

MINUTES OF THE SEVENTH PRESSURE EQUIPMENT SUB-COUNCIL MEETING OF 2018

DATE: December 6, 2018

TIME: 9:00 a.m. to 2:25 p.m.

LOCATION: Safety Codes Council Office, Edmonton

PRESENT: Izak Roux, Chair

Greg Gaudet Henry Hau

Marvin Kossowan

Billy Lee David Miller Tony McWhannel Nyssa Moore Grant Peuramaki

Jacques St-Onge

ABSA (Alberta Boilers Safety Association)

Djordje Srnic, Robin Antoniuk, Tom Chalifoux

Alberta Municipal Affairs

Allan Hantelmann, Bohdan Yard

Safety Codes Council

Allison Karch, Gerry Baron, Andrea Snow

GUEST: Matt Yarmuch

REGRETS: Mike Clancy; Geoff Kutz, Vice Chair; Todd Loran; Dr. Magdi Ghobrial; John Wolff;

Ward Wagner; Mike Poehlmann, Administrator

RECORDER: Sandi Orr

2019 MEETINGS: January 10, 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. Members were reminded that the primary duty of all Council Members is to act in the interest of safety in the built environment for the benefit of all Albertans. Round table introductions were held.

1.1. Agenda Adoption

The following item was added to the agenda:

4.6. – SCO Continuing Education Working Group

David Miller / Henry Hau moved that the agenda be adopted as amended; CARRIED

1.2. Adoption of October 25, 2018 Minutes

The minutes were corrected to read the Council Office instead of the Radisson Hotel.

Nyssa Moore / Greg Gaudet moved to adopt the minutes of October 25, 2018 as corrected; CARRIED

2. Matters for Decision

All appointments were held in camera.

2.1. Nomination of Danielle Woroniuk to represent the Education and Training industry segment for a term ending January 31, 2022, effective February 1, 2019

The letter of nomination was included in the portal and reviewed.

Grant Peuramaki / Marvin Kossowan moved to recommend to the Board the appointment of Danielle Woroniuk to the Pressure Equipment Sub-Council to represent the Education and Training industry segment for a term ending January 31, 2022, effective February 1, 2019; CARRIED

2.2. Reappointment of Geoff Kutz to represent the Large Refinery and Petrochemical Sites industry segment for a term ending January 31, 2022, effective February 1, 2019

The letter of re-nomination was included in the portal and reviewed.

Marvin Kossowan / Henry Hau moved to recommend to the Board the reappointment of Geoff Kutz to the Pressure Equipment Sub-Council to represent the Large Refinery and Petrochemical Sites industry segment for a term ending January 31, 2022, effective February 1, 2019; CARRIED

2.3. PESR In-Service Inspections, Repairs & Alterations, and PEIM Program Working Group Terms of Reference Revisions

The redrafted Terms of Reference was shown on screen.

Grant Peuramaki / Jacques St-Onge moved to approve the redrafted PESR In-Service Inspections, Repairs & Alterations, and PEIM Program Working Group Terms of Reference; CARRIED

The following members were reconfirmed: Geoff Kutz (Chair), Greg Gaudet, Grant Peuramaki, Jacques St-Onge, John Wolff, Todd Loran, Henry Hau and Nyssa Moore. The following support was reconfirmed: Robin Antoniuk, and Allan Hantelmann.

2.4. PESR Codes & Standards, Design Registration and Shop Inspections Working Group Terms of Reference Revisions

The redrafted Terms of Reference was shown on screen. The deliverables were revised and the list of members were removed from the Terms of Reference.

Greg Gaudet / Billy Lee moved to approve the redrafted PESR Codes & Standards, Design Registration and Shop Inspections Working Group Terms of Reference, as revised; CARRIED

The following members were reconfirmed: Greg Gaudet (Chair), Dr. Magdi Ghobrial, Billy Lee, David Miller, Marvin Kossowan, Tony McWhannel and Izak Roux. The following support was reconfirmed: Mike Poehlmann and Djordje Srnic. The following industry representatives, include: 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.

