

POWER IN DISCOVERY



**2022 IEEE PES T&D
CONFERENCE
AND EXPOSITION
PRE-SHOW PLANNER**



**IEEE PES
T&D**
CONFERENCE
& EXPOSITION



APRIL 25-28, 2022 | NEW ORLEANS



WELCOME

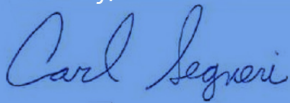
It is with great anticipation and excitement for this moment in our industry's history that I want to extend an invitation for you to join us in New Orleans for the 2022 IEEE PES T&D Conference and Exposition.

It came as no surprise to me that all of you rose to the challenge over the last few years to deliver critical services to keep individuals, businesses, and communities moving. Be sure to join us this April as we prepare for what lies ahead, including exploring new ways to tackle key issues around climate disruption, the electrification of infrastructure, and the impact of broadband and big data on energy outcomes.

We have an excellent lineup of experts and practitioners joining us this year, as well as several new experiences planned on the exhibit floor, all designed to help chart the future design and development of the grid. And we'll be sure to celebrate in ways only possible in the great city of New Orleans.

Trust me when I say this will be a T&D you won't want to miss.

Sincerely,

A handwritten signature in dark blue ink that reads "Carl Segneri". The signature is fluid and cursive, with the first letters of each name being capitalized and prominent.

Carl Segneri

IEEE PES T&D Director NA Conferences

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Wayne Bishop IEEE PES Vice President, Meetings
Tim Licitra IEEE PES Executive Director
Carl Segneri IEEE PES North America, T&D Director

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Kevin Geraghty	Carl Segneri

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The 2022 IEEE PES T&D Conference and Exposition would like to thank and recognize the following companies that have generously sponsored portions of this year's conference.

ABB Inc.

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SCHEDULE AT A GLANCE

SUNDAY, APRIL 24

8:00am – 5:00pm	ISGT Tutorials and Onsite Registration
12:00pm – 5:00pm	Onsite T&D Registration Open

MONDAY, APRIL 25

7:00am – 5:00pm	Registration Open
7:30am – 5:00pm	Tutorials, Plain Talk, Ethics Session, Building Business Relationships Workshop
8:30am – 10:30am	ISGT Opening Session, Keynote and Plenary Session
9:00am – 2:30pm	Technical Tours
11:00am - 12:30pm	ISGT Sessions
1:30pm – 3:00pm	ISGT Sessions
3:30pm – 5:00pm	ISGT Plenary Session
6:00pm – 9:00pm	Conference Opening Reception at Mardi Gras World

TUESDAY, APRIL 26

7:00am – 5:00pm	Registration Open
7:30am – 5:00pm	Plain Talk
8:00am – 9:45am	Opening Session: How the Past is Powering the Future
10:00am – 11:30am	ISGT Keynote and Plenary Session
10:00am – 3:00 pm	Technical Panel Sessions
10:00am – 5:00pm	Exhibits Open/Innovation Stages & Smart Cities Pavilion
11:30am – 1:00pm	Conference Luncheon in the exhibit hall
1:00pm – 2:30pm	ISGT Sessions
3:00pm – 5:00pm	Super Session 01: Exploring the Roadmap of Data Analytics and Artificial Intelligence for the Future Grid

WEDNESDAY, APRIL 27

7:00am – 5:00pm	Registration Open
7:30am – 5:00pm	Plain Talk
8:00am – 10:00am	Super Session 02: Preparing for Anything: Resilient System Design
9:00am – 4:00pm	Technical Tours
10:00am – 6:00pm	Exhibits Open/Innovation Stages & Smart Cities Pavilion
1:00pm – 2:30pm	ISGT Sessions
1:00pm – 5:00pm	Technical Panel Sessions
3:00pm – 4:30pm	ISGT Plenary Session
4:30pm – 6:00pm	Networking Reception in the exhibit hall
5:00pm – 7:00pm	Poster Session and Reception / Student Posters and ISGT Posters

THURSDAY, APRIL 28

7:00am – 2:00pm	Registration Open
8:00am – 10:00am	Super Session 03: Decarbonization and Grid Modernization
8:30am – 10:00am	ISGT Keynote and Plenary Session
10:00am – 3:00pm	Exhibits Open/Innovation Stages & Smart Cities Pavilion
10:00am – 12:00pm	Technical Panel Sessions
10:30am – 12:00pm	ISGT Sessions
1:00pm – 3:00pm	ISGT Plenary and Closing Sessions
1:45pm – 2:30pm	High School Power Challenge & Collegiate Poster Boards Awards
3:00pm – 4:00pm	Closing Reception and Raffle: Welcome to Anaheim in 2024!

SHOW OVERVIEW

TECHNICAL PROGRAM

Monday, April 25 – Thursday, April 28

From cyber security and renewable energies and storage to integrating DERs and advanced grid controls, this year's Technical Program will deliver an unprecedented combination of more than 100 technical sessions featuring the hottest topics surrounding our industry. Join energy sector executives, engineers, and thought leaders for a dynamic line-up of Super Sessions, Panel Sessions, and Tutorials you'll only find at T&D. You can even capture Professional Development Hours (PDH) by attending Technical Sessions, with Continuing Education Units (CEU) available for Tutorials, Plain Talk, and Building Business Relationships courses. Details on how to obtain these certificates will be provided at the conference.

CONFERENCE OPENING RECEPTION

Monday, April 25 – 6:00pm – 9:00pm

Everyone knows that New Orleans knows how to party, so plan for a great Opening Reception to kick off the 2022 IEEE PES T&D Conference, Monday evening April 25th, 6:00pm-9:00pm. The celebration will take place at Mardi Gras World where you'll savor the tastes of the city in specialties from gumbo and grits to bread pudding and beignets. You will see the parade floats, toast old friends with a hurricane, and meet new ones. As they say, "LAISSEZ LES BONS TEMPS ROULER!" Let the good times roll!

