

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

**Wednesday, September 3, 2014**

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

**Minutes**

**Attendees**

**Bill Collins  
Bob Boyd  
Connor Dolan  
Jennifer Hamilton**

**Juana Williams  
Julie Weis  
Karen Hall  
Kelvin Hecht**

**Mike Steele  
Will James  
Jesse Schneider  
Norman Newhouse**

**1 Welcome and Housekeeping Items**

- Reviewed anti-trust guidelines - [http://www.fchea.org/core/import/PDFs/ANTITRUST\\_GUIDELINES.pdf](http://www.fchea.org/core/import/PDFs/ANTITRUST_GUIDELINES.pdf)
- Reviewed meeting agenda.
- Approved August draft minutes as amended.

**2 DOE/HQ Update**

**Will James**

H2FIRST project has officially been given approval for their first project on station performance. That group will be building the first device for station performance (J2601). Named the device HySTEP (Station Equipment Performance). Anticipate development by July of next year.

**4 C&S Events and Fuel Cell Safety Information**

[http://www.fuelcellstandards.com/calendar\\_new.html](http://www.fuelcellstandards.com/calendar_new.html)

**Kelvin Hecht**

<http://www.hydrogenandfuelcellsafety.info/meetings.asp>

**Karen Hall**

**Action Item:** To be added - Piping codes for ASME – September 15-19

**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](mailto:khall@fchea.org)) or Connor Dolan ([cdolan@fchea.org](mailto:cdolan@fchea.org)).

**5 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#5 (IEC 62282-3-200 Ed.2 – *Stationary Fuel Cells – Performance*)

- CDV posted for vote and comments on June 20, 2014. **Comments to USTAG by September 5<sup>th</sup>.**

WG#6 (IEC 62282-4-101 – *Fuel Cell Systems for Forklift Applications – Safety*)

- **FDIS approved. Two US comments will be considered in next edition. Published August 1<sup>st</sup>.**

WG#6 (IEC 62282-4-102 – *Fuel Cell Systems for Forklift Applications – Performance*)

- **CD posted for comments on July 18<sup>th</sup>. Comments to USTAG by September 24<sup>th</sup>.**

WG#7 (IEC 62282-5-1 – *Portable Fuel Cells*)

- Comments for a 2<sup>nd</sup> edition posted in May 2014. **Additional comments from Japan posted on July 11<sup>th</sup>.**

WG#8 (IEC 62282-6-101 – *Micro Fuel Cells – Safety*)

- 2<sup>nd</sup> 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*)

- **Comments to CD posted on August 8<sup>th</sup>. To be discussed at November meeting.**

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. **Comments to US TAG ASAP.**

Ad Hoc Group 5 (Life Cycle Assessment – *environmental impact*)

- 1<sup>st</sup> meeting October 9-10 in Frankfurt to plan for new standards. No US representative scheduled to attend. **Comments to be provided.**

## **ISO TC 197**

**Jill Thompson**

1, 2, 3 of December technical committee meetings. 4, 5 of December full group meeting.

WG 24 – meeting four days in Munich Germany at TUV-Sud. 8, 9, 13, 14 of October. Sub-teams meeting first.

Vote on-going for Convenerships for the US available for three working groups. Karen Hall has been put forward as Convener for those groups. These were the groups vacated by Peter Ehlers.

## **NFPA 2**

**Susan Bershad**

Nothing new to report. Had meeting in July and waiting for ballots to come out at this point.

**NFPA 853****Karen Hall**

Electronic version has been published on the NFPA website. A paper version should be circulated shortly.

**ICC****Robert Sale / Bob Davidson**

Nothing to report.

**CSA****Julie Weis**

Presentation available online at [www.fchea.org/core/import/NHFCCSCC/CSA-September-2014.pdf](http://www.fchea.org/core/import/NHFCCSCC/CSA-September-2014.pdf).

**HDTA Status Update****Ken Loewenthal**

No update at this time.

**UL****Laurie Florence**

No report at this time.