2.5. Power Engineers Working Group Terms of Reference Revisions

It was noted that the Power Engineers Working Group Terms of Reference was revised earlier this year. The revised Terms of Reference was reviewed on screen.

Mandate #3 was revised to read: Ensure the voice of all stakeholders are heard when the regulation is amended.

David Miller / Henry Hau moved to approve the redrafted Power Engineers Working Group Terms of Reference, as amended; CARRIED

The following members were reconfirmed: David Miller (Chair), Mike Clancy, Todd Loran, John Wolff, Grant Peuramaki, Henry Hau, Tony McWhannel, Mike Lyne (Suncor). The following support was reconfirmed: Mike Poehlmann, Tom Lemming, John Siggers, Allan Hantelmann.

2.6. Pressure Welders Working Group Terms of Reference Revisions

The redrafted Terms of Reference was shown on screen.

The following was added to the Mandate: Provide recommendations on the Welders Examiners Syllabus. Deliverable #4 was revised to read recommendations to <u>sub</u>-council.

Billy Lee / Marvin Kossowan moved to approve the redrafted Pressure Welders Working Group Terms of Reference, as amended; CARRIED

The following members were reconfirmed: Billy Lee (Chair), Ward Wagner, Jacques St-Onge, Marvin Kossowan, Magdi Ghobrial, Nyssa Moore, Geoff Kutz, Izak Roux and Matt Yarmuch, AWOC. The following support was reconfirmed: Jason Reinhart, Robin Antoniuk, Allan Hantelmann.

It was explained that with the governance review in progress, additional changes to all working group terms of reference will be brought forward by the Council. A brief discussion was held regarding the

membership of all working groups and the expectation that all sub-council members will be members of two working groups. It was suggested that a schedule for working group meetings be circulated. If overlap is found, the Working Group Chairs should discuss this.

3. Review Matters Arising/Action List

	Item	Action	Meeting Date	Responsible	Status/Update
1.	ASME Task Group Update	Provide updates about ASME task group looking at allocating risk during the design stage.	Nov 24/16 3.8.	Roux	Ongoing, will be brought forward during ABSA reports, will be removed from action list
2.	Power Engineers Continuing Education	Provide updates from AIPE about potential continuing education for Power Engineers. UPDATE: Presented at the Alberta Chief Power Engineer Education conference, there are varying opinions from both ends of the spectrum, concern is who would administer the program, it was suggested there is a need to gain consensus with members before any further action be taken	Sep 7/17 2.1.	Hau	In progress
3.	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	A meeting is scheduled in January 2019
4.	Thermal Liquid Heating Systems	Provide an update on the status of Thermal Liquid Heating Systems in the Pressure Equipment Exemption Order. UPDATE: Removing expiry date of exemption order, ABSA has proposed extension of TLHS so not included in the exemption order. Working on how this can be addressed through the Administrator.	Oct 12/17 3.	Hantelmann / Yard	It was suggested that this be removed from the agenda at this time as it is unlikely to move forward.
5.	Low Carbon Steel	Continue to monitor the low- carbon steel project.	Feb 1/18 3.	Srnic	Ongoing
6.	BC Fernie Arena Incident	ABSA was asked to bring forward further information on how refrigeration plants are regulated in Alberta and who can operate these types of plants in comparison to other jurisdictions.	Sep 6/18 4.1.	Poehlmann	See agenda Item 4.5.2.

The Technical Advisor and Administrator will continue work on		Hantelmann / Poehlmann	See agenda Item 4.5.1.
the 4-column document for discussion at the next meeting.			

