

**National Hydrogen and Fuel Cell
Codes and Standards Coordinating Committee
(NHFCCSCC)**

**Wednesday, November 19, 2014
TIME: 3:00 – 4:30 pm (Eastern Daylight Time)**

Minutes

Attendees

**Carl Rivkin
Connor Dolan
Ernst Baumgartner
Jay Keller
Julie Cairns
Kelvin Hecht**

**Marcia Poxson
Nick Barilo
Steven Yip
Susan Bershad
Tommy Rockwood
Livio – CSA**

**Karen Hall
Juana Williams
Spencer Quong
Mike Steele
Jennifer Hamilton
Norman Newhouse**

1 Welcome and Housekeeping Items

- Reviewed anti-trust guidelines - http://www.fchea.org/core/import/PDFs/ANTITRUST_GUIDELINES.pdf
- Review agenda
- Approve October draft minutes

2 DOE/HQ Update

Will James

H₂USA held its full participant meeting last week at the Fuel Cell Seminar.

Ia-HySafe had a research priority workshop on Monday/Tuesday of last week. We are currently identifying research priorities and ranking them based on last week's workshop

Wednesday of last week we also held an IEA Safety Task Definition meeting. Both the workshop and the task definition meeting went very well. IEA is restarting the safety work after a several year break. The work of the new task will center around QRA/Consequence tool kits. This will enable the RCS community the ability to craft and execute performance based safety. The community (as sampled by the research priorities workshop and the IEA task definition meeting) embraced this enthusiastically.

3 C&S Events and Fuel Cell Safety Information

http://www.fuelcellstandards.com/calendar_new.html

Kelvin Hecht

<http://www.hydrogenandfuelcellsafety.info/meetings.asp>

Karen Hall

4 Global Technical Regulations

Nha Nguyen

No report at this time.

5 Codes and Standards Organization Updates

IEC TC 105

Kelvin Hecht

WG#1(IEC/TS 62282-1 Ed.3 – *Terminology*)

Dr. Zhigang Qi (chee) will be the new convener

PhD from McGill University

Worked at H Power, Plug & MTI Micro

Proton Exchange Membrane Fuel Cells, CRC press 2014

CEO Wuhan Intepower Fuel Cells

WG#3 (IEC 62282-3-100 Ed.1 – *Stationary Fuel Cells – Safety*)

I will remain as the convener

Next edition will try to address harmonization with European Directives

WG#7 (IEC 62282-5-1 – *Portable Fuel Cells*)

Robert Wichert will remain as convener

Single issue for 2nd edition will be relaxing CO emission proposed by Japan

WG#8, #9 & #10 (IEC 62282-6-series) – *Micro Fuel Cells*

Intent is to try to combine into a single working group

Safety, performance, cartridge and data interfaces

Ad Hoc Group 5 (Life Cycle Assessment –*environmental impact*)

1st meeting October 9-10 in Frankfurt

ISO 14040 series

No data base for consistency

Discussions to continue

ISO TC 197

Jill Thompson

Jay Keller - TC 197 US TAG meeting held earlier this afternoon. TC 197 plenary to be held first week of December. Working group meetings on December 1 – 3.

Working Group 24 – documentation being put together for stations. On fast track, principally driven by needs in Europe by having a standard to reference. The EU relaxed its needs which allowed WG 24 to relax its deadlines by about a year. Lots more work to be done to produce quality document.

Three sub groups – Separation Distances and QRA / Fuel Quality / Station Acceptance

Karen Hall - Working Group 21 / 22 / 23 (dispenser / hoses / fittings) – holding kick off meetings in Japan. Participants in NHFCCSCC are welcome to provide input in these documents.

NFPA 2

Martin Gresho/ Susan Bershad

Susan Bershad – Getting ready to go to ballot. In final stages of reviewing the ballot now. Could go out either next week or the week of December 8th. Ballot deadline will be 2 weeks.

NFPA 2 ballot and NFPA 55 revisions in regards to NFPA 2 will be going to ballot.

Anticipated publication date of NFPA 2 and NFPA 55 is May 2015.

NFPA 853

Karen Hall

No NITMAMs were received. Publication is proceeding.

ICC

Robert Sale / Bob Davidson

Spencer Quong – ICC is working on the mechanical code and building code at the moment.

CSA

Julie Cairns

CSA has a new Program Manager for Alternative Energy, Brent Hartman.

Presentation is available online at www.fchea.org/s/CSA-2014-11-19.pdf.

UL

Laurie Florence

No update at this time.

SAE

Mike Steele / Tim McGuire

Presentation is available online at www.fchea.org/s/SAE-nov2014.pdf .

ASTM

Tommy Rockwood

ILS 851 – involving GC mass spec contamination detection – samples ~~collected~~ procured a year ago. Some snags initially with accuracy of samples. Remedied and finally have now shipped. Test sites have been contacted. January 9th is the tentative deadline for posting.

ILS Cavity Ring Down Spectroscopy status– received quote for high/low gas mixture from same manufacturer. Some difficulties in producing that mixture. Manufacturer and technical lead are in contact and will provide a quote. Also, in the process of finding test labs.

One group at LANL is in the process of using the standard and will determine their participation in the round robin.

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Discussion Topics

Facilitating Deployment

Carl Rivkin

National Permitting Guide Presentation - Presentation is available online at www.fchea.org/s/NREL-deployment-Nov2014.pdf.

H₂USA Activities

Karen Hall

H2USA's Full Participant meeting was held last week at the Fuel Cell Seminar. The various working group reports are being written up. More information will be available at the next meeting.

The Hydrogen Fueling Station Working Group spent much time focusing on intermediate objectives/activities to measure progress.

Coordination level between the working groups is very high.

Both an internal and external website (www.h2usa.org) have been developed and are online.

H2FIRST – Hydrogen Test Device Apparatus being developed (HySTEP), to test SAE J2601.

Regulatory Matrix Review and Comment

Karen Hall

The latest version of the Regulatory Affairs Matrix is available online [here](#).

Comments can be submitted to Karen Hall at khall@fchea.org.

7 Permitting and Installation of Hydrogen Fueling Stations

Ca Station Implementation

Jennifer Hamilton

There may be some opportunity to update the group with regard to station performance and validation. Group being started in California led by ARB on implementation workup on implementing the HySTEP device once it is developed.

West Sacramento Linde Station – December 10th grand opening.

Continue to work with Governor's office tracking station progress.

Workshop being held with Carl Rivlkin in Hayward. Expecting 40-50 attendees. Toyota will be bringing the Mirai to that event.

Chris White, the California Fuel Cell Partnership's Director of Communications, will be speaking to Parliament in London next week. This came out from a previous speaking engagement at WHEC.

Ca DMS Metrology

Norman Ingram

Jennifer Hamilton – Two stations have received temporary stickers / documentation. West Sacramento and CAL State LA. They have been given authority to sell hydrogen (under relaxing tolerances). As new stations come online ARB will schedule out those stations for testing.

Ca DMS Fuel Quality

Ron Nies

No update at this time.

SAE J2601 Compliance

Jesse Schneider

No report at this time.

**Legal Metrology Standards Hydrogen Fuel
Quality and Measurement**

Juana Williams

No updates at this time.

8 Open Discussion & Other Issues

Action Item: Request SNL / NREL to provide an update on the next call on H2FIRST.

National Hydrogen and Fuel Cell Emergency Response Resource – template of slides to enable first responder trainers to perform training (train the trainers). Publicly available <http://h2tools.org/fr/nt/>

Next meeting time – Wednesday, December 10 at 3:00 PM Eastern.