



MINUTES OF THE FIRST PRESSURE EQUIPMENT SUB-COUNCIL MEETING OF 2019

DATE: January 10, 2019

TIME: 9:00 a.m. to 1:30 p.m.

LOCATION: Safety Codes Council Office, Edmonton

PRESENT: Izak Roux, Chair
Mike Clancy
Greg Gaudet
Dr. Magdi Ghobrial
Henry Hau
Marvin Kossowan
Geoff Kutz, Vice Chair
Todd Loran
Billy Lee
David Miller, Vice Chair
Tony McWhannel (arrived at 11:20 a.m)
Nyssa Moore
Grant Peuramaki
Jacques St-Onge
John Wolff

Alberta Boilers Safety Association

Mike Poehlmann, Djordje Sronic, Robin Antoniuk

Alberta Municipal Affairs

Allan Hantelmann, Bohdan Yard, Jon Elliott

Safety Codes Council

Allison Karch, Susan Rossmann

RECORDER: Sandi Orr

2019 MEETINGS: March 14 – Special, May 2, June 20 – Special, September 5,
October 24 – Special, December 5

2019 CONFERENCE: May 29 to 31, 2019

1. Meeting Opening

The Chair called the meeting to order at 9:00 a.m. and a safety moment was held.

It was noted that this will be Grant Peuramaki's last meeting. Grant was thanked for all of his hard work and dedication to the sub-council and the Alberta safety system.

1.1. Agenda Adoption

The following item was added to the agenda:

- 2.2 – Nomination to represent Labour

Grant Peuramaki / Billy Lee moved that the agenda be adopted as amended with a flexible order of business; CARRIED

1.2. Adoption of Minutes

The minutes were reviewed, and the following corrections were made:

- 2.3 Peuramki was corrected to Peuramaki
- Action Item #2: National was deleted and replaced with the "Alberta Chief Power Engineer Education Conference"
- Action Item #4 – expansion corrected to extension
- Administrator's Report for accidents – Tube line corrected to read tube leak

Grant Peuramaki / Mike Clancy moved to adopt the minutes of December 6, 2018 as corrected; CARRIED

2. Matters for Decision

2.1. Election of Chair and Vice Chairs

The floor was opened for nominations for the position of Chair. Geoff Kutz was nominated and respectfully declined. David Miller was nominated and respectfully declined. Henry Hau was nominated. Geoff Kutz was asked to reconsider the nomination with the support of Vice Chairs. After three calls and no further nominations, nominations were closed. A ballot vote was conducted.

Henry Hau was elected as the Chair of the Pressure Equipment Sub-Council for a 2-year term.

The floor was opened for nominations for the position of Vice Chair. David Miller was nominated. Geoff Kutz was nominated. Nyssa Moore was nominated. Billy Lee was nominated. After three calls and no further nominations, nominations were closed. A ballot vote was conducted.

David Miller and Billy Lee were elected as Vice Chairs of the Pressure Equipment Sub-Council for a 2-year term.

2.2. Nomination to represent Labour

The nomination was included in the portal and reviewed on screen.

Geoff Kutz / Mike Clancy moved to recommend to the Board the appointment of Robert James to the Pressure Equipment Sub-Council to represent the Labour industry segment for a term ending January 31, 2022, effective immediately; CARRIED

3. Matters for Discussion

3.1. Fernie Arena Incident and Refrigeration Systems

Members were referred to the 5-column document created by the Technical Advisor and asked whether there are any other questions or actions that need to be considered.

During discussions, the following was noted:

- It was confirmed that any pressure piping in these types of facilities is subject to the Pressure Equipment Safety Regulation with respect to design review and registration.
- It was questioned that there was no reference in the document to the alarm and it was clarified that the 5-column document only includes findings from the Fernie incident. In that case, the alarm did go off which initially triggered fire department response.
- A discussion was held regarding potential code revisions to CSA B52 relative to the secondary coolant circuit which is considered “non-code” because it is not designed to handle expansible fluid. Concern was expressed that revisions will only make new systems safer but there will still be concerns with existing systems.
- It is believed that relative to the Fernie incident, training of emergency procedures may have been lacking, and that perhaps ammonia safety training would be beneficial for owners and operators of these facilities. It was recognized that education is important but safe design is also a key factor.
- It was suggested that promotion of the Fernie incident video, other signage/”cheat sheets” and any available training would be excellent tools to heighten awareness of the dangers of ammonia for anyone working in these facilities.
- It was suggested that specific action items are needed to ensure positive change.