OPENING SESSION

Tuesday, April 26 – 8:00am – 9:45am

Make sure your travel plans will get you to the Morial Convention Center on Tuesday morning at 8:00am to hear the Opening Session. The session title, "How the Past is Powering the Future", is a hint of what the hour will hold for you! The casual group of power and energy industry leaders will be moderated by IEEE PES Governing Board President Jessica Bian. Please visit IEEE-T-D.org or follow us socially at @IEEETandD for special announcements on the 2022 Opening Session.

EXHIBIT HALL

Tuesday, April 26 – Thursday, April 28

With over 700 exhibitors from across the globe under one roof, there's simply no better place to explore the newest technologies, products, and services covering every aspect of transmission and distribution.

CONFERENCE LUNCH

Tuesday, April 26 – 11:30am – 1:00pm

Enjoy lunch as you walk around the exhibit hall while exploring real-world applications and the emerging technology and product solutions key to our industry's future success.

NETWORKING RECEPTION

Wednesday, April 27 – 4:30pm – 6:00pm

Engage and mingle with leading product specialists, experts, and industry leaders over hors d'oeuvres and beverages during the exhibit hall Networking Reception.

Sponsored by:

ABB Inc.
Burns & McDonnell
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Schweitzer Engineering Laboratories, Inc
United Engineers & Constructors

T&D POSTER SESSION AND RECEPTION / STUDENT POSTERS AND ISGT POSTERS

Wednesday, April 27 – 5:00pm – 7:00pm

The Poster Session and Reception provides a relaxed environment for registered conference attendees to enjoy hors d'oeuvres and beverages while viewing nearly 100 accepted papers in poster format. Here you'll have the opportunity to speak with the authors and even tour competing papers from the Student Poster Contest.

CLOSING RECEPTION

Thursday, April 28 – 3:00pm – 4:00pm

Don't miss your chance to win one of many great prizes during the Closing Reception. Join us for the festivities as we raise a glass to thank the New Orleans team for a great show and welcome the 2024 T&D Anaheim Local Organizing Committee.

NEW IN 2022!

SMART CITIES PAVILION

Tuesday, April 26 – Thursday, April 28

Around the globe we're undoubtedly facing serious challenges on issues such as climate change, increasing congestion, food insecurity, education, economic development, health and public safety, to name a few. The Smart Cities Pavilion, developed in partnership with IEEE Smart Cities, will feature utility and city case study exhibits to showcase effective collaborations working to make smarter cities a reality by leveraging technology such as smart street lighting, advanced electric vehicle charging infrastructure, sensors, and more. Explore this new and exciting pavilion to see what's worked and what's next, as well as connect with the companies dedicated to leading smart city transformation. Learn more at ieeet-d.org/smartcities.

Premiere Sponsors:

ABB

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INNOVATION STAGES

Tuesday, April 26 – Thursday, April 28

Conveniently located on the show floor, the Innovation Stages provide a unique forum where state-of-the-art technologies will be debuted and practical product applications discussions will take place. While on stage, presenters will share case studies that offer insights into emerging trends and share valuable best practices. Learn more at ieeet-d.org/innovation.

INTEGRATED SMART GRID TECHNOLOGIES (ISGT) MEETING

The 2022 IEEE PES T&D Planning Committee is pleased to welcome the 13th ISGT meeting to New Orleans, which provides a unique chance for shared education and networking opportunities. While the two events will maintain separate registration and technical programming, attendees will have access to both, ensuring a broader alignment on innovative approaches and new technologies impacting the energy grid. Learn more at <https://ieeet-d.org>.

COLLEGIATE AND YOUNG PROFESSIONAL PROGRAM

Offering an exciting and comprehensive schedule of student and young professional sessions and activities, the Collegiate Program is designed to help new talent launch successful careers in the power and energy industry. For a complete schedule of student and young professional activities visit IEEE-T-D.org/student.

PLAN YOUR SHOW AND STAY



New Orleans Is Open For Business. T&D Will Be There To Welcome You.

The health and well-being of IEEE PES T&D attendees remains our top priority. By working closely with the Ernest N. Morial Convention Center and Federal, State and Local public health officials, we will incorporate current best practices to provide you with the best level of protection at the 2022 IEEE PES T&D Conference & Exhibition.

Visit ieeet-d.org/healthguidelines for the latest.

LOCATION

The 2022 IEEE PES T&D Conference and Exposition will be located at the Ernest N. Morial Convention Center, New Orleans, Louisiana. For directions and other useful information visit <https://mccno.com/>.

REGISTRATION

To take advantage of Early Bird pricing, register by March 27, 2022. Online: ieeet-d.org / Questions: 508.743.8573

HOTEL RESERVATIONS

We've partnered with Connections Housing to provide the lowest rates at over 20 major hotels in prime locations. While some of the hotels are within walking distance to the convention center, most will be serviced by complimentary shuttle buses starting Monday, April 25 and running through Thursday, April 28.

Book by March 28, 2022

Online: [IEEET-D.org](https://ieeet-d.org)

Telephone: (470) 737-1919

Email: ieeehousing@connectionshousing.com

HOUSING ASSISTANCE



Be sure to look for the official T&D housing logo to ensure you are receiving the best rates and service. Connections Housing is available if you need assistance or have any questions while booking your hotel room.

EXPLORE NEW ORLEANS

Make the most of your stay by visiting <https://nola.gov/> to discover New Orleans's many culinary, entertainment and shopping experiences.

TECHNICAL PROGRAM OVERVIEW

SUPER SESSIONS

The Super Sessions will bring together industry thought leaders to discuss and explore topics of particularly high interest that are vitally important to the future of the power industry.

PANEL SESSIONS

50 Panel Sessions will provide comprehensive discussions on a broad range of important trends, solution-oriented topics, and real-world applications being applied both domestically and globally.

TUTORIALS

Tutorials provide an in-depth look at topics important to power and energy professionals. Special paid registration is required and lunch is provided for all ticket holders. Space fills up quickly.

