

September 4 - 6, 2024 | Embassy Suites Dallas-Frisco

57th
Annual
Symposium

TSDOS

Transmission & Substation Design
& Operation Symposium

POST-CONFERENCE REPORT

UTA
Extension and
Extended Campus

tsdos.org | 866.906.9190 | events@uta.edu

Symposium Overview

The recent 57th Annual Transmission & Substation Design & Operation Symposium (TSDOS) brought together utilities, engineers, suppliers, contractors, and consultants to present and discuss the most recent trends, challenges encountered, and solutions adopted in their industry. The hybrid event was conducted from Wednesday, September 4, 2024, to Friday, September 6, 2024, at the Embassy Suites Hotel & Convention Center in Frisco, Texas.



The symposium featured a series of live-streamed presentations with real-time Q&A sessions. Attendees had the opportunity to share ideas and experiences and learn from case studies from industry experts during the 41 symposium presentations. Attendees earned 15 PDH credits, including 1 hour of Professional Ethics, while attending the entire symposium. On Wednesday evening, 119 vendors showcased their products and services and networked with TSDOS attendees during the symposium's hospitality event in the hotel suites, atrium, and parking lot spaces.

2024 Registration Categories



- » ATTENDEE
- » VIRTUAL ATTENDEE
- » VENDOR WITH CONFERENCE REGISTRATION
- » VENDOR
- » ADDITIONAL VENDOR BOOTH STAFF

2024 Advisory Board Members

MOHAMMED AHMED, P.E.

Manager
American Electric Power

ANDREW ASTON, P.E.

Lead Substation Reliability Engineer
Oklahoma Gas and Electric

KENNETH BOWEN, P.E.

Manager, Transmission Planning
and Operations Engineering
CPS Energy

TIM CRONEMEYER

Consultant

KRYSTAL DEVOS

Engineer Sr.
American Electric Power

REZA EBRAHIMIAN, PH.D., P.E.

Director, T&D Planning
Austin Energy

MATT ESTRADA

Protection & Control Manager
American Electric Power

TIM HARTZ, P.E.

Manager, Transmission Engineering
Brazos Electric Power Cooperative

JOE HAZLEWOOD

Transmission Equipment Support
Oncor Electric Delivery

WEI-JEN LEE, PH.D., P.E.

Electrical Engineering
Department Chair
The University of Texas at Arlington

JUAN MELENDEZ, P.E.

Substation Engineering Manager
Lower Colorado River Authority

MATTHEW MORRISON, P.E.

Transmission Standards Manager
Oncor Electric Delivery

BECKY OVERDUYN, P.E.

Manager
American Electric Power

EDUARDO RODRIGUEZ, P.E.

Operations Manager
Oncor Electric Delivery

KEVIN SILLS, P.E.

Transmission Planning Manager
Garland Power & Light

DAVID SOLIS

ACT - SE ENGINEER
American Electric Power

JOHN SWIFT, P.E.

Director, Transmission Engineering
Oncor Electric Delivery

DAVID TURNER, P.E.

Consultant

RANDY WEISS, P.E.

Engineering Supervisor
Lower Colorado River Authority

**The University of Texas at Arlington
Extension and Extended Campus
Conference and Event Management Team**

CASSANDRA SMITH

Assistant Vice President

STACI MOORE

Assistant Director

BRANDI BOWEN

Manager

TERRE COLEMAN

Program Coordinator I

JONATHAN SWIFT

Program Coordinator II





ETHICS SPEAKER



LANCE KINNEY, Ph.D., P.E., EXECUTIVE DIRECTOR
TEXAS BOARD OF PROFESSIONAL ENGINEERS AND LAND SURVEYORS

Dr. Kinney is the Executive Director of the Texas Board of Professional Engineers and Land Surveyors. He has been with the Board for over twenty years and is responsible for all agency programs and activities and represents the Board at statewide, national, and international functions. He also gives licensing and ethics outreach presentations all over the state at universities, companies, and associations. Prior to working at the Board, he worked in the semiconductor industry for 11 years.

He has a Bachelor's Degree in Physics from The University of Texas, a Master's Degree in Industrial Technology from Texas State University, and a Doctor of Philosophy in Curriculum and Instruction focused on Learning Technologies from the University of Texas. He has lectured as an adjunct professor in the Engineering and Technology Department at Texas State University and Electronics and Advanced Technologies Department at Austin Community College.

