

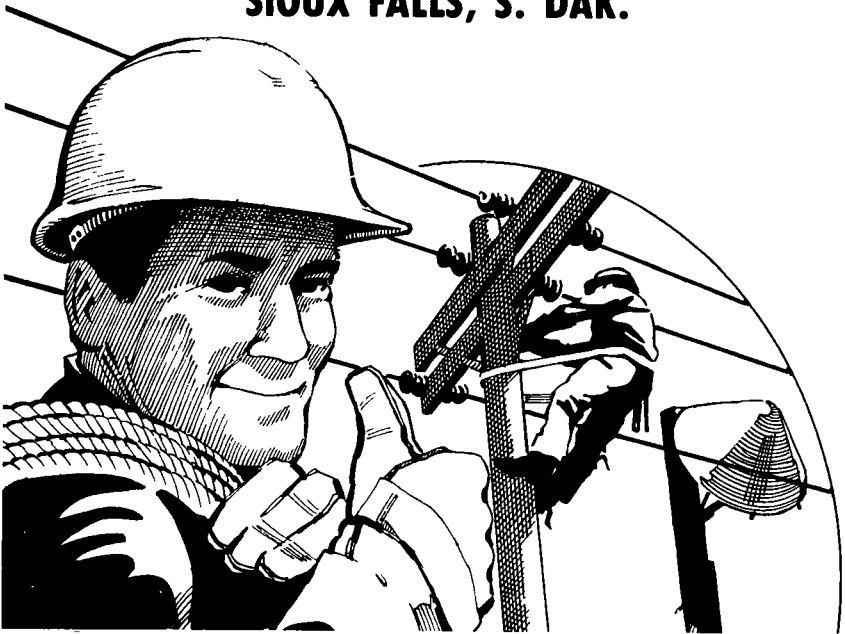
ELEVENTH ANNUAL JOINT UTILITY TRAINING WORKSHOP

JANUARY 21, 22, 23, 1986

**HOWARD JOHNSON
MOTOR LODGE
605-336-9000**

**RAMADA INN
605-336-0650**

SIOUX FALLS, S. DAK.



**SPONSORED BY
JOINT UTILITY TRAINING COMMITTEE
(JUTS)
SOUTH DAKOTA ELECTRIC COUNCIL**

PROGRAM

SESSIONS PROGRAM INFORMATION

Each session is designed as a 16-hour minicourse. Registration will be for one session only per individual. You will remain in that session for the entire length of the course. Some class sessions will be split to reduce class size and use laboratory facilities. Certificates will be sent to your respective company if attendance has been continuous.

REGISTRATION

Pre-Paid Registration
\$30.00 Per Person

Tuesday, January 21, 1986

Ramada Inn

10:00 a.m. to 12:00 p.m.

LUNCHEON

Wednesday, January 22, 1986

Howard Johnson's

12:00 p.m. to 1:00 p.m.

All session times will be:

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

Wednesday 8:00 a.m. to 12:00 Noon
1:00 p.m. to 5:00 p.m.

Thursday 8:00 a.m. to 12:00 Noon

SESSION I

Ramada Inn

LEADERSHIP SEMINAR

Registration Fee \$30.00

Title: Basic Supervisory Skills

Description: Topics will include the following:

Your Organization and You
The Adult Learning Process
The Human Touch at Work
The Critical Shift
Styles of Supervision
The Supervisor as Motivator
The Supervisor as Counselor
The Psychological Contract
Complaints and Grievances

Instructor: Kurt Peters, Montana Dakotas Utilities Co.,
Bismarck, ND

Coordinator: Andy Jensen

Course limited to a maximum of 20 students.

SESSION II

Ramada Inn

TRENCHER - AERIAL - DIGGER DERRICK - CHAIN SAWS

Registration Fee \$30.00

Title: Operator's Seminar on Hydraulic Line and Aerial Equipment

Description: This course is designed for operators and maintenance personnel of bucket trucks, digger derricks, trenchers and chain saws. This course will cover safety, proper operation, hydraulics, testing, inspection and maintenance of equipment.

PART I

Title: Chain Saw Maintenance - Operations and Safety
(2 hour presentation)

Instructor: Maury Richardson, Maury's Repair, Sioux Falls, SD

PART II

Title: Rigging Safety including cable, sling and rope and chain. (2 hour presentation)

Instructor: Ron Bedle, Campbell Chain, Chicago, IL
Randy Pierson, Dakota Rigger's & Tool Supply,
Sioux Falls, SD
Ron Johnson, MacWhyte Wire Rope, Kenosha, WI
Ken Arvidson, Sampson Rope, Waltham, MN

PART III

Title: Aerial Equipment Testing, Safety, Operation and Maintenance. (8 hour presentation)

Instructor: Cornelius "Cornie" Sheehan
Hydraulic Equipment Service, Inc., Seward, NE

PART IV

Title: Trencher Operations Safety and Maintenance
(4 hour presentation)

Instructor: Alvin Golay, Charles Machine Works, Perry, OK

Coordinator: Vic Graham

SESSION III
Howard Johnson Motor Lodge
TRANSFORMER CONNECTIONS
Registration Fee \$30.00

PART I

Title: Basic Electricity

Description: This is a 2 1/2 hour segment of slides and lecture designed to give line personnel a nontechnical, basic review of single and three phase power, and delta and wye connections. 1 1/2 hours will be devoted to hands-on nonenergized connections with miniature models.