*CEUs available

T&D POSTER SESSION AND RECEPTION / STUDENT POSTERS AND ISGT POSTERS

View nearly 100 accepted papers, meet with the authors, and tour competing papers from the Student Poster Contest while enjoying hors d'oeuvres and beverages. To view the current list of accepted papers for 2022, please visit ieeet-d.org/papers. See page 18 for this year's review committees.

TECHNICAL TOURS

A variety of exciting Technical Tours will offer participants hands-on informative tours and demonstrations. Special paid registration is required and space is limited.

PLAIN TALK

IEEE Plain Talk courses for the power industry professional provide a greater understanding of the technical aspects of the electric power industry, even if you do not have an engineering background. Gain insights into concerns of engineers, the demands of regulators and consumer groups, and the factors and trends that impact the operation of today's electric power systems. These courses are also appropriate for new engineers to the industry and engineers in other fields who are transitioning to the electric power industry and aim to increase their understanding of the electric power system by providing practical knowledge that can be used to work in or with this important industry.

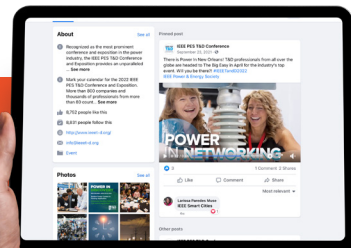
*CEUs available

BUILDING BUSINESS RELATIONSHIPS WORKSHOP

Building Business Relationships guides participants to gain valuable insights about themselves and others by discovering actionable ways to build more effective relationships with others. Through the use of a self-assessment, participants receive detailed information regarding their style and how best to work with other styles to create more effective and productive relationships. The intended result is improved communication, reduced conflict, increased engagement, improved organization effectiveness, team collaboration, and enhanced leadership capability.

*CEUs available

Follow us @IEEEETandD for special
announcements and show highlights



TECHNICAL PROGRAM

MONDAY, APRIL 25



TUTORIALS

*Box lunch included at 12:00pm

Early Bird Cost: Full Day \$295 | Half Day \$195

Student discounts available.

Take advantage of these early-bird discounts!

Higher rates go into effect on 3/28/22.

TUT-01

**OT Cybersecurity Best Practices
for Procurement**

8:00am – 5:00pm

TUT-02

**Grid Energy Storage Technology
and Applications**

8:00am – 5:00pm

TUT-03

**Distribution Automation and Management
Systems with High Penetration of DERs, IBRs,
and Microgrids**

8:00am – 5:00pm

TUT-04

**Stabilizing the Future Transmission
Grid Using Dynamic Var Technologies**

8:00am – 5:00pm

TUT-05

**Grounding Design and Analysis for Personnel
Safety in Wind and Solar Power Plants**

8:00am – 12:00pm

TUT-06

**Protection and Control with Digital Switchgear:
The Foundation for Safety, Reliability, and
Flexibility**

1:00pm – 5:00pm

TUT-07

GIS / GIL Hot Topics for Tomorrow's Grid

8:00am – 12:00pm

TUT-08

DNP3: SCADA, Clear and Simple

1:00pm – 5:00pm

TUT-09

Asset Management 101

8:00am – 12:00pm

TUT-10

Emergency Restoration of Transmission Lines – Planning, Approach, and Methodologies

8:00am-12:00pm

TUT-11

Cybersecurity-Focused Verification and Validation: A Streamlined Approach

1:00pm – 5:00pm

TUT-12

Analysis of Power Electronic-Based Transmission Technologies to Maximize Grid Utilization and Accelerate the Energy Transition

8:00am-12:00pm

TUT-13

Digital Condition-Based Asset Management Systems

1:00pm - 5:00pm

IEEE PLAIN TALK

Power System Basics: Understanding How the Bulk Electric Power System Works

7:30am – 5:00pm

BUILDING BUSINESS RELATIONSHIPS

IEEE Building Business Relationships Workshop

Morning Session: 8:30am - 12:00pm

Afternoon Session: 1:00pm - 4:00pm

Cost: IEEE Members \$250 | Non-Members \$300

TECHNICAL TOURS

TT-02

Laser Interferometer Gravitational Wave Observatory (LIGO)

9:30am – 2:30pm

Cost: \$50 *Proof of vaccination required

TT-03

Entergy Grid Storm Hardening

9:00am – 2:00pm

Cost: \$50 *Proof of vaccination required

ETHICS SESSION

Ethics Session

1:00pm – 3:00pm

***Box lunch included at 12:00pm**

Cost: IEEE Members \$50 | IEEE PES Members \$75

Non-Members \$100

ISGT SESSIONS

ISGT Opening Session and Keynote

8:30am - 10:30am

ISGT Sessions

11:00am - 12:30pm

1:30pm - 3:00pm

ISGT Plenary Session

3:30pm - 5:00pm

OPENING RECEPTION

Conference Opening Reception at Mardi Gras World

6:00pm - 9:00pm

TECHNICAL PROGRAM

TUESDAY, APRIL 26



OPENING SESSION

How the Past is Powering the Future

8:00am – 9:45am

The session title is a hint of what the hour will hold for you! The group of power and energy industry leaders will be moderated by IEEE PES Governing Board President Jessica Bian, President of IEEE Power & Energy Society.

Alison Silverstein | Independent Consultant

Damir Novosel | Quanta Technology

Edmund O. Schweitzer, III | Schweitzer Engineering Laboratories

Paul D. Hinnenkamp | Entergy

representatives from leading research and development companies that are driving our industry to the future through science and data analytics.

Hanna Grene | Microsoft

Raiford Smith | Tapestry X, the moonshot Factory

Jared Peterson | SAS

SUPER SESSION

SS01

Exploring the Roadmap of Data Analytics and Artificial Intelligence for the Future Grid

3:00pm – 5:00pm

The first super session of 2022 will focus on the implementation, application, and challenges for big data and AI within the energy grid. This includes discussion on the integration and operation of renewables, electrification, and the potential uncertainties of the energy business and operation model.

