



**Utility Advisory Council Members**

**LDC/Owner-Operator**

Alectra Utilities	Joseph Chiuco
Elexicon Energy Incorporated	Faisal Habibullah
Enova Power Corporation	Shevan Mustafa
Festival Hydro	Bryon Hartung
Hydro One - Distribution	Peter Petriw
Hydro One - Transmission	
Hydro Ottawa	Edward Donkersteeg
InnPower Corporation	Arthur Berdichevsky
London Hydro	Greg Sheil
Newmarket-Tay Power Distribution Ltd.	
Toronto Hydro	Sushma Narisetty

**General Interest**

Bell Canada/Telecom Industry	Tony Pereira
Consumer Advisory Council	Sandy Manners
CSA Group	
IHSA	
Power Workers Union	Patrick Fee

**Other Attendees**

Esther Turner (Ministry of Public and Business Service Delivery), Lori Gallagher (Utilities Standards Forum), Kathryn Farmer (Electricity Distributors Association), Stephen Cain (Ontario Energy Board)

**ESA Attendees**

Nansy Hanna, Ray Yousef, Jason Hrycyshyn, Patrick Falzon, Mel Pace, Claire Loucks, Esau Habibulla, Freda Lam



**1 Notice & Quorum**

- The meeting has quorum

**2 Minutes of UAC Meeting**

The following motion was carried:

**Motion: To accept the minutes of the June 9, 2022 meeting**

**Motioned by:** Peter Petriw

**Second:** Ed Donkersteeg

**Motion carried.**

- Peter Petriw – If there is still interest in organizing a working group for the Scorecard Component C to email Peter and he will arrange a meeting

**3 Open Action Items**

- 2019-02-04: Measurements Canada Meter Drawing Signed by a Professional Engineer
  - o On the agenda
- 2019-03-01: ESA to develop a process for facilitating resolution of conflict between LDCs and a customer equipment owner
  - o Deferred
  - o The Council has asked ESA to make this a higher priority.
  - o Internal discussions to develop a process for consistency on how ESA handles these issues across the province is the first step
- 2021-03-01: Street Lighting Work that falls under CSS
  - o Ongoing

**4 ESA Safety Awards - Nansy Hanna**

- Electrical Safety Authority Celebrates Safety Leaders at 2022 Ontario Electrical Safety Awards
- <https://esasafe.com/2022/esa-celebrates-safety-leaders-at-2022-ontario-electrical-safety-awards/>
- Infrastructure Health & Safety Association Working Group – Overhead Powerline Safety & Equipment Guideline
  - o <https://www.ihsa.ca/PDFs/Products/Id/W802.pdf>



**5 Financial Update - Esau Habibulla**

- There will be no change to how the fee is calculated for calendar year 2023
- Invoices will be sent to LDCs in Q1 of calendar year 2023
- Was this formula approved by ESAs board?
  - o This formula was approved by the board several years ago and was developed in consultation with LDCs
- Will ESA be looking at changing the formula?
  - o If there was any need to update the formula to take into consideration things like inflation ESA would bring this to the Council for review before taking to the Board for approval

**6 Ontario Electrical Safety Report (OESR) - Freda Lam**

- The OESR can be found on the ESA website <https://esasafe.com/2021-ontario-electrical-safety-report/>

**7 Reporting Meter Failures - Program Completion - Freda Lam**

- Meter failure reporting, for meter failures that were not considered serious incidents, these were requested to be voluntarily reported to ESA on a quarterly basis on the Meter Failure Reporting spreadsheet
- Reports submitted did not identify any safety issues
- ESA will start the process of closing this voluntary program
- Meter failures that are considered serious incidents under Regulation 22/04 are still required to be reported

**Action Item 2022-03-01:** ESA to close the voluntary reporting of meter failures program.  
– Freda Lam

**8 Education campaign: Dangers associated with tampering with live electrical equipment - Greg Sheil**

- London Hydro has seen a significant increase in people defeating barriers to steal copper
  - o Cutting into under bridge conduit
  - o Entering underground manholes
  - o Stealing HV customer owned cables
- London Hydro is going to be adding a lot of signage to try and deter people from stealing copper wire



- London Hydro is asking ESA if a campaign can be developed to let the public know that there are serious consequences to contacting HV lines
- This is on ESAs radar. ESA is aware of a couple of fatalities.
- The issue of copper theft is not specific to Ontario. Would it be possible to contact some other jurisdictions to find out what approaches have been most successful?
- Due to the various groups of people that may be stealing copper traditional methods of communicating (radio, TV, social media, etc.) may not be effective. We may need to get other groups involved like the Police, Municipal and Provincial groups that work with addiction and people with no fixed address, etc
- We also need to consider not bringing so much attention to the issue that more people are encouraged to steal copper
- ESA is asking LDC Council members to see if this is being tracked and to provide some data that can help guide this process

