



Utility Advisory Council Members

LDC/Owner-Operator

Alectra Utilities	Joseph Chiuco
Enova Power Corporation	Shevan Mustafa
Festival Hydro	Goran Borovickic
Hydro One - Transmission	Ajay Garg
Hydro Ottawa	Edward Donkersteeg
InnPower Corporation	Arthur Berdichevsky
London Hydro	Scott Glazer
Newmarket-Tay Power Distribution Ltd.	Eric Andres
Toronto Hydro	Sushma Narisetty

General Interest

Bell Canada/Telecom Industry	Zhi Lin
Consumer Advisory Council	Sandy Manners
Power Workers Union	Patrick Fee

Regrets

Elexicon Energy Incorporated	
Hydro One - Distribution	
CSA Group	
IHSA	

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

Other Attendees

Marvio Vinhaes (ENWIN Utilities), Ryan Zade (Ministry of Energy), Fred Kouhdani (Hydro One Transmission), Lori Gallagher (Utilities Standards Forum), Rob Koekkoek (Orangeville Hydro), Hele Guo (Ontario Energy Board), Namrata Joshi (Alectra) ,

ESA Attendees

Nansy Hanna, Jason Hrycyshyn, Patrick Falzon, Sean Burger, Mel Pace, Claire Loucks, Saira Husain, Freda Lam



1 Notice & Quorum

- The meeting has quorum

2 Agenda

The following motion was carried:

Motion: To Adopt the agenda

Motioned by: Ed Donkersteeg

Second: Sushma Narisetty

Motion carried.

3 Minutes of UAC Meeting

The following motion was carried:

Motion: To accept the minutes of the December 7, 2023 meeting

Motioned by: Ed Donkersteeg

Second: Sushma

Motion carried.

4 Open Action Items

2019-03-01: ESA to develop a process for facilitating resolution of conflict between LDCs and a Third Party equipment owner

- ESA will come up with a plan by the June 2024 meeting to move this item forward

2020-03-01: Update on the 3-Phase 3-Wire Solidly-Grounded Wye Installations

- On the agenda

2022-03-03: Distributor Bulletin: Service Entrance Equipment that is under the control of the equipment owner

- This is still in progress

2023-02-03: ESA is looking for feedback from LDC's on their requirements and rationale for customer owned disconnect switch to be located before the customer's service equipment

- This is still in progress

2023-02-04: ESA is looking for feedback from LDC's on their requirements and rationale for PME to be located before the customer's service equipment

- On the agenda

2023-02-05: What results of the Public Powerline Awareness Survey can be shared with the UAC

- On the agenda



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

- There are no concerns with the progress
- ESA follows up on the progress when necessary

6 Energized Equipment Barriers for Temporary Work - Jason Hrycyshyn

- The Council agreed that what ESA was showing was unsafe and that ESA should bring this to the attention of the industry
- ESA was asked if we could specifically say 'work instruction'
 - o This is language that comes directly from the regulation
 - o This terminology includes work instruction
 - o ESA will mention work instruction in the document
- Once the flash notice is updated ESA will circulate for a week so the Council can review before it is posted

ACTION ITEM 2024-01-01: Comments were provided at the February 29, 2024 meeting. Updates to the draft Flash Notice will be made. The updated flash notice will be provided to the UAC for a week to provide any additional feedback. If no additional feedback is received then the flash notice will be published. – Jason H

7 Ontario Electrical Safety Report - Freda Lam

- A high level overview of the 2022 Ontario Electrical Safety Report (OESR) was provided <https://esasafer.com/2022-ontario-electrical-safety-report/>

8 ESA Powerline Safety Campaign (Action Item 2023-02-05) - Saira Husain

- ESA shared details and results of the Powerline Safety Campaign

9 Loading Standard for Subsurface Chamber and Box Lids - Jason Hrycyshyn

- The Council was asked if it was aware of a March 11, 2022 Ontario government Alert entitled "Alert: Loading limitations of utility service covers" (<https://www.ontario.ca/page/alert-loading-limitations-utility-service-covers>)
 - o The council members were not aware of this alert
- Council members indicated that 'light duty' covers were typically green to match their surroundings when installed in fields and other soft surface environments and that 'heavy duty' covers were typically gray to more closely match things like sidewalks where heavier traffic is more likely



