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PROTECTION, AUTOMATION & CONTROL WORLD CONFERENCE 2026

PAC WORLD AMERICAS
2026

17 - 20 August 2026



PROTECTION, AUTOMATION & CONTROL WORLD
AMERICAS CONFERENCE 2026
Raleigh, North Carolina, USA



Monday 17 August, 2026

Raleigh Convention Center, Raleigh, North Carolina, USA

- 12:00 – 17:00 Conference registration
- 13:30 – 17:00 **Tutorial: "Digital Transformation of the Electric Power"**
 by Dr. Alexander Apostolov, Pascal Francis-Mezger, OMICRON electronics, Austria
- Digital transformation – what, why and how
 - AI and Digital transformation
 - Digital transformation and Asset management
 - Open discussion



Wye Hill Kitchen & Brewing, Raleigh, NC, USA

- 18:00 – 20:00 Welcome Reception

Tuesday 18 August, 2026

Raleigh Convention Center, Raleigh, North Carolina, USA

- 8:30 – 8:45 Conference opening - Dr. Alexander Apostolov, Conference Chairman
- 8:45 – 9:15 Keynote address: "The Intelligent Power Grid"
 Neil Bhagat, General Manager- Grid Strategy and Advancement, Duke Energy

Morning Session TUM Part 1:

Chair: Glenn Wilson, Southern Company, USA

- 9:15 – 9:30 Maximizing Redundancy in Digital Substations - Melvin Moncey Joseph, Burns & McDonnell, USA;
 Craig Wester, GE Vernova, USA
- 9:30 – 9:45 Centralized Protection in Distribution Substations: Testing Modular Relays with Conventional CT, VT Inputs and
 Process Bus Architecture - Juan Santillan, Eric Curiel, Southern California Edison, USA; Alexandr Stinskiy,
 Evandro Oliveira, Siemens, USA
- 9:45 – 10:00 Practical Implementations of Breaker Failure Protection in Digital Substations - Gurleen Kaur, Richard Hunt,
 Danovo Energy Solutions, USA
- 10:00– 10:15 Synchronous Condenser Protection - Jason Eruneo, Duke Energy, USA
- 10:15 – 10:30 Discussions
- 10:30 – 11:00 **Coffee break at the Exhibition areas at the Raleigh Convention Center**

Morning Session TUM Part 2:

Chair: Glenn Wilson, Southern Company, USA

- 11:00 – 11:15 Intent-Based Networking for IEC 61850 Ethernet Networks - Guilhermme Lisboa, Belden, Brazil; Lukas Bechtel,
 Belden, Germany; Davy Haegdorens, Belden, Belgium; Stephan Kehrner, Belden, Germany
- 11:15 – 11:30 IEC 61850 Top-Down Engineering - Keith Gray, Chris Dyer, WSP, USA; Jonathan Doroh, Glenn Wilson,
 Southern Company, USA
- 11:30 – 11:45 Initial Results of Testing Redundant Time Synchronization and Recovery Analysis of Protective Relays -
 Pascal Francis-Mezger, OMICRON electronics, USA; Geshan Wrosinghert, Meinberg USA, USA
- 11:45 – 12:00 Distributed Bus Protection Using Process Bus for a Large Transmission Substation at Duke Energy -
 Arun Shrestha, Md Aamir Rahmani, Mauricio Silveira, Schweitzer Engineering Laboratories, Inc., USA;
 Stephen B. Ladd, Taylor I. Raffield, Duke Energy, USA
- 12:00 – 12:15 Multiple approaches to reduce SCL Engineering effort of an IEC61850 Digital Substation - Sterin Jose,
 ASE / Kalkitech, USA
- 12:15 – 12:30 Discussions

12:30 – 13:30 **Lunch break** at the Exhibition areas at the Raleigh Convention Center

Afternoon Session TUA Part 1:

Chair: Craig Wester, GE Vernova, USA

13:30 – 14:30 **Topic:** Emerging Trends in Digital Substation

Utility Panel:

- Jonathan Sykes (Danovo) – Moderator
- Brant Heap (SRP)
- Glenn Wilson (SoCo)
- Shashank Bodhankar (PG&E)

