Electrical Safety Authority

Electrical Distribution Safety

Utility Advisory Council Meeting

Minutes of Meeting
October 29, 2025
9:00am – 12:00pm

Utility Advisory Council Members

LDC/Owner-Operator	
Alectra Utilities	Joseph Chiuco
Festival Hydro	Bryon Hartung
Hydro One - Distribution	Muayad Tarabain
Hydro One - Transmission	Ajay Garg
Hydro Ottawa	Edward Donkersteeg
InnPower Corporation	Arthur Berdichevsky
London Hydro	Scott Glazer
Newmarket-Tay Power Distribution Ltd.	Eric Andres
Oshawa Power	Peter Petriw
Toronto Hydro	Sushma Narisetty
General Interest	
Bell Canada/Telecom Industry	Zhi Lin
Consumer Advisory Council	Salim Al Khodari
CSA Group	Sarzil Rahman
IHSA	David Burns
Power Workers Union	Patrick Fee
Regrets	
Elexicon Energy Incorporated	Ken Gallen
Enova Power Corporation	Shevan Mustafa

Quorum 2/3 of voting members (11/16)

Other Attendees

Namrata Joshi (Alectra Utilities), Marvio Vinhaes (ENWIN Utilities), Rob Koekkoek (Orangeville Hydro), Kishen Pais (Oakville Hydro), Lori Gallaugher (USF), Esther Terner (Ministry of Public and Business Service Delivery and Procurement), Faisal Habibullah (Burlington Hydro), Brittany Ashby (Electricity Distributors Association), Rick Zhang (Toronto Hydro)

ESA Attendees

Nansy Hanna, Jason Hrycyshyn, Patrick Falzon, Goran Velickovski, Maher Girgis, Alex Piccini, Declan Doyle, Mohammed Marfatia, Freda Lam, Diana Madill, Saira Husain, Shawn Martel, Alicia Smith,

1 Notice & Quorum

- Meeting has quorum

2 Agenda

The following motion was carried:
Motion: To accept the agenda
Motioned by: Peter Petriw
Second: Sarzil Rahman
Motion carried.

3 Minutes of UAC Meeting

The following motion was carried:
Motion: To accept the minutes of the June 26, 2025 meeting
Motioned by: Peter Petriw
Second: Sarzil Rahman
Motion carried.

4 Review of Open Action Items

- Action Item 2019-03-01: ESA to develop a process for facilitating resolution of conflict between LDCs and a customer equipment owner
    - Is on the agenda for discussion at this meeting (Item 8)
- Action Item 2025-02-01: Distributor Survey on Best Practices for Connection/Reconnection of Power
    - A couple of questionnaires have been created and ESA is currently receiving feedback

5 Financial Update - Mohammed Ali Marfatia

- Fee calculation has not changed
- Any changes in the fee would be based on a change in number of customers or distribution revenue
- Distributors can expect to receive their annual invoice in January 2026

6 Electrical Safety Award Winners – Alex Piccini

- An overview of this year's award winners was provided
- The complete story of all winners can be found on the ESA website (https://esasafe.com/meetings-events/ontario-electrical-safety-awards-results/)

- Sushma was on the judging panel and got to see the number of submissions. It was very challenging to pick award recipients as there were so many deserving candidates

7 PSC Stats - Patrick Falzon

- A high level of the quantity of PSC's received and the most common issue types was shared
- ESA was asked if this presentation will be available for Distributors to provide to their staff.
    - The presentation will be a part of the minutes once posted
    - ESA made the offer to attend Distributor meetings to provide a Powerline Safety presentation

8 OESC Inspection – Equipment Supporting or Barriering Distributor-Owned Equipment (New Installations) (Action Item 2019-03-01) - Jason Hrycyshyn

