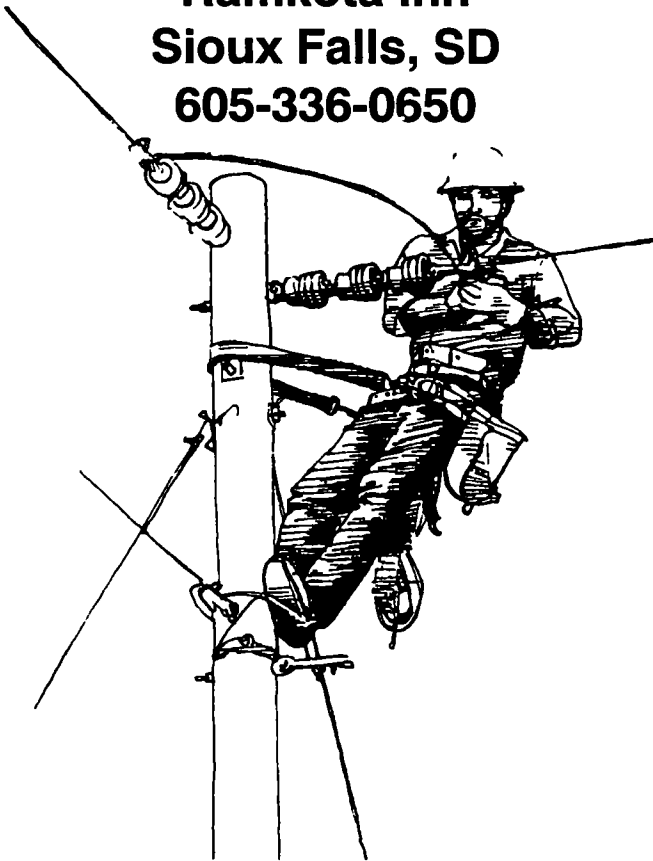


**TWENTIETH ANNUAL**

# **JOINT UTILITY TRAINING SCHOOL**

**JANUARY 17, 18 & 19, 1995**

**Ramkota Inn  
Sioux Falls, SD  
605-336-0650**



**Sponsored by  
JOINT UTILITY TRAINING COMMITTEE (JUTS)  
SOUTH DAKOTA ELECTRICAL COUNCIL**

# PROGRAM

## SESSIONS PROGRAM INFORMATION

Each session is designed as a 16-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.

### REGISTRATION

Tuesday, January 17, 1995

10 00 a m to 12 00 noon

**\$100.00 per person**

Pre-paid registration will include breakfast on Wednesday and Thursday morning at 6 30 a m -8 00 a m in the Exhibit Hall and noon meal on Wednesday in the Exhibit Hall.

### LUNCHEON

Wednesday, January 18, 1995

12 00 noon to 1 00 p m

### Mini-Courses will be:

Tuesday	1 00 p m to 5 00 p m
Wednesday	8 00 a m to 5 00 p m
Thursday	8 00 a m to 12 00 noon

# SESSION I-A and SESSION I-B

SESSION 1-A — Harvest Room

SESSION 1-B — Viking Room

## ENHANCING TEAMWORK

Tuesday, Jan 17, 1 00 p m -5 00 p m

Wednesday, Jan 18, 8 00 a m -5 00 p m

Thursday, Jan 19, 8 00 a m.-12.00 noon

**Description:** Whether you're a team leader, field technician, administrator, engineer or the newest person on the team, this session is designed for you! This session will be taught by two instructors. Each will work with half the participants at one time, then switch to work with the other half. Enrollment is limited to 50 people, 25 in each group.

### **TITLE:** Tools to Handle Those Tough People and Tough Situations

- \* How does a person communicate for maximum effectiveness . . . whether giving orders, teaching a new job, offering suggestions to the boss, or getting along within a team?
- \* How can a person learn to confront disagreements and conflict without ruining the relationships already in place? (We need to be able to apply these skills whether we're working with our subordinates, our team, our boss or our customers )
- \* How can we learn to better understand "where the other person is coming from?"
- \* How can we learn more about why people are the way they are and how others are most comfortable getting the job done?
- \* What are the benefits to your team, your company, your family, and to yourself, as you learn more about how to be most effective in all your dealings with others?
- \* How does a person learn to balance the stress of work and the demands of a personal life?
- \* How does a person learn to handle conflict better?

