



**MINUTES OF THE
FOURTH ELECTRICAL SUB-COUNCIL MEETING OF 2018**

DATE: November 5, 2018

TIME: 9:30 a.m. to 3:10 p.m.

LOCATION: Safety Codes Council Office, Edmonton

PRESENT: *Sub-Council Members*
Gerry Wiles, Chair
Scott Basinger, Vice Chair – North
Don Bradshaw
Larry DeWald
Tim Driscoll
Adam Ghani
Glenn Hedderick, Vice Chair - South
Ken Hood
Nicolas Leblanc
Lori Monaghan
Allan Nagel
Brian Townsend

Safety Codes Council

Allison Karch, Susan Rossmann, Andrea Snow, Tyler Wightman (for item 4.1. only),
Danielle Paradis (for item 4.1. only)

Alberta Municipal Affairs

Clarence Cormier, Bob Hall, Liz Gillean, Jon Elliott

REGRETS: John Briegel, Stewart Purkis, Darcy Teichroeb, Barry Voogd

GUEST: Patrick Conway, CSA Group

RECORDER: Sandi Orr

2019 MEETINGS: February 11, May 6, September 16, November 18

1. Meeting Opening

The Chair called the meeting to order at 9:31 a.m. Participants were reminded that the primary duty of all Council Members is to act in the interest of safety in the built environment for the benefit of all Albertans. A round table introduction was held.

1.1 Agenda Adoption

The agenda was included in the portal and reviewed. The following additions were made:

- 4.12. Ground Plates
- 4.13. HazLoc Updates

Tim Driscoll / Brian Townsend moved to adopt the agenda, as amended, with a flexible order of business; CARRIED

1.2. Adoption of September 17, 2018 Minutes

The minutes were included in the portal and reviewed.

Nicolas Leblanc / Tim Driscoll moved to adopt the minutes of the September 17, 2018 meeting, as circulated; CARRIED

2. Matters for Decision

2.1. Sub-Council Appointments (motion to recommend appointment to the Board)

All appointments were conducted in camera and all guests left the meeting.

2.1.1. Reappointment of Adam Ghani to represent the Major Municipalities – South industry segment for a term ending January 31, 2022, effective February 1, 2019

Correspondence regarding the reappointment was included in the portal and reviewed. Adam Ghani left meeting during this agenda item.

Don Bradshaw / Ken Hood moved to recommend to the Board the reappointment of Adam Ghani to the Electrical Sub-Council to represent the Major Municipalities – South industry segment for a term ending January 31, 2022, effective February 1, 2019; CARRIED

2.1.2. Nomination of Bert DeBruin to represent Electrical Contractors industry segment for a term ending January 31, 2022, effective February 1, 2019

The nomination was included in the portal and reviewed.

Scott Basinger / Don Bradshaw moved to recommend to the Board the appointment of Bert DeBruin to the Electrical Sub-Council to represent the Electrical Contractors industry segment for a term ending January 31, 2022, effective February 1, 2019; CARRIED

2.2. Working Group Appointments (motion to appoint to working group)

2.2.1. Nomination of Barry Thoms to the AEUC Working Group for a term ending May 1, 2021, effective immediately

The Working Group's recommendation and information regarding the candidate were included in the portal and reviewed.

Brian Townsend / Nicolas Leblanc moved to accept the working group's recommendation to appoint Barry Thoms to the AEUC Working Group for a term ending May 1, 2021, effective immediately; CARRIED

2.2.2. Nomination of Ken Chao to the AEUC Working Group for a term ending May 1, 2021, effective immediately

The Working Group's recommendation and information regarding the candidate were included in the portal and reviewed.

Brian Townsend / Nicolas Leblanc moved to accept the working group's recommendation to appoint Ken Chao to the AEUC Working Group for a term ending May 1, 2021, effective immediately; CARRIED

2.2.3. Nomination of Clark Laing to the AEUC Working Group for a term ending October 15, 2021, effective immediately

The Working Group's recommendation and information regarding the candidate were included in the portal and reviewed.