- ESA's proposed ideas and sought feedback on what equipment falls under the jurisdiction of the OESC for inspection and what would fall under the jurisdiction of Regulation 22/04 was shared
- Discussed presentation example #4 – the example highlighted the ownership demarcation point and a proposal how to address customer-installed equipment on the distributor's side of this point.
    - The distributor is advising where the demarcation point is. For a typical house the Distributor typically indicates that the line side of the meterbase is the demarcation point. ESA proposed for discussion to consider the duct (conduit) as Distributor-owned as it is before the demarcation point.
    - Distributors provided feedback that they don't want to own the conduit. If it's attached to the customer house the Distributor doesn't own it.
    - It is in the Conditions of Service and if a bulletin conflicts with the conditions of service it will create issues.
    - ESA proposed making the line side duct a Distributor asset, discussed ownership demarcation point and impacts to infrastructure responsibility.
- ESA mentioned it avoid discussion of ownership in the bulletin, as it addresses ESA Code Inspections of new infrastructure. The ownership issue relates more to phase 2 of this issue when it comes to working on existing infrastructure that is not new (typically needing repairs or replacement).
- ESA will send the draft bulletin to the UAC for comments.

Action Item 2025-03-01: ESA will send the draft bulletin - Equipment Supporting or Barriering Distributor-Owned Equipment (New Installations) - to the UAC for review (Jason Hrycyshyn)

9 OESR - Freda Lam

- https://esasafe.com/ontario-electrical-safety-report/

10 Section 11 - DRAFT Guideline - Disconnection Unused Lines - Jason Hrycyshyn

- The Guideline for Disconnection of Unused Distribution Lines has been posted (https://esasafe.com/utilities/technical-guidelines/)

11 Demand Load vs Connected Load – Rick Zhang (Toronto Hydro)

- Toronto Hydro has observed a very load requests across new developments, where the demand load is actually significantly lower than the service size, also known as the connected load as prescribed by Section 8 of the OESC.
- Historically, we've seeing gaps between the demand versus connected load being around 20% to 30%, and in rare cases 40% to 50%
- Currently we are seeing gaps of 50% to 80% across all development types
- So there's a big discrepancy between what the customers are asking for compared to what they're actually installing on site
- We're seeing customers installing a much bigger transformer on their private property, typically in the form of customer substations with very little demand load that they're looking to draw from the system.
- There are many concerns or challenges that we see with this kind of growing trend.
    - Oversizing of the infrastructure that's required to connect the customer on both the hydro side as well as the customer side
    - The potential misconception of how much load the customer can actually draw or have allocated for by the utility. They're not aware of the actual demand the utility has allocated for their property
    - The potential avoidance of introducing new technologies on these sites, such as any DER connections or any generation on-site. Because customers already have the infrastructure installed, they don't need to introduce other technologies on-site in order to reduce their demand. If they already have the infrastructure available, they can simply just add more load without having to look for alternatives
- Are other Distributors observing similar trends?
    - Other Distributors are experiencing the same issues

  - There is a lot of overbuilding that is happening and it is coming from the OESC calculations.
- Smart meters and aggregating of the data is really showing how much the system is being overbuilt and this leads to increased infrastructure costs
- It was suggested that some of the Distributor members of the UAC could discuss this topic and take it to Electricity Canada
- ESA asked if a WG should be started to look at changing how the calculation is done from the OESC side?
- ACTION:
  - Sushma will draft a survey
  - ESA can distribute the survey to Distributor main contacts and UAC members
  - After the survey it can be decided if this is a working group with ESA or USF or another forum
- USF has been on this with the CEC and with the program and project manager of this sub group, but they have yet to open this issue. Until they have a reason to start the group they will not open this. USF would like to be a part of this. Not an easy change, but with ESA on board we may be able to nudge this forward.

Action Item 2025-03-02: Toronto Hydro will draft a survey with questions relating to Demand Load vs Connected Load (Sushma Narisetty)

12 Declaration for Overhead Electrical Conductors - Sushma Narisetty

- Toronto Hydro was able to get the city of Toronto to introduce the self-declaration when submitting plans to the city of Toronto.
- Form went live in June 2025.
- Toronto Hydro provided to the UAC for use in their jurisdictions

13 Compliance Overview - Jason Hrycyshyn

- An overview of compliance to Regulation 22/04 by Distributors was provided
- Move to update the Regulation to the latest version of CSA standards.
  - Discussed ESA Auditors and the current Regulation 22/04 requirements. ESA noted that the 2015 are still referenced, but Auditors may ask about transitioning to the latest standards.
- As P.Eng there is a requirement to use the most current version of standards so the Regulation being different does cause an slight issue
- What is the timeline that ESA expects LDCs to move to newest versions of CSA standards

- The Technical Guideline indicates 1 year is typical to move to a newer standard, but this update includes a lot of changes so adoption could take longer. ESA asked the UAC if they had any thoughts on a reasonable transition period for the 2025 standards.
- Software has a major change in order to accommodate the latest version of CSA standards.

