

2018

# PUBLIC POWER LINEWORKERS RODEO

**APRIL 27-28**  
**RALEIGH/WAKE FOREST • NC**

**RODEO REGISTRATION AND INDOOR VENDOR EXPO**

APRIL 27 • RALEIGH CONVENTION CENTER • RALEIGH, NC

**RODEO COMPETITION AND OUTDOOR VENDOR EXPO**

APRIL 28 • TOWN OF WAKE FOREST • WAKE FOREST, NC

HOSTED BY:



**DON'T MISS  
THE LARGEST  
PUBLIC POWER  
LINEWORKERS  
RODEO ON THE  
PLANET!**

# CELEBRATE YOUR PROFESSION AT THE WORLD'S LARGEST PUBLIC POWER LINEWORKERS RODEO!



Join lineworkers from across the United States and demonstrate your skills and knowledge as you compete on a journeyman team or as an individual apprentice. Show your pride in the craft as you network and learn from the nation's top lineworkers.

**2018**  
**PUBLIC**  
**POWER**  
**LINEWORKERS**  
**RODEO**

APRIL 27-28  
RALEIGH/WAKE FOREST • NC



# wake forest

## ABOUT THE 2018 PUBLIC POWER LINEWORKERS RODEO HOSTS

### ELECTRICITIES OF NORTH CAROLINA

ElectriCities is the energy behind public power. For more than 50 years, ElectriCities has helped NC public power communities provide safe, reliable, and affordable power to their customers. ElectriCities serves more than 1.2 million people in North Carolina public power communities, including 32 members of the NC Eastern Municipal Agency (NCEMPA) and 19 members of NC Municipal Power Agency #1 (NCMPA1). Learn more at [www.electricities.com](http://www.electricities.com).



### NORTH CAROLINA ASSOCIATION OF MUNICIPAL ELECTRIC SYSTEMS

The North Carolina Association of Municipal Electric Systems (NCAMES) is a non-profit association and an affiliate of the NC League of Municipalities. NCAMES promotes the interest and welfare of municipal electric systems in North Carolina by advancing their design, construction, maintenance, administration, and operations. We facilitate relationships between our members and provide opportunities for them to exchange information, ideas, and experiences.



### TOWN OF WAKE FOREST, NORTH CAROLINA

A charming community with a rich heritage, Wake Forest continues its emergence as a major player in the phenomenal growth and activity witnessed throughout the Triangle. Home to over 40,000 residents, Wake Forest maintains its small-town character by captivating newcomers and long-time residents alike with its tree-lined streets, vibrant downtown, popular community events, and friendly people.

Located in northern Wake County, the town is less than 10 minutes from Raleigh, the state capital. The original home of the university that still bears its name, Wake Forest is consistently ranked as one of the safest communities in North Carolina and among the nicest places in the state to live, own a home, and raise a family.



### AMERICAN PUBLIC POWER ASSOCIATION

We are the voice of not-for-profit, community-owned utilities that power 2,000 towns and cities nationwide. We represent public power before the federal government to protect the interests of the more than 49 million customers that public power utilities serve, and the 93,000 people they employ. Our association advocates and advises on electricity policy, technology, trends, training, and operations. Our members strengthen their communities by providing superior service, engaging citizens, and instilling pride in community-owned power.



# AGENDA AT-A-GLANCE

2018 PUBLIC POWER LINEWORKERS RODEO

## FRIDAY, APRIL 27

All events on Friday take place at the Raleigh Convention Center.

**7:30 A.M. – 9:30 A.M.**

### TRAINING COURSE REGISTRATION

**7:45 A.M. – 12:45 P.M.**

### TRAINING COURSES FOR APPRENTICE AND JOURNEYMAN LINEWORKERS

- Keynote Address by Wally Haase **FREE!**
- The Dangers of Backfeed in Line Work
- Meaningful Job Briefings: Safety & Compliance in Harmony
- Transformer Connections
- Best Practices in Storm Restoration and Mutual Aid

**11:30 A.M. – 3:30 P.M.**

### INDOOR VENDOR EXPO

Connect with industry experts and learn about their latest products and services

**11:30 A.M. – 3:30 P.M.**

### RODEO REGISTRATION & SALES

Registration for apprentice, journeyman teams, judges, and greeters/auditors

**2:30 P.M. – 4:00 P.M.**

### JUDGES, GREETERS/AUDITORS MEETING (MANDATORY EVENT)

Judges and greeters/auditors must register prior to this meeting. Judges will proceed to the Apprentice Written Test after this meeting.