Brian Townsend / Nicolas Leblanc moved to accept the working group's recommendation to appoint Clark Laing to the AEUC Working Group for a term ending October 15, 2021, effective immediately; CARRIED

2.2.4. Nomination of Will Hillary to the AEUC Working Group for a term ending October 15, 2021, effective immediately

The Working Group's recommendation and information regarding the candidate were included in the portal and reviewed.

Brian Townsend / Nicolas Leblanc moved to accept the working group's recommendation to appoint Will Hillary to the AEUC Working Group for a term ending October 15, 2021, effective immediately; CARRIED

2.3. Election of Sub-Council Chair

It was explained that the election of the Sub-Council Chair must be held every two years, but there are no limits on how many consecutive terms a Chair may serve.

The floor was opened for nominations. Gerry Wiles was nominated. After 3 calls and no further nominations, ***Gerry Wiles was appointed as the Electrical Sub-Council Chair for a two-year term, by acclamation.***

2.4. Validation of Electrical Group B Training Course (100178)

The draft course was included in the portal.

Tim Driscoll / Brian Townsend moved to approve the course material for the Electrical Group B Training Course (100178); CARRIED

3. Review Matters Arising/Action List

	Item	Action	Date	Responsible	Status/Update
1.	Crossover with Building Discipline	Provide further information about where Electrical SCOs might inspect Building Code items to the Electrical Sub-Council Liaison to be forwarded to the Building Sub-Council.	Nov 7/16	Wiles	Brought to the BSC and TCC, still in progress
		It was requested that the following topics be brought forward to the BSC for discussion: <ul style="list-style-type: none"> • Exterior walls on new construction and not breaking the building envelope • Suggested revisions to STANDATA 14-BCV-012 Oil and Gas Processing Facilities 	May 7/18	Wiles	Brought to the BSC and TCC, still in progress
2.	CE Code-072 – Concrete Encasements	Revise the RFI for review by the working group and sub-council.	Feb 6/17	Basinger	Completed
		Consider drafting a Proposed Change to CE Code Part 1	Feb 6/17	CE Code Working Group	In progress
		City of Calgary may be asked to help redraft the Alberta STANDATA as an interim solution for consideration.	Feb 6/17	Basinger/Ghani	Completed
3.	Street Lighting and Traffic Control	Compile a complete review of processes throughout the province re. Street Lighting and Traffic Control Infrastructure and will report back to ESC with recommendations within 6 months.	Sep 25/17	Purkis / AEUC Working Group	Completed
4.	Pictograms of Certification Marks	Bring the following item to the TCC: Consider including all pictograms of certification marks and special inspection labels that are acceptable for use in Alberta, updated annually, include the applicable Standards Council of Canada links, along with including	Nov 20/17	Wiles	In progress

		information about Recognized Component marks and the limitations on their use.			
5.	Power Over Ethernet	Refer the Power over Ethernet submission to the CE Code Working Group for recommendation back to sub-council	Feb 5/18	Basinger	Completed
6.	Field Approvals	Refer the Field Approvals documentation to CE Code Working Group for recommendation back to sub-council	Feb 5/18	Basinger	Completed
7.	Demarcation Point between CE Code Part 1 and AEUC	Refer the issue regarding clarification of the demarcation point to the CE Code and AEUC working groups.	Feb 5/18	4.5 on today's agenda	Completed
8.	Medium Voltage Terminations	Forward the Medium Voltage Terminations issue to the CE Code Working Group.	Feb 5/18	Basinger	Needs to be discussed by the Working Group

4. Matters for Discussion

4.1. SCO Entry Qualifications

The Director of Operations and the Administrator of Certification were welcomed to the meeting to initiate discussion regarding entry qualifications for Building, Electrical, Gas and Plumbing SCOs. A slide was shown on screen of the SCO entry qualifications in the construction disciplines. This was brought forward to create awareness of the inconsistencies and an opportunity for cross-discipline discussion in the future to potentially align entry qualifications. The intent is to have a general discussion and no formal working group is being created at this time. An ESC representative was requested for this discussion and Brian Townsend volunteered.

