



Joint Utility Training School

www.juts.biz

Training Today for Tomorrow

38th Annual

Joint Utility Training School

January 22,23,24, 2013

Ramkota Inn - Sioux Falls, SD

**38th Annual
Joint Utility Training School
January 22, 23, 24 2013
Ramkota Inn, Sioux Falls, SD**

REGISTRATION FEE
\$200 per student – PREPAID

GENERAL SESSION: A PIECE OF THE PUZZLE

1. TO WORK AND BACK
2. TRANSFORMER CONNECTIONS
3. OPERATIONS AND SAFETY
4. FIELD OPERATIONS/TECHNICAL SUPPORT
5. SIEMENS REGULATORS
6. MANAGING RISK IN THE UTILITY INDUSTRY
7. SUBSTATION MAINTENANCE
8. COMPUTER TECH COURSE
9. ELECTRICAL CODE CLASS

Some sessions have limited enrollment, so make your reservations as soon as possible.

Please submit registration form with payment.

Make checks payable to: **Joint Utility Training School.**

Refunds and changes in registrations will be allowed to January 11, 2013.

Send check and registration form to: **JUTS, ATTN: JAY, 101 N 3rd St. Beresford SD 57004.**

SESSIONS PROGRAM INFORMATION

Each session is designed as a 12-hour mini-course. Registration will be for one session only per individual. You will remain in that session for the entire length of the course. Certificates will be sent to your respective company if attendance has been continuous.

To obtain continuing education credit for sessions that qualify, a copy of your completion certificate must be sent to: SD Electrical Commission, 308 S. Pierre St, C/O 1320 E. Sioux Ave. Pierre, SD 57501.

REGISTRATION

Tuesday - January 22, 2013
10:00 a.m. to 1:15 pm.
\$200 per person

Pre-paid registration will include: Vendor Show Tuesday from 5:00 to 7:30 P.M., Breakfast on Wednesday and Thursday morning at 6:30 a.m. - 7:30 a.m. in the Exhibit Hall and a noon meal on Wednesday in the Exhibit Hall.

LUNCHEON

Wednesday - January 23, 2013 12:00 noon to 1:00 p.m.

Mini-courses will be:
Tuesday General Session 1:30 p.m.-5:00 p.m.
Wednesday 8:00 a.m.-5:00 p.m.
Thursday 8:00 a.m.-12:00 noon

GENERAL SESSION

Washington Room

Tuesday, January 22,
1:30 p.m. to 5:00 p.m.

A PIECE OF THE PUZZLE

8 Traits of a Quality Team Member

Teamwork is required in all facets of our life. At work, at play, and in our everyday family life teamwork helps accomplish more with less frustration. Learning to be a quality team member is something that many times is overlooked in both our formal and informal education. Coach Kush will present what it takes to be a great teammate!

The ability to exhibit selfless behavior, respecting everyone, being accountable, and adapting to change are just a few of the areas that Coach will discuss. Come join us and learn ways you can be a better member of your team!

Coach Kush Introduction



Mr. Kush is the head football coach at **Boys Town** High School, a school for troubled and at-risk youth in Omaha, Nebraska. In addition to his coaching and teaching duties, Coach Kush speaks to a variety of groups including teachers, youth organizations, and companies. He holds a Bachelor of Science degree from the University of Nebraska at Omaha in marketing and business education, and a Master of Arts degree from the University of Nebraska in vocational and adult education. Mr. Kush has been involved in teaching and coaching for twenty-six years and was featured on **ABC World News Tonight** as their Person of the Week. He is the author of 2 books: **The 100 Yard Classroom** and **Competing With Character**. His 3rd book **A Piece of the Puzzle--8 Traits of a Quality Teammate** will be released this fall. Please welcome Coach Kush.

Coordinator: Terry Ebright

SESSION I

CONFERENCE ROOM 3

TO WORK AND BACK

General Session

Tuesday January 22, 1:30 pm – 5:00 pm

Wednesday, 8:00 a.m. - 5:00 p.m.

Thursday, 8:00 a.m. - 12:00 noon

To Work and Back

How to say what has to be said in a way that doesn't mess things up

Learning to cope when things get messed up anyway

Solving your way out of "people problems"

This is a seminar for team leaders, anyone who manages the work of others, or anyone interested in finding ways to manage life and work more effectively.