## **9 Online Serious Electrical Incident Reporting Form - Mel Pace**

- ESA is looking for feedback on the Online Serious Electrical Incident Reporting Form and if there are any obstacles to using this form as opposed to the current methods
- Reporting at Hydro One is very interlinked and this would require Hydro One to fill out an additional form. The volume of incidents at Hydro One is significant so any changes will have a large impact. Peter is trying to see if these linkages can be smoothed out to see if the integration of ESAs online form is possible.
- Toronto Hydro isn't using the online form. A question came up around training and access to the form. Training shouldn't be too difficult. There are a wide range of people that would be reporting these incidents depending on shifts and locations. How is access given to fill out this form?
  - o Bulletin DB-07-22-v1  
(<https://esasafe.com/assets/files/esasafe/pdf/Utilities/Bulletins/DB-07-22-v1.pdf>) provides the link to the online form so anyone can use it
- Is there any way for the LDCs to get access to the incidents reported? When it is sent through email it is easy to get the PDFs that were sent. If we move to the online form is there a way to have access to the submitted reports?
  - o When the form is submitted there is a field to enter emails where the report is to be sent, so all the information submitted can be sent to whatever emails are entered
- Within some LDCs all incidents are reviewed by a supervisor before they are sent to ESA. Is there a way for the form to be filled out, then allow a supervisor at the LDC to review before being submitted?
  - o No. This functionality is not available



**10 Guideline for Third Party Attachments - Jason Hrycyshyn**

- The Council was updated on the status of the working group

**11 Update on the 3-Phase 3-Wire Solidly-Grounded Wye Installations (Action Item # 2020-03-01) - Jason Hrycyshyn**

- An update on the 3-Phase 3-Wire Solidly-Grounded Wye Customer Services program was provided
- 39 Electrical Distributors have confirmed they have completed this initiative
- Does ESA communicate with LDCs that still have this issue in the event of staffing changes?
  - o ESA has reached out to the contacts we have and if there is an updated contact ESA updates its records

**12 OESC Bulletin 6-9-\* Attachment of overhead service conductors - Patrick Falzon**

- The Council was made aware of the updates to Bulletin 6-9-3 published October 2022
- This is a published deviation, with some exceptions
- 6-9-3 can be found in the sample bulletins on the ESA website  
<https://esasafe.com/electrical-products/bulletins/>

**13 CSA C22.3 No 11-2022 - Maintenance of Electric and Communication Utility Equipment and Systems - Jason Hrycyshyn**

- ESA is looking to maintain harmonization with the OEB and be a part of any process that OEB undertakes to review this new standard.
- ESA would like to be harmonized with the OEB as it would be difficult if ESA and the OEB had different maintenance requirements

**14 Guideline for Distributed Energy Resources (DER) - Jason Hrycyshyn**

- It was agreed after the last review of this guideline to review it again in 1 year and this is the 1 year revisit
- ESA is asking the Council for advice on next steps with this guideline
- LDC members of the Council would like time to review the guideline before providing advice to ESA
- LDCs have made changes to the DER processes due to OEB requirements so it would be good to have a more thorough review before providing feedback to ESA



- Voltage ride through is a requirement of the IESO – all inverters are required to have this. Voltage ride through are definite set points and have been required for about a year now.

**Action Item 2022-03-02:** ESA to solicit Council feedback between the Nov 2022 and February 2023 UAC meetings on the Guideline for Distributed Energy Resources. – Jason Hrycshyn

**15 Service Entrance Equipment Control - Patrick Falzon**

- It was agreed that it is a good idea for a Distributor Bulletin to get information regarding customer access to service boxes and other customer service equipment to all LDCs
- ESA to create a draft distributor bulletin

**Action Item 2022-03-03:** ESA to create a distributor bulletin for LDCs on Service Entrance Equipment control. – Patrick Falzon

**16 Application of OESC on electrical installation within distribution and transmission stations – Rule 2-000 of the OESC interpretation and application (OESC Bulletin 2-31-\*) - Ray Yousef**

- The proposed bulletin was reviewed with the UAC
- ESA will circulate the bulletin to the Council for feedback (provide 2 weeks to the Council to review and provide feedback).
- If there are no comments please respond back advising no comments

