



Safety Codes Council

MINUTES OF THE SECOND PRESSURE EQUIPMENT SUB-COUNCIL MEETING OF 2020

- DATE:** March 12, 2020
- TIME:** 9:00 a.m. to 2:36 p.m.
- LOCATION:** Safety Codes Council Office, Edmonton
- PRESENT:** *Sub-Council Members*
Henry Hau, Chair
Nate Bartley
Robert James
Marvin Kossowan
Geoff Kutz
Billy Lee, Vice Chair
Jim Rice
Tony McWhannel - teleconference
David Miller, Vice Chair
Nyssa Moore
Jacques St-Onge
Danielle Woroniuk
Diederick Godin - teleconference
Dr. Magdi Ghobrial
- Safety Codes Council*
Allison Karch, Kathryn Derkach, Jennifer Johnson, Susan Rossmann (for item 4.1)
- Alberta Municipal Affairs*
Allan Hantelmann
- ABSA*
Mike Poehlmann, Robin Antoniuk, Djordje Sronic, Jason Reinhart, John Siggers
- REGRETS:** Greg Gaudet, Mike Clancy
- GUESTS:** Matthew Yarmuh, AWOC; Ryan Shayegh, Sherritt International;
Colby Chapman, APVMA; Neil MacKay, APVMA
- RECORDER:** Kathryn Derkach
- 2020 MEETINGS:** May 7, September 3, October 22, December 3

1. Meeting Opening

The Chair called the meeting to order at 9:00 a.m. A round table introduction was held and a safety moment was provided.

1.1 Agenda Adoption

Geoff Kutz / Jacques St. Onge moved that the agenda be adopted, as circulated; CARRIED

1.2 Adoption of the January 9 Minutes

Nate Bartley / Robert James moved to adopt the minutes of the January 9, 2020 meeting, as circulated; CARRIED

2. Matters for Decision

2.1. Pressure Welder Regulation Request

The Assistant Deputy Minister at Municipal Affairs sent a letter to the Safety Codes Council, requesting that the Council review and provide any input on the proposed amendment to extend the expiry of the Pressure Welders Regulation.

Billy Lee / Geoff Kutz moved to recommend to the Minister to adopt the recommended Pressure Welders Regulation amendment; CARRIED

2.2. Closed Session

Jim Rice / David Miller moved to enter closed session; CARRIED

Item 2.1.1 was discussed in closed session.

Nate Bartley / Danielle Woroniuk moved to come out of closed session; CARRIED

2.2.1. Appointment of Colby Chapman/Neil MacKay to represent Pressure Vessel Manufacturing Industry

Geoff Kutz / Marvin Kossowan moved to recommend to the Board appointment of Colby Chapman to the Pressure Equipment Sub-Council to represent Pressure Vessel Manufacturing Industry for a term ending January 31, 2023, effective immediately.

2.3. Skills Matrix

Deferred to next meeting.

It was requested that sub-council members who have not sent in their skills do so before the next meeting. [All]

3. Review Matters Arising/Action List

	Item	Action	Date Initiated	Responsible	Status/Update
1.	Power Engineer Certification Differences	It was requested that the gap analysis between Alberta's and Quebec's requirements for Power Engineers be provided to the sub-council.	Sep 5/19 4.5.	Hantelmann	Document posted in January 2020 meeting folder.

	across Provinces				Complete, remove from list.
2.	Ammonia Refrigeration Systems Concerns	Continue working on long term recommendations.	Mar 14/19 2.3.	Power Engineers WG	In progress.
		ABSA will put together a task group to assist in development of an “AB-500 document” to address integrity management system requirements for ammonia refrigeration plants. The findings of this task group will be brought back to the sub-council. Tony McWhannel and Mike Clancy volunteered for the task group.	Oct 24/19 4.1.	Poehlmann/ Miller/ McWhannel/ Clancy	Item 4.2.1.1. on agenda
3.	Certification Requirements for Providing Reduced Supervision document	The Administrator asked for a status update on the Certification Requirements for Providing Reduced Supervision document and the Power Engineers Working Group’s feedback on it. Todd Loran will work with the Working Group Chair to provide an update for the next meeting.	Jan 9/20 4.3.1.	Miller	In progress.
4.	Investigate Info Bulletin to Clarify Section 4 Application	Concerns that many of the end users of Section 4 are not familiar with how to properly apply the code. It was questioned whether an Information Bulletin should be issued for the general public to clarify. It was noted that some of the issues arise because of different rules in Europe regarding manufacturers’ responsibilities. The PESR Codes and Standards Working Group will address this at their next meeting.	Jan 9/20 4.3.3.	PESR Codes & Standards Working Group	The Working Group is discussing Section 4 with a focus on modular boilers.
5.	Draft AB-500 Document on Implementation Guidance for TLHS	It is requested that sub-council members provide any input on this document to the Administrator.	Jan 9/20 4.5.	All	AB-537 has been issued. Item complete and will be removed from list.

