

HIPOC
Teleconference Meeting – Minutes

Wednesday, March 9th, 2011 – (12:00 – 2:00pm EST)

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Participant Code: 6870884

1. **CALL TO ORDER** – 12:00pm, Chair
2. **ROLL CALL ESTABLISHMENT OF A QUORUM**

#	Panelists		Present	Category
1	Robert Boyd/Tom Joseph	bob.boyd@linde.com Alt. – bh2i@ptd.net	Y/y	Industrial Gas & Chemical
2	Iby George/Bob Davidson	ibygeorge@co.clarke.ga.us Alt. – rjd@davidsoncodeconcepts.com	Y/y	Code Enforcement
3	Marty Gresho/Scott Heyworth	marty@fp2fire.com Alt. – scott@fp2fire.com	Y/n	NFPA 2
4	Brian Ladds/Andrea Zajac	Brian.Ladds@calgary.ca Alt. – -zajacanma@msn.com	Y/n	Code Enforcement
5	Greg Milewski	Gregory.Milewski@shell.com Alt. – t.b.d.	Y/	Energy Company
6	Charles Henrici/Mike St. Clair	cbhenrici@juno.com Alt. – St-clair.1@osu.edu	N/n	NFPA 55
7	John F. Mueller/Mark Mallick	John.Mueller@dos.state.ny.us Alt. – Mark.mallick@dos.state.ny.us	N/y	Code Enforcement
8	Nancy Pehrson/Dave Farese	nancy.pehrson@centerpointenergy.com Alt. – FARESEDJ@airproducts.com	N/y	NFPA 52
9	Mark Richards/Aaron Harris	Mark.Richards@versa-power.com Alt. – aharris@nuvera.com	Y/y	Fuel Cell Industry
10	Bill Houf/Isaac Ekoto	will@sandia.gov Alt. – iekoco@sandia.gov	Y/y	Academic/Research
11	Glenn Scheffler/Mike Steele	GWSSol@aol.com Alt. - msteele308@gmail.com	N/y	Fuel Cell Hydrogen Vehicles
Quorum?			Y	
Guests				
	Jeff LaChance		Y	Sandia
	Karen Hall		Y	FCHEA
Staff				
	Chad Blake	chad.blake@nrel.gov	Y	NREL
	Paul May	pmay@nfpa.org	Y	NFPA
	Bruce Johnson Justin Wiley	bejohnson@iccsafe.org jwiley@iccsafe.org	Y/y	ICC

3. **REVIEW, AMEND, APPROVE AGENDA**
4. **APPROVAL OF MINUTES**
 - a. The February minutes were approved as written.
5. **ADMINISTRATIVE ISSUES**

- a. Antonio has received letter requesting funding for code enforcer travel to in-person meetings. He is evaluating the request and will provide a formal response.

6. OLD BUSINESS

a. Report from NFPA

- i. NFPA 2 will meet for a Pre-ROP at NFPA on April 26.
 - 1) Indoor refueling task group will be created after the results of the NFPA 52 scope is made known.
- ii. NFPA 52 will be meeting at NFPA from August 1-5 for the ROP.

b. Report from ICC

- i. 2012 I-Codes will be made available in May.
- ii. Committee applications to join are available here:
 - 1) <http://www.iccsafe.org/cc/Pages/2011Call.aspx>
- iii. Proposals for the A cycle documents (includes IBC) are due 1/1/2012.
- iv. Proposals for the B cycle documents (includes IFC) are due 1/1/2013.
- v. The "work groups" (formerly Regional Code Action Committees) will be set up to hear/develop proposed changes at a regional level. This work will occur 4-6 months in advance of the deadlines.

c. Industry Update

- i. The panel voted not to send an email to PNNL.

d. Working Group - Fork Lift Fueling Indoors (see archive notes at end)

- i. **HIPOC** worked through items previously discussed to compose rationale for code language.
- ii. The working group on indoor fueling will develop code language before the next HIPOC meeting and present it for support.
 - 1) Supported items will be noted and proposed.
 - 2) Unsupported items will be left to individual proponents to submit proposals

e. Working Group – I-code proposals (see archive notes at end)

f. Action Item Update

- i. Rationale: Covered by Working group on forklift fueling indoors
- ii. Rationale: Covered by "long term coordination" action item below.
- iii. Rationale: Covered in "long term coordination" action item below

- iv. **Onsite Generators** - Siting requirements for onsite hydrogen generators.
- v. Rationale: Finished – proposal accepted at NFPA 55 meeting in Feb.
- vi. **HIPOC PR** - Wider dissemination on the existence of HIPOC and its work to provide for code harmonization, aiming to encourage industry to provide input to the HIPOC earlier.

