corrective action

**Time-based Approach** – frequency of maintenance activities of the asset(s) based on a fixed cycle time

**Risk-based Approach** – frequency of maintenance activities of the asset(s) based on a risk assessment

# CSA STANDARDS - REGULATION 22/04

## 4.1 General

The sections and analysis required within the maintenance program shall be at minimum as specified in Table 1.

Table 1 – Minimum Maintenance Program Requirements

<b>Minimum Requirements</b>	<b>Risk-based Approach</b>	<b>Time-based Approach</b>
Inventory of Assets	√	√
Risk Assessment	√	
Maintenance Strategy	√	
Maintenance Plan	√	√
Performance Feedback	√	√



Building Broadband Faster Act (BBFA)

or

Accelerated Broadband Program (ABP)





# BUILDING BROADBAND FASTER ACT (BBFA)

The Ontario Government is leading an initiative to ensure that all Ontarians have access to Broadband (from wireline) by 2025.

This means that about **700k households (premises)** will need to receive access **by 2025**. Initiative launched **March 2021** and the **rules put in place by November 2021.**

Other Related Names:

- Accelerated High-Speed Internet Program (AHSIP) - (previously the Accelerated Broadband Program)
- Up to Speed - Ontario's Broadband and Cellular Action Plan

# BUILDING BROADBAND FASTER ACT (BBFA)

This could mean ~700 people may be entering the world of 3<sup>rd</sup> Party Attachments in such things as Design Work. They will be using distribution infrastructure and attaching at a higher rate than in the past.

There is an expected learning curve. Distribution knowledge and Regulation knowledge.

Regulation 22/04 has been heavily involved in creating the Guidelines to the Act.

There are **NO** changes needed to Regulation 22/04.

**ESA is currently hosting volunteers to help review and revise the Guideline for Third Party Attachments.**

# BUILDING BROADBAND FASTER ACT (BBFA)

The following bulletins have been of particular interest and we'll review them now.

1. DB-01-20-v1 - Previous Standards

- Details what standard you have to meet.
- Previous version or the Standard edition identified in the regulation or the latest version.

2. DB-07-15-v2 - Materially Insignificant

- How to be exempt from the audit requirements of Sections 7 and/or 8.
- Telecom perhaps 7 only. Municipality perhaps 7 & 8.

# BUILDING BROADBAND FASTER ACT (BBFA)

## 3. DB-10-12-v1 - LDC Review of Plans

- Review plans, no requirement to re-engineer them.
- Look for the minimum drawing requirements.

## 4. DB-11-12-v2 – Certificate of Deviation Approval

- Make-Ready Work – alternative name.
- There is a recognized way to not implement make-ready work or delay it until after an installation.

# BUILDING BROADBAND FASTER ACT (BBFA)

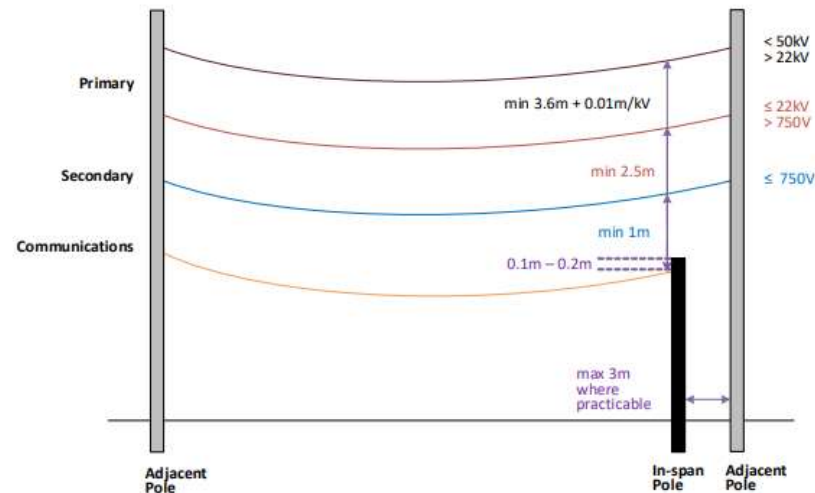
## 5. DB-02-16-v1 – Certificate of Deviations – Certified Lists

- How a P.Eng can create a “standing list of deviations”, in the event they wish to do so. This will mean that a P.Eng will not have to found each time a deviation to the standards is needed. For example, neutral wires are below the line of sight of the communication attachment.

