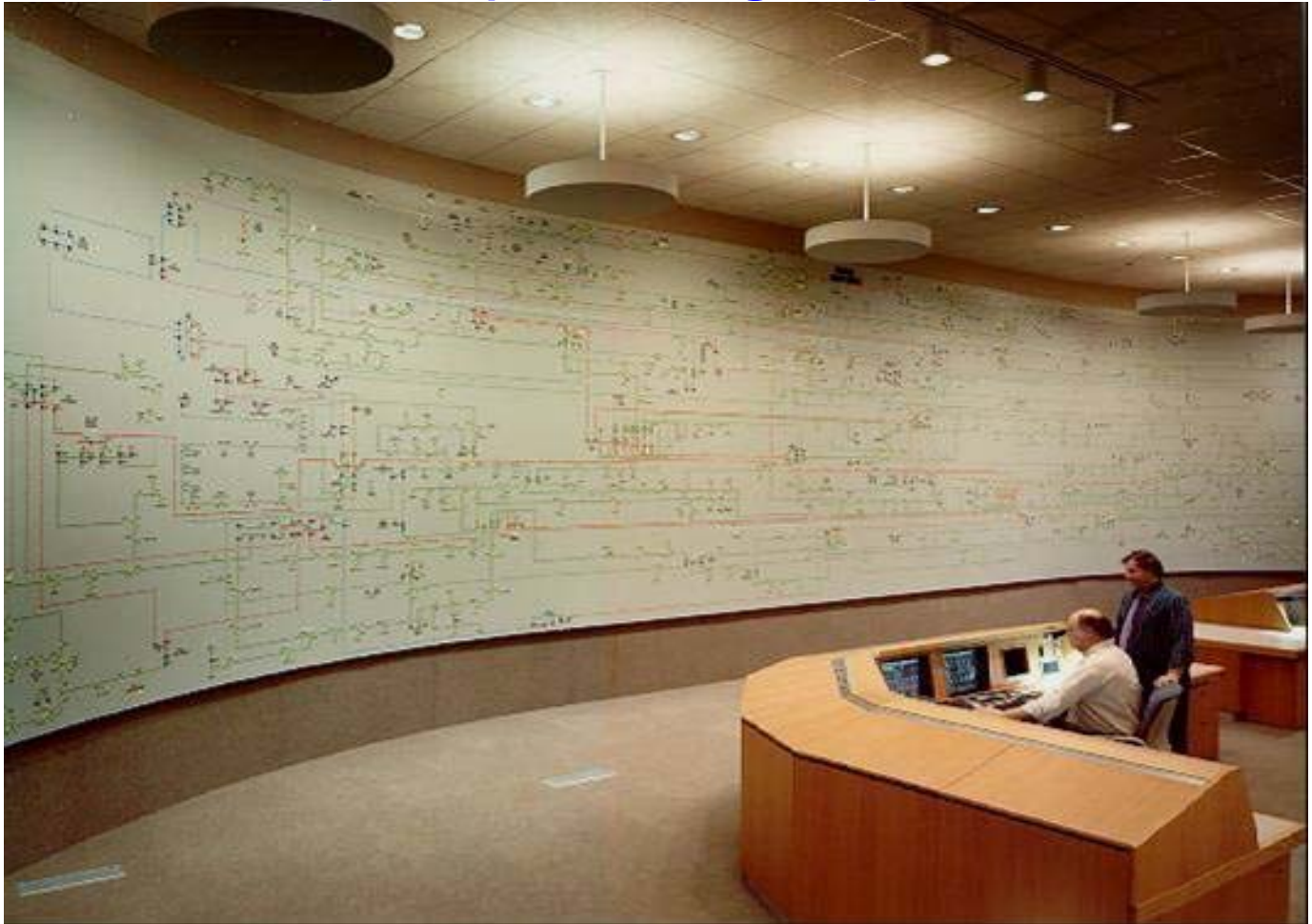


# **Control System Cyber Security: Achieve Compliance and Secure Your Systems**

**JANUARY 22-24, 2008**

**Minneapolis (Bloomington), Minnesota**



“Photo courtesy of Dairyland Power Cooperative”

