



Codes and Standards Task Group Meeting Minutes
NOVEMBER 1-2, 2006, Washington, DC

Attendees:

George A. Miller, International Consortium for Fire Safety Health and the Environment; Group Leader
Latanya Clemencia, National Association of State Fire Marshals Staff
William Chernicoff, US Department of Transportation
William Collins, UTC Power
Patrick Davis, US Department of Energy
Sergey Dorofeev, FM Global
Kenneth Krastins, Plug Power
Ian McIntyre, Canada Natural Resources Board
Bruce Torrey, Corporate Compliance

Program Area 2: Permitting and other safety standards that will facilitate the transition

Project 1: Adoption of Model National Code language for use by code officials in the permitting of hydrogen infrastructure.

The Group reviewed the two hydrogen related code changes submitted to ICC for consideration at its code change hearing in Orlando this year. Of the two, group members recalled the reason given by the ICC committee for denying proposal F-175 dealing with containment of a liquefied hydrogen spill. The committee listened to opponents, who characterized the proposal as requiring diking, which it did not. They also observed that it would not be possible to “demonstrate safe circumstances”. The group was of the opinion that NASFM should provide further documentation/discussion and continue to pursue the code change.

The second of the two proposals, F-229, dealt with indoor/outdoor storage of hydrogen at residential sites; quantities & pressures to be allowed and ventilation to be required. No one could recall the specific reasons given by the committee for denying the proposal and we need to see them before they can be addressed.

Progress by end of 2006: We will see those reasons in documents due from ICC within the month of November and will be able to decide how to address the objections then.

The entire group will review the two proposals during the month of November, will discuss as a group during a conference call to be scheduled in December, and will decide by vote how to advise the NASFM Model Code Committee before January, 2007.

Project 2: Adoption of “placeholder” standards to provide guidance to state and local code officials while the Model National Codes are being amended.

After much discussion about what was generally perceived as the extensive time necessary for the development of a ‘standard’, the group agreed that the adoption through the ANSI process of a ‘recommended practice’ as a placeholder would be a more likely achievement. We also concluded that those who may anticipate moving into the hydrogen power arena in the near future would also benefit by the creation of the document. The use of the document by both users and regulators (AHJ) would add to understanding and, ultimately, safety. Because major industries and the aerospace community have been dealing with hydrogen for decades and have produced standards and safe practices for their use, the new document should be seen as serving commercial and residential users, both for design of new facilities and for the maintenance of existing facilities.

The group agreed that the most we could expect to accomplish within the Conference time allotted was a framework, or skeleton, of a ‘recommended practice’, with the meat to be added to the bones by the entire group within the next several months. Once a framework has been agreed upon, it will be possible to divide up assignments with the entire group involved once portions are produced. The general framework looks like this:

- I- Scope: (briefly, commercial & residential facilities)
- II- Terminology/definitions
- III- Generation/production
 - a) Siting considerations
 - b) Design & model Codes
 - c) Product Standards
 - d) Test methods
- IV- Delivery
 - a) Design & Model Codes
 - b) Product Standards
 - c) Test Methods
- V- Storage
 - a) Siting considerations
 - b) Design & Model Codes
 - c) Product Standards
 - d) Test Methods
- VI- Dispensing
 - a) Siting considerations
 - b) Design & Model Codes
 - c) Product Standards
 - d) Test Methods

Appendices: Acronyms
Check Lists

William Collins and I, and other group members and staff at the upcoming NHA Conference, will begin to focus on Scope and Terminology while we are there.

Project 3: Standards development activity coordinated with other SDOs.

The group is aware of the need to do this but this project was not further defined.