

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

- DATE: February 11, 2019
- **TIME:** 9:30 a.m. to 2:50 p.m.
- LOCATION: Safety Codes Council Office, Edmonton

#### PRESENT: <u>Sub-Council Members</u>

Gerry Wiles, Chair Scott Basinger, Vice Chair – North Don Bradshaw John Briegel Tim Driscoll (arrived at 9:40 a.m.) Adam Ghani Glenn Hedderick, Vice Chair - South Ken Hood Nicolas Leblanc Lori Monaghan Brian Townsend Barry Voogd

#### Safety Codes Council

Allison Karch, Kathryn Derkach

#### Alberta Municipal Affairs

Clarence Cormier, Bob Hall

- **REGRETS:** Bert DeBruin, Allan Nagel, Stewart Purkis
- GUEST: Patrick Conway, CSA Group
- **RECORDER:** Sandi Orr

2019 MEETINGS: May 6, September 16, November 18

**CONFERENCE:** May 29-31

# 1. Meeting Opening

The Chair called the meeting to order at 9:30 a.m. A round table introduction was held.

# 1.1 Agenda Adoption

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

- 4.10. Variances Notice
- 4.11. Product vs Process Standards

# Don Bradshaw / Adam Ghani moved to adopt the agenda, as amended; CARRIED

### 1.2. Adoption of November 5, 2018 Minutes

The minutes were included in the portal and reviewed. The list of attendees was corrected to show Barry Voogd in attendance.

Under 4.10, the last sentence of the first paragraph was deleted and replaced with "The Building, Fire and Energy Code Regulations are moving through the legislative process."

Scott Basinger / Brian Townsend moved to adopt the minutes of the November 5, 2018 meeting, as corrected; CARRIED

- 2. Matters for Decision
- 2.1. Reappointment of Tim Driscoll to represent the Petrochemical industry segment for a term ending January 31, 2022, effective immediately (recommend reappointment to Board)

Scott Basinger / Ken Hood moved to recommend to the Board the reappointment of Tim Driscoll to the Electrical Sub-Council to represent the Petrochemical industry segment for a term ending January 31, 2022, effective immediately; CARRIED

2.2. Nomination of Patrick Conway to represent the Electrical Standards/Testing/ Certification Organizations industry segment for a term ending January 31, 2022, effective immediately (recommend appointment to Board)

Patrick Conway removed himself from the meeting during this agenda item.

Scott Basinger / Glenn Hedderick moved to recommend to the Board the appointment of Patrick Conway to the Electrical Sub-Council to represent the Electrical Standards/Testing/Certification Organizations industry segment for a term ending January 31, 2022, effective immediately; CARRIED

2.3. Nomination of Hussein Desouki to represent the Professional Engineers industry segment for a term ending January 31, 2022, effective immediately (recommend appointment to Board)

Brian Townsend / Nicolas Leblanc moved to recommend to the Board the appointment of Hussein Desouki to the Electrical Sub-Council to represent the Professional Engineers industry segment for a term ending January 31, 2022, effective immediately; CARRIED

2.4. Nomination of Todd Grayson to represent the Rural Electrification Areas industry segment for a term ending January 31, 2022, effective immediately (recommend appointment to Board)

Ken Hood / Nicolas Leblanc moved to recommend to the Board the appointment of Todd Grayson to the Electrical Sub-Council to represent the Rural Electrification Areas industry segment for a term ending January 31, 2022, effective immediately; CARRIED

2.5. Nomination of Tyler Masson / Mandeep Parmar to represent the Small/Municipal Electrical Utilities industry segment for a term ending January 31, 2022, effective immediately (recommend appointment to Board)

The nominations were included in the portal and both candidates were given due consideration based on their qualifications.

