MINUTES OF MEETING OF BOARD OF ELECTRICAL APPEALS

May 14, 2013 - 3:00 p.m.

METROPOLITAN AREA BUILDING & CONSTRUCTION DEPARTMENT SEDGWICK COUNTY PUBLIC WORKS BUILDING 1144 SOUTH SENECA BASEMENT CONFERENCE ROOM

Members: Cole Hawkins, Mike Kilian, Richard "Butch" Kretchmar, John Murrell, Tony Naylor, Ernie Nelson, Brad Ragland

Present: Hawkins, Kilian, Kretchmar, Murrell, Naylor, Nelson, Ragland

Staff Present: Tom Kerschen, Bud Lett, Chris Nordick, Elaine Hammons (MABCD), Jeff Vanzandt (City Law Dept), Justin Waggoner (Sedgwick County Law Dept), Fire Marshal Brad Crisp (Wichita Fire Dept), Deputy Fire Marshal Greg Harlan (Sedgwick County Fire Dept)

The meeting was called to order by Chairman Ragland at 3:00 p.m.

Board Member Naylor made a motion to approve the April 9, 2013, minutes. Board Member Kilian seconded the motion. The motion carried. 6 - 0

There was no one present asking to speak on the public agenda.

The recent examination results from Prometric and ICC for electrical examinations administered by their office for Metropolitan Area Building and Construction Department approved applicants were presented to the Board. The results were as follows:

| APPLICANT NAME | APPLICANT NUMBER | EXAMINATION CLASSIFICATION | EXAMINATION RESULT |
|-------------------|---------------------|-------------------------------|-----------------------|
| Robert James | 7554 | Master Elec | Passed |
| Dorian Burke | SG | Master Elec | Failed |
| Joseph Escalada | SG | Master Elec | Failed |
| Randy Cavanaugh | 3026 | Journeyman Elec | Failed |
| Corey Donohue | 3334 | Journeyman Elec | Failed |
| Josh Baldridge | SG | Journeyman Elec | Failed |
| Sean Dowell | SG | Journeyman Elec | Failed |
| Skyler Helsel | SG | Journeyman Elec | Failed |
| Ronald Tweed | SG | Journeyman Elec | Failed |
| Jesse O'Connor | SG | Residential Wireman | Failed |

Five (5) Master, eleven (11) Journeyman Electrician, one (1) Residential Wireman and five (5) Elevator Electrical applications were reviewed for approval to be administered the appropriate examination for certification. The results were as follows:

| NAME | NUMBER | CLASSIFICATION | ACTION |
|----------------|--------|----------------|----------|
| Eric Holsapple | 7900 | Master | Approved |

| Francis Rupp | 9241 | Master | Approved |
|------------------|------|---------------|-----------------|
| Corey Smet | 6942 | Master | Approved |
| Dorian Burke | SG | Master | Approved |
| Joseph Escalada | SG | Master | Approved |
| Antonio Arambula | 9175 | Journeyman | Approved |
| Randy Cavanaugh | 3026 | Journeyman | Approved |
| Chris Crombie | 7674 | Journeyman | Approved |
| Corey Donohue | 3334 | Journeyman | Approved |
| Charles Prior Jr | 2344 | Journeyman | Approved |
| Wesley Reeves | 8143 | Journeyman | Approved |
| Kurtis Waring | 0424 | Journeyman | Approved |
| Josh Baldridge | SG | Journeyman | Approved |
| Sean Dowell | SG | Journeyman | Approved |
| Skyler Helsel | SG | Journeyman | Approved |
| Ronald Tweed | SG | Journeyman | Approved |
| Jesse O'Connor | SG | Res. Wireman | Approved |
| Michael Barnhart | 2657 | Elevator Elec | Approved |
| Bradley Dreyer | 9160 | Elevator Elec | Approved |
| Korey Luttrell | 4045 | Elevator Elec | Approved |
| John Rannabarbar | 8616 | Elevator Elec | Approved |
| James Rowe | 8288 | Elevator Elec | Approved |
| | | | |

Four new Electrical or Elevator Contractor Licenses were issued as follows:

| QUALIFIED PERSON | COMPANY NAME |
|-------------------|---------------------------|
| Arlis Wuthnow | ArCam Solutions |
| Mark Brownlee Jr | Brownlee Electric LLC |
| Shawn Cleaver | Cloud Electrical Services |
| Christopher Ladue | PMI Iowa LLC |

Unfinished Business

Mr. Kerschen presented the Board with the wording of the proposed amendment to the electrical panel clearance exception. Board member Kretchmar made a motion to accept and present to the elected officials the wording:

"Sec. 4.2.035. – Working space about Electrical Service.

Section 110.26(A)(3) of the National Electrical Code shall be amended to add:

Exception #3: One- and two-family and multifamily dwellings, service panels located in garages, basements or accessory structures, a footing or stem wall that is located below the electric panel shall be permitted to extend not more than 12 inches beyond the front of the electric panel."

Board member Naylor seconded the motion and the motion was unanimously approved.