PART II

Title: Three Phase Power

Description: A 1 hour lecture and 3 hours of hands-on exercises with energized miniature power banks and substations.

PART III

Title: Sequence

Description: Two hours lecture and 2 hours hands-on exercises making connections on miniature transformers to provide a specific sequence.

PART IV

Title: "Trouble Shooting"

Description: Live hands-on exercises solving typical power bank and substation service problems. The instructor and supervisors will answer your questions and assist you in finding a solution to classroom exercises in trouble shooting.

Instructors: Gordon Solee and Russ Bartewek, Ottertail
Power Company, Fergus Falls, MN

Coordinators: Willy Haufschild and Jim Mergen

Course limited to a maximum of 36 students.

SESSION IV
Howard Johnson Motor Lodge
ELECTRONIC RECLOSERS, VOLTAGE REGULATORS
& OIL CIRCUIT RECLOSERS
Registration Fee \$30.00

PART I

Title: Oil Circuit Reclosers

Description: An 8-hour program on oil circuit Reclosers. Class will deal with 1) reclosers intended use in the distribution system, 2) fitting reclosers into the system and their advantages in system operation, 3) how a recloser works and performs its function, 4) the application of reclosers on the system to coordinate with other protective devices, 5) basic recloser maintenance including single phase and three phase maintenance.

Instructors: Ed Otto, Ed's Recloser, Solomon, KS
Bill Gifford, Midstate Armature, Salina, KS

PART II

Title: Regulator Maintenance

Description: An 8-hour program on regular maintenance. Class will deal with testing, maintenance and operation of regulators. A regulator and parts will be available for watching in operation. Other regulators will be available for repair. A short course on voltage settings will be held.

Instructors: Jeff England, Siemens-Allis, Overland KS
Ron Hoeft, East River Electric Power Cooperative, Madison, SD

Coordinators: Roger Nagel, Duane Vlasman

SESSION V

Ramada Inn

ELECTRIC METERING

Registration Fee \$30.00

Description: A course for metermen and utility employees who occasionally are called on to perform metering duties. Topics covered will be basic metering principles, single phase and three phase meters, demands, magnetic tapes, self contained and instrument transformer installations. A "hands-on" clinic will be held for wiring of various types of metering installations using instrument and phase shifting transformers. (12 hour presentation)

Instructor: Bob Smith, General Electric, Baton Rouge, LA

Description: Detection of energy diversion. Metering safety and meter accuracy for the meterman. Model demonstration of load management equipment. (4 hour presentation)

Instructor: Art Kollé, Otter Tail Power Company, Fergus Falls, MN

Ron Torp, Northern States Power Company
Minneapolis, MN

Coordinator: Al Kubousek

SESSION VI
Ramada Inn
ENGINEERING AND OPERATIONS
Registration Fee \$30.00

Title: Transformer Loss Evaluation
Description: Formula development and the effect of evaluation on the utility and the manufacturer. Coil and core assembly and interlacing. PCB replacement fluid and EPA regulations. (4 hour presentation)
Instructors: Wayne R. Tinder, RTE Corporation
Stewart A. Cox, RTE Corporation

Title: URD Cable - Problems and Solutions
Description: Problems the engineer may encounter with URD cable and some possible solutions. (2 hour presentation)

Title: URD Overcurrent Protection
Description: Problems the engineer may encounter in URD system protection. (2 hour presentation)

Title: URD Overvoltage Protection
Description: What problems can overvoltage cause and how to protect against them. (1 hour presentation)

Title: URD Fault Indicator Protection and Ferro-Resonance
Description: The new generation of fault indicators and their operations. A discussion on ferro-resonance. (1 hour presentation)

Title: 3 Phase Switching and Padmounted Switchgear
Description: Discussion on the application of oil, vacuum, and SF6 switches and motor operators. (2 hour presentation)

Instructors: Ken Proud, Reynolds Metals Company
Stewart A. Cox, RTE Corporation
Doug Nelson, Border States Electric Supply
David L. Hetherington, RTE Corporation

Title: Integrated Load Management and SCADA-The Pierre Story
Description: A discussion on the technologies available and how they have been applied to an integrated system in Pierre, South Dakota.