14 Like-for-Like Replacement - Goran Velickovski

- Like-for-Like Replacement and Emergency Work was reviewed
- The requirements under Regulation 22/04 and guidance provided in the Guidelines was reviewed and examples shared of typical situations detailing if the situation met the definition of like-for-like

15 3 Phase 3 Wire Update - Jason Hrycyshyn

- Item skipped due to time constraints

16 Communications Update: Copper Theft - Patrick Falzon

- Creative were show to the group for feedback
- There were comments on the wording that was chosen
- There were differing opinions on the signs with and without the images and which one would be more effective
- There were differing opinions on the colour schemes chosen and which one would be more effective at getting people's attention
- It was suggested that the Distributors would like the creatives to share with their communications departments for feedback
- ESA will provide the slide deck to the UAC for comments with a 2 week turnaround time
- What were the proposed locations for the signs
  - The signs can be used and posted in any manner the Distributor deems

Action Item 2025-03-03: ESA will provide the slide deck on the proposed creative work for copper theft signage to the UAC for comments with a 2 week turnaround time (sent November 5, 2025)

17 Emailing LDCs with same day, after-hours and storm related connection authorizations - Alicia Smith and Shawn Martel

- ESA Operations shared the new email connection authorization process with the UAC. The process is to replace the Inspector phoning a connection in to the Distributor is the following cases
    - Same day connections
    - After hours calls
    - Storm conditions
- The Distributor portal will still be operational and will still have all the Connection Authorizations for a Distributor, the email is only to remove the need for an Inspector to call in and to provide a paper trail for those connection authorizations
- ESA will be issuing a letter to all LDCs that aren't already participating asking for a dedicated email address to facilitate this process

Action Item 2025-03-04: ESA will request an email address from Distributors in the province to be used for specific connection authorization scenarios (Operations)

18 Disconnect Switch (Bulletin 84-1-*) - Patrick Falzon

- Item skipped due to time constraints

19 Bulletin 10-15-* - Patrick Falzon

- Item skipped due to time constraints

20 2026 Proposed Meeting Dates:

- February 24, 2026
- June 25, 2026 (in-person)
- October 20, 2026

Electrical Safety Authority

Utility Public Safety Concerns-stats

Patrick Falzon
Information
October 29, 2025

Utility Public Safety Concerns-stats

- ESA receives an average of 195/ year utility related public safety concerns
- Sources- both members of the public and our inspectors
- Some PSC’s come from Distributor crews not understanding they are responsible to resolve under their jurisdiction
  - Line side conduit of meter base expose Distributor supply conductors
  - Encroachments of new building to existing Distributor overhead powerlines

Utility Public Safety Concerns-stats

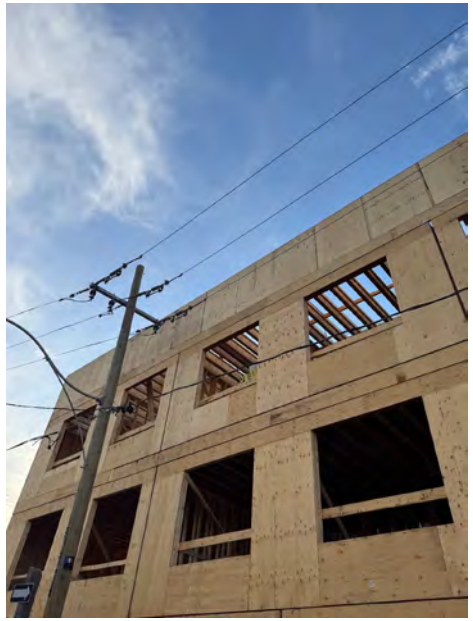
Issue	Total captured	Includes items such as
Clearance to overhead equipment	1004	Primary and secondary low wires; building/ structure clearance; pools; secondary resting on roofs
Clearance to underground equipment	326	Exposed cables at pole base, meter base; gaps around pad mounted equipment
Damaged equipment	403	Ground wire; cable guards; poles and pad mounted equipment from MVA's
Delta/wye concerns	125	Missing 4th conductor or bonding strap still connected at TX
Failed & deteriorated equipment	341	Pad mounted enclosures with holes from rusting; floating conductors from primary and secondary insulators failures
Guy wire	199	Broken/damaged guy wires, missing guy guards, damaged anchors; span guys low hanging