There are times when the challenges of work consume too much of a person's life... and there are times when the challenges of life consume too much of a person's work.

When that happens, it isn't good for anyone.

People who are unsettled at work can make everything harder at work...teamwork, safety, productivity, satisfaction, communication...these things are hard and they add to the pressures of work. Pressure isn't confined...it tries to travel from person to person until it infects everyone.

We believe that people don't want too much pressure...they want to be satisfied at work. Teamwork is difficult, and unsatisfied people have a hard time sustaining a teamwork-level effort. Problems are more readily solved when people communicate effectively without pressure. Dissatisfaction and conflict are destructive to teamwork and efficiency over time.

People who have learned to balance the demands of work with the necessities of life are not only most successful, they are happiest. They accept pressure as a part of life and learn to deal with it.

Strong coping and communication skills are success skills in this arena; they help people balance relationships...relationships with family, with friends, with co-workers. This seminar is about developing better coping skills and stronger communication skills. It is about learning to deal with people...especially with the people who bother us, those we don't like, the people we have to put up with, the ones that are on our teams but not of our teams.

The reality is that these kinds of people will always be in our lives. When we learn we can't avoid them, it is time to learn how to deal with them more effectively.

This class is a discussion with lots of interesting exercises, personal assessments, and it is devoted to doing this in a fun and interesting way!

We'll discuss these things in addition to issues introduced from the class.

How does a person sort out priorities between work and life...especially family life?

How does a person deal effectively with difficult people?

How does a person deliver bad news most effectively at work?

How does a person deal with a friend he now supervises?

How does a person project an attitude of leadership to the team?

How does a person deal with a team member who won't follow instructions?

How does a person deal with gossip within a team?

How far does team loyalty go?

This is guaranteed to be an interesting class. I hope you can be a part of it.



Jim Kellar provides consulting and training resources for people and businesses throughout the Midwest. He helps organizations and individuals design and implement solutions that meet specific goals and are sustainable over time.

Jim provides training and coaching in Performance Management, Mentoring, Teambuilding, Managing Change, and Customer Service. He helps organizations develop and implement long-term strategies to deal with retention, succession planning, and professional development.

Jim is an innovative retreat leader. Some of his retreats involve going to rustic settings in the woods or by a river, eating gourmet food, and using outdoor activities as a foundation for learning. These Unique Retreats™ are as intriguing and as useful to organizations and individuals as the retreats he conducts in traditional corporate settings. In the recent past, retreats have addressed Strategic Planning, Change Planning, Stress Management, and Management Teambuilding. Jim also facilitates large group planning and problem solving through Negotiated Rule Making.

Jim lives and works in Sioux Falls, SD. In his leisure, Jim indulges his passion for the outdoors. He can often be found kayaking a river, snorkeling, hunting, snow shoeing, hiking with his dogs, or camping with friends...or he may be conducting a training session out there.

Course limited to 30 Participants

INSTRUCTOR: JIM KELLAR

COORDINATOR: Mike Burkard

SESSION II

Washington Room

TRANSFORMER CONNECTIONS

A 12-hour workshop designed for apprentice lineman or for experienced linemen and servicemen who are willing to go through a refresher course seeking ideas for communicating and explaining electrical terms and transformer connections to employees whom they may supervise. The workshop experience will be valuable to senior linemen who did not have the opportunity to learn the trade at a lineman's school. A pocket calculator would be helpful in determining the anticipated voltage.

General Session

Tuesday January 22, 1:30 pm – 5:00 pm

PARTS I AND II

Wednesday, 8:00 a.m. - 5:00 p.m.

Description: This part will discuss basic three-phase systems. We will work with some basic phasor diagrams and try to explain the relationship of the phasor to the transformer itself. We will also make transformer connections with miniature equipment.

Description: Recognizing that the majority of work done with transformers is for single-phase loads, we will begin with basic transformers. This will include turns ratios, polarities, calculations, connections, and troubleshooting. We will use lecture, open discussion, and hands-on connection with miniature equipment.

