



TECHNICAL TRAINING COURSES



FEBRUARY 4-8, 2019



NASHVILLE,
TENNESSEE

**Underground
Distribution
Systems**

**Advanced
Topics in
Underground
Distribution**

**NEW
CONTENT**

COURSE HIGHLIGHTS

Earn PDHs

Earn 24.75 PDHs for the Underground Distribution Systems class and 6.5 PDHs for the Advanced Topics in Underground Distribution course.



Experienced Instructors

Learn from instructors who have decades of experience in the electric utility industry and understand the specific needs of public power utilities.

Unique Teaching Environment

Instructors incorporate group discussion, check-up quizzes, practical design problems, videos, and Q&A sessions into the courses.

Real-Life Examples

Classes are tailored to public power utilities and incorporate real-life examples. Network with peers from across the country and share experiences.

Utility Tour

Underground Distribution course attendees will tour a local utility's distribution system to observe equipment, operating practices, and practical examples related to classroom discussion.

Who Should Attend

Designed for electric utility engineers, designers, technicians, and field personnel who are responsible for, or who make decisions concerning, distribution systems, as well as those involved in the management, construction, and operations aspects of distribution systems.

Courses are conducted at a practical level and are appropriate for degreed engineers and engineering technicians, as well as non-degreed high school graduates with a general knowledge of the electric utility system.

The Advanced Topics in Underground Distribution is a logical follow-up to the Underground Distribution Systems course. Even if your knowledge of underground distribution is limited or recent, this course will help prepare you to improve your utility's policies, standards, and practices for planning, designing, constructing, operating, and maintaining underground distribution.

For detailed course and instructor information, visit www.PublicPower.org/Academy under **Institutes & Certificates**.

Constructing, Operating, and Maintaining Underground Distribution Systems

Monday, February 4 – Thursday, February 7

Monday – Wednesday: 8 a.m. – 4:30 p.m.

Thursday: 8 a.m. – Noon

Accreditation

Recommended CEUs 2.5/PDHs 24.75/CPEs 29.6

Field of Study: Specialized Knowledge

Course Overview

Learn all about the effective design, construction, operation and maintenance of underground electric distribution systems. Review critical factors involved in the conversion of overhead systems to underground. Tour a local utility's distribution system and participate in guest presentations from manufacturer's application engineers, cable testing engineers, or other industry professionals.

Course Topics

- Policy and service guidelines
- Underground distribution planning, design and layout
- Maintenance practices
- Operations, safety and regulatory requirements
- Cable design and application
- Terminating underground cable
- Fusing and protection
- Review of the 2017 NESC that pertains to underground systems (Part 3) and work practices (Part 4)

Course Level

Basic/Intermediate: no prerequisites; no advance preparation. It is highly recommended that you attend this course in conjunction with the Advanced Topics in Underground Distribution course.

Instructors

Larry Koshire, P.E., President, Koshire Consulting, LLC

Mark Swan, P.E., Principal, MDS Engineering Consulting, LLC

Advanced Topics in Underground Distribution



Thursday, February 7 – Friday, February 8

Thursday: 1:30 – 5 p.m.

Friday: 8 a.m. – Noon

Accreditation

Recommended CEUs .7/PDHs 6.5/CPEs 7.8

Field of Study: Specialized Knowledge

Course Overview

Underground distribution continues to be the installation method of choice in many applications on public power systems. Although the initial installation cost of underground distribution is almost always greater than equivalent overhead distribution, it offers a wide range of advantages.

Learn how to improve your utility's policies, standards, and practices for planning, designing, constructing, operating, and maintaining underground distribution and hear about current and emerging industry trends.

Course Topics

- Making the decision between overhead and underground distribution alternatives, including customer expectations
- Complying with federal and state laws and regulations governing underground distribution design
- Complying with state laws and regulations for the ethical practice of engineering in underground distribution design
- Developing and applying consistent design protocols and documentation (design criteria, construction standards, design documentation, engineering reports, and records management policies/practices)
- The line design process and how to improve it
- Ensuring long-life cable installations
- State-of-the-art cable specification and purchasing
- Cable handling and installation (including cable pulling calculations)
- Extending the life of in-service cable through improved testing, overcurrent and overvoltage protection and thermal loading
- Prioritizing capital and operating expenditures
- Current and emerging industry trends

Course Level

Intermediate: no prerequisites; no advance preparation. Some knowledge of underground distribution systems is helpful. It is highly recommended that you attend this course in conjunction with the Underground Distribution Systems course.

Instructors

M. Thomas Black, P.E., Management Consultant, Collaborative Learning, Inc.

R. John Miner, P.E., President, Collaborative Learning, Inc.

Registration and Hotel Information

Register online at: www.PublicPower.org/Academy
under Institutes & Certificates

Hotel Information

Sheraton Grand Downtown
623 Union Street
Nashville, TN 37219

APPA Room Rate

\$225 Single/Double (plus tax)

Room Rate Cut-off Date

January 14, 2019

Reservations

Contact the hotel reservation line at 615-259-2000 and mention the APPA Winter Institute, or visit www.PublicPower.org/Academy under Institutes & Certificates to make reservations online. Please note: The Association's block of rooms could sell out prior to Jan. 14, so make your hotel reservations early.

Registration Fees

Prices increase \$50 after January 14.

Underground Distribution Systems, Feb. 4 – 7

Association Members	\$1,245
Nonmembers	\$2,490

Advanced Topics in Underground Distribution, Feb. 7 – 8

Association Members	\$ 545
Nonmembers	\$1,090

Registration Fee Discounts

Save \$50 when you register before Jan. 14.

Save \$100 when you attend both courses.

Cancellations/No-Shows/Refunds/Substitutions

Registrants who cancel in writing on or before Jan. 28, 2019, are entitled to a refund of the registration fee, minus a \$50 cancellation fee. Registrants who cancel after Jan. 28, will not receive a refund, but attendee substitutions will be allowed for this

event only. Registrants and no-shows who do not cancel by Jan. 28 are responsible for the full registration fee and are not entitled to a refund.

Cancellations must be made in writing and emailed to: Registration@PublicPower.org.

Travel Arrangements

Travel arrangements and costs are the responsibility of the participants (including hotel parking, WiFi, incidentals, etc.). APPA will not reimburse for changes in travel expenditures regardless of the cause.

Name Badges

Name badges can be picked up at the APPA registration desk at the hotel starting at 7:30 a.m. on the first day of each course.

Confirmations

Confirmations will be sent via e-mail.

Meals

Beverage breaks are included in the registration fee. All meals are on your own.

Questions?

Email EducationInfo@PublicPower.org or call 202/467-2919.

Continuing Education Units

The American Public Power Association is accredited by the International Association for Continuing Education and Training (IACET) and is authorized to issue the IACET CEU.



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NEW
CONTENT



2451 Crystal Drive
Suite 1000
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www.PublicPower.org

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