



Safety Codes Council

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

DATE: January 9, 2020

TIME: 9:00 a.m. to 2:20 p.m.

LOCATION: Safety Codes Council Office, Edmonton

PRESENT: Henry Hau, Chair
Nate Bartley
Mike Clancy
Greg Gaudet
Dr. Magdi Ghobrial
Robert James
Marvin Kossowan
Geoff Kutz
Billy Lee, Vice Chair
Todd Loran
Tony McWhannel
Nyssa Moore
Jacques St-Onge
John Wolff

ABSA
Mike Poehlmann, Robin Antoniuk, Djordje Srnic

Alberta Municipal Affairs
Allan Hantelmann, Bohdan Yard

Safety Codes Council
Allison Karch, Kathryn Derkach

REGRETS: David Miller (Vice Chair), Danielle Woroniuk

GUESTS: Diederick Godin, GUAC; Matt Yarmuch, AWOC

RECORDER: Kathryn Derkach

2020 MEETINGS: March 12, 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

John Wolff / Todd Loran moved that the agenda be adopted, as circulated, with a flexible order of business; CARRIED

1.2 Adoption of Minutes

The minutes were reviewed and the following corrections were made:

- Item 2.1.4. – wording of the motion should read ‘the appointment of Diederick Godin’.
- In the Working Group Member list on page 11, Nate Bartley should be on the Pressure Welders and PESR In-Service Inspections groups. Council staff will review the Working Group Member list to ensure it is up-to-date. [Council Administration]

It was noted that Doug Brow was recommended to represent the Building and Heating Plants industry segment but he has since declined the appointment. Council staff is working to with BOMA to find a new nominee.

Robert James / Todd Loran moved to adopt the minutes of October 24, 2019 as amended; CARRIED

2. Matters for Decision

No matters for decision were brought forward at this time.

3. Review Matters Arising/Action List

	Item	Action	Date Initiated	Responsible	Status/Update
1.	Power Engineer Certification Differences across Provinces	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	A confidential document, with some of the differences between Alberta and Quebec from MA will be added to the portal for information. Work is still being done around this issue.
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	Oct 24/19 4.1.	Poehlmann/ Miller/ McWhannel/ Clancy	The task group was formed and has met to draft the document. Once the document has gone through the ABSA internal review process, it will be

		findings of this task group will be brought back to the sub-council. Tony McWhannel and Mike Clancy volunteered for the task group.			brought back to the sub-council.
3.	Development of Skills Matrix	Each sub-council member was asked to define a few skills and/or qualifications for their own position that would be essential for their work on the sub-council and to forward this to the Council by November 25, 2019.	Oct 24/19 2.1.1.1.	All	Item 4.2 on agenda.

4. Matters for Discussion

4.1. Clarification to May 2019 Minutes

It was reported that an incorrect statement was made at the May 2019 meeting and captured in the minutes. The following correction is noted:

“The May 2019 Pressure Equipment Sub-Council minutes incorrectly state that the Alberta Welding Optimization Committee (AWOC) would prefer that ASME Section IX rules be relied on as the sole requirements for welder qualification. The Chair of AWOC has clarified that AWOC has not advocated for the removal of Pressure Welder Regulation welder qualifications and/or sole reliance on ASME IX.”

Greg Gaudet / Mike Clancy moved to support the clarification to the May 2019 minutes to be noted in the January 2020 minutes as described above, and to strike through the incorrect statement in the May 2019 minutes and make note to refer to the January 2020 minutes; CARRIED.

4.2. Review Draft Skills Matrix

Work continues on the Skills Matrix document. It was noted that ‘soft skills’ such as communication or attendance would be general skills applicable to all sub-council members. Members should focus on technical skills and experience specific to their industry segment.

Sub-council members who have not submitted their skill sets were asked to do so as soon as possible. [All]

Council staff will compile all skills and bring back a redline documents with edits to the next meeting. [Council Administration]

It was clarified that this is an internal document to help nominating organizations know what to look for when seeking nominees and to help the sub-council know what skills/qualifications they should look for when reviewing new nominees.

4.3. Working Group Reports

There was discussion around the scheduling of working group meetings and it was suggested that Doodle be used as a way to gather input from the group before a meeting is scheduled. It was also noted that if working groups have non-members that need access to the Member Portal, Working Group Chairs should contact Council staff.

4.3.1. Power Engineers

The Administrator asked for a status update on the Certification Requirements for Providing Reduced Supervision interpretation. It was unclear if the working group had submitted a proposed document to the Administrator on this topic. Todd Loran will work with the Working Group Chair to provide an update for the next meeting. [Loran/Miller]

4.3.2. Pressure Welders

The Working Group Chair provided a report on the following work in progress:

- The 3 column document regarding proposed changes to the Pressure Welder Regulation has gone through a fourth revision to reduce the proposed changes down to five. This document will be brought to the March meeting for review and recommendation.
- The group reviewed the 2019 edition of ASME Section 9 and found no issues or concerns.

