

★ **Roll Call Number** \_\_\_\_\_

**Agenda Item Number**  
51A

**Date** August 10, 2009

Request to speak from Allen Suby and Nancy Suby-Bohn, 312 Corning Avenue regarding electrical codes.

Moved by \_\_\_\_\_ to \_\_\_\_\_

COUNCIL ACTION	YEAS	NAYS	PASS	ABSENT
COWNIE				
COLEMAN				
HENSLEY				
KIERNAN				
MAHAFFEY				
MEYER				
VLASSIS				
TOTAL				
MOTION CARRIED			APPROVED	

**CERTIFICATE**

I, DIANE RAUH, City Clerk of said City hereby certify that at a meeting of the City Council of said City of Des Moines, held on the above date, among other proceedings the above was adopted.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal the day and year first above written.

\_\_\_\_\_ Mayor

\_\_\_\_\_ City Clerk

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**Rauh, Diane I.**

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**From:** SimeSuby@cs.com  
**Sent:** Thursday, August 06, 2009 8:52 AM  
**To:** Rauh, Diane I.  
**Subject:** Electrical codes Allen Suby

No body wants to take their old car to a tire store to get new tires and find out that the tires can not be installed unless, by law, new brakes, new belts and hoses are also installed. This mandate would prove profitable for the tire store, but the results would be horribly expensive to the car owner. Car owners who can't afford the "add on" will drive the car until the tires are bald.

The above scenario is exactly what the City of Des Moines has imposed on its homeowners. Strict electrical rules tend to ruin the homeowner's ability to improve their electrical needs. The City must get the costs down otherwise houses turn into shacks and shacks turn into city blithe.

The Des Moines electrical code requires that any home owner who wishes to upgrade their electrical service must also do extensive rewiring of the entire house and garage. As a result of this mandate, the homeowners can not afford the electrical changeover.

Hundreds of homes in Des Moines still have only a 60 amp electrical service. What is needed is a new 200 amp service and a few new circuits. The home owners may also wish to add a circuit so that they can install central air conditioning or they may want to install a high efficiency furnace with an electrical hot water heater so that they can eliminate their old chimney.

The home owners may wish to only install the new electrical entrance and wait for other circuits later as they have the money. The new electrical entrance will give them new circuit breakers for their existing circuits.

It is a shame that some homes do not have the electrical capacity to allow for air conditioners or electric stoves. Folks living in these homes suffer from the heat and from using their old un-vented gas stove. The electrical codes forces folks to the status quo.

It is time to stop the code hearing and reconsider the Des Moines electrical codes. Many of the codes are written on hunches that are fortified by fire safety situations that rarely happen. Every electrical code should be challenged by scientific facts and be eliminated if they will not stand up to scientific scrutiny. Please reject the existing electrical code and seek rewriting. The City of Des Moines spends money enforcing codes that are not beneficial to the home owner.

One must remember that electrical codes are written by and for electricians and not by home owners.

Suggestions for Code changes.

1. Allow electrical service entrances to be installed without requiring other rewiring. (add-ons).
2. Put the responsibility for the monitoring and approval of electrical entrance standards and installations back to MidAmerican Energy rather than the City of Des Moines. (Please not that Iowa Power assumed the responsibility back in the 80"s)
3. Allow existing ground wires to be spliced with new ground wires
4. Allow wire (12-2 with ground) to be used in basement ceilings. (Abandon the old idea of requiring conduit)
5. Allow home owners the ability to do electrical installations on their own homes.

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Allen Suby Des Moines home owner 515 778 3081

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**Rauh, Diane I.**

**From:** Nancy Suby-Bohn [MsSubyBohn@msn.com]  
**Sent:** Tuesday, August 04, 2009 4:33 PM  
**To:** Rauh, Diane I.  
**Subject:** Re: Ordinances - Second Consideration

At the last council meeting, I noticed I could read a "council communication" from a lady....under an agenda item.

I don't want to read this from the podium (will be over the 10 min limit), but would like it presented for the city council to possibly receive it...

How do I do that?

Thanks - Nancy

----- Original Message -----

**From:** Rauh, Diane I.  
**To:** 'Nancy Suby-Bohn'  
**Sent:** Tuesday, August 04, 2009 10:24 AM  
**Subject:** RE: Ordinances - Second Consideration

Was this email also sent to the Mayor, Council Members and City Manager, or would you like me to forward it to them? Please let me know. Thank you.