The floor was opened for questions and the following was noted:

- The required work experience must be gained after journeyman certification
- A potential reason for Building SCOs requiring less experience than other disciplines could be because of the extensive number of SCO courses that are required in the building discipline
- It was suggested the differences could have something to do with apprenticeship—Gas and Plumbing require 3 years of apprenticeship, while Electrical requires 4 years to become a Journeyman

It was noted that if any recommendations were to be brought forward, they would be brought back to all of the sub-councils as well as the TCC.

4.2. Unintended Omission of CE Code 2015 Rule 10-808 Installation of Equipment Bonding Conductors as Part of the Section 10 Rewrite

The Electrical Administrator provided an overview of the Unintended Omission of CE Code 2015 Rule 10-808 Installation of Equipment Bonding Conductors as Part of the Section 10 Rewrite and discussions that are being held on how to address this in Alberta.

From AMA's perspective, reintroducing this as a STANDATA could be challenged. AMA is looking at all options, but it is hoped that an Errata will be issued by CSA because a change in regulation to address the gap could take well over a year. It was questioned if that section of the 2015 CE Code could be used. It was explained that the 2018 CE Code will be in force on February 1, 2019 and a mixture of two different codes (i.e. parts of 2015 and parts of 2018) is not ideal.

A discussion was held regarding the wording "as published from time to time" in the regulation. It was clarified that this is to address timely code adoption, wherein the code automatically comes in force 12 months after publication unless changed through Ministerial Order.

It was suggested that a STANDATA be published to heighten awareness to industry and educational institutes of the unintended omission.

The matter was left in AMA's hands to find the best solution to address the omission and AMA will continue to keep the sub-council informed. [Elliott/Cormier]

4.3. Street Lighting – Possible Path Forward Using OBIEC

Scott Basinger brought forward concerns regarding street lighting when it is owned by a municipality and the municipality is not a utility. It was suggested that OBIEC (Part 4) could be a path forward to allow using the same practices currently being used. It was clarified that Part 4 is not adopted for use in Alberta. Although the recommendation was presented to the TCC many years ago, the use of Part 4 was not recommended to the Minister because it was only marginally supported by the ESC.

It was also noted that OBIEC was intended for industrial facilities. Concern was expressed that if it would be allowed for streetlighting, it could expand to other types of installations.

During the in-depth discussion, the following was noted:

- If installed under Part 1, it must be inspected by an Electrical Group A SCO; and if installed under Part 3, it must be inspected by an Electrical Group B SCO. The greatest issue is determining the demarcation point.
- STANDATA - Section 0 – Object Scope, and Definitions regarding Streetlighting needs to be reviewed and updated.
- An overview was provided on the processes used in the City of Edmonton, which are working quite well.
- In the past, this was never an issue because utilities owned all the streetlighting, but this has changed over the years. Streetlighting in smaller or rural areas is likely still owned by utilities. The issue is likely more predominant in larger urban areas.

Scott Basinger / Glenn Hedderick moved to refer this matter to the CE Code Working Group for discussion and a recommendation to be presented to the ESC; CARRIED

4.4. Electric Vehicle Management Systems

A request for interpretation on Rule 8-500 Electric Vehicle Management Systems and how it relates to Rules 86-300 (2) and 8-106(11) was submitted to the Chair and reviewed on screen. A brief overview was

provided regarding a recent presentation that was provided to the Chair and Administrator on some of the current issues.

Tim Driscoll / Glenn Hedderick moved that the request for interpretation on Rule 8-500 Electric Vehicle Management Systems and how it relates to Rules 86-300 (2) and 8-106(11) be referred to the CE Code Working Group for a recommendation to be presented to the ESC; CARRIED

4.5. Solar and the CE Code Interpretation Document

A list was included in the portal of upcoming and current issues encountered by Electrical SCOs for solar photovoltaic systems which apply to Section 64 of the CE Code Part 1 2015 and 2018.