Nicolas Leblanc / John Briegel moved to recommend to the Board the appointment of Tyler Masson to the Electrical Sub-Council to represent the Small/Municipal Electrical Utilities industry segment for a term ending January 31, 2022, effective immediately; CARRIED

2.6. Appointment of Marty Cole to the Hazardous Locations Working Group (appoint to working group)

Tim Driscoll / Nicolas Leblanc moved to appoint Marty Cole to the Hazardous Locations Working Group; CARRIED

# 2.7. Appointment of Chair of the Master Electrician Working Group

The floor was opened for nominations. Glenn Hedderick was nominated. After three calls and no further nominations, nominations were closed. *Glenn Hedderick was appointed as the Chair of the Master Electrician Working Group, by acclamation.* 

# 3. Review Matters Arising/Action List

	Item	Action	Date	Responsible	Status/Update
1.	Crossover with Building Discipline	<ul> <li>The following topics were brought forward to the BSC for discussion:</li> <li>Exterior walls on new construction and not breaking the building envelope</li> </ul>	May 7/18	Wiles	Still in progress
		<ul> <li>Suggested revisions to STANDATA 14-BCV-012 Oil and Gas Processing Facilities</li> </ul>			Remove from action list
2.	CE Code-072 – Concrete Encasements	Consider drafting a Proposed Change to CE Code Part 1	Feb 6/17	CE Code Working Group	Proposed change is still being drafted
3.	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 information about Recognized Component marks and the limitations on their use.	Nov 20/17	Wiles	Still in progress
4.	Medium Voltage Terminations	Forward the Medium Voltage Terminations issue to the CE Code Working Group. <b>UPDATE:</b> A discussion was held regarding the magnitude of the issue and the unlikelihood of the Working Group being able to resolve it.	Feb 5/18	Basinger	Will discuss at April 2019 CEC Working Group meeting
5.	Unintended Omission – CE Code 2015 Rule 10-808	The matter was left in AMA's hands to address the omission and AMA will continue to keep the sub-council informed. <b>UPDATE:</b> This will be addressed during the STANDATAs being updated based on the new code.	Nov 5/18	Elliott/Cormier	Leave on action list until new STANDATAs are published
6.	Solar PV CE Code Interpretation Document	Suggest at SCO Continuing Education Working Group to work 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.	Nov 5/18	Townsend	On agenda
7.	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	Leave on action list until new STANDATAs are published

8.	AEUC Errata	Issue an errata to the 2016 AEUC to reintroduce 4.3.7. as 2-032. <b>UPDATE:</b> The Council is working with Queens Printer to publish the errata.	Nov 5/18	Council Administration	Considered complete and will be removed from action list
9.	Participation on	Tim Driscoll offered to follow up with	Nov 5/18	Driscoll	In progress
	CSA Section 64 Committee	the Section 64 Chair to see if a vacancy currently exists.			

### 4. Matters for Discussion

# 4.1. FCI Existing Fire Alarm Systems STANDATA

The Existing Fire Alarm Systems STANDATA was included in the portal. Feedback was requested by the ESC on the contents, as well as consideration as a joint STANDATA with Electrical.

It was suggested that since crossover STANDATAs are referenced, the Building discipline also be included.

# Nicolas Leblanc / Ken Hood moved to support the issuance of the Existing Fire Alarm Systems Joint Interpretation STANDATA; CARRIED

It was recommended that this be added into the Master Electricians package.

[Council Administration]

# 4.2. Solar PV CE Code Topics

It was reported that Solar PV is a pressing topic. The solar industry has arranged a meeting to discuss issues relative to Section 64. A two day meeting is scheduled for February 21-22, 2019 and it is hoped that clear requests from industry will come forward.

The Administrator provided background on the direction received from the Minister and the support of the sub-council working with industry to address code clarification.

This led to a discussion regarding working groups and the increased workload relative to solar issues. A brief discussion was held regarding the issues that have been reviewed by the CEC Working Group. Any recommendations from the industry meeting will come back to the Electrical Sub-Council for consideration.

Sub-council members were reminded of their role to make recommendations to the Minister on Codes and Standards, and to the Administrator regarding STANDATAs. Relative to submissions, in general, it was clarified that the ESC Chair and/or the Electrical Administrator can send a proposal back to a proponent if insufficient information is included.

# 4.3. Submissions re. Ground Plates – CE Code 10-700, C22.2-41

The following documents were included in the portal:

- Three submissions from Robert Johnson, Ironman Metals Inc.
- CE Code 10-700
- Section 10 Grounding and Bonding (March 2014)
- Section 10 Grounding and Bonding (January 2016)
- Excerpts from CSA C22.2 No 41-13 Grounding and bonding equipment
- Contradictions between the code and the handbook
- Electrical Variance Rule 10-700 Grounding Electrodes (number of rods)

The Administrator provided background on the direction received from the Minister to review the issues identified in the submissions.

