



Joint Utility Training School

www.juts.biz

Training Today for Tomorrow

40th Annual

Joint Utility Training School

January 20,21,22, 2015

Ramkota Hotel - Sioux Falls, SD

**40th Annual
Joint Utility Training School
January 20, 21, 22 2015
Ramkota Hotel, Sioux Falls, SD**

REGISTRATION FEE
\$200 per student – PREPAID

GENERAL SESSION

1. LEARNING TO MANAGE DIFFICULT PEOPLE AND DIFFICULT SITUATIONS
2. TRANSFORMER CONNECTIONS
3. OPERATIONS AND SAFETY
4. FIELD OPERATIONS/TECHNICAL SUPPORT
5. GE 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, 2015.

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 21, 2015

12:00 a.m. to 1:00 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 21, 2015 12:00 noon to 1:00 p.m.

Mini-courses will be:

Tuesday General Session 1:15 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 20th

1:15 p.m. to 5:00 p.m.

Speaker #1 Ken Macken

Ken Macken is the Manager of Safety and Training for KAMO Power in Vinita, Oklahoma. He has been in the electrical industry for many years starting out as an apprentice lineman and most recently was the Manager of Safety and Loss Control for the Association of Illinois Electric Cooperatives for 10 years before moving to KAMO Power.

Ken grew up on a dairy farm and loves the outdoors. He graduated from John Brown University in Northwest Arkansas with a degree in Education and Midwestern in Kansas City with a Master's degree in Adult Education. He is married to his high school sweetheart and has a son who is a junior in high school.

Ken has a passion for keeping people safe and communicating safety in a creative way. He believes safety doesn't have to be boring or mundane and that it must become personal to be affective.

Speaker #2 Ronnie Hindsman

I started working for Sam Houston Electric in June 1st 1983. I began working in the line construction, building jobs as a grounds man. We moved around to other jobs, such as service routes, winch trucks, underground crew, and bucket trucks. At this time you worked as a two man crew, learning the system and how to take care of power outages. You worked your way up to lineman. Things began to change when they started buying more bucket trucks for service routes. We started working a one man service route; I did this for several years and loved what I was doing. Then I moved over to the overhead construction crew as a lineman.

Since my accident I have moved over to the Safety and Training department to help the new young men with their training.

This has been a big change for me because I loved doing line work. So now I can help the younger helpers and lineman to work safe and to make sure they wear all their PPE when they're working so that they won't end up going through what I've gone through.

Coordinator: Terry Ebright

SESSION I

CONFERENCE ROOM 3

LEADERSHIP 101 LEARNING TO MANAGE DIFFICULT PEOPLE AND DIFFICULT SITUATIONS

General Session

Tuesday January 20, 1:15 pm – 5:00 pm

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

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

LEADERSHIP 101

LEARNING TO MANAGE DIFFICULT PEOPLE AND DIFFICULT SITUATIONS

By Jim Kellar

Most people don't go to work expecting that there will never be a disagreement. Yet, the tolerance people exhibit for challenging behaviors like conflict and anger, has an impact on the quality and service we deliver. When there is a difficult situation or a challenging person to deal with, the team suffers, as does their ability to function as a team and solve problems as a team. And as inner conflict continues, our customers suffer. In the end, it is far better if people know how to deal with situations and solve problems as a team.

Some people are easily provoked; when they, themselves become a problem, it makes our other challenges worse. Teams are confronted with issues that cry out for leadership, and the leadership to resolve these issues needs to come from within the team as well as from team leaders.

Change can cause difficulties. Whether resistance is overt or covert, there is always resistance to change. Do we ignore it and move forward with a poorly trained staff or do we wait for the resistant ones to catch up? Conflict occurs in every workplace, but if conflict isn't managed well, there are extensive repercussions. Far too often, people avoid dealing with conflict...they wait and hope someone else will. And when they get tired of waiting, they will simply withdraw and will only be partially engaged with their work.

