

# MINUTES OF THE JUNE 2010 TELECONFERENCE OF THE NATIONAL HYDROGEN AND FUEL CELLS CODES & STANDARDS COORDINATING COMMITTEE

**MEETING DATE:** June 2, 2010  
**FACILITATOR:** Karen Hall, NHA

## 1. Roll Call - Chad Blake

[Attendees](#) (16Kb PDF)

## 2. Review of Anti-Trust Guidelines - Robert Wichert

[Antitrust Guidelines](#) (27Kb PDF)

## 3. Review of/Corrections to Draft Minutes of May 2010 Teleconference Meeting

### Correction under NFPA Activities

The text "providing there are no motions submitted" needs to be removed.

### Correction under Topical Discussions

The workshop in China is "planned" and not a certainty at this time.

Chad Blake will make these corrections and re-submit the minutes for posting.

## 4. DOE/HQ Update – Antonio Ruiz

Jim Ohi provided an update and encouraged everyone to attend the DOE Annual Merit Review next week where Antonio will be available for discussions.

## 5. California Hydrogen Standards - John Mough/Gary Castro

John Mough provided an update. There has been no change in status.

## 6. Hydrogen Industry Panel on Codes (HIPOC) Activities - Bob Boyd / Glenn Scheffler

Bob Boyd provided an update. One more issue with a proposal to the fire code in advance of the ICC hearings in Dallas. John Mueller will speak on behalf of HIPOC, and Julie Cairns will speak on behalf of CSA. The proposal will insert language to "listed and approved" for components. HIPOC does not expect any issues with this proposal.

## 7. NFPA Activities - Paul May/Marty Gresho

Marty Gresho provided an update.

NFPA 2 completed its ROC meeting and the ballots should be out soon.

NFPA 55 will open for proposals this summer and will be open for proposals until November 23, 2010. All industry stakeholders are encouraged to provide proposals during this time period.

NFPA 52 will open for proposals next summer. Proposals must be in by May 23, 2011.

## 8. ICC Activities - Bruce Johnston

Bruce Johnson provided an update.

International Fire Code (IFC) Final Action hearings have been completed. The Chapter 22 Code Change Proposal "F175" to address listing and labelling was approved by the assembly. This allows documents to be used for "approval" when listing standards are not available. The IFC has been harmonized with NFPA 2 as a result of the Final Action hearings. This closes the 2012 cycle for the IFC documents. The 2012 IFC will be

published in 2011. The 2015 cycle will start in 18 months.

### **9. NREL Activities - Carl Rivkin**

Chad Blake provided an update. Preparations for the Annual Merit Review (AMR) are in progress. The workshop held in San Francisco for code officials was a success. Another workshop or two are expected to be held later this year, most likely in Southern California.

### **10. SNL Activities - Dan Dedrick**

Daniel Dedrick provided an update. A risk analysis for fuelling operations has started. Indoor operational and indoor refuelling risk analysis is in progress. Experiments are being planned. Dispersion and ignition scenarios will be examined. The experiment matrix will be developed. Modelling will follow. Large and small release scenarios will be explored. The schedule is targeting a final report by the end of the year.

Hydrogen compatibility component testing also continues. High pressure storage tank testing was delayed by compressor problems, but those problems have been resolved by using a more reliable compressor.

Material testing also continues.

### **11. LANL Activities - Cathy Gregoire-Padro**

No update

### **12. PNNL Activities - Steve Weiner**

Steve Weiner will provide an update in July.

### **13. IEC/TC105 Activities - Kelvin Hecht**

Kelvin Hecht provided an update.

#### **IEC TC 105 WG#3 (Stationary Fuel Cells-Safety)**

The Working Group will meet in Geneva on June 14th and 15th, and in Seattle on October 12th and 13th to address comments to the CD for the 2nd edition.

#### **IEC TC 105 WG#8 (Micro Fuel Cells – Safety)**

The Working Group will meet in Geneva on June 15th and 16th to start work on the second edition to include additional fuels.

#### **IEC TC 105 WG#10 (Micro Fuel Cells – Fuel Cartridge Interchangeability)**

A new standard is being proposed, 62282-6-310, to address:

1. Interchangeable power connector, and
2. Data communication protocols.

The first meeting will be held in conjunction with the IEC Plenary meeting in October in Seattle

#### **IEC TC 105 WG#11 (Single Cell Test Methods)**

A new activity has been approved to incorporate the results of the FCTESQA project to develop a test procedure for I-V polarization curves, which can be used for the characterization of PEM fuel cell stacks.

**New work** A New Ad Hoc study group has been established to investigate the incorporation of EN 50465 (European standard for small fuel cells used primarily for heat) into the scope of TC105.

Robert Wichert has been selected as the convener.

The first meeting of this study group will be July 5th and 6th in Frankfurt am Main, Germany.

A new activity to address forklift trucks and/or APU's is under consideration.

The US will vigorously support forklift truck standard(s).

Suggestions on the scope of forklift standard(s) are encouraged.

[www.fuelcellstandards.com](http://www.fuelcellstandards.com)

NREL has contracted to support this activity for another year.

Any and all suggestions to improve this service to meet your needs will be considered

- Changes or additions to the content
- Improvements to make it more user-friendly

Usage has increased markedly. Perhaps the NHA Conference contributed to the increase.

NHFCCSCC Members commented on the usefulness of the site, praising its implementation.