It was recognized that the submissions included several questions that are outside of the scope of the Electrical Sub-Council. It is the sub-council's responsibility to review the technical aspects of the submissions.

It was recognized that it is a manufacturer's responsibility to sell certified products that comply with the law. It was suggested that the proponent could contact certification bodies to have their products certified.

A discussion was held regarding penalties for selling uncertified equipment in Alberta and the processes that can be used for enforcement.

Each of the submissions were reviewed, on their own technical merit and consensus was reached on the following recommendations:

Relative to the request of an interpretation or variance, it was clarified that the ground plates are a manufactured product falling under C22.2 No. 41, not an "in situ" product as per the CE Code, Part I. Therefore, the sub-council recommends to the Administrator that the request for a variance does not prove an equal or greater level of safety.

Relative to the request for review and interpretation regarding a comparison between driven ground rod and the proponent's vertical component or flange on ground plate electrode, the proponent's product is not certified to C22.2 NO. 41 - Grounding and Bonding Equipment and it was recommended to the Administrator that the proponent be advised as such.

Relative to the request for review and interpretation regarding the need and use of C22.2 No.41, it was clarified that C22.2 No.41 is the latest consensus document for certified grounding & bonding products and compliance allows for acceptable certification markings for use in Alberta. It was recommended to the Administrator that the proponent be advised as such.

Scott Basinger / John Briegel moved that the Electrical Administrator investigate the nonconforming products (ground plates) for sale in Alberta to determine if this poses an imminent public safety risk; DEFEATED

# 4.4. AMA/Administrator Report

The Administrator's report, presented at the EIAA conference, was shown on screen. Highlights included the following:

- Staffing update
- 2018 CSA Group Annual Conference was held in Edmonton in June 2018 and an overview was provided of the committee meetings that were held during the conference
- Preparation for the automatic adoption of the 2018 CE Code on Friday, February 1, 2019
- An overview was provided of the various technical committees that fall under Strategic Steering Committee on Requirements for Electrical Safety (SCORES)
- An overview was provided of the various technical committees that fall under Strategic Steering Committee on Power Engineering and EMC (SCOPE) including overhead lines and underground construction
- An overview was provided of the Regional Meetings held throughout Alberta in 2018
- A list was shown of Technical Committee Meetings the Administrator / Advisors participate in at the provincial and national level (CSA, UL, Safety Codes Council, AIT, Utility Safety Committees, Standards Council of Canada)
- An overview was provided on other work underway

# 4.5. Council Updates

The following report was provided:

- Video conferencing capability now available
- Sub-council members were asked to submit expense claims within 30 days
- An overview was provided regarding upcoming training; all information is listed in the portal calendar
- Sub-council members were reminded of the Dr. Sauer Award nomination deadline of March 29, 2019
- The Council is investigating offering a course on solar PV for Electrical SCOs

# 4.5.1. Code of Conduct and Ethics Revisions and Related Policies

A link was included in the portal to the revised Code of Conduct & Ethics and related policies. All sub-council members were encouraged to review all revisions.

# 4.6. BSC Liaison Report

Brian Townsend reported the following items that were discussed at the last meeting that may be of interest to the ESC:

- Alberta Health provided a presentation regarding the collaboration between Health Inspectors and Safety Codes Officers
- Challenges and advantages relating to Digital Plans Reviews

# 4.7. SCO Continuing Education Working Group Report

Brian Townsend reported the following:

- The working group has met twice
- A brief update was provided on the Continuing Education initiative; information is available at <u>http://www.safetycodes.ab.ca/SCO/ConEd/Pages/default.aspx</u>
- Members were encouraged to continue to provide information of potential activities/seminar that might be applicable to SCOs

A brief discussion was held regarding the requirement of 30 credits over 3 years and that points are earned for participation on this sub-council and teaching courses. Questions were asked regarding the requirement for those not currently practicing. Specific questions that are not addressed by the FAQs posted on the website should be directed to the Council's Certification department.

# 4.8. Report from EIAA Conference (Feb 1-2, 2019)

A written report was included in the portal and the following issues were brought forward:

### Agenda Item 2019-1

There was discussion on who is looking out for plenum wire compliance as it relates to low voltage structured cabling systems. ESCO's are required to enforce conditions of use for cables under the electrical code but the flame spread ratings are outlined in the Alberta Building Code.

