

55th Annual Rural Energy Conference

February 9-10, 2017
and

Advanced Topics in Stray Voltage Investigation Workshop

February 8, 2017
Embassy Suites
Bloomington, Minnesota



Sponsored by

Midwest Rural Energy Council
University of Wisconsin, Minnesota, Iowa and South
Dakota State Extension
University of Wisconsin Biological Systems
Engineering Department
University of Minnesota Bioproducts and Biosystems
Engineering Department
Iowa State University Agricultural and Biosystems
Engineering Department
South Dakota State University Department of Agricultural
and Biosystems Engineering

Workshop Agenda

Advanced Topics in Stray Voltage Investigation Workshop



This year's pre-conference workshop will be presented by Mike Haas of We Energies, Robert Fick of Alliant Energy, and other experts. Gain a deeper understanding of stray voltage issues and learn from others who work in the field. You will learn about neutral isolation during a presentation that will cover how-to, why, and what to look for. You will learn proper techniques for grounding and testing electric livestock waterers, and also gain a deeper understanding of equipotential planes.

Wednesday, February 8

- 12:45 AM Registration. Lunch on own.
- 1:00 Neutral Isolation: How to, Why, and What to Look For - *Mike Haas, We Energies*
- 3:00 Break
- 3:15 Grounding and Testing Electric Livestock Waterers. Equipotential Planes - *Robert Fick, Alliant Energy, and other experts.*
- 5:00 Workshop ends. Dinner on own.

Please note: The conference and workshop are two different events. You can register for either one or both. Please see the registration panel.

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Jason Kollwelter, We Energies (WI)
Jerry Sorenson, Riverland Energy (WI)**
Steve Stackhouse, Oconto Electric Co-op (WI)**

* Member of MN Rural Electric Association (MREA)
** Member of WI Electric Co-op Association (WECA)
† Member of SD Rural Electric Association (SDREA)

Conference Agenda

This year's annual conference will focus on energy issues in agriculture. All of the breakouts will be presented twice so that you can choose from both tracks to design your own conference agenda.

Thursday, February 9, 2017

- 7:30 AM Registration & Refreshments
8:00 **Welcome and Conference Overview** - *Kevin McLean*, Minnesota Power, MREC President
8:15 **Policy Impacts on the Dairy Industry** - *John Holevoet*, Dairy Business Association
10:00 Break
10:15 **Understanding Electric Rates** - *Shaurice Moorman and Josh Mulder*, Power System Engineering
11:00 **Cows' Immune Response and Stray Voltage Exposure** - *Lorraine Sordillo*, Michigan State University
12:00 PM Lunch
1:00 **Breakout Session 1**
2:00 **Breakout Session 2**
3:00 Break
3:15 **Breakout Session 3**
4:15 **Breakout Session 4**
5:30 Buffet Dinner and Round Table
Discussion of Current Issues

Exhibits and posters will be on display all day Thursday. Presenters will be available during breaks.

Friday, February 10, 2017

- 7:30 AM Refreshments
8:00 **MREC Business Meeting** - *Kelly Dybdahl*, Lyon-Lincoln Electric Co-op, MREC Vice President
8:15 **Genomics in Farm Management: How is it Changing the Dairy Industry?** - *Eric Olstad*, Zoetis

Friday, February 10 (continued ...)

- 9:00 **Agricultural Financial Market Update** - *Bob Meyer*, Citizens State Bank of Loyal
10:00 Break
10:30 **Using Renewable Energy Systems in Dairy Production** - *Brad Heins*, University of Minnesota West Central Research and Outreach Center
11:30 AM **Adjourn**

Thursday Breakout Sessions

Track 1: Farm Wiring and Electrical Safety

- Proper Installation of Electric Fencers**, *Robert Fick*, Alliant Energy
- Testing Panel Neutral to Ground Separation**, *Brian Costello*, Alliant Energy
- NEV Considerations for Transmission Line Construction & Maintenance**, *Mike Warntjes and Andy Eberhardt*, ATC
- Immune Response and Stray Voltage Exposure: Further Discussion**, *Lorraine Sordillo*, Michigan State University

Track 2: Energy Issues on the Farm

- Calculating Usage to Identify Potential Energy Savings**, *Fred Daniels*, Franklin Energy Services
- Energy Efficient Technologies & Implementation for Swine and Poultry**, *Fritz Ebinger*, University of Minnesota Extension, Clean Energy Resource Teams
- Community Energy Storage and e⁻ vehicle Charging**, *Jeff Springer*, Dairyland Power
- Energy, Water and Time Efficient Hot Water Systems**, *Gary Klein*, Klein and Associates



Registration

Please refer to the registration panel for workshop and conference fees. **Advanced Topics in Stray Voltage Investigation Workshop** fee includes materials and breaks (lunch and dinner is on your own). Hotel accommodations are not included in the fee. Please note that breakfast is included with your guest room reservation at the Embassy Suites Hotel.

The **Conference registration fee** includes materials, breaks, lunch, reception, and dinner buffet Thursday. A break is included on Friday. Hotel accommodations are not included in the fee. Please note that breakfast is included with your guest room reservation at the Embassy Suites Hotel.

Make check payable to: UW-Madison

Mail or fax to:

CALS Conference Services, 640 Babcock Drive
Madison, WI 53706; Fax: (608) 262-5088

Or register on-line at:

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

Cancellations: In order to receive a full refund, you must cancel by contacting CALS Conference Services at (608) 263-1672 prior to January 27, 2017. If you fail to cancel by January 27, the full fee will apply. Substitutions are welcome at any time.

Questions: Call CALS Conference Services at (608) 263-1672.

Location and Lodging

A confirmation notice will be mailed upon receipt of registration. The conference will be held at:

Embassy Suites Hotel - Minneapolis Airport
7901 34th Avenue South, Bloomington, MN 55425
Phone: (952) 854-1000 or online: www.embassysuitesairport.com and use group code MRE.

A block of rooms has been reserved until January 17, 2017 (or until all rooms are reserved, whichever comes first) for conference participants at the nightly rate of \$149, single or double, plus 14.275% taxes. Breakfast is **included** with your guest room reservation. Be sure to mention that you are attending the Midwest Rural Energy Council (MREC) to receive the special rate.

Registration Form

55th Annual Rural Energy
Conference & Workshop
February 8-10, 2017

Complete a separate registration form (or copy) for each registrant or register on-line at:
<http://www.mrec.org/>

Early registration deadline is January 27, 2017

Name _____

Company _____

Address _____

City/State/Zip _____

Daytime Phone _____

E-mail _____

The workshop and conference are separate events. You can register for one or both.

Advanced Topics in Stray Voltage Investigation Workshop - February 8

\$ 195 (\$220 received after January 27)

Rural Energy Conference - February 9-10

\$ 365 (\$390 received after January 27)

_____ Total Enclosed

Payment must be made at time of registration.

Enclose fee. Checks payable to UW-Madison

Check enclosed

Please charge on the following account:

VISA Master Card American Express or

Discover

Card Number _____

Exp. Date _____ Name on Card _____

Signature _____

Register on-line at:
<http://www.mrec.org/>