



# Safety Codes Council

## MINUTES OF THE FOURTH ELECTRICAL SUB-COUNCIL MEETING OF 2019

**DATE:** November 25, 2019

**TIME:** 9:36 a.m. to 3:45 p.m.

**LOCATION:** Safety Codes Council Office, Edmonton

**PRESENT:** *Sub-Council Members*

Gerry Wiles, Chair  
Scott Basinger, Vice Chair – North  
Don Bradshaw  
John Briegel  
Patrick Conway (arrived at 10:08 a.m.)  
Hussein Desouki  
Tim Driscoll  
Adam Ghani  
Todd Grayson  
Glenn Hedderick, Vice Chair – South  
Ken Hood  
Nicolas Leblanc  
Tyler Masson  
Lori Monaghan  
Brian Townsend  
Barry Voogd

*Safety Codes Council*

Allison Karch, Kathryn Derkach, Sanah Sidhu, Kris Schmaltz (item 4.2. only), Peter Thomas (item 4.3. only), Sanela Galic (item 4.4. only), Charles Hallett (item 4.4. only)

*Alberta Municipal Affairs*

Clarence Cormier, Bob Hall

**REGRETS:** Bert DeBruin

**GUESTS:** Tim Roskey, Inspections Group; Graeme Vanderstar, ATCO

**RECORDER:** Sandi Orr

**2020 MEETINGS:** January 13, March 9, May 4, September 28, November 16

## **1. Meeting Opening**

The Chair called the meeting to order at 9:36 a.m.

### **1.1 Agenda Adoption**

The agenda was reviewed and the following revisions were made:

- 2.1.2. Nomination to represent the Accredited Corporations industry segment – added
- 4.1. Code Update Training - removed from the agenda
- 4.13. Gas Meters – added
- 4.14. CSA Update – added
- 4.15. Corporate-wide Variances – added

**Glenn Hedderick / Tim Driscoll moved to adopt the agenda, as amended, with a flexible order of business; CARRIED**

### **1.2. Adoption of September 16, 2019 Minutes**

The minutes were included in the portal and reviewed.

- Under 4.7.2., OBEIC was corrected to read OBIEC

**Glenn Hedderick / Nicolas Leblanc moved to adopt the minutes of the September 16, 2019 meeting, as corrected; CARRIED**

Relative to the action items, frustration was expressed that the removal of pictograms from STANDATA, particularly for the electrical discipline, is believed to be a disservice to the industry.

## **2. Matters for Decision**

### **2.1. In Camera Decisions**

#### **2.1.1. Nomination of Ken Forbes to represent the Electrical Safety Codes Officers industry segment**

The nomination was included in the portal and reviewed.

**John Briegel / Ken Hood moved to recommend to the Board the appointment of Ken Forbes to the Electrical Sub-Council to represent the Electrical Safety Codes Officers industry segment for a term ending January 31, 2023, effective February 1, 2020; CARRIED**

#### **2.1.2. Nomination to represent the Accredited Corporations industry segment**

The nominations were included in the portal and reviewed, along with the resumes of Ryan Caroll, Ed Bertschi, Gerry Doan and Dan Green. All candidates were given due consideration.

**Tim Driscoll / Adam Ghani moved to recommend to the Board the appointment of Ryan Carroll to the Electrical Sub-Council to represent the Accredited Corporations industry segment for a term ending January 31, 2023, effective February 1, 2020; DEFEATED**

**John Briegel / Patrick Conway moved to recommend to the Board the appointment of Gerry Doan to the Electrical Sub-Council to represent the Accredited Corporations industry segment for a term ending January 31, 2023, effective February 1, 2020; CARRIED**

**2.2. Skills Matrix**

The draft skills matrix document included in the portal was reviewed and changes were discussed.

A discussion was held regarding adding a point about support from the nominee’s employer. It was explained that being a member of the sub-council is a volunteer position and it is the responsibility of the nominee to ensure they manage their sub-council involvement along with their other commitments, including their day to day job.

It was noted that other sub-councils have created their skills matrix to include necessary skills and additional “nice to haves”. It was clarified that this is an internal document to assist the sub-council members in recommending candidates to the Board, as well as helping nominating organizations find individuals with the necessary skills to assist in being an effective member of the sub-council.

