National Hydrogen and Fuel Cell Codes and Standards Coordinating Committee (NHFCCSCC) Wednesday, October 8, 2014 TIME: 3:00 – 4:30 pm (Eastern Daylight Time)

Minutes

Attendees

Connor Dolan Jennifer Hamilton John Grimes Karen Hall Kelvin Hecht Laurie Florence Marcia Poxson Martin Gresho Nha Nguyen Nick Barilo Tim McGuire Mike Steele Steven Yip

1 Welcome and Housekeeping Items

- Reviewed anti-trust guidelines -<u>http://www.fchea.org/core/import/PDFs/ANTITRUST_GUIDELINES.pdf</u>
- Meeting agenda reviewed.
- Approved September draft minutes.

2 DOE/HQ Update

Will James prior report:

- Fuel Cell Seminar, Los Angeles, CA November 10 13, 2014
 - Wednesday night National Laboratory tech update includes H2FIRST overview with Sandia National Laboratories and the National Renewable Energy Laboratory
 - Monday introductory Short Course on SAE J2601 registration on the Fuel Cell Seminar website – <u>www.fuelcellseminar.com</u>

4 C&S Events and Fuel Cell Safety Information

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

http://www.hydrogenandfuelcellsafety.info/meetings.asp Karen Hall

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 Hall (<u>khall@fchea.org</u>) or Connor Dolan (<u>cdolan@fchea.org</u>).

5 Codes and Standards Organization Updates

IEC TC 105

WG#4 (IEC 62282-3-201 Ed.1 – *Stationary Fuel Cells* – *Performance for small fuel cells* Comments for Ed.2 will be discussed at November 5-6 meeting in Tokyo.

WG#4 (IEC 62282-3-200 Ed.2 - Stationary Fuel Cells - Performance)

Will James

Kelvin Hecht

Kelvin Hecht

Vote and comments to CDV will be discussed at November 5-6 meeting in Tokyo.

WG#6 (IEC 62282-4-102 – Fuel Cell Systems for Forklift Applications – Performance) Comments to CD will be discussed at November 5-6 meeting in Tokyo.

WG#7 (IEC 62282-5-1 – *Portable Fuel Cells*) Comments for a 2nd edition will be discussed at November 4-5 meeting in Tokyo.

WG#9 (IEC 62282-6-200 Ed.3 – *Micro Fuel Cells - Performance*) Comments to CD will be discussed at November 4 meeting in Tokyo.

WG#12 (IEC 62282-3-400 – Small Stationary Fuel Cells with Combined Heat and Power Output)

Comments to CD will be discussed at November 10-12 meeting in Tokyo.

Ad Hoc Group 5 (Life Cycle Assessment –*environmental impact*) 1st meeting October 9-10 in Frankfurt to plan for new standards.

ISO TC 197

Jill Thompson

Karen Hall will follow up for next month.

NFPA 2

Martin Gresho

Next event that NFPA 2 has coming is a continuation of the second draft meeting. Mandatory attendance required for all committee members. The meeting will be held via teleconference on Oct. 23rd. Invites have been sent out.

Meeting is needed as the initial second draft meeting was held in July as a joint NFPA 55 meeting. Ran into some abstract issues from 55 into 2 that are not completely editorial that will need votes. Readdress topic of enclosures (portable enclosures for hydrogen systems).

Document is moving its way through significant editorial effot to types up everything the committee wanted. Initial ballot goal was early November, now hoping before Thanksgiving.

NFPA 853

Expecting publication.

ICC

Karen Hall will follow up for next month.

CSA

Julie Weis

Karen Hall

Robert Sale / Bob Davidson

Karen Hall - In-person meeting held last week for committees. Expect significant update next month.

HDTA Status Update

Karen Hall will follow up for next month.

UL

No update at this time.

SAE

In-person meetings are going to be held on November 4th and 5th. Interface WG will meet.

Setting meeting dates for next year. When dates are approved will be circulated for inclusion on the RCS calendars.

ASTM

Karen Hall will follow up for next month.

6 Discussion Topics

Facilitating Deployment

Jennifer Hamilton – Current enrollment in upcoming permitting hydrogen station workshop is over 20 people.

Tyson Eckerle has also passed along a link to California's SmartSheet station development tracking document. The tracking document is available online at http://publish.smartsheet.com/38d2e76518bf4810a38ac079ad6b9123.

H₂USA Activities

Number of active working groups in H2USA working to prepare for roll-out of vehicles. Public website being developed. Internal website completed.

Market Support Working Group – developed website. Completed outreach materials for H_2 USA.

Locations Roadmap Working Group – Collecting data from automakers on expected vehicle roll-out. Modeling data is being developed as well in support of this effort.

Hydrogen Fueling Station Working Group – Identifying areas for improvement of station products. Working with H2FIRST on ways to improve station availability and performance. Cost and utilization task team making progress developing near-term station modeling tools. Component R&D task team identifying most significant station component that require improvements. Regulations, Codes, and Standards Permitting Task Team working on matrix of codes adoption in states and regions.

Investment and Finance Working Group – Working with NREL to develop funding scenarios for investment community.

Karen Hall

Mike Steele / Tim McGuire

Ken Loewenthal

Carl Rivkin

Laurie Florence

 H_2 USA in-person meeting for H_2 USA participating organizations will be held at the Fuel Cell Seminar.

Regulatory Matrix Review and Comment

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

California Fuel Cell Partnership works closely with the Governor's office. Station in West Sacramento officially opening date is mid-December. Training with local fire department progressing. Linde will be operating the station.

Ca DMS Metrology

Karen Hall to look into CA DMS activities and report back next meeting.

Ca DMS Fuel Quality

Karen Hall to look into CA DMS activities and report back next meeting.

SAE J2601 Compliance

No report at this time.

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

No report at this time.

8 **Open Discussion & Other Issues**

Next meeting to be held on Wednesday, November 19 at 3:00 PM.

- Will allow for reports by CSA, SAE, TC 105, and the Fuel Cell Seminar.
- Due to meeting timing, will not hold a meeting in December.

Norman Ingram

Ron Nies

Juana Williams

Jesse Schneider

Jennifer Hamilton

Karen Hall