Mr. Kerschen asked the Board if they have looked over and received feedback from electrical contractors and electrical associations as to the design of the electrical permit application for use by MABCD? Board member Naylor made a motion to use the current City electrical permit application for MABCD. Board member Kilian seconded the motion and the motion was unanimously approved.

New Business

Chairman Ragland asked the Board to review and discuss the copper wiring requirements that are currently different in the City and County jurisdictions. The current requirements that are different in the Unified Code are:

"Residential. In the jurisdiction of the City of Wichita, all residential and accessory building wiring conductors less than 100 amperes shall be copper. In the jurisdiction for Sedgwick County all residential and accessory building wiring conductors less than 100 amperes can be copper or aluminum.

In the jurisdiction of the City of Wichita, all mobile or manufactured home and accessory building wiring conductors rated two hundred amperes or less, including all service conductors that are not owned and maintained by the electrical utility company, shall be copper. In the jurisdiction of Sedgwick County, all mobile or manufactured home and accessory building wiring conductors rated two hundred amperes or less, including all service conductors that are not owned and maintained by the electrical utility company, can be copper or aluminum."

The board discussed this in great detail, expressing that the current aluminum wire is manufactured different then it was in the past and if installed properly by manufactures specifications it is safe. City Fire Marshal Brad Crisp asked to address the Board. He stated that the City Fire Department recommends the current restrictions on aluminum wire as there are people that are changing out appliances that are not properly trained in the installation and connection of aluminum wire, as such the fire potential is much greater than it is with the use of copper wire. Sedgwick County Deputy Fire Marshal Greg Harlan said he agreed with Fire Marshal Crisp and said this is also a great opportunity for increased safety throughout Sedgwick County to adopt the same restrictions in the County on the use of aluminum wire.

The Board continued to discuss this issue and the question was brought up that normally the only people in the electrical panels working with the feeder wiring is electricians and as such should be better trained on the installation and connection requirements of aluminum wire. Mr. Kerschen stated he agreed with that, but he wanted to let the Board know that the amperage sizing for 2 AWG aluminum feeders in residential changed in the 2008 NEC. Prior to the 2008 NEC feeders in residential could be sized using the same table the NEC used for sizing wiring on the service as such 2 AWG aluminum could be used for 100 amp feeders. Now you have to use 1 AWG to achieve the same 100 amp rating if the feeder does not carry 100 percent of the load as 2 AWG would have to use Table 310.15(B)(16) which rates the wire at 90 amps. The Board discussed that 90 amps would normally be sufficient to handle the load and by allowing 2 AWG aluminum to be used in those situations would be both safe and cost effective.

The Board agreed that wiring 200 amp and smaller should be copper when used with mobile or manufactured homes and their accessory buildings.

Board member Kilian made a motion to accept and present to the elected officials the wording:

"Section 4.2.070 – Conductor requirements.

- A. Commercial and Industrial.
 - (1) *Type.* All commercial and industrial wiring conductors rated two hundred amperes or less, including all service conductors required to be installed by the licensed electrical contractor, shall be copper. For parallel conductors, each individual conductor of a parallel set shall meet the requirements of this section. Parallel conductors are not to be considered a single conductor.
 - **Exception**. Feeder circuit and branch circuit conductors rated one hundred amperes or more, may be aluminum or copper-clad aluminum, provided panelboards or disconnect switches served by such circuits are marked by the manufacturer as being suitable for aluminum or copper-clad aluminum termination.,
 - (2) Minimum Size. The minimum size conductors shall be No. 12 AWG copper, except smaller

sizes will be acceptable for control wiring.

B. *Residential*. All residential and accessory building wiring conductors less than 90 amperes shall be copper.

Sec. 4.3.030. - Conductor requirements.

All mobile or manufactured home and accessory building wiring conductors rated two hundred amperes or less, including all service conductors that are not owned and maintained by the electrical utility company, shall be copper."

Board member Naylor seconded the motion and the motion was unanimously approved.

Chairman Ragland asked if there was any other business for the Board. Mr. Lett presented the Board with the check list the City had developed and has been using for meter resets when power has been off for 6 months or longer. Part of this checklist is a requirement that working smoke detectors are installed, if old smoke detectors are not present, prior to releasing to the utility company the approval to turn on power. Mr. Kerschen explained that smoke detectors are a critical life safety device and the City has been making this requirement for about 20 years. If smoke detectors are not located outside each sleeping area in a one- or two-family dwelling and inside and outside each sleeping area in all other dwellings, the City requires a 110 volt with battery backup smoke to detector to be installed in all required locations. The City does not require the smoke detectors to be interconnected at that time, just installed in all the correct locations. Both the City Fire Marshal and the County Deputy Fire Marshal felt that is an excellent requirement and working smoke detectors have proven to save lives.

Board member Naylor made a motion that the meter reset policy check list be used throughout all of MABCD jurisdictions. Board member Kilian seconded the motion and the motion was unanimously approved.

With no other business to discuss, Board Member Nelson made a motion to adjourn the meeting. Board Member Kilian seconded the motion. The motion carried.

The meeting adjourned at 4:01p.m.