The Council will make recommended edits in a redlined document for consideration at the next meeting. [Council Administration]

**3. Review Matters Arising/Action List**

	<b>Item</b>	<b>Action</b>	<b>Date Initiated</b>	<b>Responsible</b>	<b>Status/Update</b>
1.	CE Code-072 – Concrete Encasements	Consider drafting a Proposed Change to CE Code Part 1 <b>UPDATE:</b> The working group is still working on a proposed change for the next code cycle. This will be brought to the sub-council at a future meeting.	Feb 6/17	CE Code Working Group	In progress
2.	Medium Voltage Terminations	AMA will look into the topic of uncertified equipment, including that used for medium voltage terminations.	May 6/19	Cormier/Orr	Completed, remove from action list
		It was suggested that further clarification, such as more examples of recognized evaluation services, is needed and this will be brought back to AMA for consideration.	Sept 16/19	Orr	All addressed in new Variance STANDATA; Completed,

					remove from action list
3.	AEUC/CE Code WG Joint Meeting on Demarcation	Recommendations about the demarcation point were presented to the Electrical Administrator for consideration of inclusion in a STANDATA.	Nov 5/18	Cormier	On agenda, completed and will be removed from action list
4.	BOCCI Terminals	Tim Driscoll offered to conduct other research relative to code development.	May 6/19	Driscoll	Clarification was provided on what is being seen for terminations with these installations. This item will be removed from the action list

**4. Matters for Discussion**

**4.1. Code Update Training**

This item was removed from the agenda as the Council does not develop code update training for the electrical discipline. Any questions regarding training can be discussed with the Training Department.

**4.2. Sub-Council Role in Certification and Training**

Kris Schmaltz, Administrator of Certification at the Council, was welcomed to the meeting and provided an update on the generic competencies being created for all SCOs in the construction industry. The next phase will involve adding discipline specific competencies for each construction discipline. Once completed, all of the entry qualifications and training would be reviewed against the established competencies to ensure there are no gaps.

The goal is to gather input from the sub-councils regarding certification and training much earlier in the policy and training development processes and at every level. A group of volunteers will be gathered to help ensure that each of the competency profiles are consistent across construction disciplines. Gerry Wiles, Glenn Hedderick and Brian Townsend volunteered on behalf of the electrical discipline.

**4.3. QMP Template Changes**

Peter Thomas, Administrator of Accreditation at the Council, was welcomed to the meeting and provided a presentation on Quality Management Plan Revisions. Highlights of the presentation included:

- Background on the creation and revisions of QMP Templates – the current template was released in July/August 2016

- An overview of the reasons for the current review
- An overview of the ages of QMPs currently in place and progress made to transition QMPs to the current templates

Upcoming changes to the QMP Template include:

- The requirement for municipal councils to approve minor updates to the QMP was removed and in 2020 this will also include scope changes (i.e. adding or removing a discipline from the QMP), but municipal council approval is still required for new accreditation.
- A “Duly Authorized Individual” rather than a specific official may now sign off on updates and scope changes.
- Changes were made to Inspection Service Delivery Standards, including terminology, inspection timelines, and addition of project classification.
- In the Corporate QMP, changes were made to the process regarding disagreements on corrective action and non-compliance.
- The requirement that background documentation be submitted when registering variances with the Council was removed.
- Municipal and Corporate QMP templates were changed to allow jurisdiction-wide variances, in accordance with a recent notice on variances from Municipal Affairs
- Timelines regarding written notice for cancellation of accreditation, change in municipal status, or change in corporate ownership, structure or status have been removed.
- A Joint Municipal Accreditation QMP template was created.
- Cancellation of Accreditation section was revised to include the organization’s responsibility to close outstanding permits and orders.
- Annual Internal Reviews section was revised to include standardized submission dates and requirements.
- Wording was added to clarify that an SCO does not have to accept a Verification of Compliance.
- General reorganization, formatting, and updates to references.

The revised templates will be rolled out on the Council website in January 2020 and QMP Managers will be contacted directly. To ensure consistent rollout of the information, members were asked to refrain from reporting this information to any outside organizations until after the rollout.

The floor was opened for questions and it was clarified that the QMPs do not address technical aspects or the established administrative processes within a jurisdiction. It was further reported that the Government, along with the Council, will be reviewing the accreditation policies.

The presentation will be added to the portal.

[Council Administration]

#### **4.4. Tim Roskey presentation (1:00 p.m.)**

Charles Hallett and Sanela Galic from ASCA, Tim Roskey from the Inspections Group, and Graeme Vanderstar from ATCO were welcomed to the meeting.

Tim Roskey presented concerns about Part 1 installations, usually in outlying areas, that are energized without meeting the code. The Inspections Group found that, because they have no direct communication with the utility providers and because of geographic considerations, it is often difficult to inspect Part 1 installations prior to energization and, it can be difficult to correct deficiencies after energization. In the interest of safety, they are requesting that consideration be given to requiring that an inspection take place prior energization.