The conversation will be moderated by Chan Wong, Manager of Smart Meter Lab at Entergy, and will feature

PANEL SESSIONS

PN01

Impact of Renewable Energy on T&D Planning and Operations

10:00am – 12:00pm

PN02

Enhancing Grid Resilience with HVDC and FACTS

10:00am – 12:00pm

PN03

Distributed Energy Resource Management Systems (DERMS) Design and Deployment for a More Sustainable and Distributed Grid

10:00am – 12:00pm

PN04

Sen Transformer – a SMART Power Flow Controller for Harnessing the Dormant Capacity of the Transmission Lines

10:00am – 12:00pm

PN05

Implementation of Building Information Modeling Technology: Changing the Game for Substation Design

10:00am – 12:00pm

PN07

Professional Gains and Opportunities with Volunteering Engagement

10:00am – 12:00pm

PN08

Internet of Things (IoT) in Power and Energy Systems

10:00am – 12:00pm

PN09

Grid-Interactive Efficient Buildings to Enhance Power Grid Flexibility and Resilience

10:00am – 12:00pm

PN10

Fire Mitigation and Grid Resiliency

10:00am – 12:00pm

PN11

Innovations in Strategic Asset Management Planning

1:00pm – 3:00pm

PN12

The Next Generation Vision of the Future

1:00pm – 3:00pm

PN13

Building a Resilient Distribution Grid: Real-time Situational Awareness and Enhanced Control

1:00pm – 3:00pm

PN14

Distribution Network-Aware DER Coordination

1:00pm – 3:00pm

PN15

Grid Computing and Analytics – From Historical Solutions to Quantum Computing

1:00pm – 3:00pm

PN16

Bronzeville Community Microgrid: Implementation, Testing, and Lessons Learned

1:00pm – 3:00pm

PN17

Utility Hydrogen Pilot Projects

1:00pm – 3:00pm

PN18

Integration of Robust Optimization with Evolutionary Optimization in Smart Grid

1:00pm – 3:00pm

PN19

Inverter Generation Resources and Ground Fault Overvoltage

1:00pm – 3:00pm

PN20

Design, Visualizations, and the Control Room of the Future

1:00pm – 3:00pm

IEEE PLAIN TALK

Distribution System: Delivering Power to the Customer

7:30am – 5:00pm

ISGT SESSIONS

ISGT Keynote and Plenary Session

10:00am - 11:30am

ISGT Sessions

1:00pm - 2:30pm

TECHNICAL PROGRAM

WEDNESDAY, APRIL 27



SUPER SESSION

SS02

Preparing for Anything: Resilient System Design

8:00am – 10:00am

Climate and other disruptions continue to present enormous challenges for the fundamental role of utilities and the communities they serve. This session will be moderated by Cat Wong, Technology Operations Lead at Tapestry X, the moonshot Factory, and will explore lessons learned from recent extreme events, and also share current efforts on improving the resiliency and reliability of the grid to prepare for uncertainties in the future.

Damir Novosel | Quanta Technology

Erik Takayesu | Southern California Edison

Aftab Khan | Eversource Energy

Rafael da Silva Ozaki | Siemens Grid Software

PANEL SESSIONS

PN21

Technology Innovation for Humanitarian Needs and Disaster Response

1:00pm – 3:00pm

PN22

Business Values for TOs and ISOs in Utilizing Grid

Enhancing Technologies

1:00pm – 3:00pm

PN23

HVDC Transmission and FACTS Fundamentals

1:00pm – 3:00pm

PN24

New Dual Nameplate kVA Distribution Transformers

1:00pm – 3:00pm

PN25

Significant Revisions Made to C57.104, the IEEE Guide for the Interpretation of Gases Generated in Mineral Oil-Immersed Transformers

1:00pm – 3:00pm

PN26

Integrating Grid-Forming Inverters with Utility and ISO Operations

1:00pm – 3:00pm

PN27

Offshore Wind Integration: DOE Perspectives and Lessons Learned and Best Experiences of Europe

1:00pm – 3:00pm

PN28

Advanced Deep Neural Network Techniques for Smart Grid

1:00pm – 3:00pm

PN29

Latest Trends in T&D Planning and Operations

1:00pm – 3:00pm

PN30

Distributed Solar and Electrification Will Soon Intersect and Stress Grid operations. What Can and Should Utilities Do?

1:00pm – 3:00pm

PN31

Temporary Overvoltage Considerations for Solar PV Power Plants

3:00pm – 5:00pm

PN32

Large-Scale Distribution Test Feeder Development with Emerging Operational Paradigms

3:00pm – 5:00pm

PN33

Towards a Carbon Free Energy System, a Nordic Perspective

3:00pm – 5:00pm

PN34

Advanced Voltage and Current Measurement for Evolving Distribution Systems

3:00pm – 5:00pm

PN35

Protective Relaying Virtualization Development, Deployment and Use Cases

3:00pm – 5:00pm

PN36

Grid Resiliency: Preventing and Responding to Extreme Events

3:00pm – 5:00pm

PN37

The Grid Disrupted: Using Optics to Manage the Chaos of Renewable Integration

3:00pm – 5:00pm

PN38

**Advanced Smart Distribution Applications - The Building Blocks
Advanced Smart Distribution Applications - The Building Blocks**

3:00pm – 5:00pm

PN39

Value of data Science or Artificial Intelligence (AI) in Business Value Terms

3:00pm – 5:00pm

PN40

Future-Proofing the Energy Workforce: A People-First Approach to Strategic Talent Management

3:00pm – 5:00pm

TECHNICAL TOURS

TT-04

Naval Air Station Joint Reserve Base New Orleans

9:00am – 12:00pm

Cost: \$15 *Restricted to U.S. Citizens only; Background check will be done, and proof of COVID19 vaccination required