**17 Vegetation Management on Private Property - Patrick Falzon**

- Customer actions that are an issue
  - o Not providing access for the LDC to maintain the vegetation
    - The Electricity Act provides powers of entry where it's distribution system is located (s40)
  - o Planting the wrong trees under or around LDC infrastructure
- LDC Challenges
  - o Financial cost to clearing vegetation on all LDC owned secondary lines
- ESA was asked what the safety concerns were for a customer to do vegetation management on LDC owned secondary lines
  - o Not all secondary lines are insulated



- Even if the line is insulated there is the potential that a live line can be brought down
- LDCs reminded ESA that direction provided in distributor bulletins can have a huge impact on LDCs
- With the costs of contractors increasing the number of DIY'ers could increase
- ESA was asked if vegetation management around LDC owned secondary lines was viewed as a high risk activity
- ESA was asked to provide data around the number of incidents, contacts and injuries or fatalities

**Action Item 2022-03-04:** ESA to review if vegetation management around LDC owned secondary lines is viewed as a high risk activity. ESA to provide data on the number of incidents, contacts and injuries or fatalities related to vegetation management around LDC owned secondary lines. – Patrick Falzon

**18 School Bus Safety Initiative - Patrick Falzon**

- The incident and ESA's subsequent actions and safety initiative were reviewed
- LDCs liked the graphic on the sticker and would like to have access to the graphic.
  - ESA will talk to our communications department to see if we can get this graphic added to the LDC toolkit

**19 Measurements Canada Meter Drawing Signed by a Professional Engineer (Action Item #2019-02-04) - Jason Hrycshyn**

- The details of the draft bulletin was provided with pre read materials and reviewed at the meeting
- LDCs asked for a couple of weeks to review the bulletin
- ESA will circulate the draft to the Council and ask for comments back in 3-4 weeks

**19 Reminder: Advisory Council Survey - Claire Loucks**

- Survey is open till Nov 11<sup>th</sup>
- Results reported back at the next UAC meeting

**20 2023 UAC Meeting Dates - Chair**

- Thursday February 16, 2023
  - Virtual
- Thursday June 8, 2023
- Thursday October 19, 2023



**Motion:** To adjourn the meeting

**Motioned by:** Sushma Narisetty

**Second:** Arthur Berdichevsky



Utilities Advisory Committee  
November 1, 2022

# Voluntary Meter Reporting Program (Meter failure reporting spreadsheet)



# History

- Early-2000: Ministry of Energy asked OEB to develop a plan to achieve smart meter targets for electricity
- Concern that there would be catastrophic failures resulting in harm (explosions, fire)
- In 2017: Reg. 22/04 was amended so that meter failures were reported to ESA
- It was found that these meter failure reports may not be capturing all relevant data of interest to ESA, so a voluntary meter incident reporting system was started (Meter Failure Reporting Spreadsheet)

# Meter failure reporting spreadsheet (2015)

- Additional reporting mechanism
- Voluntary, reported quarterly
- For non-serious incidents: all other meter failures not identified as a serious incident for a meter failure.



## Distributor Bulletin

### Reporting Meter Failures (750V or less)

#### Distribution Company Awareness

This bulletin replaces DB-08/15, as this bulletin contains clarifications with respect to Reporting Meter Failures (750V or less). The clarifications include: that the request is limited to report incident/failures of in-service meters, and addresses events of force majeure & vandalism. This bulletin also includes a recommendation in the event an LDC has no failures to report.

In July, 2015, ESA completed a Meter Safety Due Diligence Review. One conclusion of the Review was that coordinated data collection is an important element to ensure a fulsome, ongoing picture of meter-related electrical safety incidents. Therefore, ESA is requesting and recommending that LDCs voluntarily report meter incident / failures of in-service meters, following the process outlined in this bulletin. Aggregate information will be made available to LDCs.

#### ESA Recommends

ESA requests and recommends that LDCs adopt the voluntary reporting program outlined below:

##### 1. "Meter Failure Reporting Form - Serious Incidents"

ESA requests that all in-service, electricity meter serious incidents for metering installations of 750V or less be reported to ESA using the "Meter Failure Reporting Form – Serious Incidents" form.

A serious incident for a meter failure is defined as: any fire or explosion that caused or had the potential to cause death or critical injury to a person, except a fire or explosion caused by lightning strike and other events of force majeure. ESA requests that the distributor, or any contractor or operator acting on the distributor's behalf, report to ESA any electricity meter serious incident of which they become aware within 48 hours after the occurrence.