Stress is a by-product of life and it confronts everyone. It has been proven that people in high-stress jobs tend to be much happier and safer after being taught coping skills for conflict and communication.

Team members, as well as leaders need to have a role in dealing with difficult people and difficult situations...the leader needs to be able to depend on the team for support and encouragement, and they need to depend on the leader for the same. It is everyone's job help deal with difficult people and circumstances.

Many of us were taught that: "When the going gets tough we grit our teeth, bear down, and push forward!" And this is good advice, but only if we do it together, as a team. We must act as a unit in a coordinated fashion when we deal with these kinds of issues.

During this session, participants will deal with the issues that cause difficulties for them and for their team members. We will discuss and use the skills of:

Assertiveness in Establishing Expectations

3-D Communication®

Managing the Stress of Work

Managing the Stress of Life

Emotional Intelligence

The goal of this session is to help participants grow professionally and personally. We will deal with participants' issues and teach the coping skills associated with Leadership, Teamwork, Communication, and Stress Management.



Biography of Jim Kellar

Jim Kellar was a literature teacher and a college administrator before he started a consulting/training firm 30 years ago. Today, Jim is a performance coach/trainer who works with selected clients to help address leadership and performance challenges.

He provides expertise to develop and assess leadership teams, helping organizations plan and manage change, “top to bottom” communication, and customer service. Jim delivers the training and the on-site expertise to help manage and implement change. In addition, Jim frequently helps clients with a variety of organizational planning and development activities including strategic planning and board retreats.

Jim Kellar is a performance coach, working one-on-one with leaders to help them achieve their goals. Whether it is a new leader who needs accelerated learning experiences to gain experience quickly or a seasoned leader who is faltering or needs to grow quickly, Jim has a coaching approach that has been extremely effective with middle and upper level leaders.

Kellar is committed to providing a superior resource for clients. He works with people from both large and small organizations, and from all business sectors. He is, committed to helping clients achieve their goals and work together to achieve targeted outcomes.

When Jim isn't working, he splits his time between Sioux Falls and a small farm near Freeman. Jim enjoys going outdoors to find relaxation, challenge, healthy activities, and the opportunity to learn the lessons of nature.

James Kellar

PO Box 2694

Sioux Falls, SD 57101

(605) 940-9238

kellartraining@gmail.com

Course limited to 30 Participants

INSTRUCTOR: JIM KELLAR

COORDINATOR: John Larsen

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 20 1:15 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
Rodney Haag

4 Non-Code credit hours will be given by the State Electrical Commission.

SESSION III

Lincoln Room

OPERATIONS AND SAFETY

General Session

Tuesday January 20, 1:15 pm – 5:00 pm

PART I

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

Instructor: Doug Kirkus

Doug serves as the Loss Control Administrator for the South Dakota Public Assurance Alliance and the SDML Workers' Compensation Fund. These 2 risk-sharing pools provide liability and worker's compensation coverage for just over 500 local governmental entities in South Dakota. Doug has been working with the Pools for the past 19 years. Prior to that Doug worked in law enforcement for 21 years as a Patrol Officer, Deputy Sheriff, Chief Deputy Sheriff and Chief of Police. Doug was an EMT for 25 years and an EMT instructor for 20 years. He also served many years as a Deputy County Coroner for Davison and Hanson counties. Doug is a certified defensive driving instructor through the National Safety Council.

Description:

When you are not focused on driving that decision can be the difference between life and death to you, your passengers and anyone else on the road. Distractions come in various forms so we will be discussing some of the more common distractions motorists face today. This session will focus on the importance of making safe and legal decisions when it comes to driving and dealing with distractions. We will be reviewing information from some of the most recent studies dealing with distracted driving. Hopefully everyone that attends this session will leave with a better understanding and appreciation of the dangers from distracted driving and the importance of giving driving your undivided attention.

PART II

Wednesday, 1:00 p.m. - 5:00 p.m.