TT-05

Entergrid Grid Modernization Labs

1:30pm – 4:00pm

Cost: \$15 *Proof of COVID19 vaccination required

IEEE PLAIN TALK

Transmission System: The Interconnected Bulk Electric System

7:30am – 5:00pm

ISGT SESSIONS

ISGT Sessions

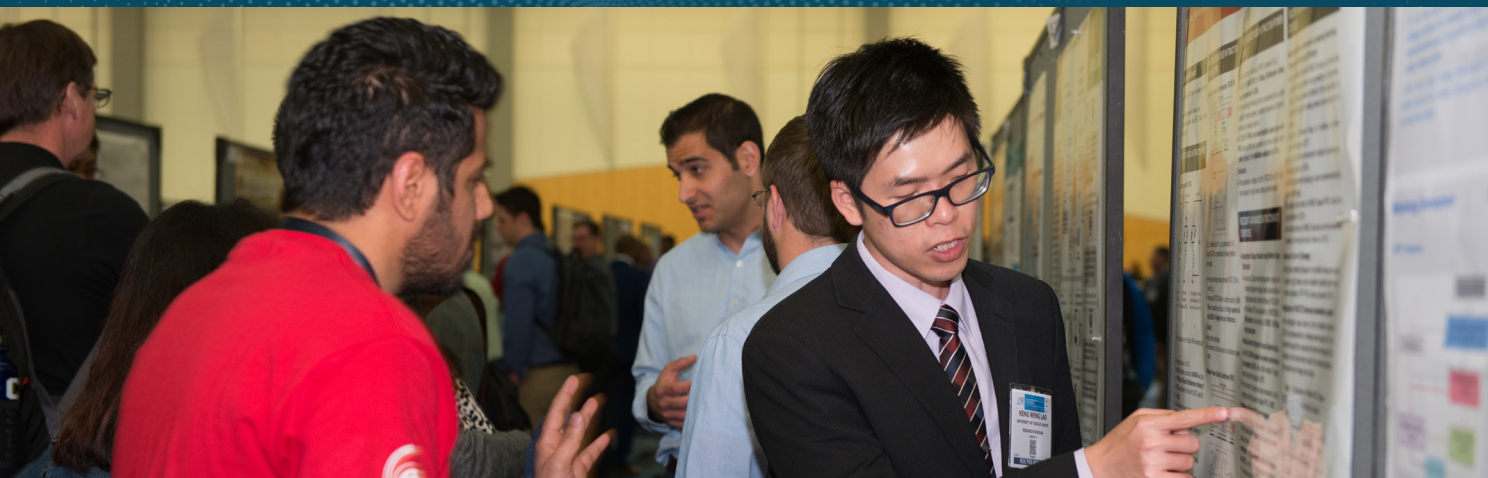
1:00pm - 2:30pm

ISGT Plenary Session

3:00pm - 4:30pm

TECHNICAL PROGRAM

WEDNESDAY, APRIL 27



T&D POSTER SESSION AND RECEPTION / STUDENT POSTERS AND ISGT POSTERS

5:00pm – 7:00pm

To view the current list of accepted papers for 2022, please visit ieeet-d.org/papers.

This year's papers were reviewed by the following committees:

- (AMPS) Big Data Analytics
- (AMPS) Computer Analytical Methods
- (AMPS) Distribution System Analysis
- (AMPS) Intelligent Systems
- (AMPS) Reliability and Risk Analysis
- Analytic Methods for Power Systems
- Electric Machinery
- Energy Development and Power Generation
- Energy Storage & Stationary Battery
- Grid & Emerging Technologies Coordinating Committee
- Insulated Conductors
- Power System Dynamic Performance
- Power System Instrumentation and Measurements
- Power System Operation, Planning & Economics
- Power Systems Communications & Cyber Security
- Power Systems Relaying & Control
- PSOPE – Bulk Power System Operations Subcommittee
- PSOPE – Distribution System Operation and Planning Subcommittee
- PSOPE – Power System Economics Subcommittee
- PSOPE – Technologies & Innovation Subcommittee
- Smart Buildings, Loads & Customer Systems
- Substations
- Surge Protective Devices
- Switchgear
- Transformers
- Transmission and Distribution

TECHNICAL PROGRAM

THURSDAY, APRIL 28

SUPER SESSION

SS03

Decarbonization and Grid Modernization

8:00am-10:00am

Organizations from across the energy ecosystem are exploring ways to optimize energy generation and usage to improve customer experience, while also developing a more efficient system to meet eco-friendly regulatory goals. This session will be moderated by Wayne Bishop, Senior Director, Industry Outreach at Quanta Technology, and includes multiple utilities in conversation around ideas and initiatives driving decarbonization and grid modernization.

David Ellis | Entergy

Nouredine Hadjsaid | G2Elab

Abigail Anthony | NARUC

Chris Root | VELCO

Shay Bahramirad | Luma Energy

PANEL SESSIONS

PN42

Proactively Securing Electric Utilities Based on Cyber-Risk Informed Testing

10:00am -12:00pm

PN43

A New Model for Investing in our Grid by Utilizing Technology

10:00am -12:00pm

PN44

Management Challenges and Corporate Social Responsibility for a Sustainable Future

10:00am -12:00pm

PN45

Integrating Behind the Meter Distributed Energy Resources (DER) for Bulk Market Services

10:00am -12:00pm

PN46

The Future of High Voltage Substation Project Execution – 3D Integrated Design and Construction (IDC)

10:00am -12:00pm

PN47

NERC Task Force Developing a Technical Report on the Integration of Cyber and Physical Security into Bulk Power System Planning, Operations, Design, and Restoration Activities

10:00am -12:00pm

PN48

Starting a Major Undergrounding Program

10:00am -12:00pm

PN49

Harmonic Voltage Distortions in Static Var System Applications

10:00am -12:00pm

PN50

Impacts of Recent FERC Regulatory Actions Regarding Dynamic Line Ratings

10:00am -12:00pm

ISGT SESSIONS

ISGT Keynote and Plenary Session

8:30am - 10:00am

ISGT Sessions

10:30am - 12:00pm

ISGT Plenary and Closing Sessions

1:00pm - 3:00pm

CLOSING RECEPTION AND RAFFLE

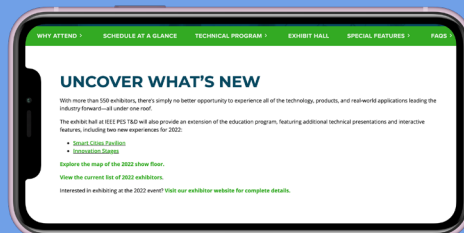
Welcome to Anaheim in 2024!