14:30 – 15:30 **Topic:** Data Center Integration – Protection and Control Issues and Solutions

Utility Panel:

- Damir Novosel (DASH Power Partners) – Moderator
- Scott Bricker (PG&E)
- Zheyuan Cheng (Danovo Energy Solutions)
- Alex Apostolov (PAC World)

15:30 – 16:00 **Coffee break** at the Exhibition areas at the Raleigh Convention Center

Afternoon Session TUA Part 2:

Chair: Craig Wester, GE Vernova, USA

16:00 – 16:15 Wildfire Challenges and Mitigation on Distribution Feeders: Practices and Experience at Xcel Energy - Ryan Ebarb, Aaron Mead, Tyler McGrath, Xcel Energy USA; Howard Self, Bob Zarovniaev, Akram Saad, Geneve Lauby, Mayur Baviskar, Mathias Ng, Danovo Energy Solutions, USA

16:15 – 16:30 Merits of Application-Focused Process Interface Units - Wayne Hartmann, GE VERNOVA, US; Chee-Pinp Teoh, John Wright, GE VERNOVA, UK; Philippe Brun, GE VERNOVA, France; Hung Hoang, Dang-Thoang VO, GE VERNOVA, Vietnam

16:30 – 16:45 Twenty Years of Centralized Remedial Action at Southern California Edison: Architecture, Operational Lessons, and the Emerging Grid Control Platform - Bill Zhang, Obinna Obah, Ronald Lim, Steve Guerrero, Southern California Edison, USA; Joel Greene, SISCO, Inc., USA

16:45 – 17:00 A Survey of Fault Studies with a Large IoT Power Quality Sensor Network - James Anderson, Ting Labs, USA; Theo Laughner, Lifescale Analytics, USA; Bob Marshall, Joe McNulty, Ting Labs, USA

17:00– 17:15 Distribution Grid Fleet Management - Peter Noglik, Hitachi Energy, Germany; Galina S. Antonova, Hitachi Energy, Canada

17:15 – 17:30 Discussions

17:30– 19:30 or later **PAC Demo Hour⁺** at the Exhibition areas at the Raleigh Convention Center

Wednesday 19 August, 2026

Raleigh Convention Center, Raleigh, North Carolina, USA

Morning Session WEM Part 1:

Chair: Galina Antonova, Canada

8:30 – 8:45 How to ensure that a Digital Substation is deployed and running with right configuration? - Sterin Jose, ASE / Kalkitech, USA

8:45 – 9:00	CT Saturation Impact on Busbar Differential Protection: Interactive Transient Closed-Loop Simulation for Protection Setting Optimization - Thalisson Moreira, John Brandao, Jorge Damasceno, L.C. Grilo, Joao Jorge
9:00 – 9:15	Adaptive Boundary-Seeking Test Generation for Protection Systems: A Vendor-Neutral Framework for Scalable Validation - Dhanabal Mani, Abel Gonzalez, Megger, USA; Christopher Ness, Megger – Canada
9:15 – 9:30	IEC 61850: Some Assembly Required - Craig Preuss, Muhammad Hamid, Black & Veatch, USA
9:30 – 9:45	Advancements in Line Protection: Model-Based Line Differential Protection - Zoran Gajic, Samir Aganovic, Reijo Pajunen, Hitachi Energy, Sweden; Mike Kockott, Mena Fahmy, Hitachi Energy, USA
9:45 – 10:00	IEC 61850 - From Protection to Prediction: The Evolution of Substation Data Use - Glenn Wilson, Jonathan Doroh, Southern Company, USA
10:00 – 10:15	Discussions

10:15 – 10:45 **Coffee break at the Exhibition areas at the Raleigh Convention Center**

Morning Session WEM Part 2:

Chair: Galina Antonova, Canada

10:45 – 11:00	Securing the Digital Substation: Encryption, IEC 61850 and the Journey to Quantum-Safe Utility Communications - Mauricio Subieta, Kenneth Rabedeau, Nokia, USA
11:00 – 11:15	How to Eat the Elephant: How to Ease Into Your Digital Substation Adoption - Chris Dyer, Keith Gray, Lily Stover, WSP, USA
11:15 – 11:30	Upgrading High-impedance Bus Differential Protection - Daniel L. Ransom; GE Vernova; USA
11:30 – 11:45	Optimizing Auto reclosing in Line and Cable, Mixed Feeder - Amir H. Soroush, SIEMENS, USA
11:45 – 12:00	Modernizing Transmission Grid Operations: Implementing Secure Remote Access and Automated Data Collection with NTCSC's Engineering and Data Concentrator Solutions (EADS) - Kgomotso Manyapetsa, Elekanyani Mugivhi, Sibusiso Mkhatswa, Eskom NTCSC, South Africa; Sunny Wong, SUBNET Solutions Inc., Canada
12:00 – 12:15	Precision Time Protocol (PTP) Cyber Security Update - Herbert Falk, OTB Consulting Services, USA; Werner Abt, Meinberg, USA
12:15 – 12:30	Discussions

12:30 – 13:30 **Lunch break at the Exhibition areas at the Raleigh Convention Center**

Afternoon Session WEA Part 1:

Chair: Rich Hunt, Danovo Energy, USA

13:30 – 14:30	Topic: Commissioning an IEC 61850 Substation Utility Panel: ■ John Bettler (Johnny P&C, LLC)– Moderator ■ Zeus Xioco (Tesco Automation) ■ Jonathan Doroh (Southern Companies)
14:30 – 15:30	Topic: Edge Analytics for Grid Monitoring: Extracting Value from PMU, PQ, and Sensor Data Utility Panel: ■ David Hart (Danovo Energy Solutions) – Moderator ■ Jim Follum (PNNL) ■ Jared Bestebreuer (SEL) ■ Kat Sico (Duke Energy)

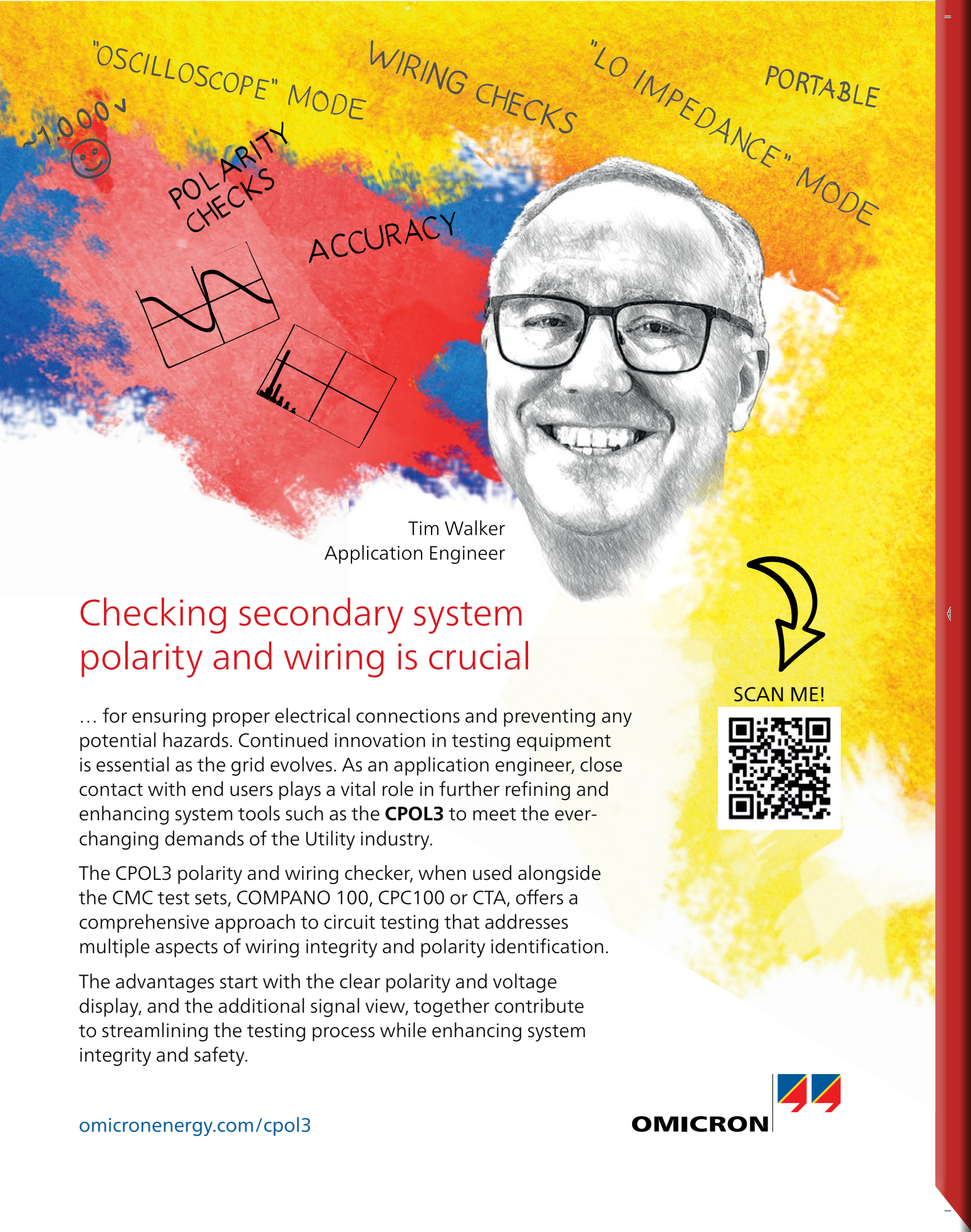
15:30 – 16:00 **Coffee break at the Exhibition areas at the Raleigh Convention Center**