Utility Public Safety Concerns-stats

Issue	Total captured	Includes items such as
Installation not to standard	245	New installation not meeting the standards-compliance follow up
Other	229	Leaking pad mounted TX's; flickering lights; fluctuating voltage
Poles	421	Leaning; cracked; rotted
Theft of copper	52	Substations; pole ground wires
Tingle voltage	68	Contribution from external sources
Vegetation	478	Vegetation in contact with primary and secondary conductors including service conductors

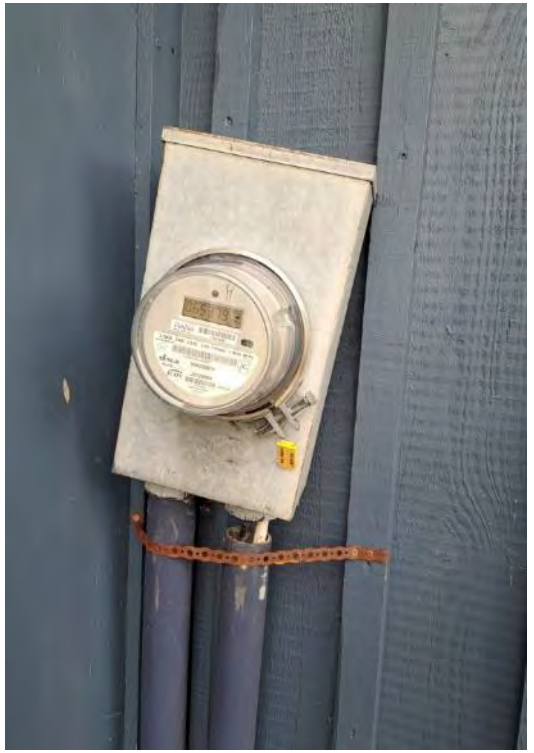
Utility Public Safety Concerns-stats

- Clearances to buildings



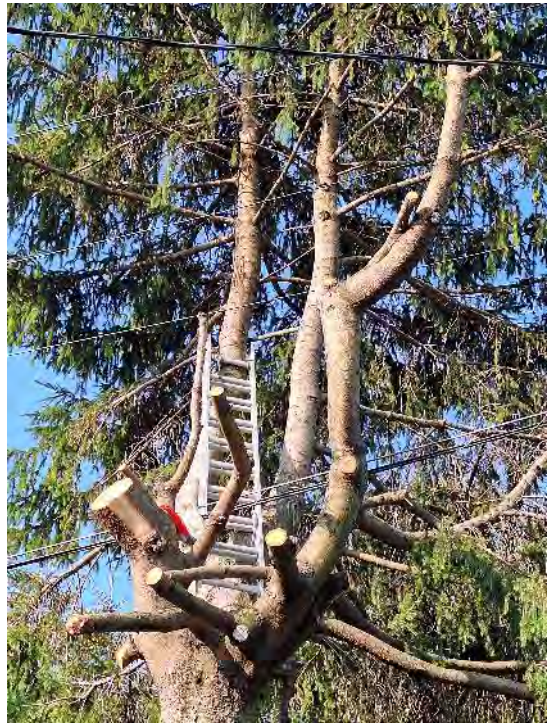
Utility Public Safety Concerns-stats

- Exposed utility conductors/ exposed Distributor supply conductors



Utility Public Safety Concerns-stats

- Vegetation management concerns



OESC Inspection – Equipment Supporting or Barriering Distributor-Owned Equipment (New Installations)

Jason Hrycyshyn
Information
October 29, 2025

PHASE 1
NEW INSTALLATIONS

Recap:

ESA informed the UAC that ESA would hold internal meetings to discuss direction for ESA Inspectors re: certain customer-installed equipment.