Dr. Kinney has served as a TSDOS ethics presenter for several years, and is always rated highly!

FEATURED SPEAKER



STEVEN VAN COHEN AUTHOR, LEADERSHIP CONSULTANT AND EXECUTIVE COACH
SYNC LEARNING EXPERIENCES, LLC

Steven Van Cohen is a Wall Street Journal bestselling author, internationally recognized leadership consultant and executive coach. His latest book is *Connectable – How Leaders Can Move Teams From Isolated To All In*.

For over a decade, Steven has helped leading organizations improve worker well-being, reduce employee disconnection and boost team belonging. Steven's top-ranked insights have been featured in CNBC, Forbes, Fortune, Fast Company, and Inc. Steven holds a MSOD from Pepperdine University and a Bachelor of Arts from The University of Illinois. He is co-founder of LessLonely.com and resides in sunny California with his wife and two daughters.

THE UNIVERSITY OF TEXAS
 AT ARLINGTON ADMINISTRATORS



PETER E. CROUCH, Ph.D., P.E. COLLEGE OF ENGINEERING DEAN

Peter E. Crouch joined UTA in August 2016 as dean of the nationally ranked College of Engineering and as a professor of electrical engineering. Since arriving, he has pursued vigorous support for the UTA President's strategic vision for The University of Texas at Arlington, and the powerful growth of the University and the College. Developing the strategic links between the College and its stakeholders, especially in the DFW metro area, is one of his most important goals.

In his previous roles, Crouch successfully enlisted the help and support of major corporations including Intel, Boeing, Northrop Grumman Corp., Motorola, and others to advance excellence in engineering education. At ASU, he worked closely with the university's leaders to secure the \$50 million naming gift for the Ira A. Fulton Schools of Engineering and helped lead the school into the top 50 in the U.S. News and World Report rankings.



CASSANDRA SMITH ASSISTANT VICE PRESIDENT
EXTENSION AND EXTENDED CAMPUS

Cassandra Smith is an accomplished official with a career spanning over 30 years in various leadership roles across multiple industries and over 18 years of service in the university setting. In her current capacity, she is the Assistant Vice President at The University of Texas at Arlington's Extension and Extended Campus. She is responsible for the strategic direction and operational management of the division, leading its growth and development in delivering innovative, high-quality education, training, and consulting services to businesses and individuals.



LISA MARTIN, P.E. DEPUTY GENERAL MANAGER & CHIEF OPERATING OFFICER
AUSTIN ENERGY

Lisa Martin is Deputy General Manager & Chief Operating Officer, overseeing Power Production, Electric System Field Operations, Electric System Engineering & Technical Services, and Energy Market Operations and Resource Planning. Martin has previously served as Vice President of Electric System Engineering & Technical Services. Martin joined Austin Energy in 2010 and has served in several engineering and compliance positions related to grid operations, transmission and distribution, generation, cybersecurity, battery storage, distributed energy resources, and technology strategy. Prior to joining Austin Energy, Martin worked in power and gas origination and energy markets for Southern California Edison. She also worked for Shell Exploration & Production Company, UPS, and the American Transmission Company. Martin holds a Bachelor of Science degree in Electrical Engineering and a Master of Business Administration in Operations Management. She is a licensed professional engineer and attended the University of Idaho Energy Executive Course.

KEYNOTE SPEAKER



 September 4 - 6, 2024 | Sessions & Workshops

GENERAL

- Storm Response, Why Collaboration Matters
- Deciphering the Wire Unloading Sequence for Transmission Structures
- Real Life Jenga: Verifying the Safety of In-Service Lattice Towers During Repair and Strengthening Efforts
- Transmission Structures Down Range: Assessment and Remediations for Bullet Damage
- Circuit Configuration Optimization to Mitigate Substation Asset Overloading
- How to Build a Substation on Settling Soils: Louisiana Project Profile
- OG&E Norman Hills Substation Case Study
- Professional Practice Update/Ethics

SUBSTATION

- Substation Integration: Managing Distributed Generation
- Systematic Site Selection for Substations
- HVDC and EHV AC As Part of a Wholistic Grid Solution
- Voltage Reduction - Experiences and Lessons Learned
- Oncor's Distribution Automation Program
- Transitioning to BIM Design for Substations
- Centralized Protection and Control: The Future of Distribution Substation Protection Systems
- Corrosion Assessment and Ground Integrity Testing of Buried Ground Grid and Aboveground Conductors in High Voltage Substations
- Lessons Learned from Fully GEM Encased Station Grid to Combat High Resistivity Soil Conditions in West Texas
- Understanding Interactions Between Interconnected Grounding Systems in Solar and Wind Renewable Generation Projects