4. Matters for Discussion

4.1. Governance Update

Susan Rossmann, Manager of Stakeholder Relations, gave a presentation on the sub-council governance review findings. Highlights of the presentation included:

- Overall, the feedback was positive with some suggestions for improving processes, some of which have already been implemented.
- Two major issues were identified:
 - It was found that the TCC was meeting too infrequently and the technical expertise at the table wasn’t always sufficient to effectively address issues.

- There are two working groups that are functioning as sub-councils but don't have the governance structure or oversight that sub-councils do: the PSDS working group (Plumbing Sub-Council) and AEUC working group (Electrical Sub-Council).
- The Board has made the recommendation to dissolve the TCC and create two new sub-councils. These recommendations would be implemented through a bylaw change, which is being presented at the AGM in May. To ensure communication among sub-councils is maintained, the Council will continue work on improved reporting systems and processes between sub-councils:
 - Liaisons
 - Joint working groups
 - Working group report templates
 - Quarterly reports
 - Two-week agenda package posting

It was noted that the Council is always open to feedback on these proposals and sub-council members were encouraged to give feedback on the new reporting and communication processes as well. If members have any further questions or feedback, contact Susan at susan.rossmann@safetycodes.ab.ca.

4.2. Working Group Reports

4.2.1. Power Engineers

4.2.1.1. Draft Integrity Management Requirements of Mechanical Refrigeration Systems Containing Ammonia

The working group reviewed the document and will finish the review at their next meeting. The Chair of the working group will compile the comments and send to ABSA. [Miller]

It was noted for information by ABSA that ASME is looking into changing the scope of Section 8.

4.2.2. Pressure Welders

The working group reviewed the Pressure Welder Regulation request from Municipal Affairs and discussed the timing and the submission process for change recommendation. It was reported that the working group have completed their review and will hold off on submitting their recommendations until October 2021.

4.2.3. PESR Codes & Standards

The working group reviewed AB537 Thermal Liquid Heating System Requirements, which was created to provide explanation and guidelines of requirements and different exemptions. There were no concerns around this document from the working group. It was requested the members of the PESR review the document.

At the next working group meeting, the group will discuss the time requirements for hydro testing for piping under B31-3.

4.2.4. PESR In-Service Equipment

The working group discussed the AB506 Inspection and Servicing Requirements for In-Service Pressure Equipment document. PESR members with comments on this document, were asked to send them to the working group chair. Final comments will be supplied to ABSA.

4.3. AMA Report

The Technical Advisor reported:

- There is still a focus on Red Tape Reduction (RTR), however DAO’s are not included in this exercise.
- The Technical Advisor took the Minister of Municipal Affairs on a tour of ABSA and other pressure equipment facilities.
- Work continues on the difference in power engineering certification in Alberta and Quebec. Gaps have been identified and the department of Labour is looking into ways to bridge those gaps. ABSA is also working the government on this issue. It was noted that AMA would involve stakeholder groups, including the PESR, as they work through this issue.
- Province and Territorial Policy Advisory Committee on Codes (PTPACC) is looking into standardization of pellet fired wood boilers.

4.4. ABSA/Administrator Report

Summary of Unsafe condition, accident and fire reports

23 unsafe condition, accident and fire reports were received since the last update.