Highlights

(CI = Customer-installed) (DO = Distributor-owned) (ODP = Ownership demarcation point)

- ESA completed internal Working Group meeting
- ESA wants published direction detailing whether or not to inspect CI equipment, where DO equipment relies upon CI equipment.
- **Installations are new and equipment must be within the jurisdiction of the OESC for an ESA inspection (as per RBO)**.

Proposed Inspector Direction

1. Follow the notification information
   a) If information is unknown, only inspect where
      i. On customer-side of ownership demarcation point; and
      ii. The equipment is above-grade equipment.

Highlights

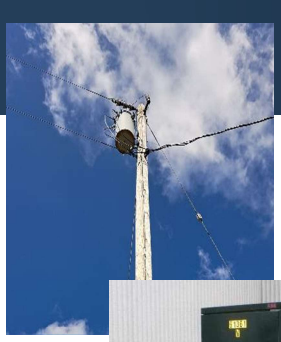
(CI = Customer-installed) (DO = Distributor-owned) (ODP = Ownership demarcation point)

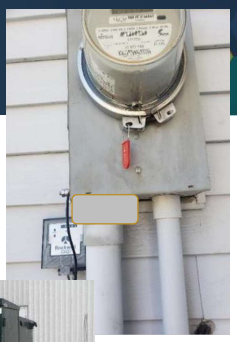
OESC Scope – Electrical work and electrical equipment operating or intended to operate at all voltages, that are located on the distributor's side of the ownership demarcation point are "Not within OESC scope".

No direction in this bulletin, it is meant to inform Distributors what they can expect of ESA in regards to specific equipment.

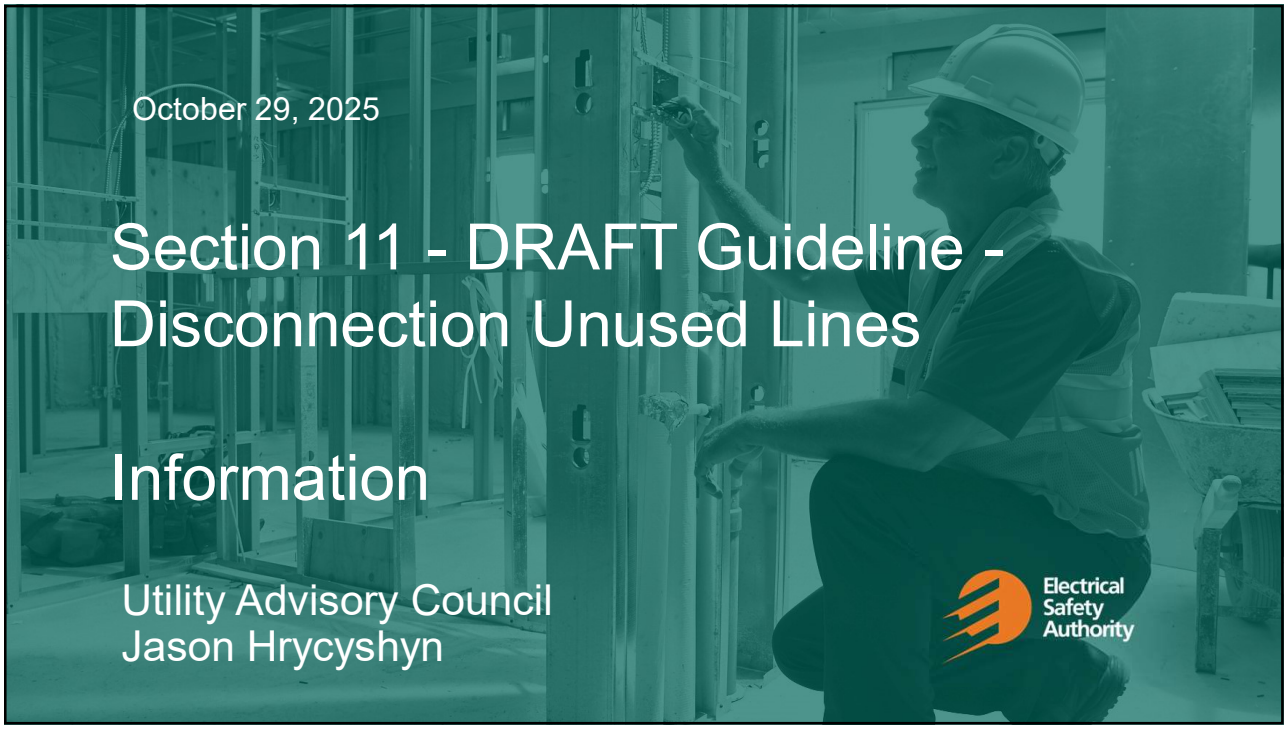
Examples - All examples assume no information in the notification & typical demarcation points

