



Safety Codes Council

MINUTES OF THE SECOND ELECTRICAL SUB-COUNCIL MEETING OF 2021

DATE: April 12, 2021

TIME: 8:34 a.m. to 11:16 a.m.

LOCATION: Videoconference

PRESENT: *Sub-Council Members*

Gerry Wiles, Chair
Scott Basinger, Vice Chair – North
Patrick Conway
Bert DeBruin
Hussein Desouki
Gerry Doan
Tim Driscoll
Ken Forbes
Adam Ghani
Todd Grayson
Glenn Hedderick, Vice Chair – South
Ken Hood
Nicolas Leblanc
Tyler Masson
Lori Monaghan
Barry Voogd
Ed Knaggs

Safety Codes Council

Allison Karch, Kathryn Derkach, Jennifer Johnston

Alberta Municipal Affairs

Clarence Cormier, Bob Hall

REGRETS: John Briegel, Brian Townsend

RECORDER: Allison Karch

2021 MEETINGS: June 7, October 4, December 6

1. Meeting Opening

The Chair called the meeting to order at 8:34 a.m. A round table introduction was held and videoconference tips were provided.

1.1 Agenda Adoption

Bert DeBruin / Tyler Masson moved that the agenda be adopted, as circulated; CARRIED

1.2 Adoption of the February 8, 2021 Minutes

The minutes were reviewed and Item 4.1. was corrected as follows: "There was a proposal from a sub-council member that explains that since industrial sites do their own testing and evaluations ~~they should be exempt from the upcoming 2021 code change~~ there is a proposed clarification to the Appendix B note stating that..."

Todd Grayson / Tyler Masson moved to adopt the minutes of the February 8, 2021 meeting, as amended; CARRIED

2. Matters for Decision

2.1. Closed Session

Ed Knags / Scott Basinger moved to enter closed session; CARRIED

Discussion of item 2.1.1. was held.

Ken Forbes / Tyler Masson moved to return from closed session; CARRIED

2.1.1. Reappointment of Glenn Hedderick to represent Education and Training

Scott Basinger / Hussein Desouki moved to recommend to the Board reappointment of Glenn Hedderick to the Electrical Sub-Council to represent Education and Training for a term ending January 31, 2024, effective immediately; CARRIED

3. Review Matters Arising/Action List

	Item	Action	Date Initiated	Responsible	Status/Update
1.	CE Code-072 – Concrete Encasements	Consider drafting a Proposed Change to CE Code Part 1 UPDATE: Scott is working on a proposed change for the next code cycle (2024). This will be brought to the sub-council at a future meeting.	Feb 6/17	Basinger	Ongoing
2.	Multi Family Unit Site Bonding	It was decided that the affected municipalities will meet with the proponent to discuss the issue further.	Jan 13/20	Wiles	Not yet met with proponent; ongoing

4. Matters for Discussion

4.1. Electric Storage Water Heaters Submission

The submission included in the Portal was reviewed. Discussion was held and it was noted that Rule 62-402 deals with overcurrent protection, not demand factors. Consensus was reached that the code is clear that 62-402 does not apply to storage tank water heaters for domestic use, but there seems to be confusion about this within industry.

Glenn Hedderick / Ken Hood moved to suggest an Information Bulletin STANDATA be drafted to clarify rule 62-402; CARRIED

4.2. CE Code Review

Discussion was held about reviewing the 2021 CE Code to flag potential issues prior to it coming into force in February 2022. Members noted some specific items in the new edition that may cause confusion or require clarification.

Ed Knaggs / Glenn Hedderick moved to form a working group to review CSA 22.1:21; CARRIED

Ed Knaggs / Tyler Masson moved that the working group deliver a final report and recommendations to the Electrical Sub-Council at the December 6, 2021, meeting; CARRIED

Ken Forbes / Glenn Hedderick moved that the working group will consist of Ken Forbes, Ed Knaggs, Patrick Conway, Glenn Hedderick, and Tim Driscoll; CARRIED

4.3. Proposed STANDATA for Section 18: modifications to existing section 18 STANDATA

Proposed revisions to the existing Section 18 STANDATA to address changes in the 2021 edition of the CE Code were included in the agenda package and viewed on screen. It was noted that a STANDATA regarding the 2021 code could not be issued as the 2021 code is not yet in force. This item was presented as information with no further action suggested at this time.