TRANSMISSION

- The Why, What, How and Value of Establishing a Robust In-Plant Quality Verification Program
- The Development of a New Approach for Spliced Leg Members in Lattice Tower
- Switching It Up: A New Innovative 3-Way GOAB Switching Structure
- VIV Analysis on Utility Structures and Their Components
- Electromagnetic Interference on Critical Infrastructure: Planning and Mitigation Strategies
- Transmission Pole Foundation Design Procedure Discussions
- Lessons Learned: Using MASW Geotechnical Exploration vs Soil Borings for Foundation Design
- Challenges and Solutions in the Installation of Utility Pole Anchor Cages: A Case Study Analysis
- Lateral Performance of Helical Piles with Bolted Couplers
- What You Can't See CAN Hurt You: Investigating, Analyzing, and Strengthening Foundations on Existing Lattice Towers

OPERATION/OTHER

- Transformer Failures Relevant to Protective Relaying and Transformer Diagnostic Testing
- Extension of Battery Life During Station Outages: Your Peace of Mind During Restoration
- Understanding the Complementary Role of Partial Discharge Monitoring in Transformer Health Assessment
- Transformer Surge Arrester Age Assessment & Proactive Replacement Program
- Power Cable System Reliability and Longevity
- Assessment of Diagnostic Effectiveness: Tan Delta vs. Partial Discharge Testing Methods for Power Shielded Cables
- Arc Flash Hazard Introduction to IEEE Standard 1584-2018 and NFPA 70E
- Asset Testing and Commissioning – Working from the Same Strategic Playbook
- How Mobile Real-Time DGA Equipment Can Improve Operational Efficiency and Safety For Transformer Gassing Anomaly Response, Including A Case Study With Duke Energy
- Human Performance Incidents (HPIs) in Utility Operations: A Case Study of Oncor's Comprehensive Approach

 **TSDOS** by the numbers


1970

Participants


1199

Attendees


67

Symposium Speakers


41

Featured Speakers, Breakout Sessions & Workshops


119

Vendors in 133 Hospitality Spaces


585

Vendor Staff

4 Countries in Participation

- Canada
- Mexico
- Türkiye
- United States

33 States in Participation

- Alabama
- Arizona
- Arkansas
- California
- Colorado
- Connecticut
- Florida
- Georgia

- Idaho
- Illinois
- Iowa
- Kansas
- Louisiana
- Maine
- Maryland
- Massachusetts
- Minnesota
- Mississippi
- Missouri
- Montana
- Nebraska
- Nevada
- New Mexico
- New York
- North Carolina
- Ohio
- Oklahoma
- Pennsylvania
- South Carolina
- Tennessee
- Texas
- Utah
- Wisconsin