Diane Rauh  
City Clerk  
City of Des Moines  
283-4209

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**From:** Nancy Suby-Bohn [mailto:MsSubyBohn@msn.com]  
**Sent:** Tuesday, August 04, 2009 8:07 AM  
**To:** Rauh, Diane I.  
**Subject:** Ordinances - Second Consideration

Dear Mayor, City Council Members, City Manager;

Thank you for this opportunity to submit a council communication pertaining to the Ordinance under consideration: Amending Chapter 26 General Article I and Electrical Article III of the Municipal Code.

According to the 2008 National Electrical Code (NEC) is changing Arc Fault Circuit Interrupters (AFCI) requirements from just Bedrooms to now include all "Habitable rooms", meaning pretty much all of the finishes spaces in your home where you are not already currently required to have Ground Fault Circuit Interrupters (GFIs) (Bathrooms, Kitchens, Laundry .. ).

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**Only the 2008 NEC includes the latest rules for electrical installation in residential, commercial, and industrial occupancies. It also introduces:**

- New article on Critical Operations Power Systems with provisions for electrical security in public and private facilities that must stay online during a crisis, such as public safety dispatch centers and hospital ICUs
- New article on Electrified Truck Parking Spaces with NEC rules for outlets to run on-board electrical systems, reducing truck emissions and fuel consumption caused by idling during driver rest times

- Revised requirements for AFCI and GFCIs in dwellings. Since arcing faults on wiring systems and extension cords can cause home fires, the Code expands AFCI use to living areas.
- New rules for tamper-resistant receptacles respond to NEISS reports that thousands of children are treated in hospitals every year for burns received as a result of inserting objects into receptacles.
- New provisions in Article 210, Article 410, and elsewhere in the Code reduce worker hazards and correlate with *NFPA 70E*® worker safety rules.
- Plus hundreds of other revisions

<http://www.nfpa.org/>

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COMMENT:

I tripped a 15A AFCI (10A vac cleaner + 8A heater).

CONCERNS:

The AFCI seemed to interrupt the CCT slower (micro-seconds?) than a standard circuit breaker, allowing the wire nuts to melt through. Is this possible?

I would think that an AFCI for \$32 would provide better protection than a standard 15A circuit at \$2.97; not just be 'arc fault' and 'code.'

What is the chain of events in an AFCI interruption?

RESPONSE:

What you experienced was a 'series fault' which is an inline arc in a hot or neutral wire caused by a weak connection. An AFCI will trip on a hot-to-neutral arc ('arc fault') or on a hot- or neutral-to-ground arc ('ground fault').

There is still a lot of debate on the effectiveness of AFCI breakers given the high cost.

Many people believe the manufacturers have lobbied the code writers in order to sell more breakers without strong statistics of fire prevention; nonetheless code is code for now.

<http://forum.doityourself.com>

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Remember, several organizations 'publish' a code book they want you to adopt every 3 years, and in order to sell code books you have to have changes/revisions, otherwise no one will buy or adopt the code books and how will an organization support themselves if they don't have changes to enforce and books for purchase?

It's not just the manufactures lobbying their product to be "required" by the organization producing a code book....it's also the code book producers lobbying their product/book to be enforced - but they call it "the code" instead of a "reference book" of current available products on the market they promote and how you should install them, which may not be the same as the way the manufacture recommends the installation of their product. The manufacture wants code books to promote their industry along with the installers, this way they can "upgrade" safety feature that may not have been proven to be effective - remember, the electrician is also marking the cost up on the "materials used"....and the added time it took him to install the extra products.

Think of an automobile and the Government safety standards...there is what is required, and then there is what the manufacture also does to "upgrade" their models....but also think air bags in the passenger side....and the number of children who have died because of this "added safety feature".

We are also familiar with VHS, DVD, and now Blue Ray and even computers as they have changed over the years -- so we know there is a better product already being developed, but until the code has been enforced long enough to recoup the manufacture's current product development costs, we probably will not see it...

How much do you want to bet the new product will follow the GFCI and become an easy to install AFCI outlet replacing AFCI circuit breaker as the GFCI outlet did.

Today's installation of an AFCI Breaker in an existing home requires the entire house to be re-wired so if the breaker trips, it does not shut off the lights -- many older homes do not have the lights in a room wired separately from the outlets (nor do they have enough space in the entrance box to add the additional breaker for the now required separate lighting circuit).

