

MINUTES OF THE MAY 2008 TELECONFERENCE OF THE NATIONAL HYDROGEN AND FUEL CELLS CODES & STANDARDS COORDINATING COMMITTEE

MEETING DATE: May 14, 2008

MEETING TIME: 1:00 – 2:30 PM (MST)

FACILITATOR: Karen Hall, National Hydrogen Association

1.0 MEETING PARTICIPANTS

Karen began the meeting by welcoming everyone and Robert Wichert conducted the roll call. The Coordinating Committee is a collaborative activity of DOE, the National Hydrogen Association (NHA), the US Fuel Cell Council (USFCC) and NREL.

[Teleconference meeting participants](#) (85Kb PDF)

There are two new members:

1. Connie Bielawski (CSA America)
2. Jill Thompson (Compressed Gas Association) – new US TAG Administrator of ISO/TC 58/SC 4 and ISO/TC197, replacing Debbie Angerman who is stepping down at the end of May

2.0 REVIEW OF USFCC ANTITRUST GUIDELINES

USFCC members were asked by Sondra Ullman to be mindful of the anti-trust guidelines, which can be found on the USFCC members' website, as well as an attachment to the minutes of past meetings.

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

3.0 REVIEW OF/CORRECTIONS TO DRAFT MINUTES FROM PRIOR TELECONFERENCE MEETINGS

When the draft Minutes of the April 9th teleconference meeting were disseminated, unfortunately, they were not received by many participants because of the size of the file. Karen agreed to post the draft Minutes on the *NHA Hydrogen and Fuel Cells Safety Report* website and asked members to review them and send corrections to Russ Hewett before the June teleconference meeting.

4.0 OPPORTUNITY FOR DOE/HQ REPRESENTATIVE TO PROVIDE LATEST INFORMATION ON WHAT'S GOING ON AT DOE

Antonio Ruiz was at the *Workshop on Permitting HFS Projects and Telecommunications Projects Having Fuel Cells for Backup Power* being held in Teaneck, NY, so there was no report on happenings at DOE/HQ.

5.0 REPORT ON CALIFORNIA HYDROGEN FUELS PROJECT'S EFFORTS TO DEVELOP A CALIFORNIA-SPECIFIC HYDROGEN FUEL QUALITY STANDARD

John Mough (California Department of Food and Agriculture/Division of Measurement Standards (DMS)) was not available to give an update.

The California hydrogen fuel quality regulation is posted on the following website: <http://www.cdfa.ca.gov/dms/hydrogenfuel/hydrogenfuel/HydrogenFuelRegulations.pdf>

6.0 REPORT ON THE CALIFORNIA FUELS PROJECT'S EFFORTS TO DEVELOP A CALIFORNIA-SPECIFIC HYDROGEN FUEL DISPENSER STANDARD

Neither Gary Castro nor Norm Ingram was available to give a report on the status of California's efforts to develop a hydrogen fuel dispenser standard. In those efforts, California DMS is working collaboratively with NIST.

Juana Williams (NIST), who was on travel, reported "offline" to Russ Hewett regarding the California

DMS/NIST efforts.

California DMS has the expertise on compressed gaseous refueling equipment and cryogenics. California asked for NIST WMD's input on a draft device type evaluation checklist it recently developed, which was provided. California has also kept NIST apprised of its work to obtain a dispenser test standard and NIST hopes to coordinate some trips that will allow for our collaboration on test equipment and procedures.

7.0 DISCUSSION OF REPORT RELEASED BY US FEDERAL MOTOR CARRIER SAFETY ADMINISTRATION

During November 2007, the DOT Federal Motor carrier Safety Administration released the report:

Changes to Consider in the Federal Motor Carrier Safety Regulations and North American Standard Inspection Procedures to Accommodate Hydrogen as an Alternative Fuel: Final Report

The objectives of the report are to: (1) provide a review of existing Federal Motor Carrier Safety Regulations with respect to changes that should be considered to accommodate commercial vehicles that use hydrogen as a fuel; and (2) provide a review of the existing North American Standard Inspection Procedures and identify changes to the procedures that should be considered for inspections of commercial vehicles using hydrogen as a fuel.

The website for the document is:http://www.trb.org/news/blurb_detail.asp?id=8934

There was excellent discussion about the DOT report. Bill Collins remarked that the report should be addressed by the USFCC Transportation Working Group. USFCC and NHA will organize a dedicated webinar to discuss the topics in the report. It will be organized by Karen Hall and Robert Wichert.

8.0 REPORT ON HYDROGEN INDUSTRY PANEL ON CODES (HIPOC) ACTIVITIES

The minutes of the last HIPOC meeting, held on May 1, have been posted on the Hydrogen and Fuel Cell Safety Report website:

<http://www.hydrogenandfuelcellsafety.info/hipoc/>

The next meeting, scheduled for June 5th, will be a public meeting that will be devoted to: (i) reviewing the actions of the technical committee for NFPA 52 relating to the Report on Proposals (ROPs); and (ii) reviewing the public comments to the ICC Final Action Hearings relating to the hydrogen technologies.

9.0 REPORT ON NFPA ACTIVITIES

Paul May, the new NFPA staff liaison for **NFPA 52, 55** and **853**, reported on the work of Task Group 6 of the Technical Committee for **NFPA 2 (Hydrogen Technology Code)**. Task Group 6 developed a new separation distance requirements table -- intended for NFPA 2 -- by revising the current table in **NFPA 55**, based on experimental work, engineering analysis and risk assessment analysis. The strategy for gaining acceptance of the revised separation distance requirements table was to first submit it as a proposal for incorporation into **NFPA 55**, while it was in its revision cycle. Then, it could be "extracted" from **NFPA 55** for incorporation into **NFPA 2**. Paul reported that the Technical Committee for **NFPA 55** accepted the new proposed table. In addition, the table has been accepted for incorporation into **NFPA 52** by its Technical Committee.