**4:00 P.M. – 5:30 P.M.**

### APPRENTICE WRITTEN TEST

Apprentices must register prior to this event and arrive by 4:00 p.m. for the test.

## SATURDAY, APRIL 28

The Rodeo competition takes place in the Town of Wake Forest. The Rodeo Awards Banquet takes place at the Raleigh Convention Center.

**7:30 A.M.**

### OPENING CEREMONY

**8:00 A.M.**

### 2018 PUBLIC POWER LINEWORKERS RODEO COMPETITION

**8:00 A.M. – 2:00 P.M.**

### OUTDOOR VENDOR EXPO

**11:30 A.M. – 1:00 P.M.**

### WRITTEN TEST CHIEF EVENT JUDGE AVAILABLE FOR Q&A

**12:00 P.M. – 5:00 P.M.**

### COMPETITOR CHECK-OUT

**6:00 P.M.**

### RODEO AWARDS BANQUET (TICKETS REQUIRED)

Competitors, judges, volunteers, families, and guests are invited to celebrate the Rodeo winners and participants at the Raleigh Convention Center.

## SUNDAY, APRIL 29 – WEDNESDAY, MAY 2

### 2018 ENGINEERING AND OPERATIONS TECHNICAL CONFERENCE

Extend your stay and attend APPA's Engineering & Operations Technical Conference -- THE national conference for public power professionals who focus on transmission and distribution, environmental policy, generation, safety, SCADA, metering, security, system planning, and supply chain management. You'll learn how public power utilities throughout the United States handle routine T&D projects and special undertakings like reliability, cybersecurity, and distributed energy resources. Visit [www.PublicPower.org/EandO](http://www.PublicPower.org/EandO) for details.

# TRAINING COURSES

Separate registration is required to attend training courses.

## FRIDAY, APRIL 27

**7:45 – 8:15 A.M.**

### OPENING RODEO TRAINING TRACK KEYNOTE ADDRESS **FREE!**

*Registrants for all training tracks are encouraged to attend this free keynote session.*

While most people in the United States can't imagine life without electricity, the reality is that over 15,000 homes on the Navajo Nation — served by the Navajo Tribal Utility Authority — are living without power. This means no refrigeration, modern appliances, or running water, creating a very different life dominated by the need to gather basic necessities to survive. Learn what life on the Navajo nation is like, hear how public power is banding together to help bring power to these homes, and take action to help connect families to the grid on the Navajo Nation.

**SPEAKER: WALLY HAASE**, CHAIR, AMERICAN PUBLIC POWER ASSOCIATION, AND GENERAL MANAGER, NAVAJO TRIBAL UTILITY AUTHORITY, FORT DEFIANCE, ARIZONA

**8:30 A.M. – 10:30 A.M.**

### THE DANGERS OF BACKFEED IN LINE WORK

*Recommended CEUs .2/PDHs 2/CPEs 2.4*

Incorrectly connected generators can backfeed onto the distribution system and create a dangerous condition that can injure lineworkers. Backfeed conditions can exist with a variety of types ranging from single-phase gas/diesel generators to larger three-phase solar installations and behind-the-meter residential solar or wind installations. In this class, you'll explore different aspects of these sources and learn how to ensure the safety of those working on the distribution facilities connected to the generation.

**INSTRUCTOR: BOB RUMBAUGH**, MANAGER OF TECHNICAL TRAINING, AMP, COLUMBUS, OHIO

**8:30 A.M. – 10:30 A.M.**

### MEANINGFUL JOB BRIEFINGS – SAFETY & COMPLIANCE IN HARMONY

*Recommended CEUs .2/PDHs 2/CPEs 2.4*

Job briefing—are we being brief when discussing the job or are we being briefed about the job? OSHA requires that prior to a job the person in charge shall present all the available information that relates to the determination of existing characteristics and conditions. So, what does that mean?

Through case studies of successes and failures, you'll learn how to conduct an appropriate and meaningful job briefing. You'll hear an overview of job briefing requirements and learn about the job briefing format from the perspective of the employee who'll be performing the tasks associated with the job.