Brief descriptions are available here:

<https://www.absa.ca/unsafe-condition-accident-fire-reporting/summary-of-unsafe-condition-accident-fire-reports/>

Date Reported	Injuries	Fatalities	Description	Loss of Containment
2020-01-30	0	0	A leak was discovered in a high pressure steam piping system. The pipe was found to have a through wall crack as the result of service induced deterioration.	Yes
2020-01-22	0	0	Operators observed smoke and steam vapor issuing from a pressure vessel. Upon further inspection, a through wall crack approximately 30 inch long was found at a circumferential weld.	Yes
2020-01-22	0	0	A tube bundle was removed from a heat exchanger for inspection and maintenance. The bundle was fouled with a substance that caught upon initial removal.	No
2020-01-21	0	0	Liquids accumulated in a compressed gas cooler the tube and froze causing the tube to fail.	Yes

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2020-01-20	0	0	Operators for a small steam leak under the insulation at a pressure vessel nozzle. It was determined that internal erosion resulted in a breach of the pressure envelope.	Yes
2020-01-18	0	0	Process upset due to failure of rotating equipment resulted in excess liquid and pressure in the system. The fluid released by the PSV contained excess liquid, which accumulated and ignited.	Yes
2020-01-16	0	0	Operator burned with hot water while draining a filter pot. Second degree burns required hospitalization and surgery.	Yes
2020-01-16	0	0	Pressure vessel sight glass gasket failed resulting in significant fluid loss. Emergency procedures were initiated to contain leak without further damage.	Yes
2020-01-07	0	0	A pinhole leak was discovered on the bridle to inlet separator as a result of a high LEL alarm. The pinhole is believed to be caused by microbial corrosion.	Yes
2020-01-06	0	0	A pinhole leak was discovered on a piping system. The pinhole was attributed to corrosion.	Yes
2019-12-24	0	0	A steam leak was detected on a blowdown line. The leak is believed to be due to corrosion.	Yes
2019-12-24	0	0	A PSV was found to be unintentionally venting, as a result of a failed lifting spring.	Yes
2019-12-20	0	0	During inspection, a total of 13 heating boilers were found to be operating without functional low water cut offs.	No
2019-12-19	0	0	A compressor safely shut down after Lower Explosive Limits (LEL) were detected in a compressor building. Cracking was discovered at a thread-o-let and is believed to be fatigue induced from vibration of the piping.	Yes
2019-12-19	0	0	Operations noticed abnormal level fluctuations in pressure vessels. Investigation found the associated piping to have failed as a result of freezing.	Yes
2019-12-18	0	0	After a planned outage, the economizer tubes on a boiler were found to be leaking during start up. The cause of the leaking tubes was found to be freeze damage, as the economizer	Yes

			was not fully drained when the boiler was taken offline.	
2019-12-12	0	0	After repair, a valve was put back into service and placed under pressure. A nipple on the valve failed and was propelled through an adjacent wall.	Yes
2019-12-11	0	0	A solvent outlet line was found to be frozen, due to failed heat tracing.	No
2019-12-07	0	0	The piping on a high temperature separator failed, allowing process fluid to escape and then ignite, causing a fire. The cause of the leak is believed to be internal corrosion/erosion.	Yes
2019-12-05	0	0	A plugged exchanger tube was found to be leaking due to a missing plug gasket.	Yes
2019-12-04	0	0	A portion of boiler feedwater piping (on the pump suction side) was overpressured, due to an error in operation.	No
2019-12-02	0	0	Frozen piping was discovered on the de-superheater water line inlet to a steam turbine generator.	No

Information Bulletins issued since January 6th, 2020

Interpretation	2020-02-18	IB20-005	<u>Requirements for Reduced Supervision in accordance with the PER</u>	PER
Interpretation	2020-02-18	IB20-004	<u>Requirements for Thermal Liquid Heating Systems</u>	PEEO
Interpretation	2020-02-18	IB20-003	<u>Updated Documents to Reflect Partial Exemptions for Thermal Liquid Heating Systems</u>	PEEO
Interpretation	2020-01-30	IB19-015-R1	<u>Power Engineering Courses Satisfactory to the Administrator</u>	PER
Interpretation	2020-01-07	IB20-002	<u>Pressure Piping Alternative Test Methods</u>	PESR

New or Revised AB-500 Documents

- AB-519 Pressure Piping Alternative Test Methods
- AB-537 Thermal Liquid Heating System (TLHS) Requirements - New
- Updated to address TLHS partial exemption
- AB-529 Pressure Equipment Exemption Order User Guide, Revision 4,
- AB-508 Safety Codes Act Flowchart, 2020-02
- AB-516 Pressure Equipment Safety Regulation User Guide, Edition 3, Revision 0
- AB-528 Requirements for Reduced Supervision of Power Plants, Thermal Liquid Heating Systems, and Heating Plants

ASME

The ASME Boiler and Pressure Vessel Code Week meetings were held in Las Vegas, Nevada, from February 3rd to 7th, 2020.

