

# MINUTES OF THE FIFTH PRESSURE EQUIPMENT SUB-COUNCIL MEETING OF 2021

**DATE:** September 9, 2021

**TIME:** 9:07 a.m. to 2:20 p.m.

**LOCATION:** videoconference

PRESENT: Sub-Council Members

Henry Hau, Chair Nate Bartley Greg Gaudet Warren Kmicik Robert James Billy Lee, Vice Chair Tony McWhannel David Miller, Vice Chair

Nyssa Moore Diederic Godin Danielle Woroniuk

Safety Codes Council

Allison Karch, Kathryn Derkach

**Alberta Municipal Affairs** 

Jon Elliott

**ABSA** 

Djordje Srnic, John Siggers, Jason Reinhart, Mike Prefumo

**REGRETS:** Bert Boulet, Jacques St. Onge, Jim Rice, Geoff Kutz

GUESTS: Justin MacNeil, Jon Wolff, Matthew Yarmuch

**RECORDER:** Kathryn Derkach

2021 MEETINGS: November 4

## 1. Meeting Opening

The Chair called the meeting to order at 9:07 a.m. A round table introduction was held and a safety moment was provided.

#### 1.1 Agenda Adoption

Tony McWhannel/Greg Gaudet moved that the agenda be adopted as circulated; CARRIED

#### 1.2 Adoption of the June 24 Minutes

Billy Lee/Nyssa Moore moved to adopt the minutes of the June 24, 2021 meeting as circulated; CARRIED

#### 2. Matters for Decision

## 2.1. Recommendations to Municipal Affairs regarding continued investigation of Pressure Welding Proposals

Municipal Affairs requested that the Pressure Welders working group review and provide feedback on a number of proposals related to the welding industry and the Pressure Welders Regulation. The working group chair provided a brief overview and the working group meeting notes were posted in the portal for members to review. It was noted that Proposal 13 was discussed and motioned at the last sub-council meeting.

## 2.1.1. Proposal 1 - Review 8(8)(a) and (c) in the Pressure Welder Regulation to harmonize welder continuity and renewal between ASME Section IX and the regulation

Billy Lee/Nyssa Moore moved to recommend harmonizing the welder continuity and renewal between ASME Section IX and the Pressure Welder Regulation; CARRIED.

#### 2.1.2. Proposal 2 – Expansion of the Initial B Test

The working group did not support this proposal.

Billy Lee/Nate Bartley moved to recommend to Municipal Affairs that the proposal to expand the Initial B Test not be investigated further; CARRIED

## 2.1.3. Proposal 3 – Additional training & content on regulations and codes in welder apprenticeship

This proposal falls outside the scope of the sub-council as apprenticeship training requirements are the purview of Alberta Apprenticeship and Industry Training.

## 2.1.4. Proposal 4 – Establish a process for inter-ministry concern or clarifications – complete

This proposal has been completed with Jon Elliott and John Brosda being in regular communication. The Pressure Welder working group will also invite Rob McRae from AIT to future meetings to encourage cross-coordination.

## 2.1.5. Proposal 5 – Allow 1st Year Apprentices to take Grade C performance test

The working group did not support this proposal.

Billy Lee/Nate Bartley moved to recommend to Municipal Affairs that the proposal to allow first year apprentices to take the Grade C performance test not be investigated further; CARRIED

2.1.6. Proposal 6 – Public document to clarify who may apply for Machine Welding Operator certification

Billy Lee/Robert James moved to recommend to Municipal Affairs continue to investigate the document that clarifies who may apply for Machine Welding Operator certification and whether it can be made public; CARRIED.

2.1.7. Proposal 7 – Amend the PWR to recognize Machine Welding Operator (WPO) Journeyperson certification

Discussion is ongoing at the working group level.

2.1.8. Proposal 8 – Clarify technical and administrative items from the PWR in an AB-500 document

Billy Lee/Nyssa Moore moved to recommend that Municipal Affairs investigate clarifying technical and administrative items from the Pressure Welder Regulation in an AB-500 document; CARRIED.

It was clarified that this recommendation is different from the initial proposal and focuses on clarification rather than removal of items from the regulation.

2.1.9. Proposal 9 – Adopt standardized ASME definitions in PWR and AB-500 document

Billy Lee/Nate Bartley moved to recommend that Municipal Affairs investigate adopting standardized ASME definitions in the Pressure Welder Regulation and AB-500 document; CARRIED.

2.1.10. Proposal 10 – Use AB-500 document to clarify conflicts between the PWR and ASME code for welder qualifications

Billy Lee/Greg Gaudet moved to recommend that Municipal Affairs investigate using the AB-500 document to clarify conflicts between the Pressure Welder Regulation and ASME code for welder qualifications; CARRIED.