**INSTRUCTORS: JOE SCHMIDT**, REGIONAL SAFETY COORDINATOR, AND **BOB SEWELL**, GENERATION AND SAFETY COORDINATOR—MINNESOTA MUNICIPAL UTILITIES ASSOCIATION, PLYMOUTH, MINNESOTA

**10:45 A.M. – 12:45 P.M.**

### TRANSFORMER CONNECTIONS

*Recommended CEUs .2/PDHs 2/CPEs 2.4*

In this course, you'll learn the basics of transformers, three-phase transformer connection, and theory. You'll review the basics of transformers, including turns ratios, polarities, calculations, connections, and troubleshooting. You'll discover the basic three-phase systems with some basic phasor diagrams and the relationship of the phasor to the transformer itself. You'll also learn about basic three-phase connections, delta connection, wye connection, open delta connection, and troubleshooting transformers.

**INSTRUCTOR: SHANE ST. CLAIR**, REGIONAL SAFETY COORDINATOR/JTS INSTRUCTOR, MINNESOTA MUNICIPAL UTILITIES ASSOCIATION, PLYMOUTH, MINNESOTA

**10:45 A.M. – 12:45 P.M.**

### BEST PRACTICES IN STORM RESTORATION AND MUTUAL AID

*Recommended CEUs .2/PDHs 2/CPEs 2.4*

Hear lessons learned and best practices in storm restoration and mutual aid, highlighting recent examples from the record-breaking 2017 hurricane season. Learn about the different stages of restoration and mutual aid from the lineman's perspective, including: crew preparation (proper inventory, assigning roles/responsibilities), coordinating travel (logistics, what to bring, support for crews), response efforts, developing preliminary damage assessments, and power restoration and safety. Receive a step-by-step guide to safe and efficient restoration (switching, tagging, testing, grounding, checking for back feed), tips for troubleshooting overhead and underground lines, dealing with the public, getting home safely, and post-disaster audits.

**INSTRUCTOR: MARK TODD**, CUSP, SENIOR SAFETY & TRAINING SPECIALIST, ELECTRICITIES OF NORTH CAROLINA, INC., RALEIGH, NORTH CAROLINA

Increase your knowledge and skills!  
Register for these training courses  
at [www.PublicPower.org/  
Rodeo](http://www.PublicPower.org/Rodeo).

Before March 17	March 17 – 30
\$75 (each)	\$100 (each)

# JOURNEYMAN AND APPRENTICE COMPETITION EVENTS

## JOURNEYMAN TEAM EVENTS

### JOURNEYMAN MASTER JUDGE

**AARON HADERLE**

*KISSIMMEE UTILITY AUTHORITY, FLORIDA*

### 4KV CROSSARM CHANGEOUT

Teams will replace an 8' fiberglass crossarm and insulators. The two-phase conductors #2 AL will be considered energized at 4kV. A complete set of required hardware will be available on the ground at each event pole. The new crossarm and insulators will be assembled after time starts. Competitors will replace the existing crossarm with new equipment and re-secure conductors with new wrap-lock ties. All insulators must be removed from the crossarm with the nut/square washers back on the stud bolts before the event is considered complete.

**CHIEF JUDGE: MIKE CONYERS, MISSOURI ASSOCIATION OF MUNICIPAL UTILITIES, MISSOURI**

### 4KV FOUR BELL CHANGE OUT

This event is simulated energized at 4kV (rubber gloves). The primary is 1/0 ASCR with #4 CU over arm jumpers on an 8' fiberglass crossarm. This will be a 2 wire 4kV event, no center phase. The objective is to change all 4 dead-end insulators under the mean time in a professional and safe manner. Continuity must be maintained with the "over arm jumper" or by means of a temporary jumper. Adequate covering must be used to protect from violating safe encroachment distances, accidentally energizing hardware, pole, and or crossarms. Tools used for this event must be approved live line tools rated for 4kV or above.

**CHIEF JUDGE: TODD PRANGLEY, SACRAMENTO MUNICIPAL UTILITY DISTRICT, CALIFORNIA**

### SATURDAY, APRIL 28

All events are timed and held on non-energized facilities. Visit [www.PublicPower.org/Rodeo](http://www.PublicPower.org/Rodeo) for full event specifications and answers to frequently asked questions (FAQs).

### HURTMAN RESCUE

This team event will run once, with all team members rescuing the hurtman—one must climb, one must open switch, and one must tag the mannequin. The mannequin will be lowered to the ground while the third team member ties the bottom part of the handline to the mannequin's legs to pull it onto the tarp. Teams must keep the mannequin off the pole and hardware. There will be NO gigs for incidental contact of the mannequin on the pole or neutral conductor provided the tagman is making an honest attempt. The mannequin's whole body must land gently (as if it were human) on the tarp provided.

