



Jack Coleman
Instructor

Jack Coleman has 49 years experience in the electric utility industry. In 1970, Jack began his career at Philadelphia Electric Company spending the first

20 years in Electric Production at fossil generating stations. There he gained experience in drum type, once-thru super critical and combustion turbine generating units. Also, he played an active role in the start-up of twin 400 MW oil fired units, as well as in the start-up of the first magnesium oxide flue gas scrubbing plants.

In 1990, Jack moved to System Operations at PECO working in all positions in the Control Center, and eventually accepting the position as the Training Coordinator for System Operations. He was also heavily involved with the PECO Energy Management System Project. For this project Jack created and designed all of the PECO Energy one-line displays and projection mimic boards. As part of this project, he also created lesson plans, scenarios and a tutorial for the operation of the PECO Energy Dispatcher Training Simulator. Jack joined PJM Interconnection in 1998, where he served as a Senior Trainer/Engineer in the Customer Relations and Training Department. There he was heavily involved in the Operator Training Simulator at PJM, developed training scenarios, and acted as the instructor/simulator operator. Along with OTS, Jack was part of a team that provided system operation and markets training to PJM and member company system operators. Specialized training was also provided to generation and transmission operators whose companies integrated into PJM RTO in 2001-2005.

During his career Jack has been an active member of the EPRI OTS User's Group, Past Chairman and Member PJM Dispatcher Training Task Force, IEEE Working Group for Operator Training, NERC Training Resources Working Group, and the NERC Continuing Education Review Panel. Jack is also co-author of the IEEE paper "The Dispatcher Training Simulator at PECO Energy Company". Jack's formal education includes an AAB from Community College of Philadelphia, and attendance at Cabrini and Rosemont Colleges in Organizational Management and Communication Programs.

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Mike Terbrueggen
CEO, O-T-S



Mike Terbrueggen is the CEO and Principal Engineer at Operations-Training-Solutions, which he founded in 1994. He designs, develops, and delivers advanced training seminars, develops training programs and materials, and provides consulting services for power operations and engineering personnel.

Mike received his undergraduate degree in Electronics Engineering from the University of Michigan (Go Blue!) and his graduate degree in Power Engineering from the University of Colorado.

Mike was born in Detroit, Michigan. After high school, he entered the U.S. Army and was stationed at Fort Carson, Colorado. He was in the 4th infantry with the 4th Combat Engineers. Mike has two daughters, one son, and four grandchildren. He lives in Longmont, Colorado, where he enjoys golf, music, and home improvement projects in his spare time.

FALL 2020

DAK-Subregion PSR Drill and Training

HOSTED BY



Primary Business Address
215 South Cascade Street
Fergus Falls, MN 56537

Phone: 218-739-8264
E-mail: tsmith@otpc.com

Week 1: October 5–8
Week 2: October 19–22

Bigwood Event Center
Fergus Falls, MN

2020 DAK-Subregion

PSR Drill and Training

This 32-hour NERC CEH course will cover an in-depth review of the System Protection, Restoration Planning Access and Implement, and many other related PSR Topics. This course will provide an annual review of our region's restoration procedures and will be an opportunity to interact and train next to the individuals you would work with if we ever have to face the actual blackout event within our region. We encourage Power Plant Personnel to attend, as well.

Partial NERC CEH credit will not be issued, but if a student wishes to attend only the PSR Drill they may do so for no fee. OTP_002 will not issue NERC CEHs for participation in the restoration drill only.

Week 1 — Power System Protection

Power System Protection for System Operators is a four-day class illustrating the fundamentals of power system protection and examines the types of protection used for transmission, generation, transformer, substation buses, and those used to maintain stability, voltage and frequency.

Week 2 — Restoration Planning, Assess and Implement

This class is next step in restoration training. Participants will be required to use the basic elements of restoration in a simulated environment. The class will be lecture and group activities (mostly activities). The Power Simulator system will be presented with elements of a real-life system including:

- Critical loads
- Underfrequency protected circuits located throughout the entire system
- Black start generation
- Generation start-up power requirements
- And more

Fall 2020 Course Schedule

Course Material Week 1: October 5–8

MONDAY, 10/5

0900–1800 Power System Protection (Mike T.)

TUESDAY, 10/6

0700–1700 MISO-wide PSR Drill

WEDNESDAY, 10/7

0700–1400 MISO-wide PSR Drill

1400–1700 Power System Protection (Mike T.)

THURSDAY, 10/8

0800–1500 Power System Protection (Mike T.)

Course Material Week 2: October 19–22

MONDAY, 10/19

0900–1800 Restoration Planning, Assess and Implement (Jack C.)

TUESDAY, 10/20

0700–1700 MISO-wide PSR Drill

WEDNESDAY, 10/21

0700–1400 MISO-wide PSR Drill

1400–1700 Restoration Planning, Assess and Implement (Jack C.)

THURSDAY, 10/22

0800–1500 Restoration Planning, Assess and Implement (Jack C.)

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.

Registration

NAME

COMPANY

BILLING ADDRESS

PHONE

EMAIL

NERC CERT#

Fee: \$1,100.00 per attendee

(Includes hotel breakfast, breaks, and lunches)

Method of payment: Bill me Check

Hotel accommodations:

Country Inn and Suites (Bigwood Event Center)

218-739-2211 or 800-830-5222

cx_ffmn@country inn.com

925 Western Avenue, Fergus Falls, MN 56537

A block of 20 rooms has been held from Sunday–Thursday for the week. Rooms are blocked under **Otter Tail Power Company Training**.

Room rate:

\$90.00 for Otter Tail Power Company.

Government rate available upon request.

To register, email this form or contact:

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215 South Cascade Street
Fergus Falls, MN 56537

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