Inspection concerns and an email from Parker Christensen were included in the portal. Excellent information is available in the document [Understanding Solar PV Permitting and Inspecting in New York State](#). Section 4.1 Array checklist was shown on screen.

It was reported that with technologies changing so rapidly, it is extremely challenging for SCOs when conducting inspections. If the SCO doesn't know or understand what they are inspecting, it is impossible to conduct a thorough inspection. It was suggested that perhaps specialized inspectors (like for Hydronics or Medical Gas under the building discipline) are needed for this growing industry. It was noted that there are some good training materials available for free online.

It was suggested that information could be provided to the SCO Continuing Education Working Group to highlight additional courses that could be of assistance to SCOs. It was further suggested that a change is needed in SCO training and certification to require a course specific to Solar PV installations. It was suggested that this could be addressed through the approval of external training rather than the Council having to create the course. Right now, SCOs are inspecting Solar PV installations and aren't experienced in this area. It was cautioned that a course for SCOs should be designed with the focus on safety and safe installation that meets code, rather than design.

After an in-depth discussion on the issue, it was requested that the ESC representative on the SCO Continuing Education Working Group bring forward the suggestion of working with educational institutes to develop a course regarding Solar PV inspections for both residential and commercial installations that would be a continuing education opportunity for interested Electrical Group A SCOs. [Townsend]

4.6. Final STANDATA Review

4.6.1. 451-CEC-4rev9: Section 4 – Conductors

The redrafted STANDATA was shown on screen and an overview of the changes was provided.

Scott Basinger / Adam Ghani moved to endorse the publishing of the redrafted STANDATA 451-CEC-4rev9: Section 4 – Conductors with an amendment to 4-022 1) b) that this is not intended to apply to two-wire receptacle and lighting branch circuits; CARRIED

4.6.2. 452-CEC-6rev7: Section 6 – Services and service equipment

The redrafted STANDATA was shown on screen and an overview of the changes was provided.

The following revision was recommended:

- *“The 2018 CE Code allows the grounded conductor to be bonded to the grounding conductor once only. If this is done in the meter socket, it would not be allowed to be done in the service box as well.”* be added under Rule 6-200 Service equipment #6.

Scott Basinger / Glenn Hedderick moved to endorse the publishing of the redrafted STANDATA 452-CEC-6rev7: Section 6 – Services and service equipment, as revised; CARRIED

4.6.3. 454-CEC-10rev10: Section 10 – Grounding and bonding

The redrafted STANDATA was shown on screen and an overview of the changes was provided.

The following revision was recommended:

- Under Bonding of Gas Piping Systems, the Rule reference (Rule 10-614(2)) will be corrected to reflect the 2018 CE Code reference.

Adam Ghani / Tim Driscoll moved to endorse the publishing of the redrafted STANDATA 454-CEC-10rev10: Section 10 – Grounding and bonding, as revised; CARRIED

4.6.4. 455-CEC-12rev8: Section 12 – Wiring methods

The redrafted STANDATA was shown on screen and an overview of the changes was provided.

The following revision was recommended:

- The section regarding Rules 12-1104, 12-1154, 12-1508 Temperature limitations was deleted from the STANDATA.

Glenn Hedderick / Tim Driscoll moved to endorse the publishing of the redrafted STANDATA 455-CEC-12rev8: Section 12 – Wiring methods, as revised; CARRIED

4.6.5. 458-CEC-18rev13: Section 18 – Hazardous locations

The redrafted STANDATA was shown on screen and an overview of the changes was provided.

The following revisions were recommended:

- For classification requirements at Flammable liquid and gasoline dispensing service stations, garages, bulk storage plants, finishing processes, and aircraft hangars, please consult Section 20 of the Canadian Electrical Code and STANDATA CEC-20 **and 22-704(2)**.
- The divisions of **explosive flammable** atmospheres into Zones based on frequency of occurrence and duration of the explosive atmosphere as prescribed...
- Rule 18-152 Wiring methods, Zone 2 Use of Non-metallic Liquid-tight Flexible Conduit in Zone 2 Hazardous Locations was deleted.

