



Specialty Engineering, presents.....

COOPER Power Systems

Voltage Regulator School **2019**

COURSE DESCRIPTION

Sometimes, there's just no substitute for digging in and getting your hands dirty. There's also no substitute for learning from the best. So when it comes to getting the most out of using and maintaining step-voltage regulators, it just makes sense to turn to the people who design and build the best in the business: Cooper Power Systems, makers of industry leading McGraw-Edison® Voltage Regulators.

Presented by Cooper Power Systems and Specialty Engineering, Inc., this course consists of three days of hands-on training sessions and lectures on the testing, troubleshooting and repair of voltage regulators. Participants are encouraged to share their own experiences and work with instructors to develop solutions to specific maintenance and repair problems they have encountered on the job. **The class will also feature Cooper's new CL-7 control, programming and operation.**

WORKSHOP FORMAT

In Three Days, You Will Learn:

Theory and Applications

- Definition of voltage regulators
- Methods of voltage support
- Regulator types (ANSI A&B)
- Schematic (Auto Transformer to SVR)
- Definitions (ANSI, BIL, etc.)
- Connections: Wye, Open Delta, Closed Delta
- Cascading/time delay coordination

Operation and Maintenance

- Receiving, installation and maintenance
- External/internal features
- Troubleshooting and schematics
- Test procedures
- Tap changers
- Troubleshooting and tap changer exercise
- Un-tanking exercise

Controls:

- Nameplate
- Basic control
- Advanced control
- Control set-up exercise

Peripherals:

- Control Replacement Assembly (CRA)
- Service parts manual
- CCI Interface Program
- Data reader

COURSE BENEFITS

Cooper Power Systems offers you factory authorized technical expertise, as well as years of hands-on, in-the-field experience. The result is a unique combination of technical know-how and practical problem-solving skills that participants use every day in their operation of equipment, and repair and maintenance programs.

Voltage Regulator School **2019**

ATTENDANCE:



You'll learn how regulators work, and how to keep them working well.

Who Should Attend:

Anyone who works in electrical transmission and distribution will benefit in some way from knowing the ins and outs of step-voltage regulators. In particular:

- Utility Maintenance Personnel
- Utility Operations Personnel
- Repair Shop Personnel
- Safety Training Personnel
- Distribution System Engineers

REGISTRATION:

Register Early: Space is limited to 25 participants and is reserved upon receipt of payment. Substitutions can be made up to the time of the course.

TUITION:

Tuition is \$1,385.00, which includes:

- Your instruction
- An extensive McGraw-Edison® Step-Voltage Regulator Training Manual
- Breakfast
- Lunch
- Refreshments
- Raffle

TRAVEL/LODGING/ TRANSPORTATION:

Attendees are responsible for their own hotel, transportation and personal expenses. This year's class will be held at the Red Lion Hotel on the River, Jantzen Beach. Daily class, lodging rooms and meals are all onsite of this property. We were able to negotiate a special room rate for students at \$109.00/night. Free shuttle services available, close to restaurants, shopping and MAX light rail stations.

LOCATION/DATES:

LOCATION:

**Red Lion Hotel on the River
909 N Hayden Island Drive
Portland, Oregon 97217**

DATES:

Jan 29, 30, 31, 2019

ADDITIONAL INFORMATION:

For additional information and to register for the class please contact:
Nicole Slattery@ nslattery@spengr.com Phone: 360.553.7311 Fax: 360.693.0592

Voltage Regulator School Registration

January 29, 30, 31, 2019

Required fields are marked with an *

Name: * _____

Title: * _____

Company: * _____

Mailing Address: * _____

City: * _____ State: * _____

Zip/Postal Code: * _____

Phone: * _____

Mobile: _____

Fax: * _____

E-mail of student* _____

How did you hear about this workshop?

Registration Fee: \$1,385.00

Registration Payment

Registrations must be accompanied by payment via check as this class fills up fast. Please reference the following in the subject line of the check:

"Cooper—Regulator School Job# 18-0100"

Please mail your check to:

Specialty Engineering, Inc.
5900 NE 88th Street Bldg B, Ste 205
Vancouver, WA 98665

Class times/Location

8:00am - 4:30pm

Red Lion Hotel on the River, Jantzen Beach

909 Ne Hayden Island Drive Portland Oregon 97217

Classroom: Timberline

Phone: 503.288.4466

Travel Arrangements/Transportation

Please make arrangements to fly into Portland International Airport (PDX). If you are scheduling a return flight on the last day of the class, we recommend that your departure time is no earlier than 7pm.

Host Hotel and Classroom

The host hotel for the class is the Red Lion Hotel on the River, Jantzen Beach, Portland Oregon. Special rooms rates were negotiated for students at \$110/night. Please use reference code: Specialty Engineering when booking. If registering on-line [use this link https://aws.passkey.com/go/special2](https://aws.passkey.com/go/special2)

Meet & Greet Night (Monday night)

All students are invited to the Specialty Engineering hospitality suite. A casual gathering to socialize with hosted food and drinks. 5pm -6:30pm Room : TBA

Refund policy

Substitutions can be made up to the time of the course. If you are unable to locate a substitution, please contact us no less than 30 days prior to the event. If we are able to find a substitution, we will refund your registration fee.

Contact Specialty Engineering, Inc.

For additional information or assistance with registration please contact: **Nicole Slattery**
Phone: 360.553.7311 email: nslattery@spengr.com

