



## Agenda

### Tuesday | May 14, 2019

- 1:00 Registration
- 1:30 Welcome, Agenda Overview, and Speaker Introductions  
Eugenio Carnevali, OMICRON
- 1:45 Tutorial #1:  
IEC 61850 Basic Concepts and Data Models  
Alex Apostolov, PACWorld
- 3:00 Coffee Break and Tech Talk
- 3:30 Tutorial #2:  
IEC 61850 Communication: Client/Server, GOOSE, and Sampled Values  
Fred Steinhauser, OMICRON
- 4:45 Tutorial #3:  
SCL Engineering Process: Concepts and Practical Example  
tba.
- 6:00 Welcome Reception

**Wednesday | May 15, 2019**

- 8:00 Continental Breakfast
- 8:30 Welcome and Agenda Overview  
Wayne Bishop, OMICRON
- 8:45 Keynote:  
The Evolution of IEC 61850  
Alex Apostolov, PACWorld
- 9:30 ComEd's Experiences Designing and Implementing IEC 61850  
John Bettler, ComEd
- 10:15 Coffee Break and Tech Talk
- 10:45 Centralized vs distributed PAC systems leveraging IEC 61850  
Benton Vandiver, ABB
- 11:15 Break-out session – Demonstration #1:  
Testing the IED Functions and How to Isolate the Devices Under Test  
OMICRON
- 12:15 Lunch
- 1:30 Removing Obstacles to Use GOOSEs Over Wireless Communication Through  
Innovative Solutions  
Andre Smit, Siemens
- 2:00 Break-out Session – Demonstration #2:  
Testing the Automation, Control, and SCADA Communication  
OMICRON
- 3:00 Coffee Break and Tech Talk
- 3:30 Applications of R-GOOSE  
Surendra Pandey, GE
- 4:00 Cybersecurity on the Grid 101  
Eduardo Cotilla-Sanchez, Oregon State University
- 4:30 Attacking an IEC 61850 Substation  
Fred Steinhauser, OMICRON
- 5:00 Surprise Announcement – Experience the Prototype of a Future Product  
tba.
- 5:30 Dinner and Entertainment

**Thursday | May 16, 2019**

- 8:00 Continental Breakfast
- 8:30 Welcome and Agenda Overview  
Wayne Bishop, OMICRON
- 8:45 Network Engineering  
Robbie Rai, Siemes Ruggedcom
- 9:15 Break-out Session – Demonstration #3:  
Troubleshooting a Process Bus Application  
OMICRON
- 10:15 Coffee Break and Tech Talk
- 10:45 IEC 61850-9-2 Process Bus Line Protection Performance and Comparative Methodology  
Jose Franco, HVM Engineers
- 11:15 Improve Protection Communications Network Reliability Through Software-Defined  
Process Bus  
David Bowen, SEL
- 11:45 Lunch
- 1:00 Break-out Session – Demonstration #4:  
System-Based Protection Testing in Digital Substations  
OMICRON
- 2:00 Workshop Wrap-Up and Final Words  
Eugenio Carvalheira, OMICRON
- 2:15 Adjourn