PART III

Thursday, 8:00 a.m. - 12:00 noon

Description: We will continue to build miniature transformer banks and work on troubleshooting. We will also discuss motor rotation as it related to three-phase systems, as well as discuss ways to prevent voltage surges during switching a three-phase bank.

Scott Meinecke trained and worked as an electrician prior to his 1984 graduation from the Powerline Program at Northwest Iowa Community College in Sheldon. Scott was employed as a lineman with Iowa Lakes Electric Cooperative in Spencer Iowa and later at their service center in Pocahontas, Iowa Scott has an AAS degree in Powerline Technology and joined Northwest Iowa College in 1989 as an Instructor in the Powerline Program. Scott continues to teach a wide variety of topics, both classroom and hands-on from pole climbing to equipment operation to substation, etc. He is well known for the hand-on Transformer Workshop taught throughout the Iowa-Minnesota-South Dakota region.

Instructor: Scott Meinecke - Northwest Iowa Community College, Sheldon, IA

Supervisor: Ken Booze - East River Electric, Madison, SD

Coordinators: Gary Clayton
Jim Moore

4 other credit hours will be given by the State Electrical Commission.

SESSION III

Lincoln Room

OPERATIONS AND SAFETY

General Session

Tuesday January 22, 1:30 pm – 5:00 pm

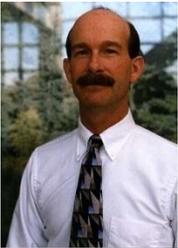
PART I

Wednesday, 8:00 a.m. - 5:00 p.m.

Beating the Odds

Tree work, particularly in relation to line clearance, continues to be near the top of high-risk professions despite our advancements in techniques and equipment. Surprisingly to many electrocution is not the highest risk to line clearance tree trimmers as many more accidents occur during felling, pruning and chipper as well as driving between sites. This session will provide an overview of the accidents that occurred in 2006 but more important - how to avoid them!

Instructor: John Ball
SDSU



John Ball is a Professor of Forestry at South Dakota State University where he conducts research on tree worker safety as well as instructs courses in arboriculture. He has published the research in a wide range of journals and trade publications including *Arboriculture & Urban Forestry*, *Arborists News* and *TCI* and has made presentations in more than 40 states. John previously managed tree care companies in the Midwest and New England.

PART II

Thursday 8:00 a.m. – 12:00 p.m.

Competent Person Training/Shoring Practical Application (SpeedShore)

In compliance with the Occupational Safety and Health Administration (OSHA) 29 CFR 1926.650 Subpart P regulations, this training is required for workers and supervisors who work in trenches and excavations. This class will cover:

- Competent person training as it is related to the OSHA 1926. Section 650-652 standard
- Defining what a trench excavation is
- Soil Mechanics
- Typical Soil Failure Modes
- Why a competent person is required by OSHA
- Duties outlined for a competent person at the job site
- Safe excavation requirements
- Excavation inspections
- Shoring requirements and alternatives

OSHA requires that at least one person is trained as a competent person for excavation sites. Completion of the Trenching and Shoring course will give the trained employee the knowledge to recognize existing and predictable hazards in excavation work and taking prompt corrective measures. This training explains shoring, sloping & benching, and trench boxes. Soil testing is also discussed as well as hazardous atmospheres within excavations.

This course will be instructed by the Loss Control Department from South Dakota Rural Electric Association. The course material comes from the Speed Shore Corporation to train the Competent Person on trenches and excavations.

Note: The Competent Person designation is an employer designation and this training will satisfy this requirement. However, the employer is responsible for actually making this determination.

Coordinators: Ken Meirose
Scott Wiese

Session IV

Amphitheater II

Field Operations / Technical Support

Part I

Tuesday 1:30pm – 5:00pm

Title: General Session

Part II

Wednesday 8:00am-8:05am: Amphitheater II

Title: Introduction and Announcements

Part III

Wednesday 8:05am-noon

Title: Utility Metering

Description: This session will look at metering installations and testing from a utility employee perspective.

Instructors: John Pollard: Southeastern Electric Cooperative Inc.