Glenn Hedderick / Tim Driscoll moved to endorse the publishing of the redrafted STANDATA 458-CEC-18rev13: Section 18 – Hazardous locations, as revised; CARRIED

4.7. AEUC/CE Code Working Group Joint Meeting Results

Excerpts from the AEUC/CE Code Working Group joint meeting were included in the portal. An in-depth discussion was held regarding the three recommendations.

Brian Townsend / Ken Hood moved to accept the recommendation that the location of the demarcation point can be unique for each customer as determined by the supply authority; however, for the purposes of determining demarcation between the Canadian Electrical Code, Part I and the Alberta Electrical Utility Code, for single detached residential underground service the demarcation point is typically located on the line side terminal of the customer's meter base, as amended; CARRIED

Scott Basinger / Allan Nagel moved to accept the recommendation that for the purposes of determining demarcation between the Canadian Electrical Code, Part I and the Alberta Electrical Utility Code, the point of demarcation for a commercial service is the secondary terminals of the transformer; and in the event that the commercial service cabling system is extended from the transformer to pedestals or underground enclosures then the demarcation point is the terminals in the pedestals or the underground enclosures; CARRIED

Scott Basinger / Allan Nagel moved to accept the recommendation that for the purposes of determining demarcation between the Canadian Electrical Code, Part I and the Alberta Electrical Utility Code, the point of demarcation for a single-phase overhead residential service is the connection point at the service head; CARRIED

The above recommendations are presented to the Electrical Administrator for consideration of inclusion within a STANDATA. [Cormier]

Regarding the suggestion to seek clarification from the Administrator when the demarcation point is different from the above, it was noted that agreement of the demarcation point should always include discussions between the utility SCO and the SCO of the Authority Having Jurisdiction.

4.8. AEUC Working Group Report

The Working Group Chair reported the following:

- The afternoon was primarily relative to the demarcation points that have already been discussed
- A presentation was received by the Chair of CSA's Strategic Steering Committee on Power Engineering (SCOPE) about their new funding model proposal for utilities
- A recommendation was made regarding an unintended omission of Rule 4.3.7. in the AEUC

Brian Townsend / Allan Nagel moved to accept the working group's recommendation to issue an errata to the AEUC to reintroduce 4.3.7. as 2-032; CARRIED

4.9. CE Code Working Group Report

An overview was provided regarding the challenges with CSA C22.1-15 Rule 4-004(d) that states that you need to know the assumptions/conditions in order to use those tables and if you don't have the assumptions, you can't use the tables. The working group believes that further clarification is needed within the Section 4 STANDATA.

Scott Basinger / Tim Driscoll moved to accept the CE Code Working Group's recommendation, as revised, to recommend to the Administrator to include the following paragraph within the Section 4 STANDATA—*Cable ampacity is dependent on temperature of conductors. For depths below those shown in tables, backfill material that differs from native soil (such as sand) for spacers not encased in concrete (NEMA Standards Publication TCB-2017), adjacent cable installations or other sources of heat, this may reduce the effective ampacity of conductors. For these installations, the use of IEEE-835 calculations by a qualified individual should be required and the exact detail of the installation design must be followed.*; CARRIED

It was reported that a preliminary review has been completed for IEEE-835 of Tables D8 to D11. There are errors in both directions. A task group has been formed to work on a Part 1 proposal for CEC-21 with a table base value (RHO of soil material, depths, etc.) aligned with IEEE-835, and a calculation of ampacities for all D8 to D11 tables using IEEE-835.

Ken Hood / Tim Driscoll moved to approve that the CE Code Working Group continue with the task to develop a Part 1 Proposal for CEC-21; CARRIED

It was reported that the CE Code Working Group reviewed the wording provided by Rene Leduc regarding a revision to the Section 2 STANDATA. A discussion was held regarding the title within the Section 2 STANDATA as it is believed not to be a misapplication. After an in-depth discussion of the recommendation, it was agreed that this is the appropriate issue that is trying to be addressed.