Instructors: Dan Cina and James Lotsliben, BBC Brown Boveri;
Jeff Boven, Landis and Gyr Systems, and Lloyd Marquardt, City of Pierre

SESSION VII
Howard Johnson's Motor Lodge
TREE TRIMMING
LINEMANS SAFETY
CHAIN SAW SAFETY & REPAIR
CABLE LOCATING & LOCATOR OPERATION
HEALTH IN THE WORK PLACE
Registration Fee \$30.00

PART I

Title: Tree Trimming

Description: A 2 hour course on proper methods of tree trimming

Instructor: Charles Hemmer, Parks Recreation & Forestry
Sioux Falls, SD

PART II

Title: Linemans Safety

Description: A 2 hour course on the experience of an accident victim

Instructor: Bob Mills, Pierre, SD

PART III

Title: Chain Saw Safety & Repair

Description: A 4 hour course on chain saw safety and repair.

Instructor: Ron Kangas, Ron's Saw Sales & Service,
Lake Norden, SD

PART IV

Title: Cable Locating & Locator Operation

Description: A 4 hour course on cable locating and locator operation.

Instructor: Jim Fox, Fresco Company, Hopkins, MN

PART V

Title: Health in the Work Place

Description: A 4 hour course on health in the work place.

Instructor: Don Lee, South Dakota Safety Council, Sioux Falls, SD

JOINT UTILITY TRAINING COMMITTEE

Chairman:

Andy Jensen, Brookings Municipal Utilities, Brookings, SD

Vice Chairman:

Merlyn Wookey, Northwestern Public Service Co., Huron, SD

Secretary:

Al Kubousek, Otter Tail Power Co., Milbank, SD

Treasurer:

Roger Nagel, South Dakota Rural Electric Association, Pierre, SD

Registration:

Mary Ellen Wagner, South Dakota Rural Electric Association,
Pierre, SD

South Dakota Electrical Council:

Pete Swanson, Watertown Municipal Utilities, Watertown, SD

JUTS MEMBERS

South Dakota Rural Electrics:

Rodney Gunn, West River Electric, Rapid City, SD
Randy Dickerson, South Dakota Rural Electric Association,
Pierre, SD
John Wheeler, Butte Electric, Newell, SD
Lyle Johnson, H-D Electric, Clear Lake, SD
Duane Vlasman, East River Electric, Madison, SD
Bob Rademacher, Beadle Electric, Huron, SD

Investor-Owned Electric Utilities:

Vic Graham, Northern States Power Co., Sioux Falls, SD
Willy Haufschild, Montana-Dakota Utilities, Mobridge, SD
Clif Roemmich, Black Hills Power & Light, Rapid City, SD

Municipal Associations:

Jim Mergen, Sioux Falls Light Department, Sioux Falls, SD
Virgil Schoeberl, Madison Municipal Utilities, Madison, SD
Lloyd Marquardt, City of Pierre, Pierre, SD

The JUTS Committee would like to thank the following instructors and their companies for their participation in the Tenth Annual Joint Utility Training Workshop. Without their involvement, this program would not be possible.

All instructors are cordially invited to breakfast at 7 a.m. on Wednesday, January 22 and Thursday, January 23 at the Ramada Inn -- compliments of the JUTS Committee.

Ken Arvidson	Sampson Rope Waltham, MN
Russ Bartewek	Otter Tail Power Company Fergus Falls, MN
Ron Bedle	Campbell Chain Chicago, IL
Jeff Boven	Landis & Gyr Systems
Dan Cina	BBC Brown Boveri
Stewart A. Cox	RTE Corporation
Jeff England	Siemens-Allis Overland Park, KS
Jim Fox	Fresco Hopkins, MN
Bill Gifford	Mid-State Armature Salina, KS
Alvin Golay	Charles Machine Works Perry, OK
Charles Hemmer	Parks & Recreation Department Sioux Falls, SD
David Hetherington	RTE Corporation

Ron Hoeft	East River Electric Madison, SD
Ron Johnson	MacWhyte Wire Rope Kenosha, WI
Ron Kangas	Ron's Saw Sales & Service Lake Norden, SD
Art Kolle	Otter Tail Power Company Fergus Falls, MN
Don Lee	South Dakota Safety Council Sioux Falls, SD
James Lotsliben	BBC Brown Boveri
Bob Mills	Pierre, SD
Doug Nelson	Border States Electric Supply Fargo, ND
Ed Otto	Ed's Recloser Solomon, KS
Kurt Peters	Montana-Dakota Utilities Bismarck, ND
Randy Pierson	Dakota Riggers & Tool Supply Sioux Falls, SD
Ken Proud	Reynolds Metals Company
Maury Richardson	Maury's Repair Sioux Falls, SD
Cornelius Sheehan	Hydraulic Equipment Service Seward, NE
Gordon Solee	Otter Tail Power Company Fergus Falls, MN

Wayne Tinder

RTE Corporation

Ron Torp

Northern States Power Company
Minneapolis, MN