

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

**Wednesday, July 9, 2014
TIME: 3:00 – 4:30 pm (Eastern Daylight Time)**

Minutes

Attendees

**Carl Rivkin
Connor Dolan
Jackie Birdsall
Jay Keller
Jesse Schneider**

**John Grimes
Julie Weis
Karen Hall
Mike Steele
Norman Newhouse**

**Spencer Quong
Susan Bershad
Tony Androsky
Will James**

1 Welcome and Housekeeping Items

Review of anti-trust guidelines -

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

Review meeting agenda.

Approved June draft minutes.

2 DOE/HQ Update

Will James

Annual Merit Review was held the week of June 16, very well attended, just over 1700 people that week. Safety, Codes, and Standards featured several presentations and one poster. Presentations will be available on the DOE website in the near-future.

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 To be added to calendar - ISO TC 197 WG 18 meeting in August (26/27?).
Codes and Standards Organization Updates**

IEC TC 105

Kelvin Hecht

- WG#1 (IEC TS 62282-1:2013 – *Terminology*)
 - TC105 posted for nominations for new convener on June 20, 2014. Input to USTAG prior to September 12th.
- WG#3 (IEC 62282-3-100:2012 – *Stationary Fuel Cells – Safety*)

- TC105 posted for nominations for new convener on June 20, 2014. Input to USTAG prior to September 12th.
- 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*)
 - CDV posted for vote and comments on June 20, 2014. Comments due to USTAG prior to September 12th.
- 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*)
 - USTAG comments to CD submitted to TC105 on June 25, 2014.
- 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.
- Ad Hoc Group 5 (*Life Cycle Assessment – environmental impact*)
 - 1st meeting October 9-10 in Frankfurt to plan for new standards. No US representative scheduled to attend.

ISO TC 197

Jill Thompson

Jay Keller - Back up and running late last year to now. Many groups have completed new work item proposals and executed kickoff meetings, the exception being a couple of the WGs which Peter Ehlers was Chair.

Jesse Schneider – Two surveys out now one for hydrogen quality, the other for safety distances. Requested feedback for the US on both surveys. Please contact Jill

Thompson, due dates are end of July for hydrogen quality and end of August for safety distances.

WG 24 and EIGA are discussing the implementation of hydrogen quality and the hope is that the survey with data will reduce the amount of hydrogen quality tests required per station type.

Next face to face meeting is in Germany in Munich from 9 – 10 and 13 – 14 at TUV sud to create a final draft of ISO 19880-1.

The surveys are available online at:

- www.fchea.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

Karen Hall – Three weeks ago WG 19 and 20, which support development of fueling station, focused on dispenser and valves, met at FCHEA offices following the DOE AMR. Got through a large number of initial comments. Jesse Schneider attended the first part of that meeting and helped layout how the information developed and how the WG input will fit into the larger efforts of WG 24.

NFPA 2

Susan Bershad

Joint meeting for NFPA 2 and NFPA 55 is scheduled next week Monday through Friday at NREL in Golden CO. 61 comments were received on NFPA 2. The meeting will overlap a day or two with content that is common to both documents.

NFPA 853

Karen Hall

No new news – going directly to publication. No public comments / second revision is underway.

ICC

Robert Sale / Bob Davidson

Spencer Quong – Bob is working on proposal on building codes to qualify some ventilation requirements in repair garages.

CSA

Julie Weis

The CSA update is available online at www.fchea.org/core/import/NHFCCSCC/CSA-July-2014.pdf.

HDTA Status Update

Ken Loewenthal

No report at this time.

UL

Laurie Florence

No report at this time.

SAE

Mike Steele / Tim McGuire

The SAE update is available online at www.fchea.org/core/import/NHFCCSCC/SAE-July-2014.pdf.

Jesse Schneider - SAE J2601 motor vehicle council vote finishes next week. We are hoping for a good result. With a good result, the document will be published within a few days after that. FCHEA is putting together a press release, and SAE will likely have a release as well.

ASTM

No report at this time.

5 Discussion Topics

Facilitating Deployment

Carl Rivkin

Several projects here are ongoing which support deployment. In May, held to training sessions in Los Angeles for code officials in regards to permitting fueling stations. Working to develop a revision of the permitting guide which is currently available on the DOE website (last update was 2004). Working to develop some video training material, primarily for code officials / project developers. Collaborating with this on orange county fire department.

Karen Hall – In regards to the permitting guide, what level of updates?

Carl Rivkin – Will not be updating the stationary portion due to other activity with TIA. Will be primarily focused on updating the code citations

H₂USA Activities

Jay Keller – Launched about a year ago, kickoff meeting held in August of last year, activities on-going since then. Parsed into four working groups, with an operational steering committee overseeing activities. Held a follow-up all hands meeting at the DOE AMR.

The Hydrogen Station WG and Market Support WG are both focused on codes and standards activities, in the process of developing a Task Force on these activities. Once completed will have a cohesive set of activities within H₂USA.

Regulatory Matrix Review and Comment

Karen Hall

The latest version is available online at <http://www.fchea.org/core/import/NHFCCSCC/FCHEA-Regulatory-Matrix-2014-6-24.pdf>.

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

Permitting and Installation of Hydrogen Fueling Stations

Ca Station Implementation

Jennifer Hamilton

Catherine Dunwoody has taken a new position within the California Air Resources Board and will be providing direct assistance to hydrogen station implementation.

Bill Elrick has been approved/appointed as the temporary working Director for the Partnership.

Ca DMS Metrology

Norman Ingram

No report at this time.

Ca DMS Fuel Quality

Ron Nies

No report at this time.

SAE J2601 Compliance

Jesse Schneider

Both Sandia and NREL are working together in H2FIRST with industry members to create a fueling device specification for J2601 for California. This specification is being vetted by industry members.

For more information, please contact Daniel Dedrick at Sandia National Laboratories or Jennifer Kurtz at NREL.

Legal Metrology Standards Hydrogen Fuel Quality and Measurement

Juana Williams

No report at this time.

7 Open Discussion & Other Issues

Next meeting: Wednesday, August 6, 2014 at 3:00 PM Eastern.