3:00pm- 4:00pm

2022 EXHIBITORS

Online Exhibitor List + Floorplan

Visit <https://ieeet-d.org/attendee/expo/> for the full list of exhibitors and to see the floorplan.



Exhibitors as of January 3, 2022. View the current list [online](#).

2023 IEEE PES GTD Conference & Exhibition Istanbul

3M Electrical Markets Division

A S E C, Inc

A Visual Plan Inc.

ABB Inc.

ABINEE - Associação Brasileira da Indústria Elétrica e Eletrônica

action Manufacturing

Aditya Birla Insulators (A Unit of Grasim Industries Ltd.)

Advanced Cable Bus, Inc.

Advanced Power Technologies

Advanced Rubber Products, Inc.

Advanced Test Equipment Rentals

AEMC Instruments

AFL

Albarrie GeoComposites Ltd

Alcad Standby Batteries

ALCE Elektrik San. ve Tic. A.Ş

Alcon Connectors, a division of Meister International LLC

Allied Bolt, Inc

ALLIS COMMUNICATIONS

All-Pro Fasteners, Inc

Almetek

Aluma-Form, Inc

Ambor Structures, Inc.

American Polywater Corporation

AMERICAN WIRE GROUP

Ampacimon

Ampirical Solutions, LLC

Ampjack Industries Ltd.

Amran Instrument Transformers

AMSC-American Superconductor

AP Sensing Americas

Apar Industries Ltd.

APEX PRODUCTS CO.,LTD

APP Engineering, Inc.

Applied High Voltage

AQ Transformer Solutions Inc

Arcteq Relays Ltd

A-Rent Test Equipment

Arruti Group

Arteche

ASC, Inc.

ASP PRIVATE LIMITED

ASPEN, INC.

ASSET Engineering

Astor Transformator Enerji Turizm.

İns.ve Pet. San.Tic. A.S.

Axis Electrical Components

BAE Batteries USA

Barnard Construction Co. Inc.

Baron USA

Basic Concepts Inc.

Basler Electric Company

Bentley Systems

Beta Engineering

Bianchi Electric

Bierer and Associates

Black & Veatch

BMarko Structures

BROCKHAUS MESSTECHNIK

Bronder Technical Services

Brooks Manufacturing Company

BTECH, Inc

Burns & McDonnell

C Three Group, The

Cable Technology Laboratories

Calumet Specialty Products

Partners, L.P.

Cam Tran Co. Ltd.

Cambridge-Lee Industries LCC

Camlin Power

Conduct Industries

Cargill

CBC Metals Processing

CEATI International

CEM

Centriforce Products Ltd

Centuri Group, Inc.

CESI

Cheryong Electric Co., Ltd

CHM Industries

Choctaw-Kaul Distribution Comp.

Classic Connectors USA

Cleaveland/Price Inc.

Cloverdale Paint Inc

CO7 Technologies

Cogent Power

Coil Innovation USA, Inc.

COMET METALS INC

Commonwealth Associates, Inc.

Compaq International (P) Limited

Computational Physics, Inc.

Concast, Inc.	Electrical Consultants, Inc.	Galvan Industries, Inc.
CONDIS SA	Electrical Contacts International, Inc	Galvatech 2000
Condux Tescmec, Inc.	Electrical Reliability Services (ERS)	Gannett Fleming
Conex Metals	Electromark Company	garza electrothermal
Construction Innovations	Electrostatics Ltd.	GE Renewable Energy
Control Panels USA Inc.	Electroswitch	GEMS METAL
Copperweld Bimetallics, LLC	Electrotechnik	Gindre Copper Inc.
Cottrell Paper Company	Elgin Power Solutions	Global Power Components
Craig Wire Products, LLC	Ellis Patents Ltd	Gonzaga University
Creative Composites Group	Elpress Inc	GPP Solutions LLC
Cross Oil Refining & Marketing Co., Inc.	EMA Electromechanics	Greenlee / HD Electric
Crosslink Technology Inc.	EMB GmbH	GRESKO
Crown Technical Systems	EMCO INDUSTRIES LIMITED	Grid Structures
CTC Global	EMEK ELEKTRIK ENDUSTRISI A.S.	Grip-Tite Manufacturing Company
Custom Truck One Source	Emerald Transformer	H2scan
Delta Star, Inc.	Empire Alloys Pvt. Ltd.	Hardcraft Industries, Inc.
DiGioia Gray & Associates, LLC	EMT SF6 Analysers, Experts in SF6	Harger Lightning & Grounding
Digitus Biometrics Inc	Testing and Handling	Haverfield Aviation
DigSILENT Americas LLC	EnergyLite – a brand of Solais Lighting Group	Haysite Reinforced Plastics
DILO Company	EnerSys	HDR
DIS-TRAN Packaged Substations	Engineering and Inspection Services, LLC	HEDRICH Group / HEDRICH GmbH
DIS-TRAN Steel, LLC.	entegra gmbh	Heinrich Georg GMBH
DMB Winders LLC	Ergon, Inc.	Henan Huaxing Wires and Cables CO., LTD
DMC Power	ERLPhase Power Technologies	Hendrix and Kerite by Marmon Utility
DNV USA, INC	Ermco, Inc.	Henkels & McCoy Group, Inc.
Doble Engineering Company	ETAP	HI TECH RADIATORS PVT LTD
DroneDeploy	Exel International	HICO America
Dronevolt	Expanse Power Services	High Voltage, Inc.
Dual-ADE	Exponential Power, Inc.	HindlePower, Inc.
DuPont Protection Technologies	Farmers Copper LTD.	Hitachi Energy USA Inc.
Dynamic Ratings, Inc.	FDH Infrastructure Services	H-J Family of Companies
East Penn Manufacturing Co	Federal Pacific	HLH Aviation
EasyPower LLC	Fiberglass Line Hardware, Inc.	HLI Rail & Rigging, LLC
Eaton	FirstPower	Honeywell Smart Energy
ebm-papst Inc.	Fischer Block	Howard Industries
EC INSULATORS JIANGSU CO., LTD.	FISO Technologies Inc	Hubbell Utility Solutions
Eco-Electrical Systems, LLC	FLOW OIL PUMPS PRIVATE LIMITED	HÜBERS Verfahrenstechnik
EDG, Inc.	Foam Supplies, Inc.	Maschinenbau GmbH
Eger Products, Inc.	Forterra Pipe & Precast, LLC	Hughes Brothers, Inc.
Egroup	Fortune Electric Company, Ltd.	Huskie & Jameson
EJ	Franklin Electric Grid Solutions	HV Diagnostics, Inc.
Elecnor Hawkeye LLC	Furukawa Electric Group	HV TECHNOLOGIES, Inc.
Electric Power Engineers, Inc.	G&W Electric Company	Hyundai Electric & Energy Systems Co., Ltd.
Electric Power Systems		