4. Matters for Discussion

4.1. ABSA/Administrator's Report

The Acting Administrator provided the following report on behalf of the Administrator:

Summary of Accident Reports (Oct. 25, 2018 – Dec. 05, 2018)

Date Reported	Injuries	Fatalities	Description	Loss of Containment
2018-11-29	0	0	Operators discovered a tube leak in an air-cooled heat exchanger. The leak was caused by freezing of liquids in the tubes.	Yes
2018-11-20	0	0	An unexpected accumulation of water in a product transfer pipe froze and caused the pipe to split releasing product.	Yes
2018-11-20	0	0	Operators discovered a process fluid leak in a piping system. Further inspection found two pinholes and significant wall loss due to corrosion in the area of concern.	Yes
2018-11-15	0	0	Operators discovered a leak at a flange on a PSV inlet. Further inspection revealed that the flange body had formed a pinhole leak.	Yes
2018-11-13	0	0	Plant operator found steam leaking from a steam heat coil. The source of the steam leak was found to be at a socket weld tee fitting.	Yes
2018-11-07	0	0	Service fluid leaked from an air-cooled heat exchanger as a result of thinned tube wall material.	Yes
2018-11-01	0	0	Operators found a process gas leak in a piping system. The source of the leak was determined to be a crack in the heat affected zone of a reducer.	Yes
2018-10-30	0	0	A bellows in a process unit failed due to stress corrosion cracking after a relatively short period of service.	Yes
2018-10-30	0	0	A process fluid leak was found under a heat exchanger. The source of the leak was found to be a nozzle that had deteriorated due to corrosion.	Yes

A brief discussion was held regarding the reporting of incidents. It was reported that a fatality occurred in November 2018 and it is still under investigation.

Information Bulletins issued by the Administrator (Oct. 25, 2018 – Dec. 05, 2018)

- IB18-020 Grade C Pressure Welder Certification
 - This Information Bulletin provides compliance guidance and interpretation of Sections 10,
 11 and 12 of the *Pressure Welders Regulation* regarding Grade C Pressure Welder Certificates of Competency
 - o Information Bulletin supersedes IB11-002 which is hereby withdrawn

The Pressure Welder Working Group will review IB18-020 to determine whether a change should be made to the Pressure Welder Regulations. [Lee]

ABSA has obtained ISO9001 Certification (Nov. 2018)

QUASAR

- Audited the ABSA's Quality Management System to the Quality System Standard ISO 9001:2015
- Has registered the ABSA's Quality Management System to the Quality System Standard ISO 9001:2015
- Scope: Reviewing and registering pressure equipment designs, performing in-service and new
 construction inspections, conducting accident investigations, certification of quality system
 programs, workforce certification of welders and power engineers, and seminars.

CSA B51

- The final ballot to approve the B51 has been opened on 2018-12-06 and will close on 2019-01-04;
 with the purpose to approve editorial changes from the August 2018 meeting and make sure that something was not omitted
- New Edition is scheduled for the first half of 2019

CSA B52

- Nov. 2018 The final ballot to approve the B52 new edition passed with 27 affirmative votes and no negative votes
- New Edition is scheduled for the first half of 2019

ASME Preparation for the 2019 Edition

- The final recirculation ballots were opened shortly after the Nov. 2018 ASME Code Week meetings and needs to be closed before Dec. 17, 2018
- Many of the recirculation ballots are still opened

Major Changes Expected to be Introduced in 2019 Edition of the ASME Codes

- New Section XIII Overpressure protection will be issued (informative)
- Section I
 - o Reduction of Gr. 91 allowable stresses (up to 19%)
 - o Task Group on Modernization is making a good progress (likely 2021)
- Section II and Section IV joint work
 - Allowable stress values (tables) will be moved in Section II (informative in 2019 Edition) and still mandatory in Section IV
 - It is planned to delete allowable stress values (tables) in 2021 Code Edition
- Section IV Minimum thickness requirements will be revised
- Section VIII Standards Committee
 - Major scope changes (rewrite) are under review
 - U-2(g) will be revised and Code Case 2695 will be incorporated in the Code
 - o UG-84 will be revised
 - UCS-66 will be revised (SA-105 will be curve A)

- Code Case for Multiple Process Welding Procedures requirements will be issued soon; it will allow transition period for the implementation of rules in UG-84(h)(5) and 3.11.8.3(g)
- Task Group on Fired Treaters was formed to develop new Appendix in Section VIII, Div. 1
- CA-1 Added definitions to CA-1 for "field site" and "intermediate site"