**Sponsored by  
Electrical and Computer  
Engineering Extension,  
KEMA, Inc.,  
and Securicon LLC.**

# **Control System Cyber Security: Achieve Compliance and Secure Your Systems**

## **JANUARY 22-24, 2008**

### **Tuesday, January 22, 1-5 PM**

Scott Mix from the North American Reliability Corporation (NERC) will:

- Discuss the NERC Reliability Standards Development Process.
- Discuss compliance issues associated with NERC Reliability Standards.
- Provide an overview of the NERC Cyber Security Standards, focusing on how they were developed, and generally what should be expected in an audit.
- Provide an update on the current status of the NERC Cyber Security Standards approval, and expected directions for modifications.

### **Wednesday, January 23, 8 AM-5 PM**

Chris Decker and Joe Bucciero from KEMA, Inc., together with Paul Hurley from KEMA partner Securicon, LLC, will offer sound, practical approaches to achieve NERC Compliance and to help better secure your systems. These presentations will:

- Examine the NERC Critical Infrastructure Protection requirements, focusing on the major impacts on utilities.
- Discuss the FERC Request for Comments and how this may, if fully embraced, impact the CIP requirements.
- Review the Policies, Procedures, and Forms required for NERC CIP compliance.
- Review a typical NERC CIP compliance project plan, focusing on the tasks required and their dependencies.
- Discuss the typical vulnerabilities that KEMA has seen and the lessons learned when doing vulnerability assessments of control systems.
- Identify ten key best-practices for achieving control system cyber security.
- Highlight the capabilities of automated tools that are available from potential vendors to help monitor the NERC CIP Standards compliance requirements.

### **Thursday, January 24, 8 AM-5 PM**

Drs. Manimaran Govindarasu, Chen-Ching Liu, and Tom Daniels from Iowa State University will:

- Identify cyber-critical infrastructure.
- Describe the power system information and communication systems for monitoring and control.
- Discuss the need for control system security.
- Describe the security engineering framework and modeling.
- Identify cyber vulnerabilities in power systems and discuss the impact of cyber insecurity on power systems.
- Describe how to perform a vulnerability assessment and investment analysis for SCADA systems.
- Provide an overview of R&D efforts in national labs, simulation tools, and test beds.
- Discuss information security concepts and misconceptions.
- Describe the "hacker."
- Discuss network service security issues - configuration, and management.

## About the Course

The NERC Critical Infrastructure Protection (CIP) Standards are approved and available, and NERC has sponsored a series of workshops that presented the intended meaning associated with each Standard. Now you need to know what needs to be done to be compliant. What series of practical steps is needed to be ready for auditable compliance? More importantly, if you achieve NERC CIP compliance, will that make your systems secure? What are some state-of-the-art techniques to resist intrusion into critical cyber networks used to control the bulk power grid? This short course is designed to answer these and other important questions.

The course is jointly sponsored by Iowa State University, KEMA, Inc., and Securicon, LLC.

## Registration Information

Registration fee is \$700 if you register by January 8, after which the fee increases to \$775. A 10% discount will be offered to groups of 5 or more from the same organization. Your fee includes all program materials, refreshment breaks, and lunch on January 23 and 24. Use check, credit card, or purchase order to pay.

## Registration Online at:

[www.ucs.iastate.edu/mnet/ecs/home.html](http://www.ucs.iastate.edu/mnet/ecs/home.html), or mail a copy of the completed registration with payment to the address shown on the back of this brochure. You may also register via fax at (515) 294-6223.

For registration questions, call Iowa State University Conference Services at (515) 294-6222.

## Change in Plans

If you cancel your registration **before** January 8, 2008, your full registration fee will be refunded less a \$15 cancellation fee. No refunds will be made **on or after** January 8, 2008. If you cannot attend the course, you may send a substitute. Call Iowa State University Conference Services at (515) 294-6222 if you have a change in plans.

## Special Needs

If you need accommodations for a disability or a dietary restriction, call Iowa State University Conference Services at (515) 294-6222.