**Instructors:** Jim Kellar - Kellar Training Associates, Sioux Falls, SD  
Suzanne Knudson, Human Relations Training Consultant,  
Sioux Falls, SD

**Coordinators:** James Mergen

**COURSE LIMITED TO 50 STUDENTS**

# **SESSION II**

Exhibit Hall

## **OCR & REGULATOR MAINTENANCE AND TESTING**

### **Part I**

Tuesday, 1 00 p m - 5 00 p m and Wednesday, 8 00 a m - 12 00 noon

**TITLE:** Regulator Operation and Troubleshooting

**Description:** Students will deal with testing, maintenance, repair and operation of regulators. Regulators, panels and mechanism parts will be available for inspection and troubleshooting. Students get an opportunity to learn how to troubleshoot panels in the shop and techniques for troubleshooting out in the field.

**Instructors:** Jim Ratliff - Lexington Switch & Controls, Lebanon, OH  
Roger Nagel - Lanick & Liljegren, Pierre, SD  
Ernie Leesch - Burmeister Electric, Vermillion, SD

### **Part II**

Wednesday, 1 00 p m - 5 00 p m and Thursday, 8 00 a m - 12 00 noon

**TITLE:** OCR Maintenance

**Description:** An 8-hour course to include 1 hour on ground testing and how it relates to OCR operation with the remaining 7 hours to cover the basics of hydraulic OCR operation, maintenance and testing with hands-on experience and problem solving techniques. The course will also touch briefly on electronic OCRs and their operation.

**Instructors:** Ronald E. Globke, Robert Schrag and Don Kettwig - Turner-Hutchinson Electric Cooperative, Inc., Marion, SD  
Jim Karolevitz - Bon Homme-Yankton Electric Co-op, Tabor, SD

**COURSE LIMITED TO 30 STUDENTS**

# SESSION III

Washington Room

## TRANSFORMER CONNECTIONS

A 16-hour workshop designed for apprentice linemen 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.

### Part I

Tuesday, 1 00 p m - 5 00 p m

**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 connections with miniature equipment.

### Part II & III

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.

### Part IV

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 relates to three-phase systems, as well as discuss ways to prevent voltage surges during switching a three-phase bank.

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

**Supervisors:** Richard Davis - NWPS, Huron, SD  
Dennis Wagner - NWPS, Huron, SD  
Clark Hendrickson - NSP, Sioux Falls, SD  
Ken Paul - MDU, Bismarck, ND  
Ken Herren - NWPS, Sioux Falls, SD  
Kenneth Booze - East River Electric, Madison, SD

**Coordinator:** Al Kubousek

## **COURSE LIMITED TO 30 STUDENTS**

16 non-code hours will be given by the State Electrical Commission

# **SESSION IV**

Exhibit Hall Pre-Function Area

## **REGULATORY COMPLIANCE/ACCIDENT INVESTIGATION**

### **PART I**

Tuesday, 1 00 p m - 5 00 p m

**TITLE:** Federal Motor Carrier Safety Regulations

**Description:** This 4-hour program will provide information on Commercial Drivers License standards, requirements and penalties, qualifications of drivers, load securement, inspection, repair and maintenance Also, new Federal Standard 382 on controlled substances and alcohol use and testing will be covered

**Instructors:** Jim Happe, Regulatory Compliance Administrator -  
Northern States Power Co., Minneapolis, MN

### **PART II**

Wednesday, 8.00 a m - 12 00 noon

**TITLE:** Hazard Communication Workshop

**Description:** This 4-hour program will provide attendees with all of the information needed to develop, implement and/or update an OSHA Hazard Communication program 1910 1200 requires all employers to identify hazardous chemicals in the workplace, train employees in their safe handling and use, and develop a written compliance program This workshop provides all the tools needed for compliance, including a sample written program

**Instructor:** Tom Slattery -  
South Dakota Safety Council, Sioux Falls, SD

### **PART III**

Wednesday, 1 00 p m - 5 00 p m

**TITLE:** Accident Investigation/Job Hazard Analysis

**Description:** Attendees of this 4-hour program will learn accident investigation techniques to recognize and evaluate the causes of workplace accidents and implement corrective actions The second half of the session focuses on the techniques of Job Hazard Analysis - a proven method of identifying and eliminating hazards before they cause accidents

**Instructor:** Tom Slattery -  
South Dakota Safety Council, Sioux Falls, SD

(Continued)

# Session IV - Regulatory Compliance/ Accident Investigation

## PART IV

Thursday, 8 00 a m -12 00 noon

**TITLE:** Emergency First Aid

**Description:** The National Safety Council's comprehensive FIRST AID INSTITUTE program is designed to teach participants the skills to recognize life-threatening emergencies and maintain the life of an accident or sudden illness victim until medical personnel arrive. All successful participants receive a 3 year First Aid certificate.

