

APPENDIX 2

International Hydrogen Infrastructure Group Codes & Standards (C & S) Status Matrices - Two matrices were presented at the May IHIG Steering Committee meeting: Hydrogen Supply Chain (by Karen Campbell of Air Products and BP's Jim McGetrick) and Vehicle Life Cycle (by GM's Mike Steele). The matrices used red/yellow/green designations and were extremely well received, i.e., first time the Steering Committee felt they could understand the material. Steve Cook of BP will present a European version of the Hydrogen Supply Chain Matrix he developed working with EIHP at the October 30th IHIG meeting and Mike Steele will present a European and Japanese Vehicle Life Cycle matrix. The role of the IHIG C & S group in supporting the new FreedomCAR C & S Tech Team will also be discussed at the meeting.

NHA 9/21-22 Detroit Workshop & International Codes Council September Code Development Hearing - BP was a sponsor of the NHA C & S workshop in Detroit Michigan 9/21-22. DOE reported that hydrogen permitting guidelines for stationary fuel cell installations and fueling stations should be finalized by end of October. Draft versions have been circulated to the BP hydrogen team for comment.

DOE also reported that only two of eight hydrogen proposals passed the September International Code Council (ICC) hearing. Canopy top storage of hydrogen, underground storage of liquefied hydrogen and minimum separation distances for gaseous hydrogen dispensers, compressors, and generators/storage vessels were defeated for lack of technical support. The DOE ICC Ad Hoc Hydrogen Committee has one more chance to support the defeated hydrogen proposals. They meet in Golden, Colorado at NREL on November 19th and 20th to develop technical support on these proposals, which will be submitted to ICC by the 1/14/03 deadline. Final action will take place on the proposals at the May 2004 ICC Hearing. Dr. Mike Swain will review ongoing hydrogen modeling and separation distances and DOE will review Sandia National Lab data on separation distances at the 11/19-20 meeting. Jim McGetrick will attend the meeting for BP.

The DOE Hydrogen C & S Coordinating Committee has made solid progress on assigning standard development organizations (SDOs) responsibilities for taking the lead in the various Hydrogen related C & S and is developing schedules for completion of the various codes and standards. .

October 2 IHIG C & S Group Meeting with DOE in Washington DC on DOE's role in aligning Hydrogen Global Technical Regulations (GTRs) and US C & S - Prentiss Seales of API and DOE's Bob Mauro, Catherine Gregoire Padro, Neil Rossmeissl and Jim Ohi attended a 10/2/03 meeting between DOE and IHIG to discuss aligning GTRs and US C & S. BP's Mike Jones summary of EIHP's role and progress in developing drafts for evaluation by recognized C & S organizations was reviewed at the meeting. DOE accepted an action item to create a matrix of ISO, IEC, ASME, API documents in use in Europe as a basis for their C & S effort as well as to track GR/GTRS. Catherine Gregoire Padro is leading DOE's effort to better align GTR's with US C & S. Jim McGetrick issued meeting minutes.