

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

**Wednesday, October 4, 2017
TIME: 3:00 – 4:00 pm (Eastern Standard Time)**

Minutes

Attendees

**Christina Daniels
Connor Dolan
Jay Keller
Jennifer Hamilton
Karen Quackenbush**

**Laura Hill
Marcia Poxson
Nick Barilo
Sara Marxen
Nha Nguyen**

**Herie Soto
Eric Nelson
Bob Boyd**

I. Welcome and Housekeeping Items

- Review FCHEA's anti-trust guidelines - Available on FCHEA's members only website and a copy can be provided to you on request.
- Approve the meeting agenda
- Approve the previous meeting minutes for September 2017.

II. DOE/HQ Update

Laura Hill

Hydrogen and Fuel Cell Day on October 8th! Lots of announcements are coming out this week and next.

www.Hydrogenandfuelcellday.org

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.

IV. Global Technical Regulations

Nha Nguyen

Kick off meeting of Phase two of the GTR is scheduled 17th – 19th. The primary objective of this meeting is to draft the terms of reference that will govern who we operate moving forward as a working group. Already have gotten a series of proposals from different members to amend the GTR. We will have some discussion regarding those proposals, as

well as reminding the members that this is a GTR, not an industry standard. In November, hope to have feedback regarding the outcome of the meeting. We expect to host our next meeting in the US, time/date not yet decided.

V. Codes and Standards Organization Updates

IEC TC 105

Kelvin Hecht

Karen – Plenary is coming up next month in South Korea. Have not heard whether working group meetings will be held. WG 08 will not be meeting.

ISO/TC 197

Glenn Scheffler/Jay Keller

WG 24 – Distributed WG CD-2. Comments have been received and addressed a week or so ago in Connecticut. The document is in good shape currently. Will wrap up and send to WG for review, vote, and comment in preparation for WG meetings in December.

WG 19 – Dispensers – Met as well. Two documents are closely linked. 19 has to follow 24. As work product for WG 24 solidifies, then WG 19 can conclude. WG 19 as such has been put on hold.

WG 22 – Hoses – Met as well. Key outcomes of the meeting is that focusing on the dispenser hose. Have convinced TC 197 that the WG members are finding difficulty for the requirements of the type b hoses, so focusing on the dispenser hoses. Passed the CD-2 with all but two votes against. Working to address those concerns to have the FDIS by the end of the year.

NFPA 2

Susan Bershad

Ballot expected on first draft meeting expected to go to Committee members soon. The document has many comments, but once language is resolved the ballot will be issued. FCHEA is putting together a task group of members to look at the pre-first draft report to prepare a ballot that meets the industry's view.

ICC

Bob Davidson

Nick Barilo – 2018 version of the codes are out now.

Written update from Bob Davidson –

There are currently are no hydrogen proposals on the agenda for ICC codes.

The ICC Codes 2018 editions just became available the last couple of weeks and a review can now be done to identify any needed changes/proposals for the IFC/IBC which would be due for submittal the second week of January 2018.

CSA

Brent Hartman

Sara Marxen - CSA HGV 4.3 is an active project for the next edition. The TSC met today to discuss the next publication and alignment with SAE J2601 status. The In-Person HGV 4.3

Technical Subcommittee meeting originally scheduled for October 25 has been cancelled. The inaugural meeting of CSA Group's Hydrogen Transportation Technical Committee will be October 24 in Cleveland, Ohio. The Hydrogen Dispenser Test Apparatus will be on display during the week.

CSA's participation in Hydrogen & Fuel Cell Day will include FREE standards downloads of HGV 4.3 and HGV 4.9 from CSA website store during the week of October 9-15.

SAE

Mike Steele

Interface Task Force is meeting November 8/9 in Torrance at Honda.

Safety Task Force is meeting November 7/8 in Troy, Michigan.

J2600 document will be sponsored by Nico at CAFCP. The document will be opened up again to discuss heavy-duty nozzle geometry.

ASTM

Jennifer Hamilton

Meeting coming up in Houston on December 5/6. Target ballot date for screening method for organic halides has changed from July 2012 to October 2019. The technical contact is from Air Gas. Christina Daniels has offered to assist with changes.

Working to get interlaboratory studies going. Two samples for ILS are planned to start up on FTIR and Cavity Ring Down.

ASME

John Bendo

No update at this time.

VI. Discussion Topics

Facilitating Deployment

Carl Rivkin

Jennifer Hamilton – California hydrogen station roll-out is at 31 stations. The last opening was in Fremont in the Bay Area. Some others are online for HySTEP to visit. Ribbon cuttings planned for Torrance on Oct 9th and San Ramon on Oct 10th.

Jay Keller – Go-Biz office in California is revising its permitting guide.

H₂USA Activities

Karen Quackenbush

Continued progress from investigations, particularly the fueling pad issue related to hydrogen. ISO WG 14 discussed this issue at their last meeting, though there is still no clear conclusion.

On-going bridge and tunnel discussions are continuing. Have had many meetings with Boston. Sandia has modeled a scenario.

Nick Barilo – On Thursday met in Boston with Sandia. Planning something in November to speak with someone higher up. The main engineer and his boss are well aligned.

Locations WG met recently and NREL has developed a modeling approach. They have written a roadmap document and is being deployed.

H2FIRST

NREL/SNL

No update at this time.

Regulatory Matrix Review and Comment

Karen Quackenbush

<http://www.fchea.org/s/FCHEA-Regulatory-Matrix-markup-September-30-2017.pdf>

Permitting and Installation of Hydrogen Fueling Stations

See updates above.

Ca Station Implementation

Jennifer Hamilton

See updates above.

Ca DMS Fuel Quality / Metrology

Kevin Schnepf

Christina Daniels - Fuel Quality – Tested 30/31 stations in CA. Sampled 34 stations total (some non-retail stations. Full 2719 sampling. Everything but particulate matter. All samples from retail stations have been passing.

Bob Boyd – Are you testing for particulates? Not right now. We are working to figure out how to do so.

Bob – There is a test method in ISO on how to test particulate testing on a consistent basis.

Legal Metrology Standards Hydrogen Fuel Quality and Measurement

Juana Williams

Jay - NIST is adopting relaxed standards similar to California which is intended to be able current technologies, which will ease restrictions across the country. This is somewhat less relaxed than CA.

VII. Open Discussion & Other Issues

Other Issues?

DOE Budget – We are under a continuing resolution until December 8th.

House/Senate/President budgets are released. There is still a conference that will need to be held if we have a budget.

DOE CRADA - Call has closed at this point. Stay tuned for activities funded out of that at this point. This is focused on the H2@Scale activity.

Fuel Cell Seminar and Energy Exposition – November 7-9. Will feature 180+ presentations, across 32 track sessions, and will feature 40+ posters. More information at www.fuelcellseminar.com.

VIII. Next Meeting

Will tentatively be held on Wednesday, November 1, 2017 at 3:00 PM Eastern.