(Yes) = Inspect
(No) = Do not inspect





1. Customer-installed **poles and conductors** with distributor-owned **transformers** attached (downstream of the ownership demarcation point). (Yes)
2. Customer-installed **poles** with distributor-owned **conductors and transformers** attached (upstream of the ownership demarcation point). (No)
3. Customer-installed **meter base** with distributor-owned **meter** attached (downstream of the demarcation point). (Yes)
4. Customer-installed **conduit (i.e. duct)** with distributor-owned **cables** inside them (upstream of the demarcation point). (No)
5. Customer-installed **foundation and grounding** with distributor-owned **pad-mounted transformer** (downstream of the ownership demarcation point). (No)



Section 11 - DRAFT Guideline - Disconnection Unused Lines

Highlights

- Both Guideline Working Groups have complete their work
- ESA completed its own internal review – no changes made
- UAC was provided a 2-week window, after last meeting.

- Non-substantive comments received and addressed.

- ESA posted updated “Guideline” with “Significant Revisions” document.

Section 11 - DRAFT Guideline - Disconnection Unused Lines

Highlights - Section 11 (Disconnection of Unused Distribution Lines)

- Addresses Distributor-owned equipment that the Distributor does not locate (e.g. within the footprint of the building), the equipment must be included in the records.
- Removed reference to the ORCGA Best Practice documentation, as it references CSA S250.
- Maintained reference to 750V, despite CSA moving to 1000V, as it harmonizes with Regulation 22/04.
- Clarifies that a Professional Engineer includes a holder of a licence, a limited licence or a temporary licence holder.

Contact Us

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Compliance Overview

Jason Hrycyshyn
Information
October 29, 2025

Compliance Overview

- Audits show 2 Distributors, each with 1 N/I.
  - In-person Audits
  - Distributor preparation for Audits
  - Partial Inspections
- Assessments indicate if CVPs require re-affirmation or revision – based on the 10-year interval.
- Declarations are still being received using the old template, Distributors receive warning about future resubmissions.

Like-for-Like Replacement and *Emergency Work*

Like-for-Like Replacement and *Emergency Work*

Definition

- "*Like-for-like Replacement*" means the replacement of one piece of electrical equipment (one assembly) under all conditions, or a part or portion of a line under emergency conditions, on an existing distribution system that maintains as a minimum the characteristics and functionalities of the original installation;
- Replacement of existing structures, meeting the *Like-for-Like Replacement* definition (e.g. maximum limit of 1 dressed pole), for the repair or replacement of failed or failing components, is permitted to meet the edition of the Standard in force at the time of the line's original design, and need not be modified to comply with current Standard editions. All other replacements of structures shall comply with the current Standard editions or the Standard editions identified in O.Reg. 22/04;
- Capital vs non-capital work. Capital work, such as upgrades and new construction, is not considered to be *Like-for-Like Replacement* and require plans or standard design drawings.