4.3.3. PESR Codes & Standards

The Working Group Chair reported that the group has reviewed the 2019 edition of ASME Section 1, Section 4, and Section 8 Divisions 1 and 2, as well as CSA z662-19.

In regards to automatic code adoption, it was clarified that the role of the sub-council is to review the codes and, if no concerns are found, to make a motion supporting the codes' automatic adoption.

Greg Gaudet / Geoff Kutz moved to support the automatic adoption of ASME Boiler and Pressure Vessel Codes, 2019 edition, and CSA Z662-19; CARRIED.

Greg Gaudet / Geoff Kutz moved to recommend to the Administrator to issue an Information Bulletin to address the use of Appendix 46, Section A, Division 1; CARRIED.

This led to a discussion regarding 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. [Gaudet]

4.3.4. PESR In-Service Equipment

The Working Group Chair provided a report on the following work in progress:

- Inspector certifications and the addition of piping to that certification
- Discussion of the high pass/fail rate of initial applications and that instruction on how to fill out the application could be beneficial as a number of people fill out the application improperly.
- There are three levels of certification, and there is an ongoing discussion that being qualified for one level should or should not automatically qualify a person for the other three.

4.4. AMA Report

The Technical Advisor reported:

- The Public Safety department at Municipal Affairs has changed its name to Technical and Corporate Services.
- Red tape reduction is ongoing.

4.5. ABSA/Administrator Report

Summary of Unsafe condition, accident and fire reports

22 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
2019-11-28	0	0	Underground piping was found to be leaking. The cause of the failure was attributed to corrosion under insulation.	Yes
2019-11-27	0	0	A high pressure steam boiler was found to be leaking feedwater. The cause of the leak was determined to be a failed gasket.	Yes
2019-11-27	0	0	A pressure piping system experienced 3 separate failures due to freezing. Failure of the electric heat tracing is believed to be the cause.	Yes
2019-11-26	0	0	A heating boiler was shut down because of a low limit alarm. Upon investigation a number of boiler tubes were found to have failed, most likely due to corrosion from inadequate water treatment.	Yes
2019-11-25	0	0	A thermowell on an autoclave failed, allowing ammonia to escape. The failure is believed to be caused by a thinned thermowell wall, brought on by erosion.	Yes
2019-11-19	0	0	Ammonia was discovered to be leaking from the top of a plate heat exchanger in a refrigeration plant. It was determined a gasket failure was the cause of the leak.	Yes
2019-11-13	0	0	A flange on an isolation valve was found to be leaking during normal operation. The line was isolated and depressurized, and the leak corrected by tightening the bolting on the flange.	Yes
2019-11-13	0	0	An air cooled heat exchanger tube failed due to the freezing of residual internal fluid left behind during maintenance work.	Yes
2019-11-12	0	0	Condensate piping failed as a result of corrosion in the line.	Yes
2019-11-12	0	0	A fire initiated at the top of a coke drum. The cause of the fire was undetermined.	No
2019-11-12	0	0	An operator noticed fluid dripping from the channel head of a heat exchanger.	Yes
2019-11-12	0	0	A section of 1 inch piping was damaged from rubbing on the compressor structure. Upon investigation a clamp was found to be broken, most likely from vibration.	No

2019-11-06	0	0	One of the tubes on an aerial cooler froze and ruptured, due to colder than anticipated temperatures.	Yes
2019-11-04	0	0	An operator noticed steam leaking from a 4 inch elbow on the outlet piping on a power boiler. Inadequate water treatment is believed to be the root cause.	Yes
2019-11-04	0	0	A pinhole leak was found on a water level control valve in a separator building. The pinhole is suspected to have been caused by sand erosion.	Yes
2019-10-31	0	0	The feed nozzle of a reactor vessel cracked at the weld, releasing process fluid. It is suspected that improper gusseting led to the cracking.	Yes
2019-10-25	0	0	An ammonia gas leak was discovered on a section of 8 inch piping. The root cause is believed to be corrosion under insulation.	Yes
2019-10-24	0	0	Two nozzles on two different compressor bottles cracked, allowing process fluid to escape. The cracks were attributed to mechanical failure of the compressor, which caused it to move violently.	Yes
2019-10-11	0	0	Steam was found to be leaking at a flanged connection. The flange was found to have pitting on the ring mating surface and the early stages of a steam cut.	Yes
2019-10-08	0	0	A 2 inch elbow on the inlet to a blowdown drum was found to be leaking. The cause of failure is believed to be steam/condensate erosion.	Yes
2019-10-07	0	0	During rounds, operators found process fluid to be leaking from a pressure vessel. Upon investigation the cause was attributed to corrosion under insulation.	Yes
2019-10-03	0	0	Steam was found to be leaking from a flanged connection in a piping system. The line was inspected and a pinhole leak was found in the weld metal connecting the flange to the piping.	Yes

