

NHA Codes & Standards Steering Committee Meeting

Draft Minutes

November 16, 2006 12:00-1:00PM EDT

Meeting Attendees

Bob Boyd	BOC
Larry Moulthrop	Proton Energy Systems
Chris Sloane	GM
Tom Joseph	APCI

NHA Staff

Karen Hall
Rex Hazelton

Meeting was opened at 12:05 PM ET by Karen Hall

Discussion Items

Industry Report on DOT Gap Analysis - final input and steps forward

Karen explained that the Report has gone through several revisions with input from NHA staff and committee members; however there were a few specific issues that needed to be addressed. One is shipping sampling containers of hydrogen for refueling. The language used was that the containers would be small, but this needs to be defined. Bob stated that the standard DOT exemption cylinder used is at 1600 PSI per gram, and that being flexible on the size would help. It was determined that the report should suggest containers that hold 10 grams per liter at 1500 PSI per gram.

Karen then addressed the issue of ASME work done in hydrogen storage in composite cylinders. Bob said that the Compressed Gas Association had approved PS26, which, once published, would provide interim guidelines for the use of composite cylinders for bulk storage of hydrogen until the ASME standards come out. DOT also updated rulemaking on ISO111, but DOT has been very resistant to the use of composite tanks.

Bob added that Linde and Toyota have developed an odorant that may be suitable for hydrogen, but could not provide further details until the finalization of the Linde/BOC merger.

ICC proposals - results and next steps

All the ICC proposals being reviewed are in the public domain, but there was discussion of those that were recommended for disapproval at the Final Action Hearings. The

fueling pad proposal was rejected by a 7-6 vote, and could easily be overturned once the standard has been fully reviewed by the committee. Another rejection was that for indoor dispensing, which occurred because there was too much new information provided at the last minute for the proposal and the chairman ruled it out of order. Tom stated that at the Final Action Hearing, scheduled for May 21-26 in Rochester, NY, there will be far greater support as Larry Moulthrop will be doing a presentation for the proposal.

NFPA 2 Update

Karen stated the first meeting took place in Denver in early November, and that an article will be published in the next *Hydrogen and Fuel Cell Safety Report*. Tom said that the new task forces have been set, and that membership could now be extended beyond NFPA 2 for anyone that wished to join for a particular issue. Tom said that an NFPA report is scheduled to be published on Nov. 17th that would list all the task forces and members

NFPA 52

The code revision cycle is underway, and HIPOC is working to bring in industry proposals. Extra time was given to finalize the proposals so that the revision cycle would line-up with NFPA 55, as 52 refers to 55 for storage requirements are there are some inconsistencies that need to be worked out. This is also good as it allows more time to submit proposals based upon discussions after the last HIPOC meeting. The new date for proposals is May 25th, 2007 (the same as the due date for NFPA 55 proposals), with the follow-up meeting taking place in June.

Hydrogen Fuel Specification activities

Jim Ohi asked for a meeting on Monday because there seems to be a wide gap in thinking between the fuel cell and auto manufacturers. There is concern that some of the test methods do not comply with specifications, and there is fear that regulations will be put in place that cannot be complied with.

Karen asked whether the SC felt that the DOE efforts within the Tech Teams are sufficiently addressing the issues, or whether there may be a role for the NHA to build consensus.

Car companies are going to start using specifications for vehicles in a manner that works. In California, they have been clear that standard methods for measurement need to be made, but no one has asked for an official certification. DOE and the USFCC have been working to figure out fuel stack specificity, and standards consideration will continue to move forward, but will not be needed until hydrogen is available for retail sale in CA in 2008 or 2009.

Bob noted that current ASTM methods are not appropriate to detect the levels of constituents specified, however the table in the draft TS would lead legislators to believe that they are. Example: In 2710, methods are shown in a table, but should instead be a footnote as to not be misleading.

Committee members should submit any changes that need to be made (ACTION ITEM)

Priorities for 2007

The cost shared contract with DOE ends in March, as does the one that funds the *Hydrogen and Fuel Cell Safety Report* safety report. DOE plans to combine the two items so that NHA can bid to continue the work. **Any codes, standards or regulation activity that NHA is not making a priority, please let NHA staff know so it can be included for 2007 work. (ACTION ITEM)**

NASFM/HELP

The National Association of State Fire Marshals Hydrogen Executive Leadership Panel has continued to meet, but does not appear to have funding to undertake many activities. They want senior-level executives to be a part of the group, but so far have been relatively unable to convince industry executives of the value of their participation. So far, efforts by NHA staff to build a bridge for communication have been largely unsuccessful and Patrick Serfass's application to be on HELP seems to have been denied. NHA staff recommends monitoring this activity and reducing any proactive efforts to build a relationship between HELP and NHA since preliminary efforts have failed to bear enough fruit to make continued efforts worthwhile.

To help meet the perceived need that fire marshals have for information, the NHA should provide them with finalized education not draft materials. **NHA should get a list of everyone with HELP and ask if they would like to receive hydrogen updates from the NHA, including monthly e-mail notification of the HFCSR (ACTION ITEM).** There are a lot of groups that need the NHA's attention to help steer the direction of the group, HELP is not one of these groups. They are also a very political group. If Steering Committee members have ideas on the type of relationship NHA should have with them, and what type of resources should be used. Patrick should speak with Tom to get further input. (He needed to leave the call prior to this discussion.)

Other Business

Karen noted Chris Sloane has been selected as the Tier I Moderator for the NHA's sessions on safety, codes and standards at the 2007 annual conference. Karen offered to assist Chris in her role.

Next teleconference meeting will take place before the Annual Conference in March.