Part IV

Wednesday 1:00pm – 5:00pm

Title: Instrument Transformers

Description: This session will cover the following topics as they relate to CTs and VTs:

- CT and VT basics – Why and where Instrument Transformers are used.
- Review of Nameplate Data in determining the right application of the IT.
- Accuracy Ratings – Relay Class / Metering or Revenue Class.
- Determining the right ratio IT and applying Rating Factors.
- Proper installation and wiring of ITs.
- The latest in industry extended range/extended accuracy CTs.
- Q and A

Instructors: John Gustafson, ABB, Inc.

Part V

Thursday 8:00-9:15AM

Title: Wood Poles

Description: An overview of various species and their characteristics when used in utility Poles

Instructor: Mike Woll: Bell Pole

Part VI
Thursday 9:30 pm – 12:00pm

Title: Weather Spotting/Awareness Training

Description: This class will cover the Weather Spotting and Awareness training provided by the National Weather Service

Instructor: Todd Heitkamp: National Weather Service

Course Coordinators: Bruce Brekke
Mark Hoogwerf

SESSION V

Jefferson Room

SIEMENS REGULATORS

Please bring a lap top computer

General Session

Tuesday January 22, 1:30 pm – 5:00 pm

SIEMENS REGULATORS

Wednesday, 8:00 a.m. - 5:00 p.m.

Thursday, 8:00 a.m. - 12:00 noon

Joel Mathewson

Siemens Energy, Inc.

VOLTAGE REGULATORS

The Regulator College of Knowledge was developed over a period of 40 years. It is designed to increase the knowledge of personnel responsible for handling, installing and maintaining single phase voltage regulators. The program consists of classroom training (various control panel and regulators operations) and hands-on instruction. Topics included to be covered are voltage regulator construction; control panel set-up: MJ-3A, MJ-X and MJ-XL; trouble shooting controls and regulators; and installing and bypassing.

Topics include:

- * Regulator Product Presentation
- * Introduction to Voltage Regulators
- * By-passing Regulators
- * Regulator Construction, Tap Changer Operation
- * Nameplates and Control Diagrams
(Straight & Inverted Designs)
- * Troubleshooting/Hands on & Discussion
- * and much more

Instructors:

BIOGRAPHICAL PROFILE

Joel Mathewson is Product Marketing Manager for Voltage Regulator Products at Siemens in Jackson, MS. He is responsible for marketing and sales of voltage regulators within the US and in various other regions around the world.

Joel joined Siemens in 2003 as a Control Panel Product Engineer within the Voltage Regulator organization in Jackson, MS prior to moving into marketing in 2007.

Joel was awarded a BS in Systems and Control Engineering from Case Western Reserve University in 2002 and completed his education there with a Master of Engineering and Management degree in 2003. He became a registered Professional Engineer (PE) in the State of Ohio in January 2009.

**Coordinators: Ken Van Zee
Dale Henderscheidt**

SESSION VI

Roosevelt Room

"Managing Risk In The Utility Industry"

General Session

Tuesday January 22, 1:30 pm – 5:00 pm

Security Consideration For The Utility Industry

Wednesday, 8:00 a.m. - 5:00 p.m.

Thursday, 8:00 a.m. - 12:00 noon

Managing Risk In The Utility Industry

Risk is inevitable. How much risk is acceptable? This presentation examines risk from a utility perspective. Topics will include:

- Meth Lab recognition
- Active shooter preparations and survival
- Organized crime recognition and avoidance (Includes "Gang chart")
- Driving security considerations
- Building, perimeter and parking lot security
- Avoiding and de-escalating confrontations
- Reducing theft(s) (Power and/or materials)
- Security assessments
- IED's and Bomb threat recommendations
- Identity theft avoidance and prevention
- Workplace violence avoidance recommendations
- Top "10" list of security considerations

This fast paced, audience interactive presentation will provide you with the cost effective "tools" required for your on-going security efforts. Attend this presentation and experience why thousands of participants from hundreds of utilities consider this a "must see" program!

Instructor: Stefan Salmonson, President - PROtective Services, Inc. Mora, MN

SPEAKERS BIO ...

Your presenter, Stefan V. Salmonson, is the president of **PRO**tective Services, Inc. He is a licensed deputy sheriff/tactical trainer, licensed private detective, licensed protective agent, certified personal protection specialist (Body Guard), international security consultant, experienced tactical specialist, contract government investigator (with security clearance), airline transport pilot and professional speaker. **PROS** provides executive and personal protection services, high-risk employment termination support services, discrete investigations, security presentations, training, keynote presentations, security assessments, consulting and risk management recommendations for several hundred clients.