4.4. Proposed Provincial Variance on 18-150 2): 2021 CE Code HazLoc Prov Variance 1

A first draft of a proposed Provincial Variance STANDATA regarding the 2021 CE Code was included in the agenda package and viewed on screen. It was reported that CSA inadvertently removed a substantial amount of equipment from Subrules 18-150 2) and J18-150 2) when these subrules were revised for the 2021 CE Code. Steps are being taken by the CSA code writing committee to correct this, but the correction won't be implemented until the 2024 edition of the code. The proposed variance would correct the issue for the time that the 2021 code is in force. If a province-wide variance is not implemented, industry would need to get individual variances for each piece of equipment, which is not feasible. This item was presented as information and will be added to the next meeting agenda as a matter for decision. [Council Administration]

4.5. Conditions of Use for Table 19

The submission included in the agenda package was viewed on screen. Discussion included the following:

- It is believed that the proponent wants to know if USEI can be used as a feeder or branch circuit.
- USEI is not a concentric neutral.
- It can be purchased with a green bonding conductor.

- USEI is intended for use underground or in ducts and it was questioned whether it would be appropriate to use within a conduit.
- Some members are familiar with it, but many aren't.
- USEI is cheaper than Teck cable and USEB, and it is thought that industry would want to be able to use it as the proponent suggests.

Ken Hood / Tim Driscoll move to recommend that USEI cable can be used in situations other than service entrances as long as it has an insulated green bonding conductor; DEFEATED

Tim Driscoll / Ken Hood move to form a working group to investigate the use of USEI in situations other than service entrances; CARRIED

Ken Hood / Adam Ghani move to appoint Barry Voogd, Lori Monaghan, Gerry Doan, Patrick Conway, and Ken Hood to the working group; CARRIED

Ken Hood / Gerry Doan move that the working group provide a final report at the June ESC meeting; CARRIED

4.6. Working Group Reports

4.6.1. AEUC

There was nothing to report as the group has not met since the last ESC meeting. Their next meeting is April 26, 2021.

4.6.2. Submerged Equipment

A final report with recommendations was circulated prior to the meeting. The chair of the working group reported the following:

- The group received subject matter expertise about servicing submerged transformers from Dave Ship, an expert in electrical equipment servicing.
- The group's scope was specific to submerged equipment but they believe it should be expanded to include equipment exposed to ingress of water, and their recommendations can apply to this expanded scope without additional work.
- NEMA GD-1 Evaluating Water Damaged Electrical Equipment, which is referenced in Appendix B, formed the backbone of the group's work.
- Electrical Safety Foundation International (ESFi) document on Submerged Electrical Equipment was also used to inform the recommendations.
- The report includes suggested wording for a proposed STANDATA as well as samples of graphics that can help readers understand what equipment should be replaced versus reconditioned.

Nicolas Leblanc / Ken Hood move to expand the application of the output of this Working Group to also include electrical equipment exposed to ingress of water, not just submerged or flooded, to align with C22.1-21 Rule 2-032 3) and associated Appendix B Notes on the rule; CARRIED

Nicolas Leblanc / Tyler Masson move to request Municipal Affairs contact NEMA for more background on decisions made on Section 3 transformers, specifically, what is the basis to say replacement of liquid filled and cast resin is required; CARRIED

A member shared an older version of a NEMA document about water damaged equipment which somewhat contradicts the current NEMA GD-1, and the letter could inquire about the rationale for that change. It was noted that industry does sometimes refurbish these transformers rather than replacing as NEMA GD-1 indicates. It was hoped that the letter may encourage NEMA to make adjustments to GD-1 as well as provide clarity to inform a draft STANDATA.