This is the mid-point in the ASME development cycle. Significant items have been reported previously. There continues to be discussion about the scope of Section VIII and the impact certain segments of industry operating in jurisdictions with legislation that uses the code to set the scope of regulatory involvement. The project to publish new Section XIII Overpressure Protection continues, with items being worked to remove overprotection rules from the construction books (e.g. Sections I, IV and VIII) that will be redundant when Section XIII is published.

CSA B51

A proposal was made to the B51 Technical Committee at its August 2019 to initiate a project to modernize CSA B51. The proposal was discussed, and the Technical Committee approved a motion to go forward with the project and to form a new Subcommittee on Modernization. The project will encompass 3 key aspects. The code is to be reformatted to make it more user friendly. A new informative (non-mandatory) annex on Scope (e.g. exemptions) is to be developed. Conformity assessment requirements are to be included.

The concept for the Scope annex is to develop it based on a compilation of exemptions in existing Canadian pressure equipment regulation. Once published, each jurisdiction could then choose to analyze it to determine if any amendments to its legislation may be in order to support harmonization while maintaining safety.

The concept for the conformity assessment elements is to develop rules to address:

- quality programs for organizations that manufacture, repair, or take responsibility for pressure equipment;
- quality programs for organizations that provide new construction inspection, design review & registration, and audits of quality systems of organizations that supply products and/or services in the pressure equipment discipline;
- processes and activities for
 - audits of quality programs,
 - inspections – new construction & repairs at B51 shops (i.e. non-ASME stamp shops),
 - design reviews & registrations;
- competency of Inspectors, Design Surveyors, and Auditors.

4.5. Council Updates

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

- There are number of member training sessions coming up, please contact Gerry to register:
 - Effective Meetings Workshop – March 23
 - Appeals Training – March 24
- Registration for Conference 2020 is now open for sub-council members and general public. Please be sure to register as soon as possible to guarantee a room at the Rimrock.

Once the Rimrock is sold out of rooms, the Council will still provide you a room at a different hotel.

- Dr. Sauer Award nominations are due on March 20. Please contact Kathryn if you have any questions about the nomination process.
- Changes to the working group procedures to be more flexible and provide more oversight of working groups. For the PESC, these changes are expected to only change the governance documentation and should effect how the groups operate.

5. Meeting Finalization

5.1. Round Table

- Marvin Kossowan was recognized for his years of service on the sub-council.

5.2. Next Meeting

The next meeting was reconfirmed for May 7, 2020 at the Council office at 9:00 a.m.

5.3. Meeting Adjournment

The meeting was adjourned at 2:36 p.m.

– NEW ACTION ITEMS –

2.3. Skills Matrix

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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> Mike Clancy, Henry Hau, Todd Loran, Tony McWhannel, John Wolff, Danielle Woroniuk, Jim Rice Industry Representative: Mike Lyne (Suncor) Support: Mike Poehlmann, Tom Lemming, John Siggers, Allan Hantelmann
Pressure Welders	<u>Billy Lee</u> Marvin Kossowan, Geoff Kutz, Nyssa Moore, Jacques St-Onge, Robert James, Nate Bartley Industry Representation: Matt Yarmuch, AWOOC Support: Jason Reinhart, Robin Antoniuk, Allan Hantelmann
PESR Codes and Standards, Design Registration and Shop Inspections	<u>Greg Gaudet</u> Magdi Ghobrial, Marvin Kossowan, Billy Lee, Tony McWhannel, David Miller, Industry Representatives: Eric Madsen, Shell Canada; Jim B. Seale, Seale Engineering; Neil McKay, Cesco; Shawn Morrison, M5 Engineering; Simon Yuen, Suncor Energy; Trevor Seipp, Becht Engineering; and Kelly Bell, Cenovus Energy Support: Mike Poehlmann, Djordje Sronic.
PESR In-Service Inspections, Repairs & Alterations, and PEIM Program	<u>Geoff Kutz</u> Greg Gaudet, Henry Hau, Todd Loran, Nyssa Moore, Jacques St-Onge, John Wolff, Nate Bartley, Jim Rice Support: Robin Antoniuk, Allan Hantelmann