2.1.11. Proposal 11 – Clarify in the AB-500 document the continued use of "retained" (versus "employed") Welding Examiners

Billy Lee/Robert James moved to recommend that Municipal Affairs investigate clarifying in the AB-500 document the continued use of "retained" (versus "employed") welding examiners; CARRIED.

## 2.1.12. Proposal 12 – Communicate to industry through AB-500 document

This proposal sums up a number of the previous proposals that identify specific items to communication via the AB 500 document.

#### 2.1.13. Proposal 14 – Use simplified language in AB 500 document

The working group supports the use of clear, simple language in the AB-500 document. As this is a generally agreed-to best practice and not feedback of a technical nature, no motion was made.

#### 2.2. Closed Session

## 2.2.1. Appointment of Justin MacNeil to represent the Pressure Vessel Manufacturing Industry

Quorum was not achieved at the time this item was addressed. It is deferred to the November meeting.

## 3. Review Matters Arising/Action List

There were no outstanding action items.

#### 4. Matters for Discussion

#### 4.1. Working Group Reports

## 4.1.1. Power Engineers

The following was highlighted from the working group:

- o Discussion was held around the definition of a boiler and process vessels
- Update was given on SOPEEC

#### 4.1.2. Pressure Welders

The following was discussed:

- Work continues on proposal 7
- ABSA provided feedback on the initial code review

#### 4.1.3. PESR Codes & Standards

The following was discussed:

- Upcoming working group meetings will discuss the summary of changes prepared by ABSA in regards to ASME B31.3, Section 8 Division 1 & 2 and Section
- September 27 meeting will review Section 13 as it relates to the Pressure Equipment Safety Regulation in conjunction with Section 6
- November meeting will be to review AB593 that was recently issued.
- There has been discussion around engineering designations and impacts with ASME and the pressure equipment safety regulation that could take on the form of a working group.

## 4.1.4. PESR In-Service Equipment

The following was discussed:

- There has been discussion around STANDATA communication/awareness when new ones are published and the role ABSA plays in that communication
- Work will continue on the AB500 documents including upcoming AB515, AB518

## 4.2. AMA Report

The Director, Mechanical Codes reported:

Allan Hantelmann, the technical advisor for pressure equipment, has retired.
 There are plans to hire a new technical advisor but no timeline at the moment.

## 4.3. ABSA/Administrator Report

The Administrator reported:

- Summary of Unsafe condition, accident and fire reports
  - No unsafe conditions, accident and fire reports were received since the last update.
  - Brief descriptions are available <a href="https://www.absa.ca/unsafe-condition-accident-fire-reporting/summary-of-unsafe-condition-accident-fire-reports/">https://www.absa.ca/unsafe-condition-accident-fire-reporting/summary-of-unsafe-condition-accident-fire-reports/</a>
- Information Bulletins
  - IB21-006: Documents issued by Alberta Municipal Affairs Governing Equipment Under Jurisdiction of the Gas Safety discipline and the Pressure Equipment Safety disciplines
  - o IB21-005: Leak Testing Components ASME B31.3
- New or Revised AB-500 Documents
  - O No new or revised AB-500 Documents issued since the last meeting.
- ASME
  - The ASME Boiler and Pressure Vessel (BPV) Code Week meetings were held virtually from July 26th to July 31st, 2021.
  - TOMC Technical Oversight Management Committee
    - All ASME Boiler Code Meetings will be virtual through December 2021. For 2022, the plan is to have virtual meetings in February, August, and November and May meeting in person (New Orleans). ASME is evaluating if the return to in person meetings or hybrid approach may be implemented for the 2022 meetings currently scheduled to be virtual.
    - ASME's TOMC and the ASME Section VIII Standards Committee are working on the rules for remote inspections that will be first proposed for use in Section VIII. They can also be used by different codes of constructions also. This development work is not related to COVID-19. It should allow quicker introduction, adoption, and use of new technologies and innovations in the remote inspections.
    - NB reported to TOMC that NB is planning to introduce Electronic Data Transfer (EDT) system replacement in 2022. This action may require adjustments in the current ASME Data Report forms.
  - ASME BPV Section I
    - The Task Group on Modernization is working on the modernization rules for power boilers. Some of these modernization initiatives will include high temperature rules (e.g. material properties, welding

requirements, PWHT, preheat), creep design rules, and creep-fatigue rules. Some of these new rules were published in the 2021 Edition of Section I. The work continues for the 2023 edition.