Afternoon Session WEA Part 2:**Chair: Rich Hunt, Danovo Energy, USA**

- 16:00 – 16:15 Network Engineering and Testing of an IEC 61850-Based Distributed Busbar Protection Scheme - Md Aamir Rahmani, Schweitzer Engineering Laboratories, Inc., USA; Wesley Roberto, Schweitzer Engineering Laboratories, Inc., BR; Ali Khan, Mauricio Silveira, Arun Shrestha, Schweitzer Engineering Laboratories, Inc., USA
- 16:15 – 16:30 From Analog CT, PT to Digital Process Bus - Hardware-in-the-Loop Protection Studies for Inverter-Dominated Transmission Systems - Alex Stinskiy, Ulrich Muenz, Abhishek Banerjee, Suat Gumussoy, Swen Elpelt, Siemens, USA; Steve Sano – Hawaiian Electric, USA; Tapas Barik – EPRI, USA
- 16:30 – 16:45 GGIO is GOOD Actually, Rich Hunt, Danovo Energy Solutions, USA
- 16:45 – 17:00 Automatic Transfer Switch over wireless communication - Nic DiFonzo, G&W Electric, USA; Fionan Burke, Hitachi Energy, USA; Galina S. Antonova, Hitachi Energy, Canada
- 17:00– 17:15 Six-Phase Transmission - What? Why? & How? - Alex Apostolov, PAC World, USA
- 17:15 – 17:30 Discussions
- 18:00 **Conference Gala Dinner at the North Carolina Museum of Natural Sciences - Daily Planet, Raleigh, NC, USA**

Thursday 20 August, 2026**Raleigh Convention Center, Raleigh, North Carolina, USA****Morning Session THM Part 1:****Chair: Alex Apostolov, PAC World, USA**

- 8:30 – 8:45 Characteristic vs Input – An Analysis of Impedances in Power Line Carrier Channels Applied Over High-Voltage Power Transmission Lines - Craig Palmer, PowerComm Solutions, USA
- 8:45 – 9:00 Series-Capacitor Line Protection—Fundamentals and New Challenges - Daniel L. Ransom, GE Vernova, USA
- 9:00 – 9:15 Rethinking Commissioning for a Digital Substation: From Field to Factory - Priya Raghuraman, Rich Hunt, Danovo Energy Solutions, USA
- 9:15 – 9:30 UCA update - Joel Greene, UCAiug, USA
- 9:30 – 9:45 Centralized and Virtualized Protection Architectures for Digital Substations: Concepts, Testing, and Practical Considerations - John Brandao, Siemens, USA; Thalisson Moreira, Jorge Damasceno, Siemens, Brazil; Evandro de Oliveira, Siemens, USA
- 9:45 – 10:00 Open-Source Approaches to IEC 61850 Engineering: A Case Study - Axel Perales, Meinberg USA, USA
- 10:00 – 10:15 Discussions
- 12:30 – 13:30 **Lunch & Networking in the Exhibition Areas**
- 13:30 **Closing of the Conference**