Some municipalities have a good working relationship with the utilities and already require this but others do not. Examples were provided of how the oil and gas industry makes a declaration that the installation is safe to energize. Concern was expressed over the fact that a utility would energize a services without having the confidence that the installation is safe.

It was suggested that the best way to handle the issue is to have municipal QMPs updated to require a final inspection before the utility is allowed to energize. From a utility perspective, this could be supported because of the challenges relating to disconnection. From an SCO perspective, it is challenging to gain code compliance if the service has already been energized. It was further suggested that this could be addressed in the AEUC.

When there are cases that an inspection is not feasible prior to energization, it was suggested that a list be created for utilities of types of things to be looked at so there is a suitable level of assurance that the installation is safe.

**Tim Driscoll / Don Bradshaw moved to support the inclusion in the QMP and ASCA Service Reference Manual of a mandatory service inspection on new electrical installations prior to energization and inclusion of this requirement within the Alberta Electrical Utility Code; CARRIED**

#### **4.5. Bonding and Pigtailing Requirements for General Use Switches**

Clarification is requested by industry regarding Rule 10-612 (5) that states “In the case of metal-enclosed systems where bonding is provided by the metal enclosure, and a device attached to the enclosure has a bonding terminal, a bonding conductor shall be installed to bond the device to the enclosure. “

The question is in regard to the bonding screw that is provided with the switches that are universally sold in Canada. In the United States, the bonding screw is a requirement for jurisdictions that allow plastic boxes that do not have the bonding strap in their design. It is believed that those kind of boxes are not allowed anywhere in Canada. An email was included in the portal from a representative of the manufacturer advising that the screw is left on the

Canadian product only as an option. He has also advised that a rewording of this rule is in the works at the CSA level but would not appear till the next code cycle.

The Administrator requested the topic to be brought to the sub-council to see if there was value in creating a STANDATA for clarification.

It was reported that some manufacturers include bonding screws and others don't include them when shipping them to Canada. Some SCOs are failing installations because they believe they are required. It was clarified that as long as the switches are screwed into a metal strap, providing continued bonding, it should be accepted.

**Ken Hood / Don Bradshaw moved to support the issuance of an Information STANDATA for clarification of Rule 10-612(5); CARRIED**

#### **4.6. STANDATA CEC-2 Change Request**

A request for a change to the existing STANDATA CEC-2 was received. The recommended changes were included in the portal and feedback was sought from the sub-council on the changes.

It was suggested that next time this STANDATA is updated, perhaps this section can be extended to cover Electric Vehicle Chargers.

**Scott Basinger / Don Bradshaw moved to support the addition of Electric Vehicle Chargers to the CEC-2 STANDATA; CARRIED**

#### **4.7. Unapproved Baby Spa Equipment**

A link was included in the portal to a Safety Alert that was issued by the Electrical Safety Authority in Ontario with warnings regarding unapproved baby spas and similar products. The Administrator brought this forward to seek feedback whether a STANDATA was necessary to heighten awareness of the issue.

Ontario is not accepting field evaluations for these unapproved products unless already certified to the UL 1593 Standard for the US market.

**Scott Basinger / Don Bradshaw moved to support the issuance of a STANDATA to note that field evaluations will not be accepted in Alberta for unapproved baby spas and similar products unless already certified to the UL 1593 Standard for the US market; CARRIED**

#### **4.8. Gas Variance VAR-GAS-03-19**

The Gas Variance VAR-GAS-03-19 regarding Engineer Authentication at Oil and Gas Production Facilities was included in the portal. It was questioned whether this should be a joint STANDATA with electrical to tie the electrical requirements of Rule 2-024 to these appliances.

It was further clarified that individual components are certified, but the entire assembly is not certified.

There was a CSA Committee set up about 3 years ago to try to build a standard for these uncertified appliances. The status of that work was uncertain.

It was suggested that further investigation is needed and it was uncertain whether there were any electrical issues. An overview was provided from the standards testing perspective on the extensive testing that would be required.

Reference was made to IEC TS 60079-46:2017, which specifies requirements for the design, construction, assembly, testing, inspection, marking, documenting and assessment of equipment assemblies for use in explosive atmospheres under the responsibility of the manufacturer of the equipment assembly.

**Ken Hood / Patrick Conway moved to support the issuance of an Electrical STANDATA to heighten awareness of the use of IEC TS 60079-46:2017 in hazardous locations; CARRIED**

#### **4.9. Working Group Reports**

##### **4.9.1. AEUC**

It was reported that working group members have been assigned sections of the AEUC to review against national code changes and propose any corresponding changes to the AEUC.

