OKLAHOMA UNIFORM BUILDING CODE COMMISSION

ALTERNATIVE FUELS PROGRAM TECHNICAL COMMITTEE
MEETING MINUTES
CONSTRUCTION INDUSTRIES BOARD/UNIFORM BUILDING CODE COMMISSION
CONFERENCE ROOM
2401 NW 23RD STREET, SUITE 2F
OKLAHOMA CITY, OK 73107
APRIL 25, 2016 - 1:30 P.M.

COMMITTEE MEMBERS PRESENT:
Greg Armstrong, Ross Barrick, Joe McKenzie (left at 3:10 p.m.), Eric Pollard, Tom Sewell, and Adam Shupe

ALTERNATE MEMBERS PRESENT:
Dave Evans and Robert Lassiter

COMMITTEE MEMBERS ABSENT:
Anthony Blatt, Paula Laney-Cowart, Terrance Hellman, Mitchell Hort, Jeremy Moore, and Cary Williamson

OTHERS PRESENT:
Billy Pope (Staff – OUBCC), Kathy Hehnly (Staff - OUBCC), John Melson (Oklahoma Department of Labor), and Angelia Cobble (Oklahoma Department of Labor)

CALL TO ORDER:
Mr. Adam Shupe called the meeting of the Alternative Fuels Program Technical Committee to order at 1:32 p.m. in the Construction Industries Board/Uniform Building Code Commission Board Room at Shepherd Mall, 2401 NW 23rd St., Suite 2F, Oklahoma City, OK 73107.

DISCUSSION AND ACTION ITEMS:
Discussion and possible approval of the March 28, 2016 regular meeting minutes
Mr. Shupe noted the minutes were behind tab "A" and asked if there was any discussion and if not would entertain a motion to approve them.

MR. ROBERT LASSITER MADE A MOTION WITH A SECOND BY MR. JOE MCKENZIE TO APPROVE THE MINUTES AS PRESENTED

VOTING AYE:	Greg Armstrong	Eric Pollard
	Ross Barrick	Tom Sewell
	Robert Lassiter	Adam Shupe
	Joe McKenzie	

VOTING NAY: None

ABSENT:	Anthony Blatt	Mitchell Hort
	Paula Laney-Cowart	Jeremy Moore
	Terrance Hellman	Cary Williamson

ABSTAIN: None

Discussion and possible action of repair garage requirements in the 2014 NEC® as compared to the 2015 editions of the IFC® and IFGC®, and the 2016 edition of NFPA 2®, the 2015 edition of NFPA 30A®, and the 2013 edition of NFPA 59A®

Mr. Shupe stated he had reviewed a few of the documents and handed out a list of items he noted to start the discussion. He stated he had not reviewed everything but wanted to review what he had found so far. He stated the list was general line items while going through the NEC®. He noted the NEC® had gone to great lengths to bring everything together as far as repair garages were concerned. He noted the ICC codes did not touch on repair garages very much but added he had not completed his review of the IFC®. He noted the NEC® went beyond electrical items for repair garages and why he went to that code first. He noted NFPA 30A® referred to NFPA 52® for construction requirements for repair garages but he didn't find the requirements in NFPA 52®. Mr. Sewell asked if it was a self-certification of the area or who made the determination. Mr. Shupe noted it would depend on the jurisdiction, adding that most jurisdictions did not have actual plan reviews associated with developing drawings and construction documents for buildings such as repair garages. He noted for example the City of Oklahoma City only reviewed architectural and site plans. He stated typically it was the inspector when out on the field that were going to see if the ventilation or classification requirements were met depending on what was done inside the space. He noted for the most part the inspectors were not very experienced in the realm of alternative fuels and wouldn’t know what to look for. He stated the electrical inspector would probably be the exception because of the detail provided in the NEC®. He added a mechanical inspector would have to open up the NEC® to see any special requirements for repair garages. He stated in the future there may be some reference in the IMC® to help draw attention to the NEC® requirements. He noted it was up to the engineer reviewing the standards to know it needed to comply with the standard. Mr. Evans stated the engineer was putting their stamp on any plans certifying they were correct. The committee discussed several cities requirements to have or not have an engineer or architect based on square footage or dollars and that a person could build a small little shop and there would be no requirements for engineering. Mr. Shupe noted there was no state requirement for licensing to qualify a person to design. He added there were plan reviews and inspections to protect the public and for compliance to the code.

