



# NEWSWIRE

## Update of MAEC Activities

June, 2004

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### Ag Grounding and Wiring Course

A series of two-day training sessions involving classroom study and hands-on wiring were held in Cass City, Cadillac, and East Lansing concentrating on agricultural wiring and grounding. Of particular interest was the use of recommended materials for wiring in livestock buildings, how to install and connect equipotential planes in floors, and converting a 3-wire feeder to an outbuilding over to a 4-wire feeder. There are rules in the National Electrical Code for agricultural installations that are different than wiring in commercial buildings. There were 30 electricians who completed the training, most of whom are involved in wiring farms.

A flyer is being prepared that will list the electrician and the company for those who successfully completed the training. The names will also be posted on the MAEC web site. Judging by the feedback, the participants have a better understanding of how the agricultural wiring portion of the Code is applied, and why differences are necessary. The training may be offered in other areas of the state next winter.



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### Proposed Decal Will Provide Grounding Notice on Telephone Pedestals

Electric utilities frequently separate the primary and secondary neutrals at the point of their electric service to livestock farm customers. This procedure, commonly referred to as “neutral separation”, prevents the off site neutral-to-earth voltage from becoming a possible source

of stray voltage that might be present at animal contact locations on the farm. When the neutrals are separated, the telephone lateral sheath bond at the pedestal is also disconnected to prevent the telephone lateral bonding from becoming a source of off site neutral-to-earth voltage on the farm.

In cooperation with the Telecommunications Association of Michigan, the Michigan Agricultural Electric Council is developing a bright yellow “Notice” decal to be applied to the outside of the pedestal. The “Notice” decal will provide notification at the pedestal that the communications junction is not bonded to the lateral sheath serving the customer’s facility. This improvement in communication will provide clear information to both electric utility and telephone personnel that the lateral sheath is to remain un-bonded.

During inspection and testing of facilities by either telephone or electric utility personnel, the disconnection of telephone lateral bonding will be verified, and the “Notice” decal will be applied to the outside of the pedestal if not already present.

The decals are expected to be available in the Fall of 2004, and will be provided at no cost to Michigan telephone companies and electric utility members of the Michigan Agricultural Electric Council.

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### Renewable Energy

A subgroup of the MAEC is starting to meet to discuss issues related to sources of renewable energy with respect to agricultural enterprises. An issue of particular interest is the innovation of new ideas for dealing with waste products from various agricultural facilities that can produce energy and possibly result in value-added products that can perhaps turn a waste disposal liability into an asset. This group will continue to introduce issues to the MAEC meetings for discussion and possible action.

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## FFA Skills Contest

There were about 80 agribusiness education students who gathered on the MSU campus in late April to participate in the electrical skills portion of the Ag Skills Contest. The state winners will go on to compete nationally. The MAEC in the past has participated in a program to provide electrical utilization and wiring teaching materials to agribusiness education teachers. This event provides an opportunity to communicate with teachers and to view first-hand students electrical skills.



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### Michigan Public Service Commission Receives Comments on Stray Voltage

On November 25, 2003 the Michigan Public Service Commission (MPSC) opened Case No. U-13934 to solicit comments, due April 1, 2004, that would enable the MPSC to decide if and how to proceed in devising and implementing stray voltage standards that would be applicable to all regulated electric utilities operating in Michigan.

Comments were filed by several parties, including a number of electric utilities, the Michigan Attorney General, Michigan State University's Department of Agricultural Engineering, and organizations representing farmer members (Michigan Farm Bureau, Michigan Milk Producers Association and Dairy Farmers of America). Reply comments, due May 3<sup>rd</sup>, were filed by Consumers Energy, DTE Energy, and Indiana Michigan Power Company. These comments and reply comments are available for review on the MPSC web site at: <http://efile.mpsc.cis.state.mi.us/cgi-bin/efile/viewcase.pl?casenum=13934>.

At the time of preparation of this article there has not been a timetable established by the MPSC to review the submitted comments and decide if and what action will be taken.

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The Michigan Agricultural Electric Council develops and presents educational programs related to electrical issues in the agricultural community. Members include electric power supplier representatives, the Michigan Public Service Commission, the Michigan State University Extension Field Staff, and Michigan State University Campus Faculty. Department of Biosystems and Agricultural Engineering, 103C Farrall Hall, East Lansing, MI 48824-1323  
[www.egr.msu.edu/age/MAEC](http://www.egr.msu.edu/age/MAEC)

## New Publications

The MAEC is cooperating with the Electrical Technology Group in the Biosystems and Agricultural Engineering Department to prepare publications. These publications are now on the web site. For electricians there are study guides for taking examinations. One publication gives details on how to conduct a neutral-to-earth voltage evaluation including the forms needed to record and analyze data. There is a recent publication providing details on how to convert a 3-wire electrical supply to an outbuilding over to a 4-wire supply.

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### Electrician Licenses Renewed

Licensed electricians in Michigan will have until the end of December, 2005 to complete a 15 hour Code Update course for license renewal. There has been some confusion on this issue. Code Update courses will be available in various locations round Michigan starting in the Fall of 2004. Check the web site for dates and locations. Persons who may be interested in the Code Update Course should let us know about interest in a particular area.

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### Web Site

The MAEC web page is a part of the Biosystems and Agricultural Engineering web site. The web site [www.egr.msu.edu/age/MAEC](http://www.egr.msu.edu/age/MAEC) has recently been revised and updated. You will find useful information on this web site. A new addition is a listing of the customer service phone numbers for all of the electrical power suppliers serving Michigan, and links to MAEC member web sites. Any suggestions for improving the usability of this web site are appreciated.

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### Events of Interest

Ag Expo on the MSU campus features 35 acres of commercial farm equipment and an opportunity to discuss issues with agricultural researchers and Extension staff. Parking for the event is at the corner of Farm Lane and Mt. Hope Road. Dates and hours:

Tuesday,	July 20, 9:00 to 5:00
Wednesday,	July 21, 9:00 to 8:00
Thursday,	July 22, 9:00 to 3:00