## **14.0 ISO/TC197 Activities – Glenn Scheffler / J. Thompson**

Glenn Scheffler provided an update. Jim Ohi also provided an update on Working Group 12 efforts and emphasized that the Working Group 12 effort has been making good progress for many years.

### **14.1 Ballots in progress**

*ISO/FDIS 17268, Gaseous hydrogen land vehicle refuelling connection devices*

The tentative US position based on the US-TAG vote is to disapprove. The tentative position and comments are posted for review by TAG member. The ballot terminates June 25.

*Systematic review of ISO 16110-1:2007, Hydrogen generators using fuel processing technologies – Part 1: Safety*

The tentative position based on the US-TAG vote is to confirm. The tentative position and comments are posted for review by TAG members. The ballot terminates June 15.

*N472, proposal to revise ISO/TR 15916:2004, Basic considerations for the safety of hydrogen systems*

The US-TAG vote is due June 7. The ISO ballot terminates July 19.

### **14.2 Recently Closed Ballots**

*ISO/FDIS 26142, Hydrogen detection apparatus – Stationary applications*

The FDIS passed. The US-TAG voted to abstain.

### **14.3 Meeting Reports**

*US-TAG for ISO/TC 197 -- May 6*

This meeting was held as both a teleconference and a face-to-face meeting in conjunction with the National Hydrogen Association's Hydrogen Conference & Expo in Long Beach, California. The status of Working Groups and issues were discussed in preparation for the plenary, and meeting minutes were posted for the US-TAG review.

*ISO/TC 197 Plenary on May 16 in Essen, Germany*

Problems related to WG11/TG1 coming to agreement on acceptable separation distances were noted. The chair has requested a description of the issue from the US-TAG within 2 weeks. Sandia provided technical assistance, and the letter was sent last Friday (May 28).

The chairman also indicated that values in the document being prepared by WG12 have been "unstable" and that the issues related to ASTM references has been side-stepped by adding test methods to the document. The point-of-contact for the US-TAG (Jim Ohi) was informed, and these items are being addressed.

Meeting notes prepared by G.W.Scheffler and K.Hall are posted for members of the US-TAG.

#### *ISO/TC 197/WG 15 Meeting in Essen, Germany*

The kick-off meeting was held to initiate work on high pressure hydrogen vessels for stationary applications. The US-TAG hopes to keep this work consistent with new ASME standards on the same subject.

#### *US-TAG Teleconference – June 1*

Based on the May 6 meeting and teleconference, a follow-up teleconference was held on June 1. In addition to completing the remainder of the original agenda from May 6, an update from the plenary meeting was provided and issues were discussed.

### **15. Fuel Cell Forklift Issues – Aaron Harris**

The Forklift Task Force met in May. Discussions continue regarding tank testing, HPIT1, HPIT2, NFPA 505 changes, UL standards and more.

Next meeting is June 21, 2010.

### **16. NIST Activities - Juana Williams**

Juana Williams provided an update. The US National Workgroup met by teleconference on May 25th. Completions of responses to comments are being finalized for the method of sale and a device code for hydrogen sales. The next meeting will be June 17th by teleconference. There is a new URL for the National Workgroup. The new URL will be provided to the Committee, but the old URL will continue to work. Please be reminded that the meeting next month will include votes on the tentative device code and it is very important that this proposal pass the vote. There is a notice in the Federal Register regarding this vote. The Workgroup will also send out a notice to stakeholders encouraging them to express their feelings regarding these topics to voting members. Committee chair contact information will also be made available.

### **17. CSA America Activities - Josip Novkovic**

Josip Novkovic provided an update.

There have been no changes in status since the previous update.

### **18. SAE Activities - Mike Steele/Glenn Scheffler**

Mike Steele provided an update.

The Safety Working Group is meeting this week. The other June meetings have been cancelled.

The next scheduled meetings are in September.

J2919 on fork lifts has been circulated. People have been asked to sign on to the web site to participate. Please contact Pat at SAE to participate. If you need help in doing this, please contact Mike Steele.

Glenn Scheffler also provided an update. The Safety Working Group is meeting tonight to discuss localized fire. Slow progress is being made on this difficult issue, but progress continues.

### **19. ASTM D.03 Activities - Jackie Button**

Jackie Button provided an update. The ballot closing report is expected soon. The ballot closed yesterday. The next meeting is June 28th through June 30th.

## **20. NHA Activities - Karen Hall**

Karen Hall provided an update regarding the Safety Report. Everyone is working to update the Safety Report to reflect the recent work in conjunction with the NHA Conference.

## **21. USFCC Activities - Robert Wichert**

Robert Wichert provided an update.

USFCC is getting ready to re-start the Transportation Working Group under the leadership of Bill Chernicoff of Toyota. The first meeting will be on July 7th and will focus on updates from the three active Task Force Groups: Hydrogen Quality, Cargo Shipment and Fork Lifts; along with a discussion of infrastructure issues. Anyone who wants to participate is encouraged to contact Bill Chernicoff or Robert Wichert to be added to the roster.

The Fuel Cell Council is also meeting with the US Department of Transportation tomorrow, June 3rd, to discuss shipment, aircraft carry-on and carriage in checked baggage for fuel cell cartridges and fuel cell systems. An update on this work will be provided at the next meeting.

## **22. Topical Discussions**

No discussion

## **23. Next Meeting – July 7th, 2010, at 3:00 PM, US Eastern Daylight Time**