Mr. Shupe reviewed Article 511 of the NEC® which was dedicated to the requirements for repair garages. He noted the NEC® referenced the 2012 edition of NFPA 30A® and the committee was reviewing the 2015 version of NFPA 30A®. Mr. Shupe noted in Article 511 the statement in the scope stated it was limited to the repair operations of fuel burning equipment and was not intended for a repair garage that only repairs electric vehicles. He added there were some sections that in the article that dealt with charging stations. He noted there were two different classifications for both major and minor classifications. He added minor maintenance included items like the exchange fluids or filters and major maintenance got into actual engine overhauls, body work and welding work. He stated there were significant changes between the requirements of the two types. He noted the two classifications applied to electrical, mechanical and fire code requirements. He noted there were probably not too many repair garages that complied with the requirements. Mr.

Shupe noted that section 511.3(D)(2), entitled "Ceiling Areas" dealt with lighter-than-air gaseous fueled vehicles and had requirements for both major and minor repairs. The committee briefly reviewed section 511.10(B) and section 625.52 entitled "Ventilation" for the requirements for electric vehicles. They discussed the requirements for ventilating electric vehicle batteries. Mr. Barrick noted he had reached out again to an electric vehicle company regarding any issues they had with the state minimum codes and still did not have a response.

The committee discussed the code requirements for repair garages looked at a worst case scenario and was written to prevent those types of scenarios. They noted the requirements were more restrictive for a repair garage verses a parking garage. They reviewed the commentary to Section 511.3 and discussed if the ventilation could be turned on and off when needed to allow for the unclassified location, determining that it would be subject to the interpretation of the local authority having jurisdiction. They discussed building separation options for the repair garages as well as possibly modifying the code to clarify when gas was detected some specific automatic ventilation requirements would need to kick in; the possibility for vehicles to have duel-fuel types and how that would affect the repair garage ventilation requirements; and natural and mechanical ventilation requirements in several of the standards under review. The committee discussed ways to revise the code to keep the safety requirements but allow for modifications to existing structures in a more reasonable price range. The committee reviewed the definitions of minor and major maintenance in the NEC® and in several of the standards under review and discussed various ways they could be modified in the NEC®. They discussed mitigating risk, safety requirements, limiting operation capabilities of repair garages, and limiting the ability of the authority having jurisdiction to interpret the code requirements if the definitions were specified. The committee consensus was to do more research and table the issue until next month.

At 3:10 p.m. Mr. McKenzie had to leave the meeting and there was no longer a quorum. The committee asked if they could stay and discuss other items, there just couldn't be a vote. Mr. Shupe asked if the right members were available to discuss the next item on the agenda. Ms. Hehnly noted the next item was the information provided form the state of California. She noted on the email from Jennifer Hamilton, the first proposal of items to be sent to the ICC was to correlate exhaust requirements for repair garages with lighter than air fuels. She noted Ms. Laney-Cowart gave her some other contacts in other states that dealt with hydrogen that referred her back to Ms. Hamilton.

<u>Discussion and possible action on information received from various sources in California related to NFPA 2 Hydrogen Technologies Code® and the International Fire Code® to include but not be limited to:</u>

<u>1. Email from Jennifer Hamilton regarding proposals to ICC for the 2018 edition of the IFC® related to NFPA 2®</u>
<u>2. California State Fire Marshal Information Bulletin 14-010</u>
<u>3. Chapter 23 of the 2013 Edition of the California Fire Code</u>

The remainder of the committee reviewed the items provided. Mr. Barrick noted he would reach out to his NFPA contacts to see if there were any proposals in any of the upcoming versions of the codes including the 2017 NEC® in the area. Mr. Shupe asked if there was any discussion on the information provided. There was discussion on the items in Ms. Hamilton's list of proposals. They

discussed elimination of the "UL" listing requirements, noting that third-party approvals were possible on some equipment. They looked at and discussed Chapter 23 of the California Fire Code, noting additional requirements in the California Fire Code that were modified or not included in the 2015 IFC® language and if the committee wanted to entertain more of the defueling shutdown control language included in California's Fire Code; and signage wording requirements at fueling stations for emergency shutdown devices (ESD's) being more specific language as "ESD" was not a generally known term. There was discussion on changing the edition year of NFPA 2 to the 2016 edition.

Assignment of review for the May 23, 2016 meeting
Continue the review of the requirements for repair garages and the information from California for discussion at the next meeting.

PUBLIC COMMENTS:
There were no public comments.

ADJOURNMENT: 3:06 p.m.

Minutes approved in Committee Meeting on the 27th day of June, 2016

MITCHELL HORT
Mr. Mitchell Hort, Chairman
Alternative Fuels Program Technical Committee

PREPARED BY: KATHY HEHNLY
Ms. Kathy Hehnly, Executive Assistant
Oklahoma Uniform Building Code Commission

OFFICIAL COPY: *Original with signatures in office file.*