Nicolas Leblanc / Scott Basinger move to recommend a STANDATA be issued to provide interpretation of C22.1 2021 2-032 3), including an illustration like one in the ESFI document to help readers visualize, and to ensure the content of the STANDATA includes details provided in the working group’s report; CARRIED

4.7. BSC Liaison Report

No items were brought forward.

4.8. Administrator/AMA Report

The Administrator reported:

- Farm Services –a letter has been sent from the ESC Chair to the EIAA representative clarifying questions about Rule 6-300 1) b) ii B) and Rule 4-006, and a STANDATA on the topic is forthcoming. It was noted that industry is eager for the clarification and requested that the Administrator bring this STANDATA to the next ESC meeting for review. [Cormier]
- Changes to the Section 2 STANDATA for the 2021 CE Code are forthcoming.
- There may be a joint Building/Electrical Interpretation STANDATA on lightning protection systems. This topic will be added to the next agenda. [Council Administration]

4.9. Council Updates

A written report was included in the portal and updates were provided on:

- Council staff continue working from home.
- Member Portal technical issues.
- Meeting invitations – members were reminded to send an email to Gerry Letendre confirming attendance if they don’t see “accept and send response” options in the invitation. Cancellations from individuals other than Council staff can be ignored.
- Contacts for nominating organizations – a list was included in the agenda package and all members were asked to review and update if necessary. [All]

4.10. Future Loads for Residential Occupancies

It was reported that some municipalities are seeing builders install future services for things such as electric vehicle chargers without the actual device being in place and without including it in the load calculations. It was noted that future services be considered in the load calculation because a different device could be installed (for example, a person buys a home with an “electric vehicle charger ready” garage but installs a hot tub instead). This item was brought forward as information.

5. Meeting Finalization

5.1. Round Table

- The member representing Education and Training reported on his participation on an ad-hoc advisory group established to support the Administrator of Certification with the Master Electrician program. The group's recent work includes developing outcome statements, reviewing the structure of the program to align with regulatory requirements, establishing metrics and KPIs, developing new exam questions, and reviewing the program materials for alignment with the 2021 CE Code. It was noted that there is another ad hoc group that will review the exam.

5.2. Next Meeting

The next meeting was reconfirmed for June 7, 2021 via videoconference at 8:30 a.m.

5.3. Meeting Adjournment

The Chair declared the meeting adjourned at 11:16 a.m.

– NEW ACTION ITEMS –

4.4. Proposed Provincial Variance on 18-150 2): 2021 CE Code HazLoc Prov Variance 1

This item was presented as information and will be added to the next meeting agenda as a matter for decision. [Council Administration]

4.8. Administrator/AMA Report

Farm Services: It was noted that industry is eager for the clarification and requested that the Administrator bring this STANDATA to the next ESC meeting for review. [Cormier]

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– MOTIONS –

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– WORKING GROUP MEMBER LISTS –

WORKING GROUP	WORKING GROUP MEMBERS (<u>Chair</u>)
AEUC	<u>Brian Townsend</u> Jim Porth, Cory Akins, Ran Li, Sandya Neelawala, Travis Shmyr, Ken Chao, Clark Laing, Barry Thoms, Will Hillary, Al Nagel, Henry Navis, Rodger Renwick, Brian Wagner, Lisa Liusz Senio, Mark Liebel, Graeme Vanderstar, Tony Walker
Single Family Residential Dwellings (Joint with GSC)	ESC: Barry Voogd, Bert DeBruin GSC: Roy Herrington, Mark Guderjan, Larry Miller
Submerged and Flooded Equipment	<u>Nicolas Leblanc</u> Tyler Masson, Adam Ghani, Scott Basinger, Patrick Conway, Hussein Desouki, Gerry Doan, Tim Driscoll
2021 CE Code Review	<u>VACANT</u> Ken Forbes, Ed Knaggs, Patrick Conway, Glenn Hedderick, Tim Driscoll
Use of USEI in Situations Other Than Service Entrances	<u>VACANT</u> Barry Voogd, Lori Monaghan, Gerry Doan, Patrick Conway, Ken Hood