



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

**Wednesday, November 2, 2016
TIME: 3:00 – 4:30 pm (Eastern Standard Time)**

Minutes

Attendees

**Andreas Wilfort
Brent Hartman
Connor Dolan
Ernst Baumgartner
Karen Quackenbush**

**Kelvin Hecht
Marcia Poxson
Mike Steele
Norm Newhouse
Robert Davidson**

**Steven Yip
Spencer Quong
Joe Gagliano
Kevin Schnepf**

I. Welcome and Housekeeping Items

The Committee reviewed FCHEA's anti-trust guidelines - Available on FCHEA's members only website and a copy can be provided to you on request

The Committee reviewed the meeting agenda.

The Committee approved the August and October minutes.

II. DOE/HQ Update

Will James

No DOE report at this time.

III. C&S Events and Fuel Cell Safety Information

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

Kelvin Hecht

<http://www.hydrogenandfuelcellsafety.info/events/>

Karen Quackenbush

Request: technical resource updates for the Hydrogen and Fuel Cell Safety website. Any committee members who have materials they would like hosted on the website can send them to Karen Quackenbush (khall@fchea.org) or Connor Dolan (cdolan@fchea.org).

Request: Please notify Karen or Connor of any meetings / events to add to the calendar.

NICOLA Motor introduction and launch of engine in December

Will add NYIAS, DC Auto Show, Presidential Inauguration to January calendar

IV. Global Technical Regulations

Nha Nguyen

No update at this time.

V. Codes and Standards Organization Updates

IEC TC 105

Kelvin Hecht

WG 2 – fuel cell modules. Group is planning a meeting on the 17th and 18th this November in Cleveland. Working on new standard. Until now worked on safety standard for modules, now working on second standard for module performance.

WG 3 – Stationary fuel cell power plants. Group has submitted draft to TC 105 for next edition, submitted for national committee comments.

WG 8 – micro fuel cells. Karen Quackenbush has been named as the new convener of that activity. Working on fuel cartridges for transporting micro fuel cell systems. Working with partners to update the document as it has been more than 5 years since publication. Moved to Preliminary Work Item. Was close to being published, but not worked out of committee. Stalled for about 1.5 – 2 years. Attended the plenary and worked with acting convener Dr. Ueno to take on the convenorship for WG 8. Working in way that does not jeopardize current approvals for shipping regulations.

ISO/TC 197

Glenn Scheffler/Jay Keller

Plenary and several WG meetings taking place in The Netherlands in December. See calendar updates for more.

US TAG held a meeting yesterday to discuss the Hoses CD that has come out. Lot of useful input for that for testing to make it better. Lot of technical work to get it done. Will likely come out with another CD.

NFPA 2

Susan Bershad

Karen – NFPA 2 held its continuation first draft meeting last month in MA at NFPA headquarters for three days. During that time were a number of public inputs reviewed and key decisions made. Technical committee voted to petition the NFPA Standards Council to slip cycle. Goal is to stay in cycle with NFPA 55 and provide necessary time to coordinate changes. Will also provide more time to the Task Groups of the committees.

ICC

Bob Davidson

Final action hearings a little over a week ago which reviewed the package of changes related to hydrogen. We had previously had the one large item at the initial meeting included – allowance for rooms / booths / areas for hydrogen vehicles, rather than making sweeping changes.

We also had help from fire code committees, some testifying in favor.

Next phase is online governmental voting, occurring this month, and requires 2/3 of those voting to approve.

The recommendation is to approve this change. Assessment is will likely not have a problem, in which case the hydrogen package submitted will all make it in.

CSA

Sara Marxen

Brent Hartman – Couple of updates.

HPIT 2 document hydrogen dispensing for industrial trucks is at ballot. Will have published by the end of the year.

FC 5 – IS adoption of 16110-1 hydrogen generation, posted for public/industry review later this month. This document will eventually be a joint CSA/UL standard.

HGV 4.3 document – discussing reopening to align with SAE document published shortly.

CHMC 2 – hydrogen materials compatibility for non-metallics – initial meeting in December of this year, need some more experts.

SAE

Mike Steele / Tim McGuire

Mike Steele – Next week is quarterly meeting. J2601 has completed affirmation ballot. Going through publishing process. One of the items dealing with 4.3 is incorporating these changes.

ASTM

Tommy Rockward

No updates at this time.

ASME

John Grimes

No updates at this time.

VI. Discussion Topics

Facilitating Deployment

Carl Rivkin

No updates at this time.

H₂USA Activities

Karen Quackenbush

RCS Joint Task Team – few members met with regulators for tunnels in MA to have information exchange with concerns regarding tunnels, safety features, etc. Started dialogue, indicated good meaningful exchange. No major show stoppers at this point.

H2FIRST

NREL/SNL

Meeting with industry recently on next phase of reference stations, urban locations. Starting dialogues on number of dispensers, capacity of dispensers, options for delivery and impact on station, etc. Recognition that those kinds of questions continue to need to be posed to fuel suppliers.

Regulatory Matrix Review and Comment

Karen Quackenbush

<http://www.fchea.org/s/FCHEA-Regulatory-Matrix-markup-September-30-2016.pdf>

VII. Permitting and Installation of Hydrogen Fueling Stations

Ca Station Implementation

Jennifer Hamilton

No updates at this time.

Ca DMS Fuel Quality / Metrology

Kevin Schnepf

Currently have 22 retail open and operating stations in CA. Schedule is to have 28 by end of the year. Have updated and upgraded all testing methods and procedures. Fuel quality testing for vehicles and type evaluating dispenser designs. Four are currently issued and three in process. By end of January additional 3 designs with technical certificate.

NPWM did approve hydrogen gas measuring devices and 5% increase in specification clause, with no sunset clause. Enables dispenser designers to apply for certificates. Good news to have type approval process beyond California's borders.

Fueling Compliance

Sara Marxen

No updates at this time.

Legal Metrology Standards Hydrogen Fuel Quality and Measurement

Juana Williams

No updates at this time.

VIII. Open Discussion & Other Issues

Unauthorized fueling

Bob Boyd/Spencer Quong

Task Force has been started in NFPA 2.

Other Issues?

IX. Next Meeting

Will skip a meeting in December and hold our next meeting on Wednesday, January 4th at 3:00 PM Eastern.