Scott Basinger / Tim Driscoll moved to accept the CEC Working Group's recommendation relative to the Section 2 STANDATA to revert back to the original revision of the Misapplication of Approval Marks or Labels as originally presented by Rene Leduc with minor typo corrections and the following statement added: *The Certification Body is meant to work together with the local inspector as part of the regulatory process within the country. Restriction of access to equipment evaluated by the Certification Body to the Authority Having Jurisdiction should not be done.*; CARRIED

It was reported that Working Group was asked to review Power over Ethernet. After further review, it was agreed that CEC-18 addresses the issue and no further action was required.

4.10. Administrator/AMA Report

It was reported that the regulation amendment to delete reference to the Code for Electrical Installations at Oil and Gas Facilities has been approved by Cabinet. The regulations adopting the Building, Fire and Elevating Devices Codes are moving through the legislative process.

With the focus on harmonization with Nationals Codes, sub-councils are encouraged to be proactive by submitting proposed changes at the National level to minimize Alberta-specific requirements.

It was questioned regarding the recent Memorandum of Revisions. It was noted this was received by the Council and this will be added to the portal. [Council Administration]

It was suggested that Alberta needs representative on the CSA Section 64 committee. It was noted that the request can be made, and it would depend whether there is currently room on the committee. Tim Driscoll offered to follow up with the Section 64 Chair to see if a vacancy currently exists. [Driscoll]

4.11. Council Updates

The following update was provided:

- Council Awards are now open for nominations; the deadline is March 29, 2019
- The Council Conference will be held on May 29 to 31, 2019 at the Rimrock Hotel in Banff
- New Member Orientation is scheduled for November 20, 2018
- An Open House will be held at the Council Office on December 5, 2018

The Chair reported on the following from the last TCC meeting:

- Brought forward issues regarding Building Envelope
- Regarding Pictograms, James Orr was not in attendance to provide an update

It was questioned regarding the Master Electricians Working Group. It was noted that the Working Group has not met since the last ESC meeting. Darcy Teichroeb's term on the sub-council expires in January 2018 and the ESC will need to appoint a new Working Group Chair.

4.12. Ground Plates

An overview was provided of new ground plates that are being seen in Edmonton that do not have certification markings. It was also noted that the ground plates being sold in some of the retail stores are not galvanized for corrosion protection nor are they certified. There is a Certification Standard in place.

Scott Basinger / Tim Driscoll moved that if a ground plate does not have certification markings, it should not be allowed to be used in Alberta; CARRIED

4.13. HazLoc Updates

The next Working Group meeting will not be until April 2018. A brief update was provided on a great deal of work being done at the national level regarding sealings.

5. Meeting Finalization

5.1. Meeting and Agenda Feedback

There was nothing new to bring forward regarding the agenda.

Allan Nagel, Stewart Purkis, Larry DeWald and Darcy Teichroeb were all thanked for their many years of hard work on the sub-council and their dedication to Alberta's safety system.

5.2. Next Meeting

The next meeting was reconfirmed for Monday, February 11, 2019 at the Council office at 9:30 a.m.

5.3. Meeting Adjournment

The meeting was adjourned at 3:10 p.m.

-- NEW ACTION ITEMS --

4.2. Unintended Omission of CE Code 2015 Rule 10-808 Installation of Equipment Bonding Conductors as Part of the Section 10 Rewrite

The matter was left in AMA's hands to find the best solution to address the omission and AMA will continue to keep the sub-council informed. [Elliott/Cormier]

4.5. Solar and the CE Code Interpretation Document

After an in-depth discussion on the issue, it was requested that the ESC representative on the SCO Continuing Education Working Group bring forward the suggestion of working with educational institutes to develop a course regarding Solar PV inspections for both residential and commercial installations that would be a continuing education opportunity for interested Electrical Group A SCOs. [Townsend]