I. Course Description

These Courses will provide utility personnel with some basic information on general safety and security concepts that will provide them with information that will allow them to better identify, recognize, and react to potential threats to their personal safety and security in a variety of areas and situations. The course will focus on an overview of personal safety, how to identify and recognize potential threatening situations and people, and how to prepare and react to potential threats of personnel harm. The course will include some hands on demonstrations on commonly used self defense tools and tactics.

II. Course Objectives/Outcomes, Standards, Assessment

| Objectives | Outcomes | Assessment |
|----------------------|---|------------|
| Identify the concept | Given the definition of the concept of personnel safety and | Lecture |

| | | |
|---|--|---|
| of what is personal safety and security | security, learners will be able to understand the general principles that can keep them safe in their personal and public life. | Group Discussion |
| Define the general principles of personal safety and security | Given the key points of the general principles of personal safety and security, learners will be able to identify and recognize potential threats to their safety and security. | Lecture Group Discussion |
| Identify personal safety and security concepts at home | Given the key points of how to stay safe and secure your personal property, learners will be able to identify how to stay safe in their home and secure their personal property. | Lecture Group Discussion |
| Identify personal safety and security concepts in the public | Given the key points of how to stay safe and secure in public, learners will be able to identify and recognize how to stay safe while in public places. | Lecture Group Discussion |
| Identify personal safety and security concepts at work | Given the key points of how to stay safe and secure at work, learners will be able to identify and recognize how to stay safe at work. | Lecture Group Discussion |
| Special considerations Drug manufacturing | Given the key points on Drug manufacturing, learners will be able to identify and recognize how Drug manufacturing can affect their safety and security. | Lecture Group Discussion |
| Special considerations Terrorist and terrorism | Given the key points on Terrorist and terrorism, learners will be able to identify and recognize how Terrorist and terrorism can affect their safety and security. | Lecture Group Discussion |
| Use of personal defense Tools | Given instruction and demonstration on the techniques for the use of various personal defense tools, learners will be able to understand the advantages and disadvantages of the different tools | Lecture Demonstration Physical practice |
| Use of positioning and proxemics when dealing with subjects | Given instruction and demonstration on the techniques for the interview and combat stance and interview position, learners will be able to understand these concepts. | Lecture Demonstration Physical practice |
| Use of Countermeasures | Given instruction and demonstration on the techniques for the use of countermeasures and escape from holds, learners will be able to destabilize, escape, or control a subject using a variety of moves, strikes, and kicks. | Lecture Demonstration Physical practice |

III. Instructional Methods/Activities

Methods and activities for instruction include:

A. Traditional Experiences

1. Lecture/discussion
2. Physical demonstration/practice
3. Practical applications

IV. About the Instructor

Sergeant Ronald Schwint has 26 years of law enforcement experience. Ron was employed by the State of South Dakota as a correctional officer and an intensive parole agent for 6 years and has been employed by the Sioux Falls Police Department for the last 20 years. During his career with the Sioux Falls Police Department Ron has worked as a patrol officer, traffic officer and traffic case investigator prior to being promoted to a field supervisor. Duties performed during his career included being a field training officer, gang task force officer, an

urban police rifle (UPR) rapid deployment team member, EVOC instructor, and a defensive tactics instructor/coordinator for the department.

Ron currently holds a Bachelor of Science degree in Criminal Justice and Sociology from Augustana College in Sioux Falls, SD and is currently enrolled in the masters program for educational administration of adult and higher education at the University of South Dakota with a focus on law enforcement training and reality based training development.

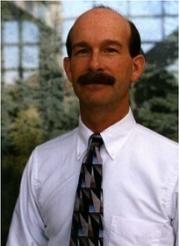
Ron has been actively involved in law enforcement training since 1994 and is an independent contractor conducting law enforcement training programs for Academies' and Agencies throughout the United States. He is currently an Armament Systems and Procedures. INC (ASP) certified instructor trainer, conducting basic and instructor certification programs For ASP throughout the United States. He also holds instructor certifications as a Verbal Judo instructor, an OC chemical munitions instructor, (PCR) physical conflict resolution instructor, EVOC instructor and a reality based training instructor. Ron has consulted with numerous Federal, County, Municipal, Military, and Security agencies about defensive tactic programs and policy development and has conducted defensive tactic certification programs for them.