Task Group was formed for ANDE Certification for BPV and Piping Programs

- ASME Nondestructive Examination and Quality Control Central Qualification and Certification Program
- Scope Statement: To provide technical guidance and oversight to ASME PC LLC (Certification Body) in accordance with the ANDE-1 Standard for boiler, pressure vessel, tanks and piping NDE and QC personnel certification

TOMC

B31.1P – is published

The plan is to replace table in B31.1 for post weld heat treatment

The BPTCS Task Group on Risk-based Design and Inspection Overview was formed

The plan is to have a draft before 2021

Additive Manufacturing

Proposal to form TG to define requirements for Additive Manufacturing

It was questioned regarding harmonization between B31.1 and B31.3 and a status update was not available.

4.2. AMA Report

The Technical Advisor reported on the following:

- Labour mobility issues relative to Quebec are still being worked on, an overview was provided on some of the resolutions being considered and the challenges relative to reviewing French course material
- Work continues with AWOC on recommendations for changes to the Pressure Welders Regulation

4.3. Council Updates

The following update was provided:

- The link to the Roles and Mandate document was shown on screen; it can be accessed on the Council website under the "Council" tab
- The meeting calendar on the portal is up to date, including sub-council member training
- Council Awards are now open for nominations, deadline March 29, 2019
- The Council Conference will be held on May 29 to 31, 2019, always looking for suggestions for speaker topics
- Requested that all expenses be submitted by December 15, 2018

A copy of the expense form will be sent to all sub-council members.

[Council Administration]

4.4. PESC Planning Session Review

The Planning Session notes were included in the portal and reviewed. The following was highlighted:

A link to the Roles and Mandate document was provided

- Emphasized the need for being proactive rather than reactive, suggested that an open forum could be held at each meeting to bring forward issues from each industry segment
- The need for teamwork and contributions from everyone are important
- Emphasized the top items that were identified at the planning session
- Emphasized the issues identified during the planning session

It was clarified that relative to the comment about ABSA under the heading Items to Improve, it was intended as a favourable comment rather than an area to improve.

4.5. Fernie Arena Incident and Refrigeration Systems

4.5.1. Fernie Incident OHS Analysis 5-Column Document

The 5-column document was included in the portal and reviewed. Members were reminded that the fatalities in Fernie, BC were a result of a combination of several factors. The document provides an excellent overview of the causes that led to the fatalities.

All members were asked to review the learnings in the 5-column document.

[AII]

It was suggested that this be deferred to the next meeting to gain consensus on the learnings and consider a working group to recommend potential actions to be taken.

4.5.2. Comparison of Supervision Requirements across Canada

The ABSA report was included in the portal and reviewed. Highlights included:

- A review of the distinguishing characteristics of plants for those jurisdictions that require certificates
- The provinces that do have supervision requirements for refrigeration plants have methods of rating the plants; the methods used to rate the plants and the thresholds for the plant ratings are not consistent
- Alberta, New Brunswick, Northwest Territories, Yukon and Nunavut have no supervision requirements for refrigeration plants

It was clarified that for those provinces that use Power Engineers for refrigeration plant supervision, only one jurisdiction requires additional refrigeration training. It was noted that at each level of Power Engineers, there are components in the training that touch on refrigeration plants, but it is not extensive at any level. It was clarified that refrigeration mechanic is a compulsory trade in Alberta.

ABSA has initiated a project to include ammonia ice plants in the plant registry in 2019. It was reported that there are about 175 curling and ice rinks in the province. About 98 to 99% have been visited and they were reminded of AB-275-General-Requirements-for-Mechanical-Refrigeration Systems that is available on the ABSA website.

Guidelines for Care and Operation of Mechanical Refrigeration Systems Containing Ammonia were circulated, and these have been sent at all facilities with a request to post. A mailout was also sent to all owners including a letter and the Guidelines document to create further awareness.