- ASME BPV Section IV
  - It was reported that Article 8 was omitted in the 2021 edition of ASME BPVC Section IV. Currently, Section IV does not have rules for modular heating boilers. The errata was issued to publish Section IV, Part HG, Article 8 and return modular boiler rules in the code.
- ASME BPV Section VIII: Some of the items that Section VIII are developing for the next edition:
  - Restructure Section VIII Div. 1 and the Standards Committee
    - Complete the reshape of the Division 1 book for the 1st consideration ballot around May 2024 (for 2025 edition)
    - Change to Periodic Maintenance by 2027 or 2029
  - Definition of unfired steam boiler
  - Moving UG-20(f) requirements in UCS-66
  - Development rules for design and construction of fired heater treater vessels
  - ASME and the refrigeration industry have been discussing the Section VIII scope issue since 2017. ASME prepared the Section VIII Scope Deliberation Report and sent this document to industry at the beginning of 2021. The response from the refrigeration industry was received just before the May Code Week. More discussion occurred in the July meeting and it will continue in the November meeting. ASME's plan is to resolve the issue and publish the scope revisions in the 2023 code edition.
  - ASME is still working on a code revision that will clarify the mandatory evaluation of external loads on standard flanges. The proposed code revision will allow the use of three evaluations methods (the current UG-44(b) and 4.16.12 methods from Brown, plus a new method from Koves) and provides a reference to EN 1591 for evaluation of external loads on standard flanges.
  - The Sub Group General Requirements (SGGR) is developing rules for Engineering Contractors, including a proposal for a new Data Report form U-1B. Engineering Contractors are vessel Manufacturers that may or may not have fabrication facilities. This item was discussed in detail at the SGGR May meeting. It was decided that the representative from the International Working Group – Germany (initiator of this item) will provide the revised proposal for the next SGGR meeting,
  - The Committee is working on a proposal that will provide the rules for the design of components that operate at high temperatures in the time dependent regime (creep). When completed, these rules will help designers of large Section I boilers and specific process vessels designed per Section VIII, Div. 2. The Committee is working on a proposal that will provide the rules for the design of components that operate at high temperatures in the time dependent regime (creep). When completed, these rules will help designers of large Section I boilers and specific process vessels designed per Section VIII, Div. 2.

- ASME BPV Section XIII
  - A new ASME BPVC Section XIII has been published on July 1st, 2021.
  - In addition, each code of construction there is a guide (e.g. Section VIII Non-mandatory Appendix PP) to the relocation of overpressure protection requirements. These guides will be in the code books one or two code editions.
  - Section XIII Standards Committee has been:
    - developing strategic items list and
    - working on enhancements of rules for each type of pressure relief devices and conceptual requirements for system design that should be included in 2023 edition of the code
  - Section XIII opened items to start transfer of overpressure protection requirements from B31 codes (e.g. B31.1, B31.3, B31.5, B31.8 and B31.12) into Section XIII.

#### ASME B31.3

- ASME B31.3 2020 edition has been published on June 18, 2021.
- The delay in publication of the 2020 edition of B31.3 is similar as the delay in publication of the 2018 edition. As a reminder, the 2018 Edition of the ASME B31.3 Process Piping Code was published at the beginning of August 2019, as there were issues with the printing of the code.

## • CSA B51

- The CSA B51 Technical Committee (TC) met virtually on Aug. 19th, 2021.
  Highlights include:
  - The B51 Technical Sub-Committee (TSC) on Modernization has held six meetings since October 2020. TSC on Modernization and Task Groups (TG) are working on development of:
    - Conformity Assessment requirements The focus is on
      - o new construction
      - capturing and documenting existing best practices
    - Reorganization of B51 code book using pressure equipment lifecycle approach
    - Transforming B51 into an electronic data book
      - to allow for each group of users to organize the code in line with their activities
      - data book concept has some artificial intelligence capacity
    - Developing an Annex that will define and synchronizing commonly used applications (special requirements) and exemptions
- Both the TSC on Modernization and TGs are planning to have seven or more meetings per year in order to complete a significant portion of the modernization project for the 2024 edition of CSA B51.
- In addition to the modernization project, CSA B51 Technical Committee and TSCs work on many code revision and new rule proposals. Notable items are:

- Introduction of impact testing requirements for commonly used carbon steel materials (e.g. SA-105, SA-106, and SA-234), with the goal of addressing low toughness issues of carbon steels in CSA B51;
- Replacement of the Statutory Declaration form with the Declaration of Conformity form for fittings and revision of the code requirements related to this change;
- Development of a proposal to reference the ISO 16528 Standard Boilers and Pressure Vessels in CSA B51;
- Revision of rules for blow-off vessels;
- Revision of rules for anhydrous ammonia vessels;
- Introduction of requirements for pneumatic testing of pressure equipment;
- Collaboration with the European Standards Bodies to investigate under what conditions European Standard EN 303-5 for heating boilers can demonstrate an equivalent standard of safety as codes and standards currently adopted by CSA B51.
- Discussion on objective based codes and approaches that may be used in B51.