2022 EXHIBITORS

IEEE MOVE Community Outreach
IEEE SmartGrid
IEEE Xplore® Digital Library
IEN HANCHANG CO.,LTD
ikeGPS, Inc.
ILJIN Electric Co., Ltd.
IML North America
Incab America LLC
Indel Bauru USA
Indji Systems, Inc.
Induron Protective Coatings
Industrial Electric MFG. (IEM)
Inertia Engineering
Infrared Cameras Inc
Infrared Inspection Systems
Insulboot
Integrated Power Co.
intellirent
Intermountain Electronics
Interstate Electrical Contractors
IPS-ENERGY USA, Inc.
Irby Utilities
iS5 Communications
Isabellenhütte USA
I-TECH USA, INC.
Jinma Industrial Group Co.,Ltd.
Johnson Thermal Systems, Inc
JSHP Transformer
JST Power Equipment, Inc.
Kaddas BirdguarD ~ Mitigating
Wildlife Caused Power Outages
Kappa optronics Inc.
KARAMTARA ENGINEERING
PVT. LTD
KCS Corporation
KDM Engineering
KEPCO (Korea Electric
Power Corporation)
Kiewit
Kinectrics
K-Line Insulators Limited
Klute Inc. T&D Steel Fabrication
KONČAR-Instrument
transformers Inc.
Krenz and Company Inc.
KSE Electricals Pvt Ltd

KUVAG North America
KV POWER
KYORITSU AMERICA LLC
L.A.E. srl
La Marche Manufacturing Company
LAESCO LLC
Lamifil
Laminated Wood Systems, Inc.
Laser Technology
Legnano Teknoelectric Company
Leidos
Lester Electrical
Lindsay Precast Inc
Lindsey Manufacturing Company
LineVision
LineWork Bucket Products LLC
Lithtech
Loresco Inc.
Lovink Enertech B.V.
LS ELECTRIC America Inc.
MAC Products, Inc.
MacKay Sposito
MacLean Power Systems
Maddox Industrial Transformer
Magnum Piering
MasTec
Mastro Graphics
Matrix Service Company
Maverick Corporation
MB Metal Technologies LLC
McWane Poles
Megger
Meiden America Switchgear, Inc.
Meister International LLC
Mesa Associates Inc.
METALOGALVA NORTH AMERICA
INC.
METALPOL S.A, de C.V.
MetPlas Inc.
Meyer Utility Structures
Micatu
Michels Power, Inc.
Midsun Group, Inc.
Milbank
MindCore Technologies inc.
Mississippi State University

MISTRAS Group
Mitas Industry Inc.
Mitsubishi Electric Power
Products, Inc.
MODERN INSULATORS LIMITED
Modine Manufacturing Company
Modular Connections, LLC
Monroe Infrared Technology
Monti Inc
Morpac Industries, Inc.
Morris P. Hebert, Inc.
Mosdorfer GmbH
MP Husky
MVA
Myers Power Products, Inc.
National Strand Products, Inc.
Nayak Corporation, Inc.
NDB Technologies
Neenah Foundry Co.
NEETRAC/Georgia Tech
NETA-InterNational Electrical
Testing Association
New River Electrical Corporation
Newpark Mats & Integrated Services
NGK-Locke, Inc.
Nisus
NKT Photonics, Inc.
NM Group a Trimble Company
NN
Nordic Fiberglass, Inc.
NovaTech, LLC
NOVINIUM, INC.
NRECA TechAdvantage Expo
nVent ERICO
Nynas, Inc.
OEL WORLDWIDE INDUSTRIES
Ofil Ltd.
Okonite Company, The
Oldcastle Infrastructure
OMICRON electronics Corp. USA
OPAL-RT TECHNOLOGIES
Oriental Export Corporation
ORMAZABAL
Orto De Mexico, S.A. De C.V.
OSENSA Innovations Corp.
Osmose Utilities Services, Inc.