##### 2. "Meter Failure Reporting Spreadsheet - Quarterly Reporting"

ESA requests that all in-service electricity meter non-serious incidents, for metering installations of 750V or less be reported to ESA using the "Meter Failure Reporting Spreadsheet – Quarterly Reporting" Form, except a fire or explosion caused by lightning strike, vandalism and other events of force majeure.

# Current status

- Only some Electrical Distributors were consistently providing information to ESA
- Many reports showed that meters were failing in a safe manner (e.g. screen failures)
- Meters were not demonstrating an electrical risk
- More recently (past two years), ESA has not received many reports from Electrical Distributors
- No reports have identified any safety issues

# Decision to cease the voluntary program

- ESA continues to capture meter failures in ESA's Powerline Safety database as part of mandatory reporting

 **Electrical Safety Authority** Current Date: \_\_\_\_\_

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**Meter Failure Reporting Form – Serious Incidents**

ESA requests that all in-service electricity meter serious incidents, for metering installations of 750V or less be reported into ESA, using this form. Serious incident for a meter is defined as any fire or explosion that caused or had the potential to cause death or critical injury to a person, except a fire or explosion caused by lightning strike and other events of force majeure. ESA recommends that the distributor, or any contractor or operator acting on the distributor's behalf, report to the Authority any electricity meter serious incident of which they become aware within 48 hours after the occurrence.

**How to Report** Email: [Utility.Regulations@ElectricSafety.on.ca](mailto:Utility.Regulations@ElectricSafety.on.ca)

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**Reporting Information**

<b>LDC Details</b>	
LDC Name:	
LDC Contact:	Contact Phone Number:

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**Meter Installation Details**

Meter Number:	
Address of Installation:	
Postal Code:	PSA Number: <small>(Enter 3 digits of house code)</small>
Manufacturer:	Model Type:
Date of Meter Manufacture:	Date of Meter Installation:
Date of Meter Failure:	Service Type: <small>Phase, W or 3 phase, voltage (ex. 120 (single), 240V)</small>

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**Details of Failure and Extent of Damage:**  
This section details known failure related facts. Examples:

- (1) Communications Module Failure, no other damage identified, pulled from Service
- (2) Fire within meter base damaged meter, meter not damaged, remaining in Service
- (3) Disconnect Failure in open position, software issue, issue resolved, remaining in Service
- (4) Blank Register Display, meter base board failure, evidence of water intrusion, pulled from Service
- (5) Meter opened with force from meter base, meter extensively damaged, pulled from Service

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Failure Details: (ex. what failed and why)

Extent of Damage: (ex. no damage, damage contained within equipment, parts opened with force, extensive damage to meter)

Meter "Service" Status: (ex. in-service, pulled from service)

Other Information:

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By submitting personal information to the Electrical Safety Authority, or its agents and service providers, you agree that ESA may collect, use and disclose such personal information in accordance with its privacy policy, applicable laws or pursuant to our administrative agreement with the Province of Ontario. If you provide us with the personal information on behalf of another individual, you represent that you have all necessary authority and/or have obtained all necessary consent from such individual to enable us to collect, use and disclose such personal information for the purposes set forth in our Privacy Policy. A copy of our policy is located on our website at [www.esa.on.ca](http://www.esa.on.ca).

# Questions and Discussion

# Appendix 1: Electrical distributors that have reported meter failures to ESA

	2015	2016	2017	2018	2019	2020	2021	2022
Total of Electrical Distributors Reporting	13	16	13	9	7	8	7	4
Total Number of Distributors	75	71	68	67	62	61	61	60
Percentage of Electrical Distributors Reporting	17%	23%	19%	13%	11%	13%	11%	7%

Data is current up to May 10, 2022



November 1, 2022

# Serious Electrical Incident Reporting Auditor General Recommendation

## Feedback

Utility Advisory Council  
Mel Pace, P.Eng.





# Serious Electrical Incident Reporting Follow-up

## Implementation of New SEI Reporting Process:

- Currently in transition of reporting via Report Online form since August 1st, 2022
- LDCs may still notify ESA via telephone, fax or email to the CSC in the interim
- Testing by some LDCs has started
- Expected date of transition by all LDCs will be communicated in an updated Distributor Bulletin
- ESA Guideline for Reporting of SEIs will be updated

The screenshot shows the top portion of the 'Report Online' form. The header includes the ESA logo and a 'Report Online' button. Below this is a navigation bar with three tabs: 'Details' (selected), 'Files', and 'Submission', followed by a 'Next' button. The main section is titled 'Section A: Reporting Info'. It contains several input fields: a 'Phone Number' field with a 'Country Code' dropdown (showing '1') and a 'Phone Number' text box; a 'Submitter Name' text box; an 'Email Address' dropdown menu; an 'Agency submitter is representing:' text box; an 'Additional Email Address(es) to be notified of submission:' text box; a 'Location of Incident' text box; a 'City' text box; and a 'Date of Incident' text box with a placeholder 'dd-MMM-yyyy'.