PART III
Thursday 8:00 a.m. – 12:00 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.

4 Non-Code credit hours will be given by the State Electrical Commission.

Coordinators: Ken Meirose
Scott Wiese

Session IV

Amphitheater II

Field Operations / Technical Support

Part I

Tuesday 1:15pm – 5:00pm

Title: General Session

Part II

Wednesday 8:00am-5:00 am: Amphitheater II

Jan 21st 8:00-12:00

Overvoltage Seminar presenter

DIFFERENT ARRESTER TYPES

» Classifications » Characteristics » Arrester design

OVERHEAD SYSTEM PROTECTION

» Arrester selection » Margin of protection » Equipment protection

UNDERGROUND SYSTEM PROTECTION

» Riser pole arrester selection » Margin of protection » URD arrester application

Tony Talavera, Field Application Engineer Eaton/Cooper Power Systems.

BIO---- Tony has been employed with Eaton's Cooper Power Systems for 19 years holding numerous positions including Application Engineering, Marketing and Sales. Tony is currently working for Eaton as the Central Region Application Engineer supporting the utility markets. Responsibilities include technical support for all products manufactured by Eaton's Cooper Power Systems for the electrical distribution system. Tony holds a Bachelor of Science degree in Electrical Engineering Technology from the Milwaukee School of Engineering.

Jan 21st 1:00-5:00

Making a Good Electrical Connection

Presentation focuses around ANSI C119.4 and RUS standards. Focus is on differentials in expansion/contraction, anodes/cathodes, and dealing with the types of corrosion. The four categories of tensions are also discussed. Advantages and disadvantages of each connector type are discussed, as is the connection to earth to achieve low resistance grounding. Hot line clamps, hot line stirrups, and hot line connectors is presented, in regards to actual RUS construction applications of connecting to transformers, reclosers, regulators, capacitors, and feeder-to-feeder applications.

Marty Reynolds, Business Development Manager Border States Electric.

BIO---Marty has been serving the electric utility industry for 37 years. He attended the MATC, the University of Wisconsin, and Montana State University studying in both electrical engineering and business management. Marty started in this business building and designing custom metal enclosed switchgear and apparatus. He has taught “Making a Good Electrical Connection” for the past 20 years across the North central and Northwest regions of the United States, for statewide and regional engineering conferences. Marty has been instrumental in the design of several pad-mounted substations, EHV underground projects, and various other custom designed substation, transmission, and distribution projects.

Jan 22nd 8:00-12:00

Title: Applying State Law to Road Moves

Description: This presentation will give an overview of how newly enacted State Laws apply to Road Moves. Dave will give examples of best practices used during utility coordination and show how the utility owner can benefit from State Law through that coordination effort.

(State Laws being addressed are SDCL 31-19-1.1, SDCL 31-26-23 and SDCL 31-26-23.1)

Title: Plans Reading Course

Description: This course was designed for utility companies and will teach the basics of reading highway construction plans. It will explain the different views depicted in a set of plans, how to measure both horizontal and vertical distances and how to understand field markings.

Dave Hausmann- SDDOT

Course Coordinators: Bruce Brekke
Brad Wenande

SESSION V

Jefferson Room

GE REGULATORS

General Session

Tuesday January 20, 1:00 pm – 5:00 pm

GE REGULATORS

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

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



Presenter: Eric J. Bradford
Voltage Regulator Product Engineer
GE Energy

Eric joined GE directly out of college and now has 15 years of experience in numerous roles. Eric has covered quality control as a Technical Support Engineer at the General Electric Shreveport Plant; moving into the Engineering Department in 1998 and accepting the lead in the Voltage Regulator Product Line in 2005. He is an IEEE SA Member.

