

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

Wednesday, June 4, 2014

TIME: 3:00 – 4:30 pm (Eastern Daylight Time)

Minutes

Attendees

**Bob Boyd
Bob Davidson
Connor Dolan
Ernst Baumgartner
Jesse Schneider**

**John Grimes
Juana Williams
Karen Hall
Larry Moulthrop
Mike Steele**

**Spencer Quong
Susan Bershad
Tim McGuire
Will James**

1 Welcome and Housekeeping Items

Review of anti-trust guidelines -

http://www.fchea.org/core/import/PDFs/ANTITRUST_GUIDELINES.pdf

Approved meeting agenda.

Review May draft minutes.

2 DOE/HQ Update

Will James

Department of Energy Annual Merit Review – Week of June 16 – If you will be attending you are encouraged to register. There will be an international infrastructure meeting on Thursday afternoon (June 19). This will feature updates from H₂USA, HySUT, and H2Mobility.

RFI just closed on hydrogen contamination detection at the station. Wrap up report to be issued and a workshop to be held in Troy, Michigan. The workshop will be focused on the contamination side, will not dive far into the fuel quality side. The requirements and needs to detect certain contaminants will be a focus. Strictly an open workshop to gather input on this contamination detection issue.

Just kicked off the H2FIRST project, R&D arm on infrastructure needs. Will be under direct support of H₂USA.

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

Action Item: Request for 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 Hall (khall@fchea.org) or Connor Dolan (cdolan@fchea.org).

4 Codes and Standards Organization Updates

IEC TC 105

Kelvin Hecht

WG#4 (IEC 62282-3-201 Ed.1 – *Stationary Fuel Cells – Performance for small fuel cells*
Comments received and posted on 4/4/14 for Ed.2. To be discussed at next meeting.

WG#4 (IEC 62282-3-200 Ed.2 – *Stationary Fuel Cells – Performance*)
Compilation of comments posted on 4/11/14. A revised CD will be posted for vote (CDV) by 7/31/14

WG#6 (IEC 62282-4-101 – *Fuel Cell Systems for Forklift Applications – Safety*)
FDIS posted on May 23 for vote by July 25, 2014.

WG#7 (IEC 62282-5-1 – *Portable Fuel Cells*)
Comments for a 2nd edition posted in May 2014.

WG#8 (IEC 62282-6-101 – *Micro Fuel Cells – Safety*)
2nd edition in progress. IEC 62282-6-101 will be General Requirements. Specific technologies will be separate documents.

WG#9 (IEC 62282-6-200 Ed.3 – *Micro Fuel Cells - Performance*)
CD posted on 4/18/14 with a closing date of 7/18/14 for comments.

WG#10 (IEC/TS 62282-6-400 - *Micro Fuel Cells – Power & Data Interchangeability*)
In view of CDV rejection, member countries voted to proceed as a Technical Specification.

WG#11 (IEC TS 62282-7-2 *Single Cell – Test Methods For Solid Oxide Fuel Cells*)
To be posted as a DTS by September 2014.

WG#12 (IEC 62282-3-400 – *Small Stationary Fuel Cells with Combined Heat and Power Output*)
CD posted on 5/30/14 with a closing date of 9/5/14 for comments.

ISO TC 197

Jill Thompson

Jesse Schneider – WG 24 (Stations) – to prepare for the upcoming face to face meeting (June 20 at FCHEA HQ) the WG has sent out a survey for hydrogen quality assurance as well as safety distances. Each team member country has been asked to provide input. Version 4 of the draft 19880-1 has been released to the team for comment.

The surveys are available online at:

- www.fcchea.org/core/import/NHFCCSCC/ISO-TC197-WG24_N0086_WG_24_SURVEY_1-ISO_WG_24_H2_Quality_As.pdf

- [www.fchea.org/core/import/NHFCCSCC/ISO-TC197-WG24_N0087_WG_24_Survey_2Safety_Distance_RCSNEW .pdf](http://www.fchea.org/core/import/NHFCCSCC/ISO-TC197-WG24_N0087_WG_24_Survey_2Safety_Distance_RCSNEW_.pdf)

WG 19 (Dispensers) and WG 20 (Valves and Components) will be meeting the week after the AMR in Washington, D.C.

NFPA 2

Susan Bershad

The public comment deadline closed for NFPA2 and NFPA 55. About 60 comments were received. The comments have been reviewed and overlap is about half of the comments. Five days in Golden for the meeting, first two days will be NFPA 55, the next two will be NFPA 55 and 2, the final day will be just NFPA 2.

Copies of the PDF comments have gone out the committee for review. RSVP deadline is June 30.

NFPA 853

Karen Hall

No new proposed changes. Moving forward to the consensus agenda.

ICC

**Robert Sale /
Bob Davidson**

Bob Davidson – Code progress is status quo. Still waiting for response on scoping requirements to address ventilation issues. 2015 editions of the codes are available. Physical copies available now, online in few weeks. New premium online subscription service came out this year.

Karen Hall – 2015 version of I codes, heard would have reference to NFPA 2.

Bob Davidson – Correct, in the code change proposal packages, included references to NFPA 2 in at least 3 locations - the motor fueling chapter, compressed gas, and flammable gas chapter. Part of the step to bring alignment and reliance to NFPA 2 in the Fire Code.

CSA

Julie Weis

CSA presentation available online at www.fchea.org/core/import/NHFCCSCC/CSA-June-2014.pdf.

HDTA Status Update

Ken Loewenthal

Nothing new to report.

UL

Laurie Florence

Nothing new to report.

SAE**Mike Steele
Tim McGuire**

Mike Steele - Quarterly meeting being held next week. Will have more to report after that.

Jesse Schneider – J2601 first editing version seen two days ago. Feedback sent. Best case scenario is first week in July for publishing (after successful MVC ballot).

ASTM

Nothing new to report.

5 Discussion Topics**Facilitating Deployment****Carl Rivkin**

Karen Hall – Will mentioned earlier in the DOE report about H2FIRST that the National Laboratories are helping to provide some of the data to the H2USA Hydrogen Fueling Station Working Group. These are the issues that will largely enable large-scale deployment such as how can we ensure that the codes and standards that are necessary are adopted, etc.

Regulatory Matrix Review and Comment**Karen Hall**

The latest version is available online at www.fchea.org/core/import/NHFCCSCC/FCHEA-Regulatory-Matrix-May-21-2014-PDF.pdf.

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

Permitting and Installation of Hydrogen Fueling Stations**CAFCP Station Implementation****Jennifer Hamilton****Ca DMS Metrology****Norman Ingram****Ca DMS Fuel Quality****Ron Nies****SAE J2601 Compliance****Jesse Schneider**

Presentation recently from the CEP (Clean Energy Partnership Berlin) to indicate that the J2601 will be adopted country-wide, however, it will be restricted to the 4-10 kilogram classes. This will alleviate the need for SIL certification, etc. and streamline adoption of J2601 in Germany, and perhaps Europe.

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

Request – Currently still undergoing internal safety reviews before we can start the field phase of the dispenser test methods code update. Looking for experts on high-pressure hydrogen.

7 Open Discussion & Other Issues

Next meeting to be held on July 9th at 3:00 PM Eastern.