- Based on the picture it appears that the cover used is suitable for its environment
 - o Lori will bring this to the No. 7 Committee to see if they have any feedback on this issue
- When placing assets on the public right of way the LDC would ask for approval from the Municipality and the Municipality would verify that equipment (cover) is suitable for the traffic that will be in that area (pedestrian, service vehicles, etc.)
- Under the 'Protective Measures' section of the alert could be interpreted such that employers could 'replace an existing utility cover with one of sufficient strength'
 - o The Ministry should be asked to update this language so it doesn't advise workers to replace the cover but instead contact the necessary utility (LDC, Telecom, etc.) to have the cover replaced
- These covers can be covered with snow and other debris effectively concealing them from workers
- Patrick F sits on the Provincial Labour Management (Section 21) committee with the MOL and can take this to that committee to discuss further
- Jason H will put a draft bulletin together (will work with Scott Glazer) and get feedback from PF section 21 committee and bring back to the UAC

ACTION ITEM 2024-01-02: Lori G will discuss the Loading Standard for Subsurface Chamber and Box Lids at the upcoming Section 7 Committee meeting to see if there is any feedback the Committee can provide or if changes to standards would be warranted. – Lori G

ACTION ITEM 2024-01-03: Patrick F will discuss the Loading Standard for Subsurface Chamber and Box Lids at the upcoming Provincial Labour Management (Section 21) committee meeting to see if there is any feedback the Committee can provide or if changes to standards would be warranted. – Patrick F

ACTION ITEM 2024-01-04: Jason H will work with Scott G to draft a bulletin with the input from Lori G (ACTION ITEM 2024-01-02) and Patrick F (ACTION ITEM 2024-01-03) on the Loading Standard for Subsurface Chamber and Box Lids. – Jason H

10 Incident involving incorrect phase markings on secondary side of transformer - Sean Burger

- A recent incident involving different phase markings on the secondary side of a transformer vs the primary side of a transformer was reviewed
- DB-08-10 Standard Operating Procedure review was published as a result of a similar incident



- ESA Recommends: Electrical Distributors should review their Standard Operating Procedures to ensure connections are made safely, correctly and that stakeholder's roles are clearly defined.

11 Proposed Ontario Amendment on PME on the Line side of consumer's service box (Action Item 2023-02-04) – Patrick Falzon

- The proposed Ontario Amendment (OA) to the Ontario Electrical Safety Code Rule 36-200 was discussed
- This OA was put forward by members of the UAC

12 2024 OESC – Ontario Amendments Public Consultation

- The Public Consultation will run from February 29, 2024 to April 22, 2024 and can be found on the ESA website at <https://esasafe.com/public-consultations/>
- Once the consultation is complete ESA will review the comments received and make any updates as necessary
- ESA Board of Directors will review in June 2024 for approval to send to the Ministry
- After Board approval it will be sent to the Ministry for review and approval
- The Council had some feedback to provide ESA
 - ESA encourages everyone to submit their comments through the OA process and ESA will review all the comments

February 22, 2024

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	February 2023	November 2023	February 2024
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	2,983	1,261	967
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	41	44	47



Contact Us

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Energized Equipment Barriers for Temporary Work

Regulation 22/04

Feedback
February 29, 2024

Energized Equipment Barriers for Temporary Work

- Focus on demarcation point safety concerns.
- Temporary work, accessible to the public, where energized parts and/or conductors were not placed behind typical end-of-construction barriers.
- Distributor left the job site.



Energized Equipment Barriers for Temporary Work

Highlights – Flash Notice

- Aligns with 2018, Distributor Bulletin entitled “Energized Temporary Distribution Work”
 - Contains ESA Direction “**For temporary electrical installations that are common occurrences where the equipment is to be energized**, in order to maintain compliance with Regulation 22/04 **Electrical Distributors shall comply with all sections of Regulation 22/04.**”
- Electrical Distributors are expected to have approved plans, drawings or specifications that address the work above and ensure that
 - No energized parts or conductors are in the equipment that the customer or Licensed Electrical Contractor (LEC) is expected to be working on or in; **and**
 - Barriers (e.g. mechanical protection) exist that are suitable for the situation and hazards to which the live parts and/or conductors are reasonably expected to be exposed.



Loading Standard for Subsurface Chamber and Box Covers

Regulation 22/04

Information

February 29, 2024



Loading Standard for Subsurface Chamber and Box Covers

- March 11, 2022 the Ontario government issued an Alert entitled “Alert: Loading limitations of utility service covers”.
 - <https://www.ontario.ca/page/alert-loading-limitations-utility-service-covers>
- ESA is interested in understanding the reach and impact of the Alert on Distributors.