Information Bulletins issued since October 24th, 2019

Notification (Information)	2020-01-06	IB20-001	<u>Thermal Liquid Heating Systems Partial Exemption</u>	PEEO, PESR, PER
Interpretation	2019-12-13	IB19-015	<u>Power Engineering Courses Satisfactory to the Administrator</u>	PER
Alert	2019-12-10	IB19-014	<u>Alert – Emerson Automation Solutions Product Service Bulletin</u>	PESR

Interpretation	2019-12-10	IB19-013	<u>Registration of PE Alternation Design Based on FFS</u>	PESR
Interpretation	2019-12-04	IB19-012	<u>Performance Qualification Card Expiry</u>	PWR

New or Revised AB-500 Documents

AB-535 Requirements for Alteration Design Registration based on Fitness for Service Assessments.
New Annex B – Quality Plans for FFS

ASME

The ASME Boiler and Pressure Vessel Code Week meetings were held in Atlanta, Georgia, from October 28th to November 1st, 2019. Highlights include:

- Technical Oversight Management Committee (TOMC)
 - It was reported that the committee on Qualifications for Authorized Inspection (QAI) has been working on a proposal that will address situations where an Authorized Inspector Supervisor and client (manufacturer) cannot agree. In those cases, a non-conformance shall be reported to ASME for resolution.
- 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. Their goal is to have some of these new rules published in the 2021 Edition of Section I.
- Section VIII
 - The Section VIII Task Group on Scope and Exemptions has been working with the U.S. refrigeration industry in exploring different options on revising the scope without impacting industry.
 - The Task Group working on the revision of U-2(g) rules completed their work. The last item was accepted and it specifies activities where an engineer must provide oversight.
 - The code change will introduce the requirements for responsible engineer and designer, and the manufacturer will be required to establish the minimum competence requirements for performing design activities, and the qualification and certification requirements for personnel. This code change will be published in the 2021 edition.

The Administrator gave a presentation on Thermal Liquid Heating Systems (TLHS). Highlights included:

- There is confusion around the difference between boilers and TLHS systems; they may look the same but they operate very differently.
- There has been legislation introduced over the past 40 years to help regulate but the implementation and application of the rules has been inconsistent.
- The interpretations (definitions) in the Regulations are subject to reader interpretation, leading to further confusion.
- To help solve these issues, ABSA proposed in 2015:

- that all requirements apply to TLHS installed in ‘non-process’ facilities
- to establish partial PESR exemption for TLHS installed in oil, gas and chemical facilities – selective application of PESR Section 37 and accident reporting
- to establish conditional exemption from PER
- to modify existing interpretations (definitions) in the PESR and PER.
- This proposal has been acted on and ABSA has created a draft AB-500 document on TLHS to provide implementation guidance. They are looking for feedback from stakeholders on the document. The document will be circulated and it is requested that sub-council members provide any input to the Administrator. [All]

There was discussion around the Information Bulletin IB20-001 Thermal Liquid Heating Systems Partial Exemption. It was clarified that defined terms are open to interpretation but if the Administrator sees issues arise, he can take action regarding clarification.

4.6. Council Updates

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

- The process for ‘in-camera sessions’ and clarification that any motions made during those sessions must be made out of camera and recorded in the minutes.
- Allison will be on maternity leave starting in March. Please remember to include Kathryn on all emails going forward.
- There are number of member training sessions coming up, please contact Gerry to register:
 - New Member Orientation – March 5
 - Effective Meetings Workshop – March 23
 - Appeals Training – March 24
- Registration for Conference 2020 will open for sub-council members only in February. Please be sure to register before the end of February to guarantee a room at the Rimrock. Any registrations after that may be at a different hotel. General registration for non-members will open in March.
- Reminder to submit any outstanding 2019 expense claims.

5. Meeting Finalization

5.1. Round Table

Todd Loran, John Wolff, Mike Clancy were recognized for their years of service on the PESC.