4.7. AEUC/CE Code Working Group Joint Meeting Results

The above recommendations are presented to the Electrical Administrator for consideration of inclusion within a STANDATA. [Cormier]

4.10. Administrator/AMA Report

It was questioned regarding the recent Memorandum of Revisions. It was noted this was received by the Council and this will be added to the portal. [Council Administration]

Tim Driscoll offered to follow up with the Section 64 Chair to see if a vacancy currently exists. [Driscoll]

-- MOTIONS --

1.1 Agenda Adoption

Tim Driscoll / Brian Townsend moved to adopt the agenda, as amended, with a flexible order of business; CARRIED

1.2. Adoption of September 17, 2018 Minutes

Nicolas Leblanc / Tim Driscoll moved to adopt the minutes of the September 17, 2018 meeting, as circulated; CARRIED

2.1.1. Reappointment of Adam Ghani to represent the Major Municipalities – South industry segment for a term ending January 31, 2022, effective February 1, 2019

Don Bradshaw / Ken Hood moved to recommend to the Board the reappointment of Adam Ghani to the Electrical Sub-Council to represent the Major Municipalities – South industry segment for a term ending January 31, 2022, effective February 1, 2019; CARRIED

2.1.2. Nomination of Bert DeBruin to represent Electrical Contractors industry segment for a term ending January 31, 2022, effective February 1, 2019

Scott Basinger / Don Bradshaw moved to recommend to the Board the appointment of Bert DeBruin to the Electrical Sub-Council to represent the Electrical Contractors industry segment for a term ending January 31, 2022, effective February 1, 2019; CARRIED

2.2.1. Nomination of Barry Thoms to the AEUC Working Group for a term ending May 1, 2021, effective immediately

Brian Townsend / Nicolas Leblanc moved to accept the working group's recommendation to appoint Barry Thomas to the AEUC Working Group for a term ending May 1, 2021, effective immediately; CARRIED

2.2.2. Nomination of Ken Chao to the AEUC Working Group for a term ending May 1, 2021, effective immediately

Brian Townsend / Nicolas Leblanc moved to accept the working group's recommendation to appoint Ken Chao to the AEUC Working Group for a term ending May 1, 2021, effective immediately; CARRIED

- 2.2.3. Nomination of Clark Laing to the AEUC Working Group for a term ending October 15, 2021, effective immediately**

Brian Townsend / Nicolas Leblanc moved to accept the working group's recommendation to appoint Clark Laing to the AEUC Working Group for a term ending term ending October 15, 2021, effective immediately; CARRIED

- 2.2.4. Nomination of Will Hillary to the AEUC Working Group for a term ending October 15, 2021, effective immediately**

Brian Townsend / Nicolas Leblanc moved to accept the working group's recommendation to appoint Will Hillary to the AEUC Working Group for a term ending term ending October 15, 2021, effective immediately; CARRIED

- 2.3. Election of Sub-Council Chair**

Gerry Wiles was appointed as the Electrical Sub-Council Chair for a two-year term, by acclamation.

- 2.4. Validation of Electrical Group B Training Course (100178)**

Tim Driscoll / Brian Townsend moved to approve the course material for the Electrical Group B Training Course (100178); CARRIED

- 4.3. Street Lighting – Possible Path Forward Using OBIEC**

Scott Basinger / Glenn Hedderick moved to refer this matter to the CE Code Working Group for discussion and a recommendation to be presented to the ESC; CARRIED

- 4.4. Electric Vehicle Management Systems**

Tim Driscoll / Glenn Hedderick moved that the request for interpretation on Rule 8-500 Electric Vehicle Management Systems and how it relates to Rules 86-300 (2) and 8-106(11) be referred to the CE Code Working Group for a recommendation to be presented to the ESC; CARRIED