# Thank You

November 1, 2022

# Working Group – Third Party Attachment Guideline

## Information

Utility Advisory Council  
Jason Hrycyshyn



# Working Group – Third Party Attachment Guideline

## Update

- Working Group Members have been selected
- First meeting scheduled for November 16, 2022
- 3 Communications Reps, 8 Electrical Distributor Reps, 0 G.I.

Rogers	Hydro One Networks Inc
Bell Canada	Oakville Hydro Electricity Distribution Inc
Xplore Inc.	Synergy North Corp
	Elexicon Energy Inc
	Toronto Hydro – Electrical Systems Limited
	Entegrus Powerlines Inc
	Hydro Ottawa Limited
	Alectra Utilities Corp

# Working Group – Third Party Attachment Guideline

## **ESA Goals include**

- Updating and revising Guideline material
- Incorporating Bulletins and similar into the Guideline
- Reviewing the PEO Guideline regarding Software-Based Engineering Tools



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November 1, 2022

# 3-Phase 3-Wire Solidly-Grounded Wye Customer Services

## Update

Utility Advisory Council  
Jason Hrycyshyn





# 3-Phase 3-Wire Solidly-Grounded Wye Customer Services

FLASH NOTICE #1	January 2022	May 2022	October 2022
Number of Possible Configuration of Concerns	Number of Possible Configuration of Concerns	Number of Possible Configuration of Concerns	Number of Possible Configuration of Concerns
~15,000	~5,416	~4,275	~3662
Number of LDCs without a Possible Configuration of Concern	Number of LDCs without a Possible Configuration of Concern	Number of LDCs without a Possible Configuration of Concern	Number of LDCs without a Possible Configuration of Concern
12	35	38	39





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Utility Advisory Council November 2, 2022

# Attachment of overhead service conductors

Patrick Falzon, C. Tech  
Powerline Safety/Code Specialist  
Powerline Safety Group  
Electrical Safety Authority

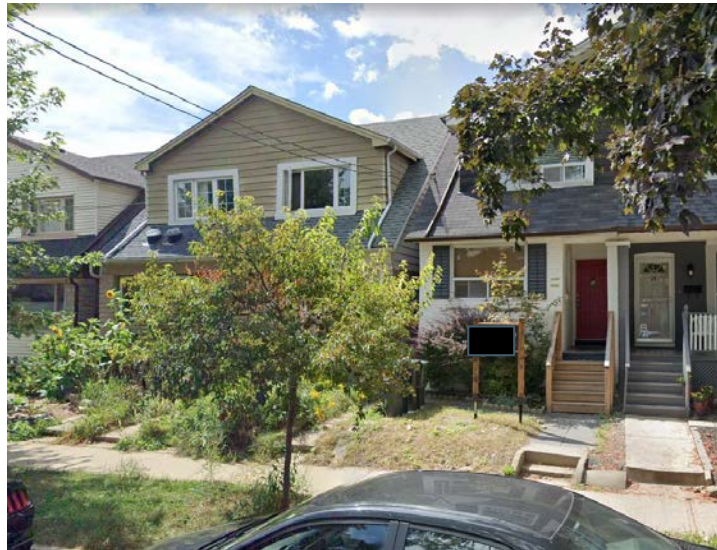


# Attachment of overhead service conductors

## Background

ESA has seen an increase in the number of residential service upgrades.

Due to some locations where there is very little to no clearance between buildings, only option provided by the LDC in consultation with the customer's Licensed Electrical Contractor is to locate the point of attachment onto the fascia board.





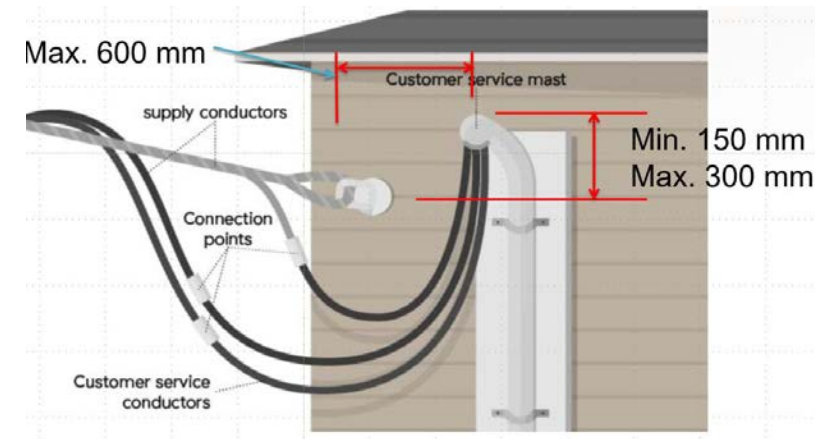
# Attachment of overhead service conductors