It was recognized that the PESC action on this subject to date has included a presentation from Tom Chalifoux of ABSA, viewing the Fernie video, and reviewing the 5-column document created by AMA. It was also noted that ABSA has created specific initiatives, some which were being worked on prior to the Fernie incident. It was suggested that a smaller task group be established to review everything that has been presented in order to bring back recommendations to the sub-council on any potential action items (e.g. proposed code changes, awareness training for both owners and operators, etc.).

A discussion was held regarding cross discipline issues and it was suggested that where something is identified outside of the Pressure Equipment discipline, these recommendations should be brought to other disciplines.

It was reported that this topic has also been addressed at the Technical Coordinating Committee (TCC), Plumbing Sub-council (PSC) and the Building Sub-council (BSC). An overview was provided of the two requests made by a refrigeration industry group to the Building Sub-Council, one being a seat on the BSC and the other regarding permitting requirements. It was emphasized that there is a need for oversight because it does span across several disciplines and it was suggested this should be overseen by the TCC.

It was agreed that the Power Engineers Working Group will work with ABSA and AMA to create a one-page summary/action list for review by the sub-council before presenting it to the TCC.
[Miller]

Contact information from the Refrigeration Industry Promotion Committee will be provided to the Power Engineers Working Group.
[Council Administration]

In order to provide something to the TCC at its next meeting, it was suggested that once completed, the Working Group's document will be added to the portal and an email circulated to all PESC members.
[Miller / Council Administration]

All members will be provided 4 days to review the document and provide any additional feedback.
[All]

3.2. Working Group Reports

All Working Group Chairs were reminded to post the working group meeting dates in the portal as all PESC members are welcome to attend.
[Miller / Lee / Gaudet / Kutz]

It was reported that the Council is working on a process to document working group members. In the meantime, the Recording Secretary was asked to document the working group members in the minutes.
[S.Orr]

3.2.1. Power Engineers Working Group

A brief update was provided on a meeting held and recommendations regarding suggested revisions to the AB-528 document were forwarded back to the Administrator. The next meeting is scheduled for February 7, 2019.

It was confirmed that the Terms of Reference has been revised and is with Council Administration.

3.2.2. Pressure Welder Working Group

No meeting has been held since the last previously reported meeting. One thing that will be looked at is how the new code editions may affect pressure welders. An overview was provided from ABSA on code changes that may need to be looked at.

It was confirmed that the Terms of Reference has been revised and is with Council Administration.

3.2.3. PESR – Codes and Standard, Design Survey/Registration and New Inspection Working Group

No meeting has been held since the last previously reported meeting. The next meeting is scheduled for January 25, 2019. An overview was provided from ABSA on code changes that will need to be looked at by the Working Group.

It was confirmed that the Terms of Reference has been revised and is with Council Administration.

3.2.4. PSER – In-Service Inspections Working Group

No meeting has been held since the previously reported last meeting. Work continues on the Gr. 91 materials document and a report should be available for the next meeting. It was emphasized that the document will be completed for final review by the Working Group and requested that this item be added to the March 2019 agenda for endorsement as the code will be published on July 1, 2019. [Council Administration]

It was confirmed that the Terms of Reference has been revised and is with Council Administration.

3.3. AMA Report

The Technical Advisor reported the following:

- Work is ongoing with AWOC on recommendations for changes to the Pressure Welders Regulation
- There will be about 20 codes that will need review by this sub-council and this many take some time
- Background was provided regarding the national initiatives across provinces relative to labour mobility. However, it has been recognized by some provinces that not all training of all certifications are equivalent.. AMA's recommendation is that when granting equivalency for a non-standardized certificate it should be for a class lower than what has been issued by the originating jurisdiction due to safety concerns.

It was suggested that a presentation regarding certification differences be provided at a future meeting and that consideration be given for a letter supporting AMA's position.

3.4. ABSA/Administrator's Report

The Administrator reported the following:

Summary of Accident Reports

Date Reported	Injuries	Fatalities	Description	Loss of Containment
2018-12-05	0	0	Oil was found leaking into the firetube of a fired treater. The treater was immediately safely shut down, with no further consequences.	Yes
2018-12-05	0	0	A firetube flange gasket on a fired treater leaked, releasing process fluid. The leak was the result of over-torquing the flange bolts.	Yes
2018-12-03	0	0	Small bore piping on a compressor suction scrubber failed, releasing gas. The gas ignited causing an explosion and fire.	yes

Information Bulletins issued:

- IB18-022 Requirements for Reduced Supervision in accordance with the
- IB18-021 Reference Syllabi for Power Engineer Examination

AB-500 Documents issued:

- AB-528, Edition 3 - Requirements for Reduced Supervision of Power Plants, Thermal Liquid Heating Systems, and Heating Plants

Codes

CSA B52:18 – New Edition Published, Summary of Changes:

- Added definition of mechanical joint
- Many revisions to Table 1 refrigeration classifications and quantities
- Revisions to Table 2 system application requirements –added/revise group A2L and B2L
- Updated standards listed in clause 5.2 systems 125 kw or less
- Updated table 4 minimum design pressure
- Revised clause 5.7.2.4 to address use of mechanical joints in copper tubing.
- Revised clause 6.2.5.4 location of fan switches
- Revised clause 6.10 emergency discharge only required when mandated by authority having jurisdiction
- Revised 7.3.6.1.1 – added groups A2L and B2L
- Annex L revised and changed from informative to normative – Infrequently Used Refrigerants

CSA B51:19 – Ballot closed January 4 (final ballot before the code publication), Summary of changes:

- Added definitions of mechanical joint and high-energy steam piping
- Introduced a new type of CRN - prefixed by "ALT", followed by a "-", followed by the CRN – purpose: to identify that alternative Code rules were used for a design
- Added the requirement that the manufacturer's data report shall include a list of the alternative rules with the component parts on which they were used
- Revised the requirements for boiler clearance requirements

- Added the requirement that the loadings need to be considered in designing a boiler
- Revised the requirements for thermal fluid heaters and associated piping
- Note added about carbon steel low toughness properties

- Added restriction on mechanical joints whose mechanical strength or leak resistance is dependent on friction-only clamped connections
- Revised the requirements for pressure relief devices
- Revised the requirements for discharge piping from multiple pressure relief devices
- Revised the requirements for ANSI/UL 132 pressure relief valves in propane service
- Table 5 has been revised and “In-service testing” column rewritten
- Annex D – New Data Report forms added, and existing Data Report forms updated and harmonized with ASME data report forms (where applicable)
- Added Annex K (normative) – Requirements for pressure vessels designed and constructed using cold-stretch technology is added
- Added Annex L (informative) – Condition assessments for high-energy steam (HES) piping systems is added

ASME Code

- Next meetings in February
- Code Case 2945 Section VIII D1, D2 – multi-process welding procedure requirements – allows use of 2015 rules for procedures qualified before 1 January 2018. Code case will expire 1 January 2022.
- Concern regarding frequent cycling of heating boilers (code revisions and introduction of new code cases)
- Minimum thickness requirements will be reduced in Section IV 2019 Ed.
- Proposals for new code cases or revisions of existing code cases that allow lower minimum thickness requirements than revised (lowered) values in 2019 edition of Section IV
- Section IV does not have fatigue rules and it allows construction details that are typically not allowed in codes that require fatigue evaluation
- New generations of Section IV boiler designs have
 - Lower water content
 - Higher temperature gradients
 - Higher number of temperature cycles
 - No defined boiler life specified
 - Construction details that do not allow access for inspection
 - Boilers are not intended to be repaired (constructed to be replaced rather than repaired)
 - Message (about the all above) not clearly conveyed to the owners

The ABSA 2018 Annual Report was circulated as information.

The PESR – Codes and Standard, Design Survey/Registration and New Inspection Working Group was asked to begin working on reviewing the changes to CSA-B51 and CSA-B52 codes right away so that these can be completed prior to the ASME codes being published to try to reduce the

workload.

[Gaudet]

3.5. Council Updates

The following report was provided:

- Sub-council members were asked to submit expense claims within 30 days
- Upcoming training is listed in the portal calendar
- Recommendations for SCO continuing education to be provided to the PESC representative – Grant Peuramaki until Danielle replaces him on the working group

More information about the continuing education program is available at:

<http://www.safetycodes.ab.ca/SCO/ConEd/Pages/default.aspx>

PESC member contact information on the portal will be updated. [Council Administration]

3.5.1. Revisions to Code of Conduct & Ethics 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 as they are expected to abide by the Code.

3.5.2. PESC Membership Change

It was reported that Ward Wagner is no longer with the International Brotherhood of Boilermakers and a new nominee has been provided. This was addressed under Matters for Decision.

4. Review Matters Arising/Action List

	Item	Action	Meeting Date	Responsible	Status/Update
1.	Power Engineers Continuing Education	Provide updates from AIPE about potential continuing education for Power Engineers.	Sep 7/17 2.1.	Hau	Nothing new to report
2.	Stress Values for Gr. 91 Materials	Both PESR working groups to begin discussions re. the implications of the proposed change for lowering allowable stress values for Gr. 91 materials to identify concerns and recommendations to address the concerns.	Sep 7/17 3.2.	Wolff / Gaudet	Ongoing
3.	Low Carbon Steel	Continue to monitor the low-carbon steel project.	Feb 1/18 3.	Srnic	Ongoing monitoring
4.	BC Fernie Arena Incident	All members were asked to review the learnings in the 5-column document.	Dec 6/18 4.5.1	All	Closed, removed from action list

5. Meeting Finalization

5.1. Meeting and Agenda Feedback

An overview of new action items was provided.