Optional Information:

Stefan writes security related articles for publications and is frequently interviewed by journalists regarding security concerns. Clients include national/international corporations, government agencies, foreign royalty, public utilities, school districts/student transportation, flight department/associations, prisons, hospitals, financial institutions, media, the trucking, real estate and insurance industry.



Stefan V. Salmonson, PPS

PROprotective Services, Inc.
209 East Maple Avenue, Suite 5
Mora, Minnesota 55051

Office: 320-679-4848

Cell: 612-961-5867 (24/7)

E-Mail: Stefan@PROprotectiveServicesinc.net

WEB: WWW.PROprotectiveServicesinc.net

Stefan V. Salmonson, PPS, President

Coordinators: Terry Keller
Doug Enstad

SESSION VII

Crystal Room

SUBSTATION MAINTENANCE

PART I

GENERAL SESSION

Tuesday, January 22, - 1:30 p.m. - 5:00 p.m.

PART II

Title: Substation Maintenance

Wednesday, January 23, 8:00 a.m. - 5:00 p.m.

Also Thursday, January 24, 8:00 a.m. - 12:00 noon

Description: This class is meant to give a good foundation on the knowledge of substation equipment, operation and maintenance practices.

The class will cover as much ground as possible, including detailed discussion about all substations equipment. All efforts will be made to gear the class to your specific needs.

TOPICS INCLUDED ARE:

- Safety Considerations
- Specific hazards of the substation
- Apparatus
- Review of major substation equipment design and deployment
 - Station One Lines
 - Bus configuration
 - Switching Equipment
 - Transformers
 - Voltage Control
 - Protection and Automation
- Operation and maintenance
 - Substation Switching
 - Equipment and maintenance

SPEAKERS BIO ...

Gary Roskos has worked in the utility industry for more than 28 years, starting as an engineering intern with Northern States Power in 1983. During his 20 years with NSP and Xcel Energy, he gained experience in the following areas:

- Substation Design and Construction
- Protective Relaying

- System Analysis and Reliability
- Electric System Maintenance and Troubleshooting
- Metering
- Distribution Construction and Trouble Operations

Upon leaving Xcel Energy at the end of 2002, he worked for Open Systems International, Inc., a leading provider of SCADA/EMS systems, helping with product development and project management for projects throughout the world.

In 2006 he spent time with Cooper Power Systems/Cannon Technologies working on product development and product management in the areas of substation monitoring and distribution automation.

He started his own consulting company in 2008 and continues to work on substation design and electric system automation projects throughout North America.

He holds a Master's Degree in electrical engineering from the University of Minnesota, with an emphasis in power systems operation and analysis.

Coordinators: Corey Gunderson
Mark Patterson
Rodger Krom

SESSION VIII

Amphitheater I

Computer Tech Course

GENERAL SESSION

Tuesday, January 22, - 1:30 p.m. - 5:00 p.m.

January 23, 2013 Wednesday

8 AM to 12PM or 4 hrs

Title: Milsoft Utility Solutions - Engineering & Operations in the Smart Grid

Instructor:

Steven E. Collier

Vice President, Marketing & Business Development

Milsoft Utility Solutions

Outline of Topics to be Covered:

Introduction and Objectives of the Session

Smart Grid Basics

Why Is A Smart Grid Important?

Problems with the existing electric utility grid

New challenges for the electric utility grid in the future

New and emerging technologies make a smart grid inevitable

What Is a Smart Grid?

Distributed Intelligent Electronic Devices

Two-Way, Broadband, Digital Communications

Operating Platforms

How Should a Smart Grid Be Deployed?