Mr. Bradford is responsible for conducting Voltage Regulator schools and training; cost-out projects; control development; core/coil design; and design testing.

This presentation will cover:

- Regulator Design**
- Construction Practices**
- Applications**
- Programming**
- Troubleshooting**
- Hands on training**
- Q&A**
- All Aspects of the GE VR Product**

SESSION VI

Roosevelt Room

"Managing Risk In The Utility Industry"

General Session

Tuesday January 20, 1:15 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**protective 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@PROtectiveServciesinc.net

WEB: WWW.PROtectiveServicesinc.net

Stefan V. Salmonson, PPS, President

Coordinators: Terry Keller
Doug Enstad

SESSION VII

Crystal Room

SUBSTATION MAINTENANCE

PART I

GENERAL SESSION

Tuesday, January 20, - 1:15 p.m. - 5:00 p.m.

PART II

Title: Substation Maintenance

Wednesday, January 21, 8:00 a.m. - 5:00 p.m.

Also Thursday, January 22, 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
Rodger Krom

SESSION VIII

Amphitheater I

Computer Tech Course

January 21, 2015 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:

ENGINEERING & OPERATIONS IN THE SMART GRID

Steven E. Collier, Director, Smart Grid Strategies, Milsoft Utility Solutions

Foundations of the US Grid

Economies of Scale

Exponential Growth

Alternating Current

Regulated Monopoly Franchise

Cost-Plus Pricing

One Way Power Flow

Vertical Integration of Generation, Transmission, Distribution, Retail

Centralized Control

Wide Area Synchronous Grids

Customer Satisfaction

How Things Changed to Erode / Eliminate these Foundations

New Circumstances and Developments That Require a New Kind of Grid

New Technologies

New Grid Components

Market Demands

Economic

Environmental

Structural

Global Energy & Economics

Technology Revolution Enables a New Kind of Grid
Electronics
Telecommunications
Information
Energy

The “ENERNET”
The Decentralized Grid
The Internet of Things
Peer to Peer Energy

Engineering & Operations in the Smart Grid
Grid Analysis and Planning
Operations Management & Automation
Geographic Information Systems
Customer and Employee Communications

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:

Session Title: From Field to Office, GIS Powers Decision Making

Abstract: It is critical for electric utilities to be able to communicate asset information across the enterprise, as well as communicate with the public. GIS data and software can be centralized to deliver GIS capabilities to large numbers of users across an organization, which improves efficiency; productivity; planning; and, most important, customer service. GIS users can leverage company data beyond traditional facilities management adding more value to decision-making processes and return on investment—including field data collection, engineering, marketing, public relations, land management, operations, and more.

This session will review new, cost effective trends in GIS technology for distributing and analyzing GIS data throughout an organization. Various field devices will be reviewed from handhelds, Smartphone's, tablets and traditional laptops. Those interested in implementing a GIS or looking for efficient ways to integrate existing GIS data throughout an organization more efficiently will benefit from this session.

Wednesday
3 PM to 5PM

Title: Practical tips and tricks for effective GPS data collection

Instructor:

Jacob Wittenberg
Kyle Burdine

Frontier Precision, Inc.

Outline of Topics to be Covered:

Field Data Collection Solutions.

In this session we will discuss the latest **Trimble** mobile data collection solutions for collecting fast and accurate information in the field. We will demonstrate how this technology allows users to effectively and efficiently collect location based information in areas where traditional GPS technology will not allow. Lastly, we will discuss the software solutions, both traditional and emerging cloud based, that are changing the way we collect and manage data.

January 22, 2013 Thursday

8AM to 12PM 4hrs

Title: "Troubleshooting Power Quality Issues (Flicker Analysis Training) & Volt Var Optimization"

Presenters:

Pat McClernon
John Carroll
Power Monitors

PMI is IEEE certified for 3 hours of training

8:00 a.m. Introductions

8:15 a.m. Seven Elements of Power Quality
 John Carroll
 PMI

9:00 a.m. Power Quality Applications and Case Studies across America

- Troubleshooting Power Quality Issues
- Conservational Voltage Reduction

- Volt Var Optimization
- Monitoring Renewal Sources of Energy
- Impact of Solar Photovoltaic and Electric Vehicle Charging Stations

11:00 PMI Products and Pro Vision Power Quality Software Overview
Future of Remote Power Monitoring

End at 12:00 p.m.