# BUILDING BROADBAND FASTER ACT (BBFA)

## 6. DB-06-22-v1 – In-Span Structures and Overhead Unsupported Conductors

- You can leave a “short pole” in-span of taller structures for a limited time (typically 2 years), under certain conditions.



# Auditor Question

No Questions were received... Any Questions?

# Proposed schedule – Order in which to address guidelines **(Note 1)**

- 1) Year 1 - Guideline for Excavation in the Vicinity of Utility Lines (Section 10)
- 2) Year 1 - Guideline for Third Party Attachments (Section 7 & 8)
- 3) Year 2 - Technical Guideline (Section 7)
- 4) Year 2 - Technical Guideline (Section 8)
- 5) Year 3 - Technical Guideline (Section 6)

ESA will be reviewing the need for a Section 4 & 5 guideline.

**Note: Order may be changed as needed to address new requirements, stakeholder feedback, etc (e.g. Regulation amendments).**



# Proposed schedule – Order in which to address guidelines

- 6) Year 4 - Guideline for Change of Ownership (Section 3)
- 7) Year 4 - Guideline for Proximity to Distribution Lines (Section 10)
- 8) Year 4 - Guideline for Disconnecting Unused Lines (Section 11)
  
- 9) Year 5 - Guideline for Reporting of Serious Electrical Incidents (Section 12)
- 10) Year 5 - Guideline for Audit (Section 13)
- 11) Year 5 - Guideline for Declaration of Compliance (Section 14)



## Focus of 2022 Audits

ESA is looking for the BBFA to heavily impact the operations of Electrical Distributors.

# Focus of 2022 Audits

## Clause 5.8.3.3

### Midspan Structures that Support only the Communication Conductors

There has been discussion regarding “Pole Stumping” and “Double Poling”

“**Pole Stumping**” refers to placing a temporary mid-span pole in line with existing aerial lines. Attaching to this temporary pole allows the current attachments to the complex (make-ready needed) pole to be raised or lowered as required to reduce any impact to the mid-span clearance requirements going in either direction.

“**Double Poling**” refers to placing a second - usually shorter - pole in close proximity to an existing pole that requires complex make-ready work for an additional attachment to be added. In some instances, this scenario can be completed safely as a temporary attachment solution to circumvent a complex make-ready issue. In these instances, standard pole clearance and required attachment specifications still apply in addition to the spacing requirements necessary to allow for the complex make-ready activity to take place at the initial pole (which is being circumvented). Once the complex make-ready is completed, the temporary attachment(s) must be moved back to the primary pole and the secondary pole will need to be removed.

# Bulletins published

## **Bulletins**

[DB-03-22-v1 The DDI Process – Clarifications and Changes](#)

[DB-04-22-v1 Raising of Buildings](#)

[DB-05-22-v1 Grounding and Bonding of Meterbases](#)

[DB-06-22-v1 In-Span Structures and Overhead Unsupported Conductors](#)

[DB-07-22-v1 Serious Electrical Incidents – Online Reporting Form](#)

## **Flash Notices**

[None](#)

# Other Issues

1. Configurations of Concern – On-going
2. Auditor General - Complete
3. Legislative Review Panel, Ontario's Broadband Plan & Building Transit Faster Act - On-going
4. COVID-19 - No changes (Auditor & LDC decides on remote audits)
5. DERs, Reg 22/04 Guideline - Reaffirm/Revise work underway
6. AODA and the website - On-going
7. CSA (O/H & U/G) standards - On-track (2022 amendment, 2025 new versions)
8. Load Serving Entities / DSOs - On-going (No new news)



# Questions

Any Questions?