- 4.6.1. 451-CEC-4rev9: Section 4 – Conductors**

Scott Basinger / Adam Ghani moved to endorse to endorse the publishing of the redrafted STANDATA 451-CEC-4rev9: Section 4 – Conductors with an amendment to 4-022 1) b) that this is not intended to apply to two-wire receptacle and lighting branch circuits; CARRIED

- 4.6.2. 452-CEC-6rev7: Section 6 – Services and service equipment**

Scott Basingers / Glenn Hedderick moved to endorse the publishing of the redrafted STANDATA 452-CEC-6rev7: Section 6 – Services and service equipment, as revised; CARRIED

4.6.3. 454-CEC-10rev10: Section 10 – Grounding and bonding

Adam Ghani / Tim Driscoll moved to endorse the publishing of the redrafted STANDATA 454-CEC-10rev10: Section 10 – Grounding and bonding, as revised; CARRIED

4.6.4. 455-CEC-12rev8: Section 12 – Wiring methods

Glenn Hedderick / Tim Driscoll moved to endorse the publishing of the redrafted STANDATA 455-CEC-12rev8: Section 12 – Wiring methods, as revised; CARRIED

4.6.5. 458-CEC-18rev13: Section 18 – Hazardous locations

Glenn Hedderick / Tim Driscoll moved to endorse the publishing of the redrafted STANDATA 458-CEC-18rev13: Section 18 – Hazardous locations, as revised; CARRIED

4.7. AEUC/CE Code Working Group Joint Meeting Results

Brian Townsend / Ken Hood moved to accept the recommendation that the location of the demarcation point can be unique for each customer as determined by the supply authority; however, for the purposes of determining demarcation between the Canadian Electrical Code, Part I and the Alberta Electrical Utility Code, for single detached residential underground service the demarcation point is typically located on the line side **terminal** of the customer's meter base, as amended; CARRIED

Scott Basinger / Allan Nagel moved to accept the recommendation that for the purposes of determining demarcation between the Canadian Electrical Code, Part I and the Alberta Electrical Utility Code, the point of demarcation for a commercial service is the secondary terminals of the transformer; and in the event that the commercial service cabling system is extended from the transformer to pedestals or underground enclosures then the demarcation point is the terminals in the pedestals or the underground enclosures; CARRIED

Scott Basinger / Allan Nagel moved to accept the recommendation that for the purposes of determining demarcation between the Canadian Electrical Code, Part I and the Alberta Electrical Utility Code, the point of demarcation for a single-phase overhead residential service is the connection point at the service head; CARRIED

4.8. AEUC Working Group Report

Brian Townsend / Allan Nagel moved to accept the working group's recommendation to issue an errata to reintroduce 4.3.7. as 2-032; CARRIED

4.9. CE Code Working Group Report

Scott Basinger / Tim Driscoll moved to accept the CEC Working Group's recommendation, as revised, to recommend to the Administrator to include the following paragraph within the Section 4 STANDATA— *Cable ampacity is dependent on temperature of conductors. For depths below those shown in tables, backfill material that differs from native soil (such as sand) for **spacers not encased in concrete (NEMA Standards Publication TCB-2017)**, adjacent cable installations or other sources of heat, this may reduce the effective ampacity of conductors. For these installations, the use of IEEE-835 calculations by a*

qualified individual should be required and the exact detail of the installation design must be followed.;
CARRIED

Ken Hood / Tim Driscoll moved to approve that the CEC Working Group continue with the task to develop a Part 1 Proposal for CEC-21; CARRIED

Scott Basinger / Tim Driscoll moved to accept the CEC Working Group's recommendation relative to the Section 2 STANDATA to revert back to the original revision of the Misapplication of Approval Marks or Labels as originally presented by Rene Leduc with minor typo corrections and the following statement added: *The Certification Body is meant to work together with the local inspector as part of the regulatory process within the country. Restriction of access to equipment evaluated by the Certification Body to the Authority Having Jurisdiction should not be done.;* CARRIED

4.12. Ground Plates

Scott Basinger / Tim Driscoll moved that if a ground plate does not have certification markings, they should not be allowed to be used in Alberta; CARRIED