1029

TSDOS Total Mobile App Downloads


1691

Logins

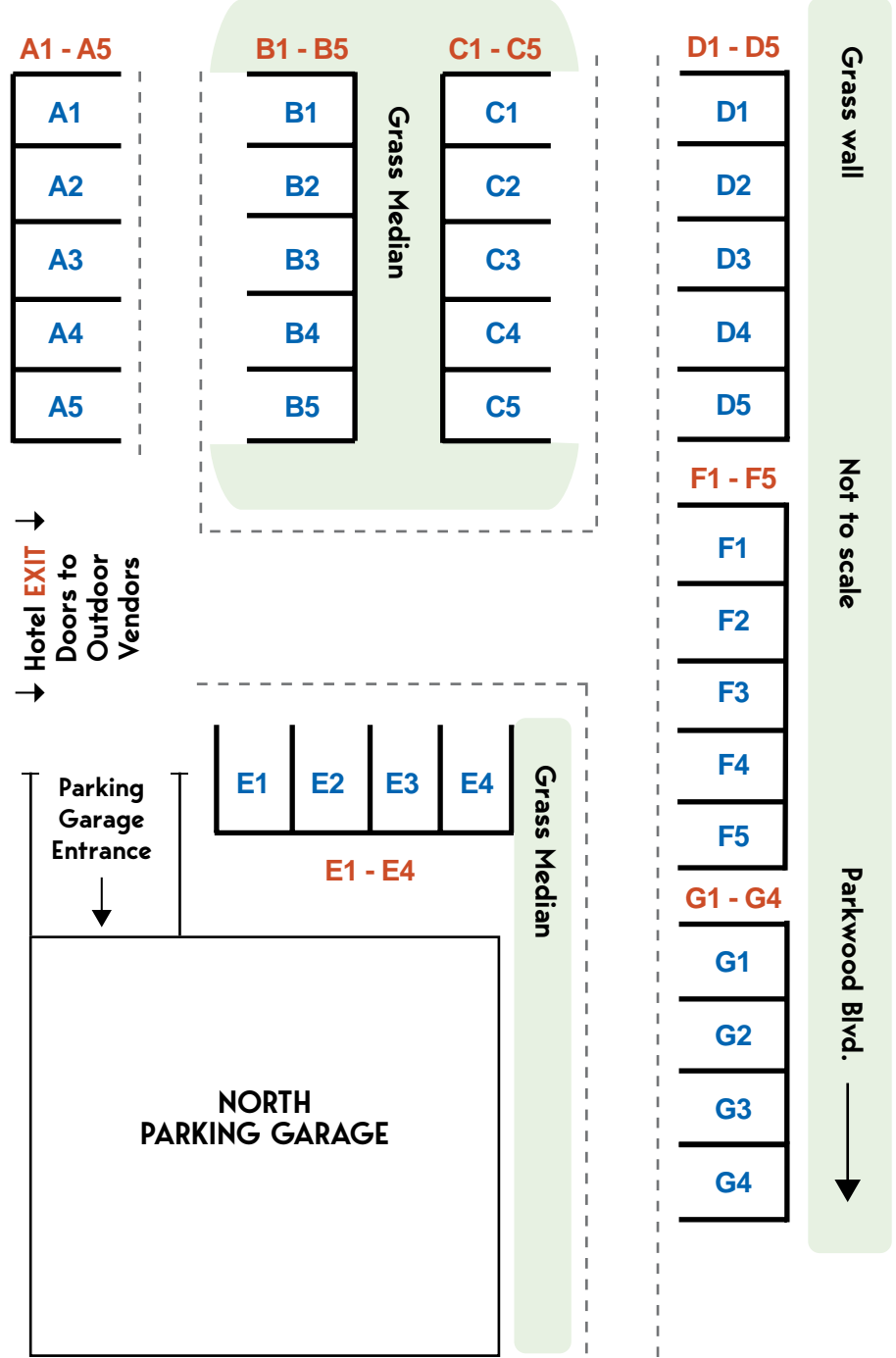


75% iOS

25% android

23 OUTDOOR VENDORS

G1 - G2	3 Phase Technologies
F3 - F4	EBR, Inc.
F1 - F2	EHV Solutions
B2	Fred Oberlender
A3 & B3	Great Southwestern Construction
B1	Hubbell Power System
A1 - A2	KD Johnson, Inc. and Nucor Towers & Structures
G4	Kinectrics
C2 - C3	Leidos
C1	Mastec
D4 - D5	MESA Associates, Inc.
G3	Meyer Utility Structures
D3	Primary Utility Services, LLC.
F5	PSC Primoris T&D
C4 - C5	Sabre Industries
B4 - B5	Surveying And Mapping, LLC.
E1	TE Connectivity
D1 - D2	United Rentals
E2 - E4	VAISALA and Butler & Land
A4 - A5	Valmont Utility and Preferred Sales Agency



 This Vendor Map is also available in the TSDOS Mobile App.

110 INDOOR VENDORS Suite location accompanied with company name.

PENTHOUSE SUITE 14TH FLOOR

1405 Sabre Industries

ATRIUM

6 AMICO
 3 CHM Industries
 1 Concrete Fence
 8/9 DFI Piling
 5 Drillers Choice
 2 Electrical Technologies, Inc.
 4 Kenner Chain Wall
 7 Spatial Business Systems

LOBBY

» MICA Steelworks

FRISCO 3 & 4

» DIS-TRAN Steel, LLC
 » inoLECT
 » Keasler Associates
 » Prolec GE Waukesha

2ND FLOOR MEETING ROOMS

INDIAN TRAIL

» Race Rock
(Previously Structural & Steel Products)

BUFFALO TRAIL

» All-Pro Fasteners, Inc.