OESC Rule 6-112 2) b) states

- 1) A means of attachment shall be provided for all supply or consumer's service conductors.
- 2) **The point of attachment shall be**
  - a) on the same side of the building as the consumer's service head or equivalent;
  - b) solidly anchored to the structure or service mast;**
  - c) in a position that allows the overhead service conductors or cables to have an angle away from the structure; and
  - d) in compliance with the requirements of the supply authority.

6-116 Consumer's service head location

- 1) **The consumer's service head or equivalent shall be installed**
  - a) in compliance with the requirements of the supply authority; and
  - b) in such a position that the point of emergence of the conductors from the consumer's service head or equivalent is
    - i) a minimum of 150 mm and a maximum of 300 mm above; and
    - ii) a maximum of 600 mm horizontally from the support for attachment of the overhead service conductors or cables.



# Attachment of overhead service conductors

Fascia boards varies in size from 1"x 6", 2"x 6" or 2"x 8".

ESA has seen existing locations where the point of attachment has pulled away from the fascia board

In consultation with the Building Department, the fascia board is defined as a wooden or other flat piece of material that is covering the ends of the rafters and is considered part of the roof

OESC Rule 6-112 8) states:

***8) The supply or consumer's service conductor support shall not be attached to the roof of a structure, except as permitted in Subrule 9).***

***9) Notwithstanding Subrule 8), it shall be permitted to fasten the upper service mast support and the eye bolt, to which a guy wire is attached, to a main structural member of the roof, such as a roof rafter, a roof truss, or the equivalent.***





# Attachment of overhead service conductors

October 2022 Bulletin 6-9-3

Published deviation allowing the point of attachment on to the fascia board

For service upgrades and repairs on existing dwellings, notwithstanding Rules 6-112 8) and 6-116 b), the point of attachment is permitted to remain on the fascia board when all of the following conditions have been met:

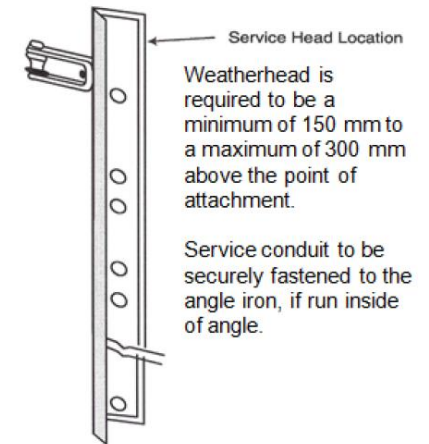
- the point of attachment is not pulling away from the fascia board;
- the fascia board does not show any signs of deterioration and is verified by the installer to be structurally sound (Note1); and
- the point of attachment is acceptable to the supply authority.
- \*Note 1: For existing installations, the fascia board and point of attachment shall be supported in a manner that is equivalent to fastening to the building structure. When the support is inadequate, it shall be abandoned or reinforced to the equivalent level of building structural support.
- Deviation does not apply to new buildings

# Attachment of overhead service conductors

Angle iron has been accepted practice

Bulletin 6-9-3 provides the following deviation with the following conditions for new installations:

- 1) Perforated light duty angle iron is not permitted.
- 2) Angle iron shall be 100 mm x 100 mm x 9.5 mm (4" X 4" X 3/8") hot dipped galvanized)
  - Angle iron shall have a minimum of three through bolts securely fastened to the building structure.
  - Bolts shall be 16 mm (5/8") hot dip galvanized.
  - Bolts shall have 50 mm X 50 mm (2" X 2") flat washers.
- 3) The consumers service conduit is required to be securely fastened and supported where it extends through the roof line and the emergence of the conductor from the weather head is required to be a minimum of 150 mm to a maximum of 300 mm above the support for the of attachment of the overhead conductor, as required by Rule 6-116 1) b).
- 4) In accordance with the supply authority's requirements for the point of attachment.