**Instructor:** Ron Harris -  
South Dakota Safety Council, Sioux Falls, SD

**Coordinators:** Bruce Brunick and Dean Greer

16 non-code hours will be given by the State Electrical Commission

# **SESSION V-A**

Lincoln Room

## **ELECTRIC METERING**

Tuesday, 1 00 p m - 5 00 p m  
Wednesday, 8 00 a m - 5 00 p m  
Thursday, 8 00 a m - 12 00 noon

**TITLE:** Basic Metering

**Description:** A 16-hour course designed for linemen or apprentice meterpersons with little or no metering experience

**Topics:**

- Basic Concept of Metering
- Metering Math
- Single-Phase Self-Contained Metering
- Current and Potential Transformers
- Single-Phase Transformer Rated Metering
- Multipliers
- Self-Contained Poly-Phase Meters
- Transformer-Rated Poly-Phase Wiring Schemes
- Meter Testing Techniques
- Diversion Investigation Techniques

Each student is required to bring to the course a meter any type of meter will work, i e , single- or poly-phase (three-phase), old or new

**Instructors:** Larry Chapman - Chapman Metering Co , Avoca, IA  
Chuck Vaughn - Kansas Electric Power Cooperative  
Topeka, KS

**Coordinator:** Jim Lewis

16 non-code hours will be given by the State Electrical Commission



# **SESSION V- B**

Roosevelt Room

## **ELECTRIC METERING**

Tuesday, 1 00 p m - 5 00 p m

Wednesday, 8 00 a m - 5 00 p m

Thursday, 8 00 a m - 12 00 noon

**TITLE:** Advanced Metering

**Description:** A 16-hour course with troubleshooting, wiring schematics and metering applications Any instrument you use in troubleshooting or varifying meter wiring is welcome

- Day 1:**
- A Basic Meter Designs - understanding how loads are metered
  - B Self contained meter applications - when to use self contained over transformer rated Includes wiring schemes and common problems
  - C Combined with basic group on power diversion, metering safely and socket voltage checks
- Day 2:**
- A Current and voltage transformers - intended use, requirements, how to size for services and when to use
  - B Electromechanical vs Solid State Meters - advantages and disadvantages
  - C Single-phase transformer-rated wiring schemes and trouble shooting techniques
  - D Poly-phase transformer-rated wiring schemes and trouble shooting techniques
  - E Begin hands on with troubleshooting panel This will continue through Thursday as well

**Instructors:** Larry Chapman & Todd Eilers -  
Chapman Metering Co , Avoca, IA

**Coordinator:** Jim Moore

16 non-code hours will be given by the State Electrical Commission

# SESSION VI

Amphitheater II

## ENGINEERING

### **PART I**

Tuesday, 1 00 p m -3 00 p m

**TITLE:** Electricity A La Carte

**Description:** The electric utility industry will be moving from a commodity market to a product market. Customers expectations and demands will reflect this change. Are you ready for the 21st century customers?

**Instructors:** Steve Wegman & Leni Hook  
SD Public Utilities Commission, Pierre, SD

### **PART II**

Tuesday, 3 00 p m -5 00 p m

**TITLE:** Personal Protective Grounding

**Description:** This session will cover methods of personal grounding as it applies to OSHA regulations. A demonstrator model will be used to simulate grounding applications.

**Instructor:** Jim Fox - A B Chance, Maplelake, MN

### **PART III**

Wednesday, 8 00 a m -12 00 noon

**TITLE:** Electric/Magnetic Fields

**Description:** This session will cover issues relating to EMF. History and basic theory of EMF will be discussed. Different types of equipment used to measure field strength will be displayed and results of measurements will be compared to computer modeling. Otter Tail Power Company will present their experiences and discuss what educational material is available to inform customers and employees.