## Emergency Messages

During course hours, messages may be left at (952) 831-8000. Messages will be posted near the course registration area.

## For Further Information

For questions about program content, contact Tom Baird (515) 294-7678 or [tbaird@iastate.edu](mailto:tbaird@iastate.edu).

## Continuing Education Credit

Upon completion of the course, attendees will be eligible for 1.7 Continuing Education Units from Iowa State University.

## Location

**This course will be held January 22-24 at the Crowne Plaza-Minneapolis Airport West, 5401 Green Valley Drive, Bloomington, Minnesota.** A block of rooms has been reserved at the Crowne Plaza for the nights of January 22 and 23 at the rate of \$135 per night plus tax. Please make your own reservation by calling (952) 831-8000. Be sure to ask for the block "ISU/KEMA Cyber Security Course".

The Crowne Plaza features the following:

- ❖ Complimentary Business Center with 2 computer stations, printers/scanners
- ❖ Full service Restaurant, Lounge and Room Service
- ❖ Complimentary parking
- ❖ In room coffee service, iron and ironing board, hair dryers, two-line phones, modem connection and large work stations
- ❖ 6 Miles from the Mall of America
- ❖ Complimentary transportation to/from Minneapolis/St. Paul International Airport as well as the Mall of America
- ❖ Complimentary wireless high speed internet access throughout the hotel

## Tax Deduction

The expense of continuing education, when taken to maintain and improve professional skills is tax deductible. Contact your accountant for details.

# IOWA STATE UNIVERSITY ELECTRICAL AND COMPUTER ENGINEERING WEB SITE

<http://www.ucs.iastate.edu/mnet/cybersecurity/home.html>

**Control System Cyber Security: Achieve Compliance and Secure Your Systems**  
**Minneapolis (Bloomington), Minnesota --- January 22-24, 2008**

**08-2028**

**Registration Information:**\*  Mr.  Ms.  Mrs.  Dr.

First Name	Middle Name (Initial)	Last Name
Company/Affiliation	Dept.	Day Phone
Email		Fax Number
Mailing Address 1		Night Phone
Mailing Address 2		
City	State	Zip Code

**Registration Fee:** (Please check the appropriate fee)

- |  |          |
|--|----------|
| <input type="checkbox"/> Early Registration Fee (by January 8)                       | \$700.00 |
| <input type="checkbox"/> Regular Registration Fee (on/after January 8)               | \$775.00 |
| A 10% discount will be offered to groups of 5 or more from the same organization.    |          |
| <input type="checkbox"/> Early Registration Fee with discount (by January 8)         | \$640.00 |
| <input type="checkbox"/> Regular Registration Fee with discount (on/after January 8) | \$697.50 |

Your fee includes all program materials, refreshment breaks, and lunches.

**Please contact me, I have special dietary needs and/or need accommodations for a disability.**

**It's easy to Register!**

**Online—**

<http://www.ucs.iastate.edu/mnet/cybersecurity/home.html>

**Mail—**

University Conference Services  
 Iowa State University  
 102 Scheman Building  
 Ames, IA 50011

**Fax—**

(515) 294-6223

**Questions –**

(515)294-6222

**Method of Payment**

**Check (Payable to Iowa State University)**

**Credit Card**       **Visa**       **MasterCard**       **Discover**

Card Number \_\_\_\_\_ Exp. Date \_\_\_\_ / \_\_\_\_

Cardholder Name \_\_\_\_\_ Signature \_\_\_\_\_

**Purchase Order (Please indicate billing address below, if different from above)**

PO Number \_\_\_\_\_

Send Invoice to: Name \_\_\_\_\_

Billing Address \_\_\_\_\_

Telephone / Fax \_\_\_\_\_ / \_\_\_\_\_

\* Iowa State University requests this information to preregister you in a conference. No one outside the university, with the exception of participants in this conference, is routinely provided this information. If you fail to provide the required information, we cannot promise accurate registration. (Reference: Iowa Code, Chapter 22.11; Iowa Fair Information Practices Act)

Office Use Only

**(Only one registration per form - Duplicate for additional registrations)**