**CHIEF JUDGE: SHAWN BLOMGREN, HUNTSVILLE UTILITIES, ALABAMA**

You'll be judged on safety, work practices, neatness, ability, equipment handling, and timely event completion.

### 4KV 600 AMP SWITCH REPLACEMENT

This is a 4kV event working with Class II or higher rubber gloves off the pole. The event will be framed with two stitches. The team only needs to replace one of the 600-amp under-slung switch on an 8' crossarm on a 40' pole. The team can choose which switch is changed out and the load cannot be interrupted. The permanent jumpers will have terminal pads mounted on them and bolted to the switch.

**CHIEF JUDGE: TREVOR ROTH, NEBRASKA PUBLIC POWER DISTRICT, NEBRASKA**

### 4KV JUMPER REPLACEMENT

This event will require the team to change out both primary jumpers energized on a 4kV double dead-end on an 8' wood arm construction. Constant continuity must be maintained. The primary jumpers to be replaced will be #4 bare solid copper tied to a polymer pin type insulator with #6 copper. The jumpers will be connected to the primary with hot line clamps. Teams will replace the jumpers and pin type insulators. Insulator pins will remain on the arm during the replacement.

**CHIEF JUDGE: CODY RAVELING, MINNESOTA MUNICIPAL UTILITIES ASSOCIATION, MINNESOTA**

## APPRENTICE EVENTS

### APPRENTICE MASTER JUDGE

**BOB RUMBAUGH**

*AMP, OHIO*

### DOUBLE DEAD-END BELL CHANGE OUT

This is a dead and grounded event. The construction spec will be single-phase, straight-line, double dead-end. There will be a jumper across the top of the pole, tied on the pole top pin. The apprentice will change out both dead-end bells.

**CHIEF JUDGE: GASPARENI DIXON, MEMPHIS LIGHT GAS AND WATER, TENNESSEE**

### HURTMAN RESCUE

This event is a simulation of rescuing an injured co-worker. The apprentice must ascend the pole and safely lower the mannequin to the ground. Time starts at the judge's signal with the apprentice standing at least an arm's length from pole in any direction. Note: The apprentice's belt, hooks, and rubber gloves in bag will be lying on the ground at arm's length.

**CHIEF JUDGE: DAVE DWINELL, DENTON MUNICIPAL ELECTRIC, TEXAS**

# REGISTRATION DEADLINES AND FEES

## APPRENTICE EVENTS

### APPRENTICE MASTER JUDGE BOB RUMBAUGH

AMP, OHIO

### ROPE TOSS

The competitor will throw a rope over an 8' fiberglass crossarm mounted at the top of a 40' pole. The competitor must tie one end to a guy wire using a rolling bends knot. The guy wire is 20' long, and one end is attached to an existing anchor. The rope must be pulled tightly and tied to another anchor using a bowline on a bight with two snub hitches. Rope will be provided and laid out at each event station. The specified knots are the only knots that will be accepted and can be found in the Lineman's and Cableman's Handbook.

**CHIEF JUDGE: JOHN GLIGOR,** SANTEE COOPER, SOUTH CAROLINA

### SIDEWALK GUY

The apprentice will install a new guy wire and sidewalk guy bracket on a partially framed 40' pole. After installing the equipment, the guy will be placed under tension and when completed, judged for proper installation. The apprentice shall return the pole back to normal before exiting the event.

**CHIEF JUDGE: DARIN KOEHLER,** SAN MARCOS ELECTRIC UTILITY, TEXAS

### SATURDAY, APRIL 28

All events are timed and held on non-energized facilities. Visit [www.PublicPower.org/Rodeo](http://www.PublicPower.org/Rodeo) for full event specifications and answers to frequently asked questions (FAQs).

### WRITTEN TEST

This 20-minute written test, based on APPA's Safety Manual for an Electric Utility, 16th edition, determines the apprentice's knowledge of safe work practices. The test takes place on Friday afternoon at the Raleigh Convention Center.

**CHIEF JUDGE: KEITH CUTSHALL,** CLARKSVILLE DEPT. OF ELECTRICITY, TENNESSEE

### SCORING JUDGE

**KEN STONE,** BRAINTREE ELECTRIC LIGHT DEPARTMENT, MASSACHUSETTS

### FREQUENTLY ASKED QUESTIONS (FAQS)

Submit or review questions about events at [www.PublicPower.org/Rodeo](http://www.PublicPower.org/Rodeo) until April 6. After April 6, all questions should be asked onsite.