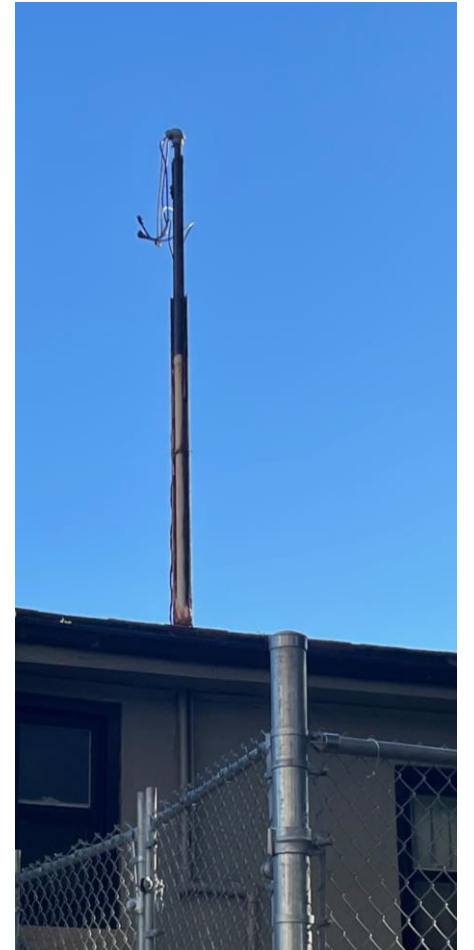




# Attachment of overhead service conductors

For service upgrades or repairs, existing angle iron smaller than 100 mm x 100 mm x 9.5 mm (4" X 4" X 3/8") and is not hot dip galvanized, is permitted to remain provided the angle iron shows no signs of deterioration and is in accordance with the supply authority's requirements.

Note: For existing installations where U-channels support supply or consumer supply conductors, it will not be permitted to be reused for overhead conductor support.







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November 1, 2022

# CSA C22.3 No. 11 - 2022 - Maintenance of Electric and Communication Utility Equipment and Systems

## Information

Utility Advisory Council  
Jason Hrycyshyn



# CSA C22.3 No. 11 - 2022 - Maintenance of Electric and Communication Utility Equipment and Systems

## Highlights – (from Feb 2022 – UAC Meeting)

**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

Note: Currently there are no requirements for a “Detailed Inspection” in Appendix C. This may require new processes and training to be put in place by Distributors which may increase costs.

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

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

Note: Currently there is only the “Time-based Approach” allowed. In the short term the “Risk-based Approach” may increase costs incurred by the Distributor in the short term, however in the long term this should be a lower cost for the majority of the equipment.

# CSA C22.3 No. 11 - 2022 - Maintenance of Electric and Communication Utility Equipment and Systems

## C22.3 No.11 - Schedule

~~Public Review: Nov 2021- Jan 2022~~

~~CSA Group's Pre-Approval Editing: Jan - April 2022~~

~~Technical Committee Ballot: May 2022~~

~~Ballot Disposition: May - Jun 2022~~

~~Publication Planned: July - Sep 2022~~

**Publication Complete: September 2022**

- ESA and OEB are looking into jointly assessing next steps.
- UAC feedback / advice



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November 11, 2022

# Guideline for Distributed Energy Resources (DER) - 1 Year Revisit

## Feedback

Utility Advisory Council  
Jason Hrycyszyn



# Guideline for Distributed Energy Resources (DER) - 1 Year Revisit

## BACKGROUND INFORMATION

The Utility Advisory Council suggested that the Council review the “Guideline for Distribution Energy Resources” annually. The annual period ended **June 1, 2022**.

ESA is not suggesting any changes at this time.

ESA has no record of receiving any requests for changes.

ESA is requesting feedback regarding next steps. (e.g. reaffirmation, and date for the next scheduled review).

# Guideline for Distributed Energy Resources (DER) - 1 Year Revisit

ESA is interested to hear if Electrical Distributors are requiring installations meet the latest version of CSA C22.3 No.9 for all or some installations?

ESA is interested to hear more about the adoption of Advanced inverter functions

- Under/over frequency and voltage ride-through
- Time-phased flexibility in disconnecting and reconnecting
- Control of advance functions (pre-sets vs utility control)
- Etc...





# Contact Us

Electrical Safety Authority

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Utility Advisory Council November 2, 2022

# Service Entrance Equipment Control Information

Patrick Falzon, C. Tech  
Powerline Safety/Code Specialist  
Powerline Safety Group  
Electrical Safety Authority





# Service Entrance Equipment Control

## Background

ESA has been identifying field concerns where the utilities has been installing their locks on customer's main service switch which may not meet the requirements of Rule 6-206 1) b)

Rule 6-206 Consumer's service equipment location

- 1) Service boxes or other consumer's service equipment shall be
  - a) installed in a location that complies with the requirements of the supply authority;
  - b) **readily accessible or have the means of operation readily accessible**; and

## Definition

Readily accessible — **capable of being reached quickly for operation**, renewal, or inspection, without requiring those to whom ready access is a requisite to climb over or remove obstacles or to resort to portable ladders, chairs, etc.



