



Pat Everly President/Instructor

Pat Everly has almost 25 years serving many roles in the electric industry. Pat started his career with Philadelphia Electric Company in 1979 and spent the first 11 years in electric production. These eleven years were spent in both nuclear and fossil generation facilities. Pat's exposure in the fossil oil, and dual fuel facilities. This provided Pat with working experience with combustion turbines, once thru and drum-type boilers, demineralization and wastewater plants, along with SO2 flue-gas scrubbing plants.

Pat then moved onto the Pennsylvania, New Jersey, and Maryland interconnections where he gained extensive experience in the operation of the first power pool in North America. At PJM, he worked in system operations before moving into the role of the Training Supervisor for the PJM System Operating Personnel. It was during this time that simulation scenarios were, not only incorporated into the normal training cycle, but also utilized in the control room position qualifying tests. While filling this training role at PJM, Pat served as the Chairperson of the PJM Dispatcher Training Task Force, Vice-Chair of the NERC Certification Examination Working Group, and continues today to serve as the Chairperson for the IEEE Working Group for System Operator Training. In addition to the role he played in System Operators training, Pat was also involved with the training efforts for PJM markets that included Market Based Rate, the PJM Regulation Market, and the PJM Two-Settlement System.

Pat left PJM to join the NERC staff as Manager - Certification. In this role, he was responsible for the administration assistance for the WECC System Operator Certification Program and the PJM System Operator Certification Program. In addition to the personnel certification responsibilities, Pat also participated in many Control Area Certifications and Reliability Coordinator Audits. Both of these efforts included reviews of training programs for System Operators. Pat has also been a guest speaker at the Iowa State System Operator Short Course, American Power Dispatcher Association Meetings, and various regional seminars throughout North America.

Email: peverly@oesna.com



William H. Smith President/Instructor

Mr. William H. Smith is President of Powersmiths International, Inc., a consulting firm specializing in power system engineering, planning and operations. Powersmiths specializes in providing competitive advantage to generation and transmission companies operating in regulated or competitive marketplaces while recognizing that these companies must maintain or improve system reliability.

He has most recently assisted utilities in understanding and assessing compliance with the new and ever evolving NERC Reliability Standards.

Assists companies with gap analyses, process and procedure development, Internal Reliability Standards reviews and mock audits, audit preparation and mitigation plan development and implementation.

Mr. Smith has also authored the book Electric Power System Reliability, 2014. This text explains the NERC Reliability Standards in the context of an understanding of the power system fundamentals required to implement them.

Powersmiths has developed its unique system operator training program called OPS-X which uses computer simulation to model power system fundamentals, EHV system operations, congestion management, transmission system operations and blackout and system restoration. Operators get hands-on training as to the procedures to be followed to comply with the NERC Reliability Standards.

OPS-X can also serve as a system operator simulator as required by several of the NERC Reliability Standards. Powersmiths regularly constructs power system models of client systems to provide compliance.

Mr. Smith regularly teaches courses on Electric Power System Reliability. All of his courses are NERC certified. Since 2006 he has trained over 1000 operators in System Operations, the NERC Reliability Standards and System Reliability.

Prior to founding Powersmiths, Mr. Smith worked fourteen years at Florida Power and Light Company serving as Director of Power System Planning and later as Director of Power System Engineering.

Mr. Smith served in the USAF from 1973-1976 where he was responsible for designing and installing instrumentation systems to capture data from explosive simulations.

Education

- Rensselaer Polytechnic Institute, Troy, New York
B.S. Electrical Engineering, Cum Laude, 1972
- Master of Engineering, Electric Power Engineering, 1973
- University of Miami, Miami, Florida
M.B.A. (Finance), 1984
- Harvard University, Graduate School of Business
Administration Program for Management Development, 1990

Professional Achievements

- Registered Professional Engineer: Florida and Pennsylvania
- NERC Certified Reliability Coordinator and Transmission Operator
- NERC Approved Continuing Education Provider

Publications

- "Electric Power System Reliability"
- American Power Conference, "New Techniques in High Voltage Transient Measurements," February, 1980.
- CI&RE, "New Field Laboratories for the Measurement of Electrical Transients," August, 1980.

Electric Power Research Institute, "Florida Power and Light Company's Study of Shell Based Gasified Combined Cycle Power Plants," January, 1989.



GREAT RIVER ENERGY



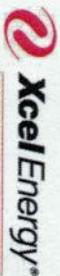
Minnkota Power Cooperative, Inc.



Western Area Power

MONTANA-DAKOTA UTILITIES CO

A Division of Xcel Energy Group, Inc.