REGISTER AT [WWW.PUBLICPOWER.ORG/RODEO](http://WWW.PUBLICPOWER.ORG/RODEO)

### APPRENTICE AND JOURNEYMAN TEAMS

Registration Deadline: March 30, 2018

Category	Fee by March 16	Fee March 17 – March 30
Team with judge	\$500 (each)	\$550 (each)
Team without judge	\$600 (each)	\$650 (each)
Apprentice	\$250 (each)	\$300 (each)
Training courses	\$75 (each)	\$100 (each)

### JUDGES, GREETERS, AUDITORS, AND GENERAL VOLUNTEERS

Hard-working volunteers are essential to the Rodeo's success and serve as judges, auditors, greeters, and general helpers. Register to volunteer at [www.PublicPower.org/Rodeo](http://www.PublicPower.org/Rodeo). The deadline to register is April 7, but positions will close as the desired number of volunteers is achieved.



### HOTEL INFORMATION

#### RALEIGH MARRIOTT CITY CENTER

You'll enjoy your stay at the Raleigh Marriott City Center, conveniently located in downtown and connected to the Raleigh Convention Center. You can explore the vibrant surroundings near Historic Oakwood and visit top destinations including PNC Arena, Marbles Kids Museum, and Duke Energy Center for the Performing Arts. Visit Rye Bar and Southern Kitchen for a taste of fresh, locally sourced meals, handcrafted cocktails, and a wide array of local and craft brews. After an eventful day, head to the hotel's elegant rooms, appointed with comfortable workspaces, marble bathrooms, and flat-panel TVs with access to Netflix, Hulu and Crackle. When downtime arises, opt for a swim in the indoor pool or break a sweat in the modern fitness center.

# REGISTRATION AND CONTACT INFORMATION

## HOTEL INFORMATION

### ADDRESS

Raleigh Marriott City Center  
500 Fayetteville Street  
Raleigh, NC 27601

### MAIN TELEPHONE

919-833-1120

### GROUP RATES

\$199 (Single/Double) per night (plus 12.5% tax)

### CHECK-IN

4 p.m.

### CHECK-OUT

Noon

### PARKING

Valet Parking fee: \$30/overnight;  
Day Guests: \$18  
Off-site parking, fee: 3 USD hourly, 12 USD daily

### INTERNET ACCESS

Complimentary wireless internet in sleeping rooms

### RESERVATION CUT-OFF DATE

April 4, 2018. If rooms remain in the block after the cut-off date, the group rate will be honored. If not, you may be charged a higher rate. The room block may sell out before April 4, so register early.

### RESERVATION TELEPHONE

888-236-2427

### GROUP CODE

"American Public Power Association"

### ONLINE RESERVATION LINK

To register, visit [www.PublicPower.org/Rodeo](http://www.PublicPower.org/Rodeo) and click on the hotel tab.

### APPA HOTEL RESERVATIONS CANCELLATION POLICY

Cancelled reservations that are not resold may become a financial liability for the Association, so please make your reservations thoughtfully. If you require additional assistance with housing, please contact Meeting Services at 202-467-2941 or [Meetings@PublicPower.org](mailto:Meetings@PublicPower.org).

## CONTACT INFORMATION

### RODEO REGISTRATION

Patrick O'Rourke  
Phone: 202-467-2986  
Email: [POrourke@PublicPower.org](mailto:POrourke@PublicPower.org)

### GENERAL RODEO QUESTIONS

Giacomo Wray  
Phone: 202-467-2994  
Email: [GWray@PublicPower.org](mailto:GWray@PublicPower.org)

### E&O CONFERENCE

Ursula Schryver  
Phone: 202-467-2980  
Email: [USchryver@PublicPower.org](mailto:USchryver@PublicPower.org)

### HOTEL QUESTIONS

Joy Campbell  
Phone: 202-467-2908  
Email: [JCampbell@PublicPower.org](mailto:JCampbell@PublicPower.org)

### SPONSORSHIP AND VENDOR EXPO

Pamela Cowen  
Phone: 202-467-2903  
Email: [PCowen@PublicPower.org](mailto:PCowen@PublicPower.org)

## DATES TO REMEMBER

### DECEMBER 1

Competitor and volunteer registration opens

### MARCH 30

Competitor and volunteer registration closes

### MARCH 16

Competitor reduced-rate registration ends

### APRIL 4

Hotel reservations deadline

### APRIL 6

FAQs submission deadline