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Utility Advisory Council November 2, 2022

# Vegetation Management Feedback

Patrick Falzon, C. Tech  
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# Vegetation Management

Electrical Distributors legal responsibility under Ont. Reg. 22/04 to manage vegetation around their assets:

- Primary distribution lines on private and public right of way
- Secondary distribution lines including service lines on private and public right of way
- Electrical equipment such as transformers







# Vegetation Management

## Interpretation

### *1. In this Regulation,*

*“distribution line” means an electricity distribution line, transformers, plant or equipment used for conveying electricity at voltages of 50,000 volts or less;*

*“secondary distribution line” means an electricity distribution line conveying electricity at 750 volts or less phase to phase*

## Safety Standards

*4(4) “All overhead distribution lines, including secondary distribution lines, shall meet the following safety standards:*

*4(4)3. Energized conductors and live parts shall be barriered such that vegetation, equipment or unauthorized persons do not come in contact with them or draw arcs under reasonably foreseeable circumstances.”*



# Vegetation Management

Some Electrical Distributors Conditions of Service are creating the appearance of transferring the responsibility onto the property owners not aligning with the intent of Reg 22/04. Thereby creating hazards and potential incidents not meeting the primary intent of the Regulation-Electrical Safety for members of the public



# Vegetation Management

## Some Conditions of Service indicates otherwise

Example 1: *“The customer is responsible for the cost of trimming trees on private property in the vicinity of XXXXX Distribution Inc. lines.”*

*Example 2: “XXXXX will coordinate and maintain tree clearance around all its distribution lines that are located on the public road allowance. XXXXX will also maintain tree clearance around its overhead lines **over 750 Volts** that may be located on private property.” “**Customers are also responsible for continuing tree trimming, tree and brush removal around service lines that are less than 750 Volts that are located on private property** as well as around overhead lines over 750 Volts when these lines are owned by the Customer.”*

Potential issues:

- Customer refuses to pay to hire a utility arborist and hazard is left outstanding;
- Customer may hire the non competent person to perform the work; or
- Property owner will tackle the work themselves to save money and putting themselves in harms way



# Vegetation Management

## Next Steps:

- When ESA issues a utility public safety concern letter to the Distributor and the safety hazard has not been resolved after a certain time, a compliance review will be initiated.

Current Distributor Bulletin DB-12-09 v2 will be revised

ESA will recommend Electrical Distributors review their  
Conditions of Service

Recommendations considered from the UAC, ESA may consider  
approaching the OEB.



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Utility Advisory Council November 2, 2022

# School Bus Incident Information

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# School Bus Incident

- School bus hit a utility pole and brought lines to the ground
- 18 students on board. 16 exited the vehicle, 2 remained due to injuries
- First responders attended site before LDC was able to make the site safe
- Recloser did operate instantaneously and upon energization took out the in-line fuse



# School Bus Incident

- When LDC crew arrived to make the site safe, they noticed emergency responders around the bus and students outside the bus as well
- Immediate action
  - ESA has communicated with the school bus company and will work with the drivers to provide powerline safety awareness at their mandatory training session- discussion placement of stickers
  - School bus company has 8 locations
  - Province wide initiative
  - ESA will work with the Ontario School Bus Association to provide powerline safety awareness information





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November 11, 2022

# Measurements Canada Meter Drawing Signed by a Professional Engineer

## Feedback

Utility Advisory Council  
Jason Hrycyshyn





# Measurements Canada Meter Drawing Signed by a Professional Engineer

## BACKGROUND INFORMATION

The Utility Advisory Council suggested that ESA provide direction with respect to metering installations and the roll of the Measurements Canada Meter Drawings.

ESA has provided a new Draft Bulletin for this councils review and is seeking feedback.

# Measurements Canada Meter Drawing Signed by a Professional Engineer

## DRAFT BULLETIN - HIGHLIGHTS

1. Measurements Canada specifications (MCS) only address accuracy of the electricity metering.
2. MCS are deemed to satisfy Regulation 22/04 section 7, without approvals by a P.Eng. (i.e. no additional approval required)
3. There are safety requirements with respect to metering work that are not addressed by the MCS and are required to be addressed.
  - Examples are provided in the draft bulletin





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