The next meeting of the full technical committee for **NFPA 2 (Hydrogen Technologies Code)** will be June 26-27 at NREL in Golden, CO. Persons wishing to attend the meetings are invited to contact Paul May at pmay@nfpa.org.

10.0 MICHIGAN'S STATE-WIDE PROCESS FOR PERMITTING HYDROGEN-FUEL PROJECTS

The state-wide rules for the permitting of projects involving use of hydrogen as a fuel went into effect on May 1. The rules cover both hydrogen fueling station and telecommunications projects involving use of hydrogen.

[Michigan Rules document](#) (342Kb PDF)

11.0 REPORT ON IEC/TC105 ACTIVITIES AND DOCUMENTS IN THE "COMMENTS" STAGE

Kelvin Hecht reported on IEC/TC105 activities.

- Kelvin's report (Kb PDF)

Highlights include:

1. WG#1 met in Geneva during the week of May 5-9 and reviewed the comments on the Committee Draft of the revised *Terminology* document
2. WG#4 met in April to discuss maintenance of the standard *Stationary Fuel Cell Power Systems – Performance* and the possibility of harmonizing it with *ASME PTC-50 (Fuel Cell Power Systems Performance)*
3. A survey is being conducted to determine the need for a standard for fuel cell propulsion for "non-vehicles" (e.g., wheelchairs, forklifts, etc) and auxiliary power units
4. *ANSI/CSA FC 1 (Stationary Fuel Cell Power Systems)* is being harmonized with *IEC 62282-3-1 (Stationary Fuel Cell Power Systems - Safety)*

IEC 62282-3-1 has been adopted in Europe as *EN 62282-3-1* and has been harmonized with the Low Voltage Directive.

The report also includes April statistics on usage of the *Hydrogen and Fuel Cells Codes and Standards Matrix and Database* website. The address for the website is: www.fuelcellstandards.com

12.0 REPORT ON ISO/TC197 ACTIVITIES AND DOCUMENTS IN THE "COMMENTS" STAGE

Glenn Scheffler gave a briefing on the US TAG meeting on May 30th. The primary purpose is to prepare for the upcoming ISO/TC 197 plenary meeting. There are two documents out for vote:

1. Gaseous hydrogen and hydrogen blend fuel tanks -- an extension requested and granted to August 2008.

2. ISO FDIS 22734-1 (Hydrogen Generators using electrolysis) The US TAG will be meeting on document within a week or two.

Debbie Angerman is retiring, and the Committee wished her the best. In addition, the Committee expressed its thanks for all of her excellent work over the past years.

ISO-16110-2 is also out for vote on reformer performance. Comments are requested by July 14th.

[Debbie's report on ISO/TC197 activities](#) (102Kb PDF)

13. OPPORTUNITY FOR CDOs AND SDOs TO REPORT ON THEIR ACTIVITIES

13.1 NIST

In Juana William's absence, Karen Hall reported on an upcoming meeting at the Gas Technology Institute in Illinois, June 17 – 19, 2008. This will be a meeting of the US National Work Group (USNWG) on Commercial Hydrogen Measurement Standards.

PURPOSE: Development of Hydrogen Measurement Standards - Days 1-2: Device Standards and Test Procedures/Day 3: Method of Sale Requirements

Juana sent a brief announcement that the Gas Technology Institute will host the June 2008 meeting of the U.S. National Work Group for the development of hydrogen measurement standards. The expertise of the Committee is needed to ensure the development of an appropriate and fair set of design, accuracy, installation, use, method of sale requirements, and test procedures for equipment used in hydrogen measurements for vehicle and other refueling applications. These standards are intended to be the basis for criteria used to approve equipment for commercial use and for codes adopted as law and regulation and enforced by State and local weights and measures officials who regulate commercial equipment such as motor-fuel dispensers.

NIST is encouraging the participation of all stakeholders since their input is important to harmonize national and international legal metrology requirements where possible and to avoid conflicts with related hydrogen standards developed by other standards and codes developing organizations.

For additional details, contact Juana Williams.

13.2 SAE

Mike Steele reported that the May meetings of the Hydrogen Safety Group will be held during the week of May 19th. The focus will be on:

- SAE J2578 (Recommended Practice for General Fuel Cell Vehicle Safety)
- SAE J2579 (Technical Information Report for Fuel Systems in Fuel Cell and Other Hydrogen Vehicles)

The second edition of SAE J2719 (Information Report on the Development of a Hydrogen Quality Guideline for Fuel Cell Vehicles) has been published. ASTM continues to work on developing testing procedures.

SAE J2719 (Information Report on the Development of a Hydrogen Quality Guideline for Fuel Cell Vehicles), which was successfully balloted, is undergoing editing by SAE staff and will be published in a couple of weeks.

14.0 OPEN DISCUSSION AND OTHER ISSUES

The participants had a discussion regarding local codes. They asked that the Committee work on a collaborative relationship with the National Conference of States on Building Codes and Standards (NCSBCS) to provide a database on the local codes and their basis model codes throughout the country.

15.0 NEXT MEETING

The next meeting will be a teleconference meeting as follows:

- DATE: June 4th (First Wednesday)
- TIME: 3:00 – 4:30 pm EDT