**Instructor:** Kenneth Schmaltz - Otter Tail Power Company,  
Fergus Falls, MN  
Jerry Martens - Otter Tail Power Company,  
Fergus Falls, MN  
Prof. Wayne Knabach - SDSU, Brookings, SD

(Continued)

## Session VI - Engineering

### **PART IV**

Wednesday, 1 00 p m -5 00 p m

**TITLE:** Electric Design Guidelines

**Description:** This session will cover guidelines used when designing residential distribution facilities. Specific areas covered will be transformer and secondary loading, voltage drop, and cost considerations.

**Instructor:** John Dalager - Dalager Engineering, Bath, SD

### **PART V**

Thursday, 8 00 a m -12 00 noon

**TITLE** Underground Cable Fault Locating

**Description** Latest methods and equipment will be discussed and compared. Most current equipment used for locating faults will be demonstrated.

**Instructor** Rodney Machac - Cable Repair Systems Corp , Dallas, TX

**Coordinators** Todd Chambers and Stuart Wevik

4 code & 2 non-code hours will be given by the State Electrical Commission

# **SESSION VII**

Amphitheater I

## **OPERATIONS AND SAFETY**

### **Part I**

Tuesday, 1 00 a m -3 00 p m

**TITLE:** Protective Temporary Grounding

**Description** Proper protective grounding procedures, featuring the equipotential method

**Instructor:** Jim Fox - A B Chance Co , Maple Lake, MN

**TITLE:** Care and maintenance of cover-up material

**Description:** Proper and best methods of cleaning and refinishing protective equipment, including fiberglass sticks, poles and all other protective equipment

**Instructor:** Jim Fox - A B Chance Co , Maple Lake, MN

### **PART II**

Tuesday, 3 00 p m - 5 00 p m

**TITLE:** Lockout/Tagout Hazardous Energy Sources

**Description:** Proper methods of lockout/tagout, regulations and equipment needed, etc

**Instructor:** Jon Puetz - SDSU Extension Services, Brookings, SD

### **PART III**

Wednesday, 8 00 a m - 5 00 p m

**TITLE:** Inspection and Care of Synthetic Slings

**Description:** Establish an absolute need for a viable system of sling inspection that integrates the sling user, the sling inspector and the facility into an efficient, pro-active system of accident prevention through education

**Instructor:** Mike Gelsky - President of Lift It Manufacturing Co , Inc  
Los Angeles, CA

(Continued)

# Session VII - Operations and Safety

## **Part IV**

Thursday, 8 00 a m - 9 00 a m

**TITLE:** How - Why - and Where of Lightning Arrestor Application

**Description:** Proper methods of lightning arrestor installations stressing lead lengths, what location is best for a particular installation, etc

**Instructor:** Dave Black -  
Joslyn Corp , Chicago, IL

## **PART V**

Thursday, 9 00 a m - 12 00 noon

**TITLE:** Defensive Driving Overview

**Description:** This three-hour program will provide information on defensive driving techniques, reading traffic situations, highway, city and adverse weather driving, in-vehicle and on-road distractions, and identifying hazards to avoid collisions. An excellent refresher for experienced drivers or an overview of defensive driving techniques for those without prior formal training.

**Instructors:** Jim Harner & John Rath -  
South Dakota Safety Council, Sioux Falls, SD

**Coordinators:** Ken Wetz and Larry Brink

**COURSE LIMITED TO 40 STUDENTS**

6 non-code hours will be given by the State Electrical Commission

# **SESSION VIII**

Jefferson Room

## **ACHIEVING EXTRAORDINARY CUSTOMER RELATIONS**

Tuesday, 1 00 p m -5 00 p m  
Wednesday, 8 00 a m -5 00 p m  
Thursday, 8 00 a m -12 00 noon

This class consists of hands-on training on how to deal with other people. It is specifically designed to deal with utility customers but will also help the participant communicate with spouse, children, and people in general.

It is a hands-on practice-type training class put together by Kaset, Inc. It is applicable to all classifications of employees but most helpful to those dealing directly one-to-one with customers.

**Instructors:** Dean Swanson - Otter Tail Power Co , Fergus Falls, MN  
Kevin Kouba - Otter Tail Power Co , Bemidji, MN

**Coordinator:** Juell Chapman

**COURSE LIMITED TO 20 STUDENTS**

# **SESSION IX**

Crystal Room

## **NATIONAL ELECTRICAL SAFETY CODE**

Tuesday, 1 00 p m - 5 00 p m Intro Part 1

Wednesday, 8 00 a m - 5 00 p m Part 2

Thursday, 8 00 a m - 12 00 noon Parts 3 & 4

**Description:** The purpose of this class is to teach electric distribution personnel how to use the NESC book and some of the things to look for on their existing system. This class is distribution oriented. Lectures, practice exercises, videos and practical application slides are used to make this a multimedia course.