5.2. Next Meeting

The next meeting was reconfirmed as a special meeting on March 14, 2019 at 9:00 am at the Council office.

5.3. Meeting Adjournment

The Chair thanked all of the sub-council members to allow him to serve on the sub-council, as a member, as a Vice Chair, most recently as the Chair, and he looks forward to continuing on some of the working groups. The Council was thanked for all the services and support they provide the sub-council.

Izak Roux was thanked for his dedication to the sub-council and to the Alberta safety system over the past 9 years.

Mike Clancy / Greg Gaudet moved that the meeting be adjourned; CARRIED

The meeting was adjourned at 1:30 p.m.

--- NEW ACTION ITEMS ---

3.1. Fernie Arena Incident and Refrigeration Systems

It was agreed that the Power Engineers Working Group will work with ABSA and AMA to create a one-page summary/action list for review by the sub-council before presenting it to the TCC.
[Miller]

Contact information from the Refrigeration Industry Promotion Committee will be provided to the Pressure Equipment Working Group. [Council Administration]

The Working Group's document will be added to the portal and an email circulated to all PESC members. [Miller / Council Administration]

All members will be provided 4 days to review the action list and provide any additional feedback. [All]

3.2. Working Group Reports

All Working Group Chairs were reminded to post the working group meeting dates in the portal as all PESC are welcome to attend. [Miller / Lee / Gaudet / Kutz]

Recording Secretary will document the working group members in the minutes. [S.Orr]

3.2.4. PSER – In-Service Inspections Working Group

It was emphasized that the document (Gr.91) will be completed for final review by the Working Group and requested that this item be added to the March 2019 agenda for endorsement as the code will be published on July 1, 2019. [Council Administration]

3.3. AMA Report

It was suggested that a presentation regarding certification differences be provided at a future meeting and that consideration be given for a letter supporting AMA's position.

3.4. ABSA/Administrator's Report

The PESR – Codes and Standard, Design Survey/Registration and New Inspection Working Group was asked to begin working on reviewing the changes to CSA-B51 and CSA-B52 codes right away so that these can be completed prior to the ASME codes being published. [Gaudet]

3.5. Council Updates

PESC member contact information on the portal will be updated. [Council Administration]

--- MOTIONS ---

1.1. Agenda Adoption

Grant Peuramaki / Billy Lee moved that the agenda be adopted as amended with a flexible order of business; CARRIED

1.2. Adoption of Minutes

Grant Peuramaki / Mike Clancy moved to adopt the minutes of December 6, 2018 as corrected; CARRIED

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Henry Hau was elected as the Chair of the Pressure Equipment Sub-Council for a 2-year term.

David Miller and Billy Lee were elected as Vice Chairs of the Pressure Equipment Sub-Council for a 2-year term.

2.2. Nomination to represent Labour

Geoff Kutz / Mike Clancy moved to recommend to the Board the appointment of Robert James to the Pressure Equipment Sub-Council to represent the Labour industry segment for a term ending January 31, 2022, effective immediately; CARRIED

5.3. Meeting Adjournment

Mike Clancy / Greg Gaudet moved that the meeting be adjourned; CARRIED

WORKING GROUP MEMBERS

PESR In-Service Inspections, Repairs & Alterations, and PEIM Program Working Group

Geoff Kutz, Greg Gaudet, Grant Peuramaki, Jacques St-Onge, John Wolff, Todd Loran, Henry Hau and Nyssa Moore

Support: Robin Antoniuk, Allan Hantelmann

PESR Codes & Standards, Design Registration and Shop Inspections Working Group

Greg Gaudet, Dr. Magdi Ghobrial, Billy Lee, David Miller, Marvin Kossowan, Tony McWhannel and Izak Roux.

The following support was reconfirmed: Mike Poehlmann and Djordje Sronic.

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

Power Engineers Working Group

David Miller, Mike Clancy, Todd Loran, John Wolff, Grant Peuramaki, Henry Hau, Tony McWhannel

Industry Representative: Mike Lyne (Suncor)

Support: Mike Poehlmann, Tom Lemming, John Siggers, Allan Hantelmann

Pressure Welders Working Group

Billy Lee – Chair, Ward Wagner, Jacques St-Onge, Marvin Kossowan, Magdi Ghobrial, Nyssa Moore, Geoff Kutz, Izak Roux

Industry Representation: Matt Yarmuch, AWOC

Support: Jason Reinhart, Robin Antoniuk, Allan Hantelmann