Marvin Kossowan / Todd Loran moved to hold an in-camera discussion; CARRIED

Marvin Kossowan / Mike Clancy moved to come out of camera; CARRIED

ABSA has been working with TSSA on a CRN harmonization project with the intent to standardize design reviews and the qualifications of the person doing the review. About a year ago, a web portal was launched that all regulatory authorities would have access to and through which people could submit design submissions. The Regulatory Reconciliation and Cooperation Table (RCT), established under the Canadian Free Trade Agreement (CFTA), created a CRN agreement that has been signed by all provinces except Alberta, New Brunswick, and Nova Scotia. The agreement came into effect January 1, 2020. There have been some implementation issues with the CRN Online Portal because of this agreement and because of other considerations, such as

ABSA's tight turnarounds for design proposals. There is discussion of extending the turnaround time from 8 working days to 15 or perhaps more.

5.2. Next Meeting

The next meeting was reconfirmed for March 12, 2020 as a special meeting.

5.3. Meeting Adjournment

Nate Bartley / Mike Clancy moved that the meeting be adjourned; CARRIED

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

--- NEW ACTION ITEMS ---

1.2 Adoption of Minutes

In the Working Group Member list on page 11, Nate Bartley should be on the Pressure Welders and PESR In-Service Inspections groups. Council staff will review the Working Group Member list to ensure it is up-to-date. [Council Administration]

4.2. Review Draft Skills Matrix

Sub-council members who have not submitted their skill sets were asked to do so as soon as possible. [All]

Council staff will compile all skills, and bring back a redline documents with edits to the next meeting.

[Council Administration]

4.3.1. Power Engineers

The Administrator asked for a status update on the Certification Requirements for Providing Reduced Supervision interpretation. It was unclear if the working group had submitted a proposed document to the Administrator on this topic. Todd Loran will work with the Working Group Chair to provide an update for the next meeting. [Loran/Miller]

Commented [KD1]: Mike - I'm not 100% sure this is the document you were referring to so please correct me.

4.3.3. PESR Codes & Standards

The PESR Codes and Standards working group will address this at their next meeting. [Gaudet]

4.5. ABSA/Administrator Report

This proposal has been acted on and ABSA has created a draft AB-500 document on TLHS to provide implementation guidance. They are looking for feedback from stakeholders on the document. The document will be circulated and it is requested that sub-council members provide any input to the Administrator. [All]

--- MOTIONS ---

1.1. Agenda Adoption

John Wolff / Todd Loran moved that the agenda be adopted, as amended, with a flexible order of business; CARRIED

1.2. Adoption of Minutes

Robert James / Todd Loran moved to adopt the minutes of October 24, 2019 as amended; CARRIED

4.1. Clarification to May 2019 Minutes

Greg Gaudet / Mike Clancy moved to support the clarification to the May 2019 minutes to be noted in the January 2020 minutes as described above, and to strike through the incorrect statement in the May 2019 minutes and make note to refer to the January 2020 minutes; CARRIED.

4.3.3. PESR Codes & Standards

Greg Gaudet / Geoff Kutz moved to support the automatic adoption of ASME Boiler and Pressure Vessel Codes, 2019 edition, and CSA Z662-19; CARRIED.

Greg Gaudet / Geoff Kutz moved to recommend to the Administrator to issue an Information Bulletin to address the use of Appendix 46, Section A, Division 1; CARRIED.

5.1. Round Table

Marvin Kossowan / Todd Loran moved to hold an in-camera discussion; CARRIED

Marvin Kossowan / Mike Clancy moved to come out of camera; CARRIED

5.3. Meeting Adjournment

Nate Bartley / Mike Clancy moved that the meeting be adjourned; CARRIED

WORKING GROUP MEMBERS

WORKING GROUP	WORKING GROUP MEMBERS (<u>Chair</u>)
Power Engineers	<p><u>David Miller</u> Mike Clancy, Henry Hau, Todd Loran, Tony McWhannel, John Wolff, Danielle Woroniuk Industry Representative: Mike Lyne (Suncor) Support: Mike Poehlmann, Tom Lemming, John Siggers, Allan Hantelmann</p>
Pressure Welders	<p><u>Billy Lee</u> Marvin Kossowan, Geoff Kutz, Nyssa Moore, Jacques St-Onge, Robert James, Nate Bartley Industry Representation: Matt Yarmuch, AWOC Support: Jason Reinhart, Robin Antoniuk, Allan Hantelmann</p>
PESR Codes and Standards, Design Registration and Shop Inspections	<p><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 Srnic.</p>
PESR In-Service Inspections, Repairs & Alterations, and PEIM Program	<p><u>Geoff Kutz</u> Greg Gaudet, Henry Hau, Todd Loran, Nyssa Moore, Jacques St-Onge, John Wolff, Nate Bartley Support: Robin Antoniuk, Allan Hantelmann</p>