It was questioned whether other types of plants, other than curling and ice rinks, have been considered. It was clarified that the majority are industrial/commercial installations which have pressure equipment that is already being looked at. A brief overview was provided about the industry committee that has been

created and their desire for more regulation in Alberta, particularly with the changes in technology, new refrigerants, and higher pressures in modern refrigeration systems, all of which present significant risk.

It was emphasized, from a sub-council perspective, there is a need to determine whether an equivalent level of safety is being maintained in Alberta in the absence of certification requirements and a defensible case that Alberta is doing its due diligence. In addition to pressure equipment, this topic spans over several disciplines including the building and electrical disciplines.

It was questioned regarding the Refrigeration Operator exam and reported that it has been developed. It is under review by subject matter experts and is expected to be available in 2019.

4.6. SCO Continuing Education Working Group

Grant Peuramaki provided a brief report from the first working group meeting:

- Reviewed Terms of Reference and the objectives of the working group
- An overview was provided of the program requirements for SCO certification
- The program is very flexible and achievable
- The working group is compiling a list of potential courses, workshops and activities that would be beneficial to SCOs and count toward the program

An overview was provided on how this affects ABSA and National Board Certification requirements. Relative to ABSA SCOs, even with only one Board Certification, an SCO would achieve 36 credits over 3 years, not including all of the additional in-house training SCOs participate in.

It was recommended that Danielle Woroniuk replace Grant Peuramaki on the working group should her appointment be confirmed.

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 for January 10, 2019 at 9:00 am at the Council office.

5.3. Meeting Adjournment

Billy Lee / Greg Gaudet moved that the meeting be adjourned; CARRIED

The meeting was adjourned at 2:25 p.m.

--- NEW ACTION ITEMS ---

4.3. Council Updates

A copy of the expense form will be sent to all sub-council members.

[Council Administration]

4.5.1. Fernie Incident OHS Analysis 5-Column Document

All members were asked to review the learnings in the 5-column document.

[AII]

1.1. Agenda Adoption

David Miller / Henry Hau moved that the agenda be adopted as amended; CARRIED

1.2. Adoption of October 25, 2018

Nyssa Moore / Greg Gaudet moved to adopt the minutes of October 25, 2018 as corrected; CARRIED

2.1. Nomination of Danielle Woroniuk to represent the Education and Training industry segment for a term ending January 31, 2022, effective February 1, 2019

Grant Peuramaki / Marvin Kossowan moved to recommend to the Board the appointment of Danielle Woroniuk to the Pressure Equipment Sub-Council to represent the Education and Training industry segment for a term ending January 31, 2022, effective February 1, 2019; CARRIED

2.2. Reappointment of Geoff Kutz to represent the Large Refinery and Petrochemical Sites industry segment for a term ending January 31, 2022, effective February 1, 2019

Marvin Kossowan / Henry Hau moved to recommend to the Board the reappointment of Geoff Kutz to the Pressure Equipment Sub-Council to represent the Large Refinery and Petrochemical Sites industry segment for a term ending January 31, 2022, effective February 1, 2019; CARRIED

2.3. PESR In-Service Inspections, Repairs & Alterations, and PEIM Program Working Group Terms of Reference Revisions

Grant Peuramki / Jacques St-Onge moved to approve the redrafted PESR In-Service Inspections, Repairs & Alterations, and PEIM Program Working Group Terms of Reference; CARRIED

2.4. PESR Codes & Standards, Design Registration and Shop Inspections Working Group Terms of Reference Revisions

Greg Gaudet / Billy Lee moved to approve the redrafted PESR Codes & Standards, Design Registration and Shop Inspections Working Group Terms of Reference, as revised; CARRIED

2.5. Power Engineers Working Group Terms of Reference Revisions

David Miller / Henry Hau moved to approve the redrafted Power Engineers Working Group Terms of Reference, as amended; CARRIED

2.6. Pressure Welders Working Group Terms of Reference Revisions

Billy Lee / Marvin Kossowan moved to approve the redrafted Pressure Welders Working Group Terms of Reference, as amended; CARRIED

5.3. Meeting Adjournment

Billy Lee / Greg Gaudet moved that the meeting be adjourned; CARRIED