Relative to the proposed STANDATA for demarcation, the proposed change of wording was provided in the portal and discussed.

It was questioned regarding residential vs. commercial when a large installation such as an apartment building is residential. It was suggested that the size of the installation be addressed rather than residential vs commercial.

After an extensive review of the recommended revisions, consensus was reached that the wording be revised as follows:

“The purpose of the STANDATA is to provide guidance in situations where the demarcation point is not already identified.

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, the **typical** point of demarcation:

- for an overhead service is the connection point at the service head;



- for a residential underground service is the line side terminal of the customer’s meter base;
- for a commercial underground 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.

The demarcation point should be identified in all cases.”

**Brian Townsend / Scott Basinger moved to accept the amended wording for inclusion in the Demarcation STANDATA; CARRIED**

#### **4.9.2. CE Code**

There was nothing new to report.

#### **4.9.3. Hazardous Locations**

There was nothing new to report.

#### **4.9.4. Master Electrician**

The Working Group Report was included in the portal and an overview was provided of the topics discussed.

**Scott Basinger / Ken Hood moved to accept the exam description, as presented, which will be sent to colleges and prospective students; CARRIED**

There was no objection to including basic Building Code and Appendix A questions in the Master Electrician Exam question bank.

A suggestion to create a course for Master Electricians to gain better knowledge of the Building Code was discussed.

An overview was provided on the requests for interpretation sent to Part 1 regarding:

- Application of rule 4-004 and 4-006
- Application of rule 4-004 and Table 5A
- Application of rule 4-004 and 14-100

#### **4.10. BSC Liaison Report**

The last BSC meeting was primarily a review of the National Proposed Code Changes. ESC members assisted the Distilleries Working Group regarding hazardous area classifications relative to the electrical discipline.

There were no new topics to bring forward to the Building Sub-Council at this time.

#### **4.11. Administrator/AMA Report**

It was reported Alberta Municipal Affairs no longer has a dedicated website and all safety codes related information is on the Government of Alberta website. The electrical codes and standards can be found at: <https://www.alberta.ca/electrical-codes-and-standards.aspx>.

Four STANDATAs were recently issued. If members notice issues in any STANDATA, it was requested they bring it forward to the Administrator.

Two STANDATAs are still in progress. One is on Demarcation and the other is relative to Retroactivity.

It was reported that Safety Tips that used to be housed on the Government website are now being put on the Council website. The Administrator will bring the Structures Near Power Lines Safety Tips to the AEUC Working Group for feedback. [Cormier]

#### **4.12. Council Updates**

The Council written report was included in the portal and the following highlights were provided:

- An overview was provided on the feedback received from sub-council members and the additional information included on the agenda to help sub-council members prepare for the meeting
- All members are required to complete online FOIP training by December 31, 2019
- An overview was provided of the changes to the Expenses Policy and new expense form
- Open House – Friday, November 29
- The Board approved the addition of a seat representing Accredited Corporations and nominees were brought forward earlier in the meeting

##### **4.12.1. Appeals Reporting Consultation**

Similar to the quarterly reports on sub-council activities, feedback was sought on whether the sub-council would like to see reporting of appeals statistics. It was noted that there are not a lot of appeals in the electrical discipline. No specific information was requested.

#### **4.13 Gas Meters**

A submission was received regarding reduced clearance from gas regulators. Information was reviewed about the types of regulators that may be installed with reduced clearances and the standards they are certified to.

After further discussion, it was recognized that if the installation of these new certified pressure relief regulators is allowed under the Gas Code, it should be acceptable under the Electrical Code. The Electrical Code does reference CSA B149.1 and if CSA has approved the device to allow for reduced clearance, it would seem that the new devices should be acceptable.

**Don Bradshaw / Barry Voogd moved to support the issuance of a STANDATA to clarify that pressure relief regulators that are CSA approved to allow for reduced clearances are acceptable; CARRIED**

#### **4.14 CSA Update**

Notes from the CSA Electrical Week were included in the portal and highlights of the meetings relative to Part I were provided.

#### **4.15 Corporate-wide Variances**

As it was previously reported that corporate-wide variances are now allowed within the accredited corporation's jurisdiction, there were no further questions to bring forward.