7. NEW BUSINESS

- a. New Action Items
- b. New Administration Topics

8. SIGNIFICANT DATES

- a. **NFPA 2 – Expected publication date: April 1, 2011.** Pre ROP meeting at NFPA Headquarters is April 26th, 2011
- b. **NFPA 55 – ROC meeting date:??**
- c. **NFPA 52 – Proposal closing date:** May 23, 2011, ROP Meeting week of August 1st, 2011
- d. **IFC 2015 Edition Proposal Closing Date:** ??

9. NEXT MEETING(S)

- a. **Next Web Meeting:**
 - i. Wednesday, March 30 from 12:00-2:00PM ET (11:00AM-1:00PM CT; 10:00AM-12:00PM MT; 9:00-11:00AM PT).
- b. **Next In Person:**

10. ADJOURNMENT

- a. The meeting was adjourned at 2:00PM ET.

11. Working Group Notes (Archive)

- a. **Working Group on Indoor Fueling Details:**
 - i. Marty, Bob, Aaron, Bill, John...to develop language and draft indoor fueling proposals for NFPA 52 and NFPA 55. The overall goal is to advance performance-based material as well as advance the appropriate prescriptive approach. **SCOPE:** To take the two failed IFC proposals from HIPOC, and the PNNL best practice summary, review them, capture the intended purpose intent and scope of indoor fuel dispensing systems in a white paper , and determine where and how to make proposals to into NFPA and ICC documents to accommodate indoor (and outdoor) fast fueling of hydrogen powered utility vehicles

1) August 30 meeting reviewed the failed proposals to the ICC and work involved to revise the original proposals. There is a potential conflict between the publication of NFPA 52 (2013) if any NITMAMs are submitted and submitting related proposals to the ICC.

2) At a follow-up meeting 10/14/10, the forklift task force started with NFPA 52 and PNNL best practice as the “seed” document to aid in define indoor fast fuel refueling standards and inform specific change proposals. Aim toward cleaning up NFPA 52 first, then consider ICC changes/references. Proposals are to be developed to revise the layout in NFPA 52 to be more the model Code for NFPA 2 to extract from. Following the layout in NFPA 2 as a starting point may be the cleanest method to improve the structure in NFPA 52, which in turn would serve as the ideal layout for NFPA 2 to extract. NOTE: This seems to be a moot point now that NFPA-2 is the primary control document. Can we delete this portion?



Microsoft Office
Word 97 - 2003 Docu

- ii.
- iii. It was suggested that the group work to have the ICC point to NFPA-2 rather than have NFPA-2 (or NFPA-52) material be constructed to expect that the ICC will reference the NFPA Codes. It should be noted that all further ICC code references should be towards NFPA-2
- iv. The group plans to submit their proposals to NFPA 52, regardless of the outcome of the how and when the hydrogen scope removal is made official.
- v. Indoor Refueling Sub Group – working on a best practices “White Paper” document which will initially form basis of proposals for NFPA 52 but will also encompass many of the current discussion topics and serve as a benchmark when looking for where to make changes to the I-Codes
- vi. PNNL-DOE Indoor Refueling Best Practices Document – see attached from Linda Fassbender, PNNL. This is an early draft that Linda is hoping for feedback on.



Best Practices for
Indoor Refueling of H

- vii. PNNL/DOE Hydrogen First Responder Training course:
<http://hydrogen.pnl.gov/FirstResponders/>
- viii. DOE code official’s course:
http://www.hydrogen.energy.gov/training/code_official_training/
- ix. Hydrogen Incidents Database: <http://www.h2incidents.org/> - there is an RSS feed option on this page to receive email updates for new incidents (similar to the secret list for FF close calls).

b. Working Group on I-Codes Notes:

- i. **Discuss Results of Long-Term Code Coordination.** HIPOC should review how the I-Codes should change, considering the publication of NFPA 2. NFPA 2 should be used to locate the existing material on hydrogen to compare to the I-Codes. Setup a task group to develop code changes for NFPA 52 and analyze how these changes will go into NFPA 2.
- 1) NFPA 2 Code can be used to compare to the I-Codes. Is there troublesome IFC content? If so does reference to NFPA 2 help?
 - 2) Each HIPOC member to review NFPA 2 (if available), NFPA 55 and 52 as well as IFC to develop concepts for coordination.
 - 3) Discuss these concepts at in-person meeting and determine which ones to push forward with and outline both strategy and the basis statement.
 - 4) Assign proposal development tasks to HIPOC members. Draft proposals to be reviewed at 1st telecom after the in-person.
 - 5) Changes to NFPA 52 Code on indoor fueling need to be considered to be the technical Code for the I-Code to reference (higher priority item due to May 23 closing date).
 - 6) NFPA 52 items – Develop proposals for NFPA 52. Items include reviewing draft proposals to NFPA 52 on indoor fueling, reviewing draft revisions to chapter 9 of NFPA 52, the revision of NFPA 2 with regards to the material in the I-Codes, and take advantage of opportunities to tour local indoor fueling areas.