**SAE****Mike Steele / Tim McGuire**

Meetings are next week.

On August 28, notification that J2578 (general fuel cell safety) was republished. Becomes J2578-201408.

Will James – DOE webinar on J2601 (September 11 from 12:00 – 1:00 PM Eastern) – Introduction to hydrogen fueling standardization.

Jesse Schneider - A more in-depth deep dive will hopefully be held at the Fuel Cell Seminar tentatively on Monday, November 10<sup>th</sup> at 9:00 AM PDT.

Upcoming - The Energy Department will present a live webinar titled "Introduction to SAE Hydrogen Fueling Standardization" on Thursday, September 11, from 12:00 to 1:00 p.m. Eastern Daylight Time (EDT).

The webinar will provide an overview of the SAE Standards SAE J2601 and J2799 and how they are applied to hydrogen fueling for fuel cell electric vehicles (FCEVs). Validated in the lab and proven in the field over the last decade, the SAE J2601 hydrogen fueling protocol standard, coupled with the SAE J2799 FCEV communications standard, provide the basis for hydrogen fueling in the first generation of infrastructure worldwide.

Register to attend this webinar.

<http://links.govdelivery.com/track?type=click&enid=ZWFzPTEmbWFpbGluZ2lkPTIwMTQwODI4LjM1NDU0MDExJm1lc3NhZ2VpZD1NREItUFJELUJVTC0yMDE0MDgyOC4zNTQ1NDAxMSZkYXRhYmFzZWlkPTEwMDEmc2VyaWFsPTE3MDM4NDU1JmVtYWlsaWQ9a3Jpc3Rlbi5uYXZvakBlZS5kb2UuZ292JnVzZXJpZD1rcmlzdGVuLm5hd29qQGVLmRvZS5nb3YmZmw9J>

## **ASTM**

No report at this time.

## **6 Discussion Topics**

### **Facilitating Deployment**

**Carl Rivkin**

Workshops on-going in California for permitting officials. Just confirmed date for the next one in the Bay Area on December 9<sup>th</sup>.

### **H<sub>2</sub>USA Activities**

**Karen Hall**

Working Group meetings are on-going.

The next in-person meeting will be held in conjunction with the Fuel Cell Seminar.

### **Regulatory Matrix Review and Comment**

**Karen Hall**

Latest version – [www.fchea.org/core/import/NHFCCSCC/FCHEA-Regulatory-Matrix-Aug-28-2014.pdf](http://www.fchea.org/core/import/NHFCCSCC/FCHEA-Regulatory-Matrix-Aug-28-2014.pdf)

Comments can be submitted to Karen Hall at [khall@fchea.org](mailto:khall@fchea.org).

**Action Item:** Any updates available for IEEE, ASTM, or other groups in which FCHEA staff are not actively participating, please contact Karen to keep these items up to date.

## **7 Permitting and Installation of Hydrogen Fueling Stations**

### **Ca Station Implementation**

**Jennifer Hamilton**

The Governor's Office has developed a Green Team.

Phone call with stakeholders within ASME on a working group item, relating to tank verification for refueling stations. ASME Section 10 has some activity within this discussion trying to modify the qualifications to reduce the cost as they are cumbersome.

Continuing to keep communications open and looking into potential agreement with tank developers to reduce qualifications.

Station project tracking in-house and with the Governor's office. Tracking progress and status.

### **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**

The H2FIRST team had a meeting last week, confirmed that budget is approved for HySTEP device. Any questions can contact Terry Johnson.

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

Still working on Phase 2 of the project that will allow us to take a look at the practicality of the field test methods. Working to line up stations where we can obtain data on the three methods.

Will James – Given the device is a 35 MPa device. What will the direction be once data is obtained.

Juana Williams – Focus is test methods. Based on the results of the last phase, will be able to say more on where we might go with 70 MPa dispensers.

**8 Open Discussion & Other Issues**

Next meeting: Wednesday, October 8, 2014 at 3:00 PM Eastern.