Like-for-Like Replacement and *Emergency Work*

- O. Reg. 22/04, s. 7 (7) *Approval of plans, drawings and specifications for installation work* does not apply with respect to work on an electrical installation that involves the replacement of one piece of electrical equipment with another piece of electrical equipment of the same voltage and characteristics.
- This section allows the *Like-for-Like Replacement* of limited equipment on the distribution system.
- Replacement of existing structures, meeting the *Like-for-Like Replacement* definition (e.g. maximum limit of 1 dressed pole), for the repair or replacement of failed or failing components, is permitted to meet the edition of the Standard in force at the time of the line's original design, and need not be modified to comply with current Standard editions. All other replacements of structures shall comply with the current Standard editions or the Standard editions identified in O.Reg. 22/04.

Like-for-Like Replacement and *Emergency Work*

- Section 7(7) of the Regulation states that the requirements of section 7 do not apply for work on electrical installations that involves the replacement of one piece of electrical equipment with another piece of equipment of the same voltage and characteristics. This section allows the *Like-for-Like Replacement* of limited equipment on the distribution system.
- Examples where this exception may apply could be:
  - Defective equipment replacement with similar equipment (failed transformer, damaged switchgear, rotten pole);
  - Replacement of substandard with standard single components (insulators, poles, cross arms, conductors);
  - Single assembly replacement such as a pole and the associated material;

Like-for-Like Replacement and *Emergency Work*

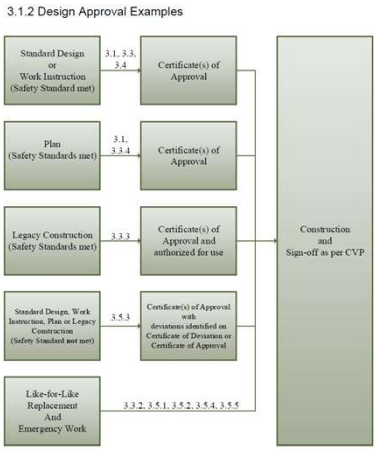
- In recognition that line repair or replacement work that is done under emergency conditions (“trouble calls”) or for maintenance purposes in accordance with *Like-for-Like Replacement* this work may not have a certificate of approval, all such work would require a *Record of Inspection* and a *Certificate* as per the approved construction verification program.
- The *no undue hazard to persons or property statement* addresses the approval of construction for these instances. Since *Like-for-Like Replacement* and *Emergency Work* are performed without reference to an approved standard or plan, the *no undue hazard statement* is often referred to, which is noted in the CVP to serve as both the *Record of Inspection* and a *Certificate*.

Like-for-Like Replacement and *Emergency Work*

Substation *Like-for-Like Replacement*

- ESA allows for *Like-for-Like Replacement* of limited equipment in a distribution substation such as replacement for maintenance purposes (or equipment) within the substation.
- Due to the secured nature of substation property, replacement of equipment under maintenance that maintains as a minimum the characteristics and functionalities of the original installation may be replaced using *Like-for-Like Replacement*. There are no limitations as to the number of individual pieces of equipment, within a secured substation property, which may be replaced under non-capital work (*Like-for-Like Replacement*).
- Capital work (new construction or upgrades) is not *Like-for-Like Replacement* and requires plans or Standard Designs

Like-for-Like Replacement and *Emergency Work*



Like-for-Like Replacement and *Emergency Work*

Examples:

- Electrical distributor is replacing <u>one failed</u> or failing structure. This is deemed as a replacement of an existing structure (4), meets the *Like-for-Like Replacement* definition and is permitted to meet the edition of the Standard in force at the time of the line's original design, without being modified to comply with the current edition.
- Electrical distributor is replacing <u>more than one structure</u>, where the structures are adjacent to one another. This is deemed as a replacement of existing structures (4), does not meet the *Like-for-Like Replacement* definition and shall comply with the current edition of the Standards or the Standard editions identified in O.Reg. 22/04.
  - Distributor's have been informed to utilize the general guidance to deliberately avoid issues, where the Regulator will have to intervene with expanded guidance. Expanded guidance is seen as undesirable.

Like-for-Like Replacement and *Emergency Work*

What happens under emergency conditions?

- During emergency situations, when it is necessary to restore power (continue supply) or address a safety hazard, work can be conducted without plan or work instructions.
- Work under *Like-for-Like Replacement* exception to section 7 of O.Reg. 22/04
- Repairs made during emergency conditions to follow requirements of Section 9(2) of O.Reg. 22/04 in that part or portion of the EDS can be replaced with similar construction as long as no undue hazard is created.