SHAWNEE TRAIL

» GE Verona

2ND FLOOR SUITES

204 Bird Electric Enterprises, LLC
 206 Electrical Consultants, Inc.
 209 KVP Energy
 202/203 PSC Primoris T&D
 205 Saber Power
 201 SA-RA Group
 207 Valmont Utility

3RD FLOOR SUITES

310 AMPJACK
 308 Black & Veatch
 307 Burns & McDonnell
 328 Butler & Land

327 CAMPOS EPC
 323 CEC
 306 Crown Technical Systems
 305 Custom Truck One Source
 319 EBR
 311/312 EHV Solutions
 326 Force Electrical Services
 321 Incab America, LLC
 316 Len T. Deloney Co.
 and Grid Structures
 304 McCord Engineering, Inc.
 315 Meyer Utility Structures
 301/330 Newpark Mats
 & Integrated Services
 329 Osmose
 318 Schneider Engineering, LLC.
 314 Sediver
 325 Southwire
 313 Stanley Consultants
 322 Sterling
 309 Surveying And Mapping, LLC.
 324 SynchroGrid, LLC.
 302/303 TAPP, Inc.
 314 Utility Sales Agents of North Texas
 320 WESCO Distribution, Inc.
 317 YAK ACCESS

4TH FLOOR SUITES

423 Bell Lumber & Pole Company
 421 Beta Engineering
 429 Chain Electric Company
 424 City Transformer,
 Normandy Machine Co.
 & North American Substation Services
 418 Energy Reps
 401/430 Exo
 415 Hawrylak & Associates, LLC.
 427 HDR
 408/409 Hubbell Power System
 426 Irby Utilities
 419 J.H. Davidson & Associates, LLC.
 422 Kiewit
 428 Landpoint

412/413 Michels Corporation
 406 Parkline
 425 Pike Electric
 402/403 Sempco Surveying
 410 Shemar
 416 Southeast Power Corporation
 420 Spartan Infrastructure
 407 T-CORR
 411 Techline
 405 TechServ
 417 TerraCon
 404 Threaded Fasteners, Inc.

5TH FLOOR SUITES

514 7 Arrows Land Staff
 501/530 AQUAWOLF
 518 Ambor Structures
 510 Arkansas Electric Cooperatives, Inc.
 507 Buckingham Manufacturing
 526 CDS Muery
 509 DIS-TRAN Steel, LLC.
 524 Durisol
 525 ECS Southwest, LLP.
 513 Enercon
 511 Entrust Solutions Group
 516 Grid Structures
 512 KD Johnson/Nucor
 519 Locweld
 508 Mid-Con Energy Services
 517 Mustang Extreme
 504 Natina
 520 PLP
 527 Power Engineers
 506 Powersystems Group
 505 Primary Utility Services
 528 SAE Towers
 529 TorcSill
 523 TRC
 522 TWE (Tolunay-Wong Engineers)
 515 Utility Pole Solutions
 521 Utility Power Solutions, LLC.
 502/503 Wagner-Smith Equipment Co.

PINNACLE SPONSOR



PLATINUM SPONSORS



CONFERENCE BAG SPONSOR



WIRELESS SPONSOR



PROGRAM SPONSOR



TITLE SPONSORS



BRONZE SPONSORS



LUNCH SPONSORS



LANYARD SPONSOR



KEYCARD SPONSOR



COFFEE (WITH SNACKS) BREAK SPONSOR



WINDOW CLING SPONSORS



MOBILE APP SLASH SCREEN SPONSOR



ELEVATOR GRAPHIC WRAP SPONSORS



REGISTRATION TICKET GIVEAWAY SPONSOR



CHARGING STATION SPONSOR



COFFEE (ONLY) BREAK SPONSORS



OUTDOOR TABLE SPONSOR



WATER BOTTLE SPONSORS



MOBILE APP BANNER AD SPONSORS



CONTRIBUTING SPONSORS



DOOR PRIZE SPONSORS



SECURE YOUR SPOT AT TSDOS 2025

WITH EARLY REGISTRATION

TSDOS SAVE THE DATE

SEPTEMBER 3-5, 2025

Pre-Conference on September 2

REGISTRATION IS
OPEN NOW
FOR ATTENDEES



Attendees

Register
Online at
tsdos.org

REGISTRATION IS
OPEN NOW
FOR CURRENT VENDORS



Vendors

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Online at
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*Vendor registrations will be
reviewed for final approval*

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