The Importance of Integration & Interoperability

The Importance of Public Telecom Networks

The Importance of the Internet

The Importance of a Technology Strategy

The Role of Dis-intermediaries

Engineering & Operations in the Smart Grid

Engineering Analysis and Planning

Outage Management Systems

Geographic Information Systems

Wednesday
1 PM to 3 PM or 2hrs

General Information Systems (GIS)

Instructors:

Kendis Scharenbroich and Brandon Crissinger

*From: **Pro-West & Associates Inc.** - Geographic Information System Specialists*

Outline of Topics to be Covered:

1. GIS & Utilities Overview
2. GIS Software and applications overview
3. Building a GIS database
4. GPS data collection
 - a. Hardware options
 - b. Accuracy Standards
 - c. Correction options
 - d. Integration with GIS
5. GIS-based Utility applications

Wednesday
3 PM to 5PM

Title: Practical tips and tricks for effective GPS data collection

Instructor:

Brandon Tourtelotte

Sales Manager, Utilities

Compass Tools, Inc.

Outline of Topics to be Covered:

Description: A brief discussion of why you might want to implement a GIS and GPS program for Utility management.

Then we'll look at all issues that affect the accuracy and overall quality of your GPS data. Different types of accuracy and methods to improve it will be explored.

The various software packages available for accurate mapping will be examined.

Finally we'll cover integration with other equipment, such as Bluetooth laser rangefinders for GPS offsets. You'll leave the session much better equipped to collect good data in any environment you encounter.

Learning objectives:

1. Explain the difference between corrected and uncorrected GPS data
2. Explain the difference between real-time and post processed accuracy (and real-time correction)
3. Explain some of the considerations between accuracy and cost of devices and

ruggedness

January 24, 2013 Thursday
8AM to 10AM 2hrs

Title: "Enhancing Electric Power SCADA Communications Using Wireless Instrumentation"

Presenters:

Bret Dianich - Regional Manager with FreeWave Technologies

This presentation will cover wireless data modem applications in electric power SCADA projects. Topics to be included will be I/O telemetry, Ethernet networking, data backhaul and wireless network design in Distribution Automation scenarios. Bret Dianich with FreeWave Technologies, Inc. will deliver the presentation and will have wireless equipment on-hand to discuss and demonstrate. Bret is a Regional Manager with FreeWave Technologies and has been involved with wireless automation projects for four years."

Thursday
10AM to 12PM 2 hrs

Title: Cell Phone Tech
Cellular Only/Verizon Premium Retailer

Presenters:

Ryan Revell – Sales Consultant

- Discuss/explain 4G LTE and 3G Networks
- Smartphone's
- Basic Phones
- Various Operating Systems
- Hottest Phones
- Mobile Broadband
- Tablets
- Home Phone Connect
- Apps & More
- Plans and Pricing
- Q&A

Coordinators: Adam Amundson & Tim Chance

SESSION IX

CONFERENCE ROOM 2

NATIONAL ELECTRIC CODE HOURS

8 Hours Code Credit

Each attendant needs to bring a 2011 NEC code book

GENERAL SESSION

Tuesday, January 22, - 1:30 p.m. - 5:00 p.m.

PART I

CONFERENCE ROOM 2

CODE CLASS

Wednesday, January 23, 8:00 a.m. - 12:00 p.m.

PART II

Amphitheater II

METERING AND SOCKETS

Wednesday, January 23, 1:00 – 5:00

Title: Instrument Transformers.

Description: This session will cover the following topics as they relate to CTs and VTs:

- CT and VT basics – Why and where Instrument Transformers are used.
- Review of Nameplate Data in determining the right application of the IT.
- Accuracy Ratings – Relay Class / Metering or Revenue Class.
- Determining the right ratio IT and applying Rating Factors.
- Proper installation and wiring of ITs.
- The latest in industry extended range/extended accuracy CTs.
- Q and A

PART III

CONFERENCE ROOM 2

CODE CLASS

Thursday, January 24, 8:00 a.m. - 12:00 noon

SPEAKERS BIO ...

Glen Janssen: Glen is a Beresford Graduate and still lives in the area. He started in the electrical business in the late 1960's. Glens knowledge and experience comes from working on a large variety of electrical jobs ranging from residential, commercial, industrial and power plants. Glen is a former State of South Dakota Electrical inspector.

Larry Kippas: Larry is a Marion native and will be assisting Glen with the code class. Larry is also a former State of South Electrical and now is the City of Sioux Falls Electrical Inspector.

This class will get you 8 hours of approved credits for renewing your South Dakota state Electrical License's Metering and Sockets

Course Coordinators: Mark Koller