Coordinators: Mark Peterson, Mike Letcher & Tim Chance

SESSION IX

CONFERENCE ROOM 2

NATIONAL ELECTRIC CODE HOURS

8 Hours Code Credit

Each attendant needs to bring a Current NEC code book

GENERAL SESSION

Tuesday, January 20, - 1:15 p.m. - 5:00 p.m.

PART I

CONFERENCE ROOM 2

CODE CLASS

Wednesday, January 21, 8:00 a.m. - 12:00 p.m.

Instructor: Larry Kippas

Larry is a Marion native, he started his career in 1976 at Mitchell Vo Tech, and worked in the field with various contractors. In 1989 he went to work for the South Dakota Electrical Commission as an electrical inspector. In 2005, he took an electrical job with the city of Sioux Falls, and is currently the CHIEF Electrical Inspector for Sioux Falls. He is currently on the board of directors for the International Association of Electrical Inspector and also on the board of directors for the Sioux Falls Electrical Council.

PART II

Lincoln Room

Wednesday, January 21, 1:00 – 5:00

I. Course Description

These Courses will provide utility personnel with some basic information on general safety and security concepts that will provide them with information that will allow them to better identify, recognize, and react to potential threats to their personal safety and security in a variety of areas and situations. The course will focus on an overview of personal safety, how to identify and recognize potential threatening situations and people, and how to prepare and react to potential threats of personnel harm. The course will include some hands on demonstrations on commonly used self defense tools and tactics.

II. Course Objectives/Outcomes, Standards, Assessment

| Objectives | Outcomes | Assessment |
|------------|----------|------------|
|------------|----------|------------|

| | | |
|---|--|---|
| Identify the concept of what is personal safety and security | Given the definition of the concept of personnel safety and security, learners will be able to understand the general principles that can keep them safe in their personal and public life. | Lecture Group Discussion |
| Define the general principles of personal safety and security | Given the key points of the general principles of personal safety and security, learners will be able to identify and recognize potential threats to their safety and security. | Lecture Group Discussion |
| Identify personal safety and security concepts at home | Given the key points of how to stay safe and secure your personal property, learners will be able to identify how to stay safe in their home and secure their personal property. | Lecture Group Discussion |
| Identify personal safety and security concepts in the public | Given the key points of how to stay safe and secure in public, learners will be able to identify and recognize how to stay safe while in public places. | Lecture Group Discussion |
| Identify personal safety and security concepts at work | Given the key points of how to stay safe and secure at work, learners will be able to identify and recognize how to stay safe at work. | Lecture Group Discussion |
| Special considerations Drug manufacturing | Given the key points on Drug manufacturing, learners will be able to identify and recognize how Drug manufacturing can affect their safety and security. | Lecture Group Discussion |
| Special considerations Terrorist and terrorism | Given the key points on Terrorist and terrorism, learners will be able to identify and recognize how Terrorist and terrorism can affect their safety and security. | Lecture Group Discussion |
| Use of personal defense Tools | Given instruction and demonstration on the techniques for the use of various personal defense tools, learners will be able to understand the advantages and disadvantages of the different tools | Lecture Demonstration Physical practice |
| Use of positioning and proximics when dealing with subjects | Given instruction and demonstration on the techniques for the interview and combat stance and interview position, learners will be able to understand these concepts. | Lecture Demonstration Physical practice |
| Use of Countermeasures | Given instruction and demonstration on the techniques for the use of countermeasures and escape from holds, learners will be able to destabilize, escape, or control a subject using a variety of moves, strikes, and kicks. | Lecture Demonstration Physical practice |