Like-for-Like Replacement and *Emergency Work*

(Record of Inspection and Certificate) or (No Undue Hazard Statement)

- Record of Inspection and Certificate: Competent person inspects and records compliance with standard designs, specifications or plans and use of approved equipment.
- No Undue Hazard Statement: Competent person inspects and records compliance that:
  - metal parts that are not intended to be energized and that are accessible to unauthorized persons are adequately grounded,
  - live parts are adequately insulated or barriered,
  - the installation meets the minimum CSA clearances from buildings, signs and ground or barriers are installed to protect,
  - the structure has adequate strength.

Like-for-Like Replacement and *Emergency Work*

QUESTIONS submitted prior to UAC meeting

Like-for-Like Replacement and *Emergency Work*

- Is there any special consideration or limitation of Like-for-Like replacements where Grade 1 Construction is required (e.g. Railway Crossings/Proximity, Controlled Access Highway Crossings/Proximity, etc…). Note past revisions of CSA didn't always require Gr 1 construction Lines such as highway crossings (2010).
- Some of the equipment replacement is heavier for what's otherwise the same characteristics. For example, the new transformer efficiency standards are resulting in heavier transformers for the same kVA & voltage rating. Distributors need to replace this equipment 'like-for-like" on emergency and planned work without the need to replace entire structures.).
- Can we confirm replacing a stub pole with the pole it's supporting is considered "one structure" replacement and hence eligible for a Like-for-Like replacement?
- If a Distributor orders and installs large quantities of an equipment that future testing reveals the product was defective, can a mass replacement be completed "like-for-like"? For example, if we find the switches we purchased from Vendor X now failing prematurely or defective insulators or if it's poles that came from a particular facility that now have premature rot.

Like-for-Like Replacement and *Emergency Work*

The current restriction on replacing only one asset under 'non-emergency' situations as like-for-like is too limiting (at least for our utility) (reference: 1.3.26).

1.3.26 "like-for-like replacement" means the replacement of one piece of electrical equipment (one assembly) under all conditions, or a part or portion of a line under emergency conditions, on an existing distribution system that maintains as a minimum the characteristics and functionalities of the original installation;

- For example, we may have a number of rotten poles in a pole line that need to be replaced as like-for-like, but we can only do staggered locations due to this limitation. For everywhere else we have to put together a design and a plan, although there is no impact on the existing pole line. This has significant impact on our resources to address failing assets in a timely manner. Section 3.5.1 of the guideline does not put this limitation as long as the qualifying requirements are met, as follows:

Like-for-Like Replacement and *Emergency Work*

3.5 Construction and Repairs of an Existing *Distribution system*

3.5.1 Is there any planned installation work that does not require design approval?

Section 7(7) of the *Regulation* states that the requirements of section 7 do not apply for work on *electrical installations* that involves the replacement of one piece of electrical equipment with another piece of *equipment* of the same voltage and characteristics. This section allows the *like-for-like replacement* of limited equipment on the *distribution system*.

Examples where this exception may apply could be:

- *like-for-like replacement* of defective *equipment* with similar *equipment* (failed transformer, damaged switchgear, rotten pole);
- *like-for-like replacement* of *equipment* (insulators, a pole, cross arms, conductors);
- *like-for-like replacement* of a single dressed pole, plus its associated stub pole;
- *like-for-like replacement* of a single pad-mounted transformer, plus its associated foundation;
- *like-for-like replacement* for substations, see paragraph 3.5.5 of this document.

Like-for-Like Replacement and *Emergency Work*

Resources and references:

- Distributor Bulletins – ESA
  - Bulletin DB-05-10-v1 Distribution Substation & Like-for-Like
  - Bulletin DB-01-20-v1 Previous Editions of the Overhead and Underground Standards
  - ESA Technical Guidelines Sections 6, 7 & 8
- Electrical Distribution Safety Regulation – ESA (O.Reg. 22/04)
- utility.regulations@electricalsafety.on.ca

Electrical Safety Authority

Thank you!

Questions?