### **5. Meeting Finalization**

#### **5.1. Round Table**

The Chair requested that each working group chair prepare a report for the upcoming EIAA Technical Conference being held on January 31 and February 1, 2020 and provide the draft to the Council for review. [Working Group Chairs]

A presentation template will be provided to all Working Group Chairs. [Council Administration]

Don Bradshaw reported that this will be his last sub-council meeting and he will be briefing the new EIAA representative on a number of topics of interest to the EIAA for continued follow-up. Don Bradshaw was thanked for his service on the sub-council.

It was reported that as of January 1, 2020, the Council has made the business decision to do all sub-council administration in house. Sandi Orr was thanked for 19+ years of service as a contractor of the Council.

#### **5.2. Next Meeting**

The next meeting was reconfirmed for January 13, 2020 at the Council office at 9:30 a.m.

#### **5.3. Meeting Adjournment**

The meeting was adjourned at 3:45 p.m.

-- NEW ACTION ITEMS --

**2.2. Skills Matrix**

The Council will make recommended edits in a redlined document for consideration at the next meeting. [Council Administration]

**4.3. QMP Template Changes**

The presentation will be added to the portal. [Council Administration]

**4.11. Administrator/AMA Report**

The Administrator will bring the Structures Near Power Lines Safety Tips to the AEUC Working Group for feedback. [Cormier]

**5.1. Round Table**

The Chair requested that each working group chair prepare a report for the upcoming EIAA Technical Conference being held on January 31 and February 1, 2020 and provide the draft to the Council for review. [Working Group Chairs]

A presentation template will be provided to all Working Group Chairs. [Council Administration]

**-- MOTIONS --**

**1.1 Agenda Adoption**

**Glenn Hedderick / Tim Driscoll moved to adopt the agenda, as amended, with a flexible order of business; CARRIED**

**1.2. Adoption of September 16, 2019 Minutes**

**Glenn Hedderick / Nicolas Leblanc moved to adopt the minutes of the September 16, 2019 meeting, as corrected; CARRIED**

**2.1.1. Nomination of Ken Forbes to represent the Electrical Safety Codes Officers industry segment**

**John Briegel / Ken Hood moved to recommend to the Board the appointment of Ken Forbes to the Electrical Sub-Council to represent the Electrical Safety Codes Officers industry segment for a term ending January 31, 2023, effective February 1, 2020; CARRIED**

**2.1.2. Nomination to represent the Accredited Corporations industry segment**

**Tim Driscoll / Adam Ghani moved to recommend to the Board the appointment of Ryan Caroll to the Electrical Sub-Council to represent the Accredited Corporations industry segment for a term ending January 31, 2023, effective February 1, 2020; DEFEATED**

**John Briegel / Patrick Conway moved to recommend to the Board the appointment of Gerry Doan to the Electrical Sub-Council to represent the Accredited Corporations industry segment for a term ending January 31, 2023, effective February 1, 2020; CARRIED**

**4.4. Tim Roskey presentation (1:00 p.m.)**

**Tim Driscoll / Don Bradshaw moved to support the inclusion in the QMP and ASCA Service Reference Manual of a mandatory service inspection on new electrical installations prior to energization and inclusion of this requirement within the Alberta Electrical Utility Code; CARRIED**

**4.5. Bonding and Pigtail Requirements for General Use Switches**

**Ken Hood / Don Bradshaw moved to support the issuance of an Information STANDATA for clarification of Rule 10-612(5); CARRIED**

**4.6. STANDATA CEC-2 Change Request**

**Scott Basinger / Don Bradshaw moved to support the addition of Electric Vehicle Chargers to the CEC-2 STANDATA; CARRIED**

#### **4.7. Unapproved Baby Spa Equipment**

**Scott Basinger / Don Bradshaw moved to support the issuance of a STANDATA to note that field evaluations will not be accepted in Alberta for unapproved baby spas and similar products unless already certified to the UL 1593 Standard for the US market; CARRIED**

#### **4.8. Gas Variance VAR-GAS-03-19**

**Ken Hood / Patrick Conway moved to support the issuance of an Electrical STANDATA to heighten awareness of the use of IEC TS 60079-46:2017 in hazardous locations; CARRIED**

##### **4.9.1. AEUC**

**Brian Townsend / Scott Basinger moved to accept the amended wording for inclusion in the Demarcation STANDATA; CARRIED**

##### **4.9.4. Master Electrician**

**Scott Basinger / Ken Hood moved to accept the exam description, as presented, which will be sent to colleges and prospective students; CARRIED**

#### **4.13 Gas Meters**

**Don Bradshaw / Barry Voogd moved to support the issuance of a STANDATA to clarify that pressure relief regulators that are CSA approved to allow for reduced clearances are acceptable; CARRIED**