Tim Walker
Application Engineer

Checking secondary system polarity and wiring is crucial

... for ensuring proper electrical connections and preventing any potential hazards. Continued innovation in testing equipment is essential as the grid evolves. As an application engineer, close contact with end users plays a vital role in further refining and enhancing system tools such as the **CPOL3** to meet the ever-changing demands of the Utility industry.

The CPOL3 polarity and wiring checker, when used alongside the CMC test sets, COMPANO 100, CPC100 or CTA, offers a comprehensive approach to circuit testing that addresses multiple aspects of wiring integrity and polarity identification.

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Fred Steinhauser
IEC 61850 Expert

What's going on in my Substation Automation System and SCADA?

As an expert in the IEC 61850 world, I know how important testing SAS and SCADA are. StationScout provides a really simple and clear overview of the communication within automation and control. Both the behavior of IEDs and all signals transmitted are visualized transparently. The dedicated powerful test set establishes a cyber-safe connection to the station network. StationScout is the ideal tool during the entire lifecycle of digital substation systems.



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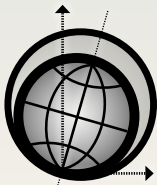


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- Supports System Lifecycle including Design, Factory Acceptance Testing, Commissioning and Maintenance Phases of the Substation.



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Welcome Reception - at the Wye Hill Kitchen & Brewing

Monday, August 17, 2026, 6:00 – 8:00pm

To start off the PAC World Conference, we enjoy getting together to catch up and get to know others who are joining the conference. We will provide light appetizers and refreshments to enjoy.

The reception is included in your registration fee. You will need to wear your badge to attend.

Wye Hill Kitchen & Brewing

201 S Boylan Ave, Raleigh, NC 27603

<https://wyehill.com/>



PAC Demo Hour+

Tuesday, August 18, 2026 @ 5:30pm – 7:30pm or later...

We are so excited to invite you to visit the PAC World Americas Conference exhibition area for a fantastic opportunity for you to spend quality time viewing detailed demos and information.

PAC World is opening up the exhibition area of the Conference to all PAC specialists who are interested to meet with our exhibitors – even those who are not registered for the conference.

Come by and see us!

Enjoy some lite munchies and drinks while you see a demo, learn about what's new, and talk to our exhibitors at no registration charge to you..

PAC Demo Hour+

at Raleigh Convention Center Exhibition Area



Gala Dinner - at the North Carolina Museum of Natural Sciences - Daily Planet

Wednesday, August 19, 2026, 18:00 – 22:00

Join us for our Gala Dinner, where we always have a great time and a great meal!

Plus, we will have some fun entertainment afterward..

This dinner is also when all the photo contest awards are announced, including the popular vote.

Such a fun time to mingle with others from the PAC Community

The North Carolina Museum of Natural Sciences - Daily Planet

11 W Jones St, Raleigh, NC 27601

<https://www.naturalsciences.org/>

the Gala Dinner is kindly sponsored by: OMICRON electronics

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Conference coordinator:

Angela Sayegh (PAC World, USA)

For any issues and questions related to the organization of the PACW Americas Conference please e-mail to Angela Sayegh at: angela.sayegh@pacw.org

Advisory Committee:

To ensure that the PAC World magazine and conference are at a high level that meets the needs of the industry, we have invited world known experts in the field of electric power systems protection, automation and control as members of the magazine Advisory Board and the conference Advisory Committee.

They help us with their ideas, comments and suggestions to improve the content and quality of the magazine and the conference.

The members of the PAC World Advisory Board and the PAC World Conference Advisory Committee are (in alphabetical order):

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We want to say "Thank you!" to the people and companies that made PAC World Americas 2026 happen.

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Thank you, All