III. Instructional Methods/Activities

Methods and activities for instruction include:

A. Traditional Experiences

1. Lecture/discussion
2. Physical demonstration/practice
3. Practical applications

IV. About the Instructor

Sergeant Ronald Schwint has 26 years of law enforcement experience. Ron was employed by the State of South Dakota as a correctional officer and an intensive parole agent for 6 years and has been employed by the Sioux Falls Police Department for the last 20 years. During his career with the Sioux Falls Police Department Ron has worked as a patrol officer, traffic officer and traffic case investigator prior to being promoted to a field supervisor. Duties performed during his career included being a field training officer, gang task force officer, an

urban police rifle (UPR) rapid deployment team member, EVOC instructor, and a defensive tactics instructor/coordinator for the department.

Ron currently holds a Bachelor of Science degree in Criminal Justice and Sociology from Augustana College in Sioux Falls, SD and is currently enrolled in the masters program for educational administration of adult and higher education at the University of South Dakota with a focus on law enforcement training and reality based training development.

Ron has been actively involved in law enforcement training since 1994 and is an independent contractor conducting law enforcement training programs for Academies' and Agencies throughout the United States. He is currently an Armament Systems and Procedures. INC (ASP) certified instructor trainer, conducting basic and instructor certification programs For ASP throughout the United States. He also holds instructor certifications as a Verbal Judo instructor, an OC chemical munitions instructor, (PCR) physical conflict resolution instructor, EVOC instructor and a reality based training instructor. Ron has consulted with numerous Federal, County, Municipal, Military, and Security agencies about defensive tactic programs and policy development and has conducted defensive tactic certification programs for them.

PART III
CONFERENCE ROOM 2

CODE CLASS
Thursday, January 22, 8:00 a.m. - 12:00 noon

Instructor: Larry Kippas

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

Part I & Part III

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

Part II

4 Non-Code credit hours will be given by the State Electrical Commission.

Course Coordinators: Mark Koller
Frank Doherty

Joint Utility Training Committee

Chairman: Ken Meirose – Black Hills Power, Sturgis, SD

Vice Chair: Terry Ebright – Sioux Valley Energy, Colman SD

Secretary: Dale Henderschiedt – Brookings Municipal Utilities, Brookings, SD

Treasurer: Tom Honkomp - WESCO

South Dakota Rural Electric Association:

Ken VanZee – Douglas Electric Coop, Armour, SD

Tim Chance – Southeastern Electric Coop, Alcester, SD

Terry Keller – Cam-Wal Electric, Selby, SD

Roger Crom – SD Rural Electric Association, Pierre, SD

Terry Ebright – Sioux Valley Energy, Colman, SD

Rodney Haag - Oahe Electric, Blunt, SD

Investor –Owned Electric Utilities:

Scott Wiese – Otter Tail Power Co, Milbank, SD

Brad Wenande – Northwest Energy, Huron SD

Bruce Brekke – Montana-Dakota Utilities, Mobridge, SD

Ken Meirose – Black Hills Power, Sturgis, SD

Municipal Electric Utilities:

Dale Henderschiedt – Brookings Municipal Utilities, Brookings, SD

John Larsen – City of Sioux Falls, Sioux Falls, SD

Jay Nordquist – City of Beresford, Beresford, SD

Ginny Beck – Crooks Municipal Gas, Crooks SD

Mark Koller – City of Vermillion, Vermillion, SD

Generation, Transmission, Political Sub Districts, Statewide Association:

Frank Doherty – SD Rural Electric Association, Pierre, SD

Terry Ebright – Sioux Valley Energy, Colman SD

Doug Enstad – Watertown Municipal Utilities, Watertown, SD

Dave Zwetzig – Butte Electric Coop, Newell, SD

Gary Clayton – Rosebud Electric, Gregory, SD

Mark Patterson – SD Rural Electric Association, Wall, SD

Cory Gunderson – East River Electric Coop, Madison, SD

Vendors Association:

Tom Honkomp - WESCO