

**CPSC MEETING LOG  
DIRECTORATE FOR ENGINEERING SCIENCES**

**SUBJECT:** Meeting Log for the Z21/CSA Joint Technical Subcommittee on Standards for Gas-Fired Low-Pressure Steam and Hot Water Boilers

**LOCATION:** Cleveland Marriott Downtown at Key Center, Cleveland, Ohio

**DATE:** October 30, 2019

**TIME:** 8:30 am

**LOG ENTRY SOURCE:** Ronald A. Jordan

**ENTRY DATE:** December 12, 2019

**COMMISSION ATTENDEES:**

Ronald Jordan                      ESMC

**NON-COMMISSION ATTENDEES:**

Glenn	Bergum	Resideo
Paul	Cabot	American Gas Association Inc.
Kevin	Carlisle	Karl Dungs Inc
David	Delaquila	Aquila Consulting, LLC
Chris	Ellingwood	Patterson-Kelley
Larry	Gill	IPEX Management Inc
Andy	Gould	Reliance Comfort LP
Craig	Grider	Intertek
Travis	Hardin	Underwriters Laboratories Inc.
Ryan	Jensen	Emerson Climate Technologies
Larry	Kidd	Rheem
John	Kory	CSA Group
Tae	Kwon	Air-Conditioning, Heating, and Refrigeration Institute
Aaron	Lord	Laars Heating System
Frank	Myers	
Rupesh	Savadekar	Beckett Gas Inc.
Paul	Sohler	Crown Boiler Company
Phillip	Stephens	Weil-McLain, A division of the Marley-Wylain company
Carl	Suchovsky	Appliance Engineering, Inc.
Bob	Vlasic	Enbridge
James	York	Rinnai America Corporation
Joseph	Boros	Rheem
Mairy	Sanz	Enbridge
Patrick	Villaume	Patterson Kelley

Cory	Weiss	Field Controls LLC
Matthew	Wilber	Crane Engineering/ESi
Dragica	Jeremic	CSA Group – PM
Beth	George	CSA Group
Judd	Smith	CSA Group
Amy	Thomas	CSA Group
John	Busse	US Boiler Company, Inc.
Kevin	Choi	UL
Shannon	Corcoran	AHRI
Lisa	Davis	Lochinvar
Chad	Johnson	AO Smith
Matt	Menotti	Intertek
Randy	Oshiro	Noritz America
George	Prociw	Enbridge Gas
John	Simpson	Resideo
Shajee	Siddiqui	Zodiac Pool Systems
Sue	Whitfield	Weil-Mclain

#### **A.1.9.1: Non-Metallic Venting.**

The Non-metallic Venting WG was established to address this issue. The WG will review the Non-Metallic Venting Proposal and providing a report to the Boilers TSC.

#### **A.1.9.2: Liquefied Petroleum or Propane.**

Replace occurrences of Liquefied Petroleum with Propane, except LP/air mixtures. This item was assigned to the Air-Conditioning, Heating, and Refrigeration Institute (AHRI) staff to address.

#### **A.1.9.3. Low Ambient Temperature.**

Addressing issues in which low (particularly outdoor) temperatures may affect the safe and/or proper operation of gas appliances and their components. Is there adequate coverage? If so, why? If not, what plans will be taken to be addressed? A WG was formed to address this issue.

#### **A.1.9.8: Altitude Limitation: RFC #5**

This agenda item was a proposal that a statement be included at the beginning of the Performance section in gas appliance standards indicating that all testing be conducted at an altitude/elevation below 2000 feet. The rationale for the proposal was that North America codes define altitudes of 2000 feet or higher as High Altitude and require a derating or adjustment of the gas appliance per manufacturer instructions. Currently, without this stated requirement there is the risk of testing being done at elevations greater than 2000 feet on gas appliances which are then installed at elevations that range down to sea level. Although appliance performance can't be predicted when tested at high altitude, the concern is that there is less mass of oxygen per unit volume, combustible gas per unit volume, and reduced air density compared to installations at altitudes less than 2000 feet. If general testing occurs at a High Altitude, then testing of combustion are in question because of the potential for unstable burners, higher CO, flame impingement, etc. Also, due to the change in air density, safety devices of heating appliances

controlling supply air temperatures can be affected when the same product is installed at a lower altitude.

The TSC voted on and approved adding the proposed statement to the beginning of the Performance sections of affected gas appliance standards. In addition, an AHRI WG was established to review the Standard and propose additional recommendations for testing for boilers installed at high elevations. The WG will consider research proposal submissions to CSA, AGA, AHRI and ASHRAE.

The meeting adjourned at 4:30 pm.