An AFCI outlet would not require the house to be rewired for it could easily replace the existing outlet and only trip the outlet or be the first outlet in a series and trip all the outlets in a room but not the lights....and as you read from a web discussion, an arcing can start a fire between the outlet and the breaker before the AFCI breaker even trips -- and AFCI outlet would also have a standard circuit breaker as a back-up, so if one doesn't pop, the other one will - before the wire nuts melt through.

Also, the producers of the NEC code "claim" they have proof the addition of the AFCI's over the years has "reduced" fires.... I'd like to see their proof, for I doubt people are reporting how many times they are "resetting" their breakers, praising the AFCI breaker "saved" their home from a fire.

Notice the manufactures of extension cords and Christmas lights are also starting to install their own little fuses/circuit breakers within their product. This not only is preventing fires, is also protecting them from being sued when their product is used in a way not recommended by the manufacture (overloaded) and a fire occurred.

So is it the AFCI's and the code that is preventing fires? Or is it the manufacturing of safer products including educating the public about the hazards of misusing extension cords that has reduced the fires.

Code books that are NOT FREE to the public (like the Iowa Code and the Municipal Codes are) are a "product", or a "reference book" -- and should be reviewed by more then just those who will profit from the adoption of it.

The Building and Fire Safety Code Appeals Board has already approved and is waiting for the City Council to adopt the removing of the 2008 NEC - GFCI requirements by deleted GFCI's for refrigerators/freezers appliances and sump-pumps outlets to prevent food spoilage and damage to home...which I agree on (and it shows some codes in published books are not always a good to follow).

Knowing the 2008 NEC is also a product, I personally believe, until more evidence can be produced, showing the benefit of the added expense of AFCIs or until an AFCI outlet is manufactured, I propose also deleting the 2008 AFCI changes as mandatory and instead suggest the 2008 AFCI change as an elective upgrade (if the owner/buyer/electrical contractor sees the benefits in having this feature) until actual documentations showing the benefits of the AFCI, including the extra cost, can be produced by the NFPA that will supersede the costly damages to computer (or loss of data) and entertainment systems caused by an AFCI branch suddenly loosing power instead of just the single outlet where the arcing may be occurring.

And what others of the "hundreds of other revisions" will directly effect residential property owners who are the major stakeholders in our communities. Was a 2008 NEC code book made available for them to review so the board could get their input before this ordnance consideration came before the City Council?

Also, the proposed ordnance consideration does not reference property owner's rights and the process for applying for Waivers, Variances or Hardship Clause as allowed in the Administrative sections of both the Iowa Code and Municipal Code.

This leads me to wonder if the Building and Fire Safety Code Appeals board can act as both the legislative branch of adopting the codes for building and the judicial branch during the appeals process. I know Planning and Zoning has two separate boards, one (P&Z Board) for adopting process for changes to the

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Municipal code with the city council as their executive branch, and the other (Zoning Board of Appeals) for the appeals process .

Lastly, requiring licensing to pull the needed permits needs to be challenged, for HUD has already challenged this with the Uniform Plumbing Code and licensing has been removed as a permit application requirement. In the 2003 UPC, it reads:

103.1 Permits

103.1.3 Licensing. As a result of an agreement between the Department of Housing an Urban Development (HUD) and IAPMO, the requirements for licensing have been removed from this section of the UPC. Provisions for licensing shall be determined by the Authority having Jurisdiction.

103.2 Application for Permit

103.2.1.5 Be signed by the permittee or the permittee's authorized agent, who may be required to submit evidence to indicate such authority"....

The 2006 International Building Code (IBC), 2006 International Existing Building Code (IEBC) and 2006 International Residential Code (IRC) -- which the IRC also included the 2005 National Electrical Code (NEC) for one- and two-Family Dwellings -- also reads "the Owner or Owner's Authorized agents" are the ones required to pull permits for properties they own.

The City of Des Moines and the State of Iowa continues to rewrite the permit process removing the owner or owner's authorized agent as the only ones who should be allowed to pull the needed permits.

The owner is the sole person responsible for maintaining their property and is ultimately responsible for any and all work done to the property. If the owner decides to authorize someone on their behave, the owner would be wise to authorize a qualified person; but it's not up to the government to do this for the owner nor should the local and state governments be releasing the owner from this responsibility as they have been doing.

As you see, I have a lot of questions, and wonder if the public understand what is happening for I can't be the only one?

As always, thanks for reading.

Nancy Suby-Bohn  
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Des Moines, IA 50313-4336