#### CSA B52

- Technical Committee (TC) meeting was held virtually 27 April. The TC and its subcommittee are working on items for the next edition of B52 scheduled for publication December 2022. Some of developing items include:
  - Introduction of new refrigerants
  - Review and potentially revision of Clause 5.2 (125 kW exemption).
  - Pipe materials certified per UL-207
  - Requirements for ammonia refrigeration systems

## CSA Z662

- Technical Committee (TC) meeting was held virtually June 16, 17 & 18, 2021. The TC and its subcommittee are working on items for the next edition of Z662 scheduled for publication in June 2023. The next meeting is scheduled for end November and it will last three or four days in order to catch up with the items that progress slower.
- Some of the items that CSA Z662 TC is working on are:
  - item to incorporate requirements for H2 and renewable (biogas, synthetic) gases into Z662
  - developing safety class methodology (class locations).
  - addressing the HAZ softening issues

#### 4.4. Council Updates

A written report was included in the portal and highlights included:

- We will be moving to a hybrid meeting schedule with approximately half our meetings in person (when possible) and the other half virtual.
- The Safety Codes Council AGM will be held on October 29. Further details will be sent out very shortly.
- Member Training is being offered virtually.
  - New Member Orientation November 9, 9:00 a.m. 12:30 p.m.

- Effective Meetings Workshop October 20 & October 21, 8:30 a.m. 12:30 p.m.
  - Must attend both sessions
- o Contact Gerry Letendre to register: gerry.letendre@safetycodes.ab.ca
- Council office reopening on October 12, 2021
  - Staff may continue to work from home on some days.

#### 4.4.1. Feedback on special meeting format

The current working group special meeting format was put in place many years ago to ensure work was moving forward. Currently our working groups are well established and processes are in place outside of special meetings to ensure work is getting done. There is an opportunity for sub-council members to provide feedback on the current format with a survey being emailed out.

Feedback on the current special meeting format included:

- Some members believe special meetings work well, but there isn't always enough time during the working group breakout sessions
- Previously, members didn't have the tools for remote meetings but as technology and circumstances have change, this isn't as much of an issue anymore.
- Would like to keep special meetings but continue to have longer outside working group meetings.
- It would be helpful to rotate the groupings of meetings during special meetings.

## 4.4.2. 2022-23 Meeting Dates

Draft meeting dates have been posted in the member portal for January 2022 through to June 2023.

It was noted that the proposed March dates will likely fall over the IPEIA conference. Council staff will move those meetings later into the month. [Council Administration]

#### 5. Meeting Finalization

## 5.1. Round Table

None identified.

#### 5.2. Next Meeting

The next meeting was reconfirmed for November 4, 2021, virtually at 9:00 a.m.

#### 5.3. Meeting Adjournment

The meeting was adjourned at 2:20 p.m.

## - NEW ACTION ITEMS -

## 4.4.2. 2022-23 Meeting Dates

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#### - MOTIONS -

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## - WORKING GROUP MEMBER LISTS -

WORKING GROUP	WORKING GROUP MEMBERS (Chair)
Power Engineers	<u>David Miller</u> , Bert Boulet, Henry Hau, Tony McWhannel, Danielle
	Woroniuk, Jim Rice, Mike Lyne, Todd Loran, John Wolff
	ABSA: Mike Poehlmann, John Siggers
Pressure Welders	Billy Lee, Geoff Kutz, Nyssa Moore, Jacques St-Onge, Robert James, Nate
	Bartley, Henry Hau, Justin MacNeil, Rick Walmsley, Matt Yarmuch
	ABSA: Mike Prefumo, Jason Reinhart
PESR Codes and	Greg Gaudet, Henry Hau, Billy Lee, Tony McWhannel, David Miller, Eric
Standards, Design	Madsen, Jim B. Seale, Neil McKay, Shawn Morrison, Trevor Seipp,
Registration and Shop	Diederic Godin, Kelly Bell
Inspections	ABSA: Djordje Srnic
PESR In-Service	Geoff Kutz, Greg Gaudet, Henry Hau, Todd Loran, Nyssa Moore, Jacques
Inspections, Repairs &	St-Onge, John Wolff, Nate Bartley, Diederic Godin (Vice Chair), Jim Rice
Alterations, and PEIM	ABSA: Mike Poehlmann, Mike Prefumo, John Siggers
Program	