### **IMPORTANT**

**STUDENTS MUST BRING A CURRENT NESC BOOK WITH THEM**

**ALSO**

**COPY OF 3RD ADDITION OF NESC HANDBOOK**

PART 1 Electric Supply Stations

PART 2 Safety Rules for Overhead Lines

PART 3 Safety Rules for Underground Lines

PART 4 Work Rules

**Instructor:** Robert Witter, PE - Robert Witter & Associates,  
Albuquerque, NM

**Coordinator:** Dennis Schnabel

16 non-code hours will be given by the State Electrical Commission

# REGISTRATION

## 1995 JOINT UTILITY TRAINING SCHOOL

Company \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ Zip \_\_\_\_\_ Phone \_\_\_\_\_

**Type or print name as it should appear on the certificate**

Session

Name

Session	Name

Please submit this form with payment. Make checks payable to Joint Utility Training School. Send check and registration form to South Dakota Rural Electric Association, ATTN Dawn Trapp, PO Box 1138, Pierre, SD 57501-1138



# **Joint Utility Training Committee**

## **Chairman:**

Don Seeklander - City of Estelline, Estelline, SD

## **Vice-Chairman:**

Al Kubousek - Otter Tail Power Company, Milbank, SD

## **Secretary:**

Jim Moore - Northern Electric, Bath, SD

## **Treasurer:**

Randy Dickerson - South Dakota Rural Electric Association, Pierre, SD

## **South Dakota Electrical Council:**

Pete Swanson (liaison) - Watertown Municipal Utilities, Watertown, SD

## **JUTS Members**

### **South Dakota Rural Electric Association:**

Charles W Birkholt - Cam Wal Electric, Selby, SD

Ken Wetz - Butte Electric, Newell, SD

Juell Chapman - Grand Electric, Bison, SD

Larry Brink - Beadle Electric, Huron, SD

Jim Moore - Northern Electric, Bath, SD

### **Investor-Owned Electric Utilities:**

Al Kubousek - Otter Tail Power Company, Milbank, SD

Robert Crawford - Northwestern Public Service, Huron, SD

Dennis Schnabel - Montana-Dakota Utilities Co , Mobridge, SD

Dean Greer - Northern States Power Company, Sioux Falls, SD

Stuart Wevik - Black Hills Power and Light, Rapid City, SD

### **Municipal Electric Utilities:**

Tom Honkomp - Brookings Municipal Utilities, Brookings, SD

Jim Mergen - Sioux Falls Light Department, Sioux Falls, SD

Bruce Brunick - City of Vermillion, Vermillion, SD

Don Seeklander - City of Estelline, Estelline, SD

Todd Chambers - City of Pierre, Pierre, SD

### **Generation, Transmission, Political Subdistricts, Statewide Association:**

Jim Lewis - South Dakota Rural Electric Association, Pierre, SD

Randy Dickerson - South Dakota Rural Electric Association, Pierre, SD

Don Hook - East River Electric Power Cooperative, Madison, SD

Rodney Gunn - West River Electric, Rapid City, SD

**20th Annual  
Joint Utility Training School  
January 17, 18 & 19, 1995  
Ramkota Inn - Sioux Falls, SD**

**REGISTRATION FEE  
is \$100.00 per student - PREPAID**

I	ENHANCING TEAMWORK	- 50 Maximum
II	OCR AND REGULATOR MAINTENANCE	- 30 Maximum
III	TRANSFORMER CONNECTIONS	- 30 Maximum
IV	REGULATORY COMPLIANCE/ ACCIDENT INVESTIGATION	
V	ELECTRIC METERING V-A V-B	
VI	ENGINEERING	
VII	OPERATIONS AND SAFETY	- 40 Maximum
VIII	CUSTOMER RELATIONS	- 20 Maximum
IX	NATIONAL ELECTRICAL SAFETY CODE	

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

Please submit this form with payment. Make checks payable to Joint Utility Training School. Refunds and changes in registration will be allowed to January 6th. No phone-in registrations will be accepted. Send check and registration form to South Dakota Rural Electric Association, ATTN Dawn Trapp, PO Box 1138, Pierre, SD 57501-1138