It was agreed that this will be brought to the Electrical Sub-Council for further discussion.

An overview was provided of the issues and it was agreed that the subject be forwarded to the Building Sub-Council for clarification. [Wiles]

# Agenda Item 2019-11 CE Code 10-210 Grounding connections for solidly grounded ac systems supplied by the supply authority—Where do we ground the identified conductor at each outbuilding on a farm site?

It was proposed and agreed that as an organization, EIAA go on record to support single point grounding on the consumer's side of the demarcation from the supply authority, as a result of the deletion of Rule 10-208(1a) from the CE Code 2018 and that this support be submitted to the ESC and the CECWG/AEUC Working Group on demarcation.

The Administrator will check on the status of the STANDATA on demarcation. [Cormier]

# Agenda Item 2019-02 Hazardous Location Section 18 sealing

A request for similar wording be put into a STANDATA now vs waiting for the next code cycle.

It was agreed that this will be brought to the Electrical Sub-Council for consideration of an Information Bulletin STANDATA to mirror the wording that will be included in Appendix B of the CE Code 2021.

Tim Driscoll provided an overview of the several subjects submitted to the technical committee on seals. It was suggested that the technical committee continue their work and bring forward all recommendations for seals so that everything can be addressed in one STANDATA. Clarification was provided regarding conduit installations.

This item was received as information.

### 4.9. Nuisance Tripping – Arc Fault Breakers

Emails were included in the portal regarding nuisance tripping.

Before any work can be done to resolve this, the EFC needs to know about the issues. Any equipment that appears to be causing the AFCI tripping should be reported by email to info@electrofed.com with the subject line "AFCI tripping" and include:

- 1. Manufacturer
- 2. Model
- 3. Serial Number

Once aware of an issue, manufacturers can act to resolve it. Changes could be forthcoming regarding testing within the Part 2 Standard to ensure products do not nuisance trip.

### 4.10. Variances Notice

An overview was provided of the meeting with EIEEA members and the Director of Codes and Standards. Correspondence was included in the portal along with proposed revisions to the draft Variances Notice regarding the term "uncertified" vs "unapproved" and to allow for accreditation-wide variances. The draft was included in the portal for sub-council use only and any feedback was welcomed.

This led to a discussion regarding public safety and additional engineering involvement when using products where a Canadian Standard does not exist.

### 4.11. Product vs Process Standards

It was reported that there are 2 new standards in the CE Code Appendix A – IEC 61508-3 and 61511.

The EIEEA Group has determined that 61511 is a process standard and not a product standard. Two actions were recommended:

- CE Code Part II, General Requirements—initiate a project to delete 61511 from Appendix
   A. Keep it as an adopted standard but change it from a C22.2 to a "C" standard, which is
   non-mandatory. Tim Driscoll has already brought forward the subject to CSA and will be
   formally submitted change request.
- ESC/AMA—issue a provincial variance to delete from Appendix A.

The Administrator reported that a provincial-wide variance may not be possible as it is currently in the code, unless an equivalent level of safety can be proven.

After a lengthy discussion on the issue and agreement that 61511 is an engineering guideline, it is believed that equal safety can be proven.

# Tim Driscoll / Scott Basinger moved that the Administrator consider publishing a province-wide variance to delete the mandatory requirement of using Standard 61511 as a product standard; CARRIED

Chairs of the CECWG and HLWG will work together on potential wording. [Driscoll / Basinger]

# 5. Meeting Finalization

# 5.1. Meeting and Agenda Feedback

There was nothing new to bring forward regarding the agenda.

### 5.2. Next Meeting

The next meeting was reconfirmed for Monday, May 6, 2019 at the Council office at 9:30 a.m.

### 5.3. Meeting Adjournment

The meeting was adjourned at 2:50 p.m.

# -- NEW ACTION ITEMS --

# 4.1. FCI Existing Fire Alarm Systems STANDATA

It was recommended that this be added into the Master Electricians package.

[Council Administration]

# 4.8. Report from EIAA Conference (Feb 1-2, 2019)

An overview was provided of the issues and it was agreed that the subject (plenum wire compliance) be forwarded to the Building Sub-Council for clarification. [Wiles]

The Administrator will check on the status of the STANDATA on demarcation. [Cormier]

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