Loading Standard for Subsurface Chamber and Box Covers

- **Highlights**

- Suggested precautions when conducting construction work over underground utility subsurface chambers and boxes (vault) under sidewalks and other non-roadway areas.
- Ontario a worker died and another was critically injured while operating a mobile elevated work platform over a utility service cover that was on top of a telephone company cable vault embedded in concrete below a public sidewalk.

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Loading Standard for Subsurface Chamber and Box Covers | February 29, 2024



Loading Standard for Subsurface Chamber and Box Covers



- **Highlights**

- Cover broke under the weight of the equipment, destabilizing the elevated platform and causing it to tip over.
- This was a light duty cover

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Loading Standard for Subsurface Chamber and Box Covers | February 29, 2024



Loading Standard for Subsurface Chamber and Box Covers

• Highlights

- Utility vaults located underground, in grass surrounds or designated walkways where there is no deliberate vehicle traffic, may use “**light duty**” service covers designed for green belt application. These covers are rated at 907 kilograms (kg) or 2,000 pounds (lbs) and categorized for pedestrian use only.
- Utility vaults that are located anywhere in a sidewalk where vehicular traffic is limited to class 7 vehicles (3,060 kg or 2.5 ton truck) require a “**heavy duty**” cover with at least a tier 22 grade and designed to withstand a maximum applied load of 9,979 kg or 22,000 lbs.

Loading Standard for Subsurface Chamber and Box Covers

• Highlights

- **Obligations under the *Occupational Health and Safety Act* and the *Construction Projects Regulation***
- Employers must ensure that existing utility covers are capable of supporting loads they may be subjected to by the work activities taking place and, if necessary, replace an existing utility cover with one of sufficient strength. Alternatively, the utility cover may itself be covered with a material capable of supporting the load without failure.

Loading Standard for Subsurface Chamber and Box Covers

- **Discussion**

- Feedback on the Alert
- Suggested action items for ESA
 - ESA Bulletin, C22.1, C22.3 No.7

- **Additional Resources**

- SCTE Standard – SCTE 77 2023 – entitled “Specification for Underground Enclosure Integrity”
 - Produced by “The Society of Cable Telecommunications Engineers” (SCTE) Standards and Operational Practices
 - The document is intended to provide guidance for the use of enclosures in non-deliberate traffic areas



Incident - Incorrect Phase Markings on Secondary Side of Transformer

Feedback
February 29, 2024

Incident - Incorrect Phase Markings on Secondary Side of Padmounted Transformer

- December 2023, while installing a cable to a padmounted transformer, an LEC labeled their wiring **Red**, **White**, **Blue** for L1, L2, L3 and Black for Neutral. (Due to the fact that they normally colour code this way in other high voltage industries)
- The LDC connected the padmounted transformer secondary **Red**, Black, **Blue** for X1, X2, X3 and **White** for X0
- Another LEC wired a disconnect switch **Red**, Black, **Blue** for L1, L2, L3 and **White** for their neutral to be code compliant.
- Shocks were experienced on a doorknob while energized and requested the LDC to disconnect the service.
- The LDC did not verify voltage beyond the padmounted transformer secondary.

Incident - Incorrect Phase Markings on Secondary Side of Padmounted Transformer

- DB-08-10 Standard Operating Procedure Review
 - Published as a result of a similar incident
 - Recommends: Electrical Distributors should review their Standard Operating Procedures to ensure connections are made safely, correctly and that stakeholder's roles are clearly defined.



Ontario Amendment Rule 36-200

Patrick Falzon and Peter Petriw
Information
February 24, 2024

Ontario Amendment Rule 36-200

Background from Dec 7, 2023 UAC meeting

- HV service layouts provided by the LDC's shows the PME beyond the ownership demarcation point ahead of the customer's service equipment
- This requirement causes the customer to install a non-code compliant installation
- Option-UAC to submit an Ontario Amendment.

Customer Service Entrance Equipment

PME

Ownership Demarcation point

Ontario Amendment Rule 36-200

Members of the UAC created a proposal to accept PME's ahead of the consumer's service equipment

Proposal presented to the Ontario Provincial Code Committee (OPCC) Feb 21, 2024 meeting

Add Ontario amendment to Rule 36-200:

36-200 Service equipment **and metering** location

1) Service equipment shall be installed in a location that complies with the requirements of the supply authority and, in the case of a building, shall be at the point of service entrance.

2) **Metering equipment shall be connected on the load side of the service equipment, except that it shall be permitted on the supply side when owned by the supply authority.**

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Ontario Amendment Rule 36-200

Next steps:

Will be posted for public consultation

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