Paradoxe Corporation	Promeji	SEECO
Park Electric Company	Protec Equipment Resources	SEFCOR, Inc.
Pascor Atlantic Corporation	Prysmian Group	SEI Industries Ltd.
Peak Substation Services LLC	PTI Transformers	SensorLink Corporation
Pennsylvania Transformer	Public Utilities Maintenance, Inc.	Sentry Electrical Group, Inc.
PENTA Electrical Safety	PUPI Crossarms (GEOTEK)	Shallco Incorporated
Products LLC	Qualitrol Company LLC	Shanghai Huaming Power
Petro-Canada Lubricants Inc.	Quality Power Electrical Equipments	Equipment Co., Ltd.
Petroflex NA	Quanta Services	Shanghai Shemar Power
PFIFFNER Instrument	Raytech USA, Inc.	Holdings Co., Ltd.
Transformers Ltd.	RCM Technologies	Shawcor
Phenix Technologies, Inc.	Rea Magnet Wire	Shell Oil Products
Phillips & Jordan, Inc.	Reinhausen Manufacturing Inc.	Shihlin Electric and
Phoenix Contact	RH Systems, LLC.	Engineering Corporation
Phoenix Electric Corp.	RHM International	Siba Fuses LLC
Piedmont Bushings and	Richards Manufacturing	Sicame Group
Insulators, LLC	Ritz Instrument Transformers, Inc	Siemens Energy
PLANSEE SE	RNG Exports Private Limited	Signature Systems
PLH Group	Roechling Glastic Composites	Sinoma Jiangxi Insulator and
Plymouth	ROHN Products, LLC	Electricity Co.,Ltd;
PNA/API	Roxtec Inc.	Skipper Limited
Point On Wave LLC	RS Technologies Inc.	Slacan Industries Ltd
Polaris Electrical Connectors	RTDS Technologies Inc.	Slingco
Powell Industries, Inc.	S&C Electric Company	SMART GRID SOLUTIONS
Power Delivery Products, Inc.	Saber Power Services	Smart Wires Inc.
POWER Engineers, Inc.	Sabre Industries	Smit Transformer Sales, Inc.
Power Grid Components, Inc.	SAE Inc.	Solidification Products Int'l. Inc.
Power Line Sentry, LLC	Safearth	Soltex, Inc.
Power Line Systems, Inc	Saft America, Inc.	Southern States, LLC
Power Manufacturing, LLC	Saint-Gobain Tape Solutions	Southern Switch & Contacts
Power Monitors, Inc. (PMI)	SALCO, Inc.	Southwest Electric Co.
Power Partners	Salisbury by Honeywell	Southwire Co
Power Systems Integrity	SAM Companies	Spartan Composites LLC
Power Temp Systems	Sam Dong Inc.	Special Fleet Service
PowerGrid Services	SAN JIANG ELECTRIC MFG.	SPECTRUM INDUSTRIES, INC
Powering America NECA-IBEW	CO., LTD	Speedwell Technologies PVT LTD.
Powerline Hardware	SA-RA Group	SPF America
Powertech Labs Inc.	Sargent & Lundy	Spiradrill
PPC Insulators	SAS	SPL
Preformed Line Products	SAVER S.p.A.	Stanley Consultants
Primax Technologies Inc	SBB EMERGENCY TOWERS	Stantec Consulting
PrimeLine Utility Services, LLC	Schweitzer Engineering	Staubli Electrical Connectors, Inc.
Primoris T&D Services, LLC.	Laboratories, Inc	Sterling
ProColombia	SCOPE	Stored Energy Systems Inc
Professional Plastics	Scott Manufacturing Solutions	STORK RUBBER PRODUCTS
Prolec GE Waukesha	Sediver	PVT. LTD.

2022 EXHIBITORS

StressCrete Group
SubGrid Solutions
SUBNET Solutions Inc.
Substation Engineering Company
Summit Utility Structures, LLC
Sunbelt Solomon
Superior Concrete Products
Superior Tray Systems Inc
SUPREME & CO. PVT. LTD.
Survallent
Suzhou Furukawa Power Optic
Cable Co., Ltd
Switchgear Power Systems, LLC
Systems with Intelligence
T&R Electric Supply Company
Taihan Cable & Solution Co., Ltd.
TATUNG ELECTRIC CO. OF
AMERICA, INC.
TBEA USA Corporation
TE Connectivity/Raychem
Team Fishel
Tecfuse USA
Tech Products, Inc.
Tech4 LLC
Telescada
Terracon Consultants, Inc.
Tesco Controls
Tetra Tech Canada Inc.
The Gund Company, Inc.
The Pelsue Company
Threaded Fasteners, Inc.
Three D Metals
TorcSill Foundations, LLC

Tower Solutions Inc.
Trachte LLC
Tranco Production Machines Ltd
TransAmerican Power Products,
Inc. (TAPP)
Transformers Magazine
TransGard LLC
Trantech Radiator Products Inc.
Trayer Engineering Corporation
TRC
Trench Limited
Triple Crown Products, Inc.
Tulstar Products
TÜV Rheinland
Twistarp
UL LLC
Ulteig
Underground Devices, Inc.
UNIQUE INDUSTRIAL
PRODUCT COMPANY
United Engineers & Constructors
United Rentals
United Utility
USABand
Utility Pole Solutions, Inc
Utility Solutions Inc.
VAF Industries, LLC
Vaisala
Valmont Utility
Vantera Incorporated
VanTran Transformers
Varasset
VFP, Inc.

VIAT America Inc
Victor Insulators, Inc
Vidya Wires Pvt LTD
VIN DIP INDIA PVT LTD
Virginia Transformer Corporation
VIZIMAX Inc.
Votgard, a Division of Saf-T-Gard
International, Inc.
VON Corporation, The
Von Roll
W. E. Gundy & Associates, Inc.
(WEGAI)
Watson Drill Rigs
WEG Transformers USA
Weidmann Electrical
Technology Inc.
Weschler Instruments, Div of
Hughes Corp.
Westwood Professional Services
WIKI Instruments, LP
Williams Form Engineering
Corporation
Wilson Bohannon Lock Company
Wilson Construction Company
Windsor Stevens
Winola Industrial Inc.
WPI Worcester Polytechnic Institute
WSP
Xiamen Peaks Electric Co., Ltd
YAK ACCESS
ZTZ Services International, Inc.