RESPONSIBLE BY NATURE

2017 SPRING PSR DRILL AND TRAINING

Otter Tail Power Company
is proud to host the
2017
DAK-SUBREGION
PSR DRILL AND TRAINING

Week 1	April 17-20
Week 2	May 1-4
Week 3	May 15-18

Arrowwood Resort
Alexandria, MN

2017 Spring PSR Drill and Training

The Dak-Subregion is proud to announce Mike Terbrueggen, O-T-S (week1), Pat Everly, OES-NA (week2), Bill Smith, Powersmiths (week 3) and Neil Lindgren Otter Tail Power for all three weeks. These presenters have been arranged for this year's power system restoration drill and training seminar. This 32-hour NERC CEH course will cover an in-depth review of:

- Week 1 - Dynamics of Disturbances
- Week 2 - Emergency Operations and Emergency Response & Reporting
- Week 3 - Transmission Operations, Balancing Authority Operations and Emergency Operations

This course is designed not only to provide an annual review of our regions restoration procedures, but is also an excellent chance to interact and train next to the individuals you will be working beside. If we ever have to face the actual blackout event within our region. We would like to encourage Power Plant Personnel to attend as well. Partial NERC CEH Credit will not be issued, but if a student wishes only to attend the PSR Drill they may do so for no fee, however OTP_002 will not issue NERC CEHS for participation in the restoration drill only

Course Material Week 1

- Monday April 17, 2017**
0900-1800 Dynamics of Disturbances (Mike T)
- Tuesday April 18, 2017**
0800-1800 Dynamics of Disturbances (Mike T)
- Wednesday April 19, 2017**
0800-1800 Dynamics of Disturbances (Mike T)
- Thursday April 20, 2017**
0700-1600 DAK PSR Philosophy Overview (Neil L)
DAK Region PSR Drill Using the OTP Power Network Analysis Application (PNNA) (Neil L & Jake H)

Course Material Week 2

- Monday May 1, 2017**
0900-1800 Emergency Operations (Pat E)
- Tuesday May 2, 2017**
0800-1800 Emergency Operations (Pat E)
- Wednesday May 3, 2017**
0800-1800 Emergency Response & Reporting (Pat E)
- Thursday May 4, 2017**
0700-1600 DAK PSR Philosophy Overview (Neil L)
DAK Region PSR Drill Using the OTP Power Network Analysis Application (PNNA) (Neil L & Jake H)

Course Material Week 3

- Monday May 15, 2017**
0900-1800 Transmission Operations (Bill S)
- Tuesday May 16, 2017**
0800-1800 Balancing Authority Operations (Bill S)
- Wednesday May 17, 2017**
0800-1800 Emergency Operations (Bill S)
- Thursday May 18, 2017**
0700-1600 DAK PSR Philosophy Overview (Neil L)
DAK Region PSR Drill Using the OTP Power Network Analysis Application (PNNA) (Neil L & Jake H)

This Training Session is specifically designed to exceed the PSR Training Requirements listing in NERC Standards.

Those wishing to attend the PSR Drill only may do so free of charge; no CEHS will be given.

About the instructors



Mike Terbrueggen
CEO, O-T-S



Mike Terbrueggen was born in Grosse Pointe, Michigan in 1954. He graduated from De La Salle High School in 1972. Upon graduation in 1972 he entered the U.S. Army and was stationed in Colorado Springs, Colorado. He was in the 4th Infantry with the 4th Combat Engineers. He has two daughters, one son, and two grandsons and lives in Longmont, Colorado where, in his spare time, enjoys golfing and hiking. Mike's undergraduate degree is from Michigan and is in Electronics Engineering. His graduate degree is from University of Colorado and is in Power Engineering. Mike formed Operations-Training-Solutions in 1994, is the CEO and Principal Engineer, and designs, develops, and delivers advanced training seminars, develops training programs and materials, and provides consulting services for power operations and engineering personnel.

Registration form

Cost is \$1,100.00 per attendee. This includes breakfasts, breaks, and lunches.

Name _____

Company _____

Billing address _____

Phone _____

Email _____

NERC Cert# _____

Method of payment

Bill me Check

Hotel accommodations

Arrowwood Resort & Conference Center
A block of 25 rooms has been held from Sunday-Thursday for the week. Rooms are blocked under Otter Tail Power Company Training.

- Room rate**
\$94.00 per night
- \$91.00 government rate
- 2100 Arrowwood Lane NW
Alexandria, MN 56308
- Reservations Call 866-386-5263
Resort Direct: (320) 762-1124

Contact person:

Tammy Smith
Otter Tail Power Company
215 South Cascade Street
Fergus Falls, MN 56537
Phone: 218-739-8264
Fax: 218-739-8625
E-mail: tsmith@otpc.com