

TSDOS

TRANSMISSION &
SUBSTATION
DESIGN &
OPERATION
SYMPOSIUM



THE UNIVERSITY OF TEXAS AT ARLINGTON
SEPTEMBER 9 - 10, 2020

POST CONFERENCE REPORT

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★
THE UNIVERSITY OF TEXAS AT ARLINGTON



Out of concern for the health, safety, and well-being of our community, we transitioned our 53rd Annual Transmission & Substation Design & Operation Symposium (2020 TSDOS) from an in-person event to a dynamic and interactive Virtual Conference on Wednesday, September 9 - Thursday, September 10.

Over the course of two days, we provided keynote presentations, workshop discussions, and interactive sessions with real-time Q&A via a web-streamed conference platform. Attendees were able to earn PDH credits, including 1 hour of Ethics, participate in sessions and visit vendors for a chance at winning door prizes.

Our robust on-line exhibit floor experience allowed vendors to demo their products, share videos, download documents and chat with attendees. Attendees unable to join the sessions in real-time, had access to view all portions of the event for up to three weeks after the conference.



PHIL WILSON

GENERAL MANAGER, LCRA

Phil Wilson became LCRA's 11th general manager on Feb. 3, 2014. LCRA's general manager serves as the organization's chief executive officer and carries out LCRA Board policy, manages LCRA's relationships with its customers and stakeholders, appoints and directs executive staff, and oversees projects and operations that support LCRA's public service mission.

Prior to joining LCRA, Wilson was executive director of the Texas Department of Transportation. Under the direction of the Texas Transportation Commission, he managed, directed and implemented TxDOT policies, programs and operating strategies. He also represented TxDOT before the Texas Legislature and other entities. Before joining TxDOT in 2011, Wilson served as senior vice president of Public Affairs and as a corporate officer for Luminant, Texas' largest electric generation company. In 2007, then-Gov. Rick Perry appointed Wilson as Texas' 106th Secretary of State. In that position, he was the chief elections officer and the chief international protocol officer for Texas. Wilson also served as chair of the Governor's Competitiveness Council and on the Texas Border Security Council.

Wilson previously served as the chair of the Board of Directors of the Austin Chamber of Commerce and as the chair of the chamber's Opportunity Austin initiative, in addition to having served on the chamber's executive committee. Wilson currently serves on the boards of the Large Public Power Council and Texas Public Power Association. Wilson has a Master of Business Administration from Southern Methodist University and a bachelor's degree from Hardin-Simmons University.

GENERAL

- Networked UAVs and Their Civilian Applications
- Integration and Control of Distributed Power Sources
- Safety in Equipotential Zones
- 2018 Colorado City Major Storm Event: Oncon Restoration Effort
- **KEYNOTE SPEAKER: Future of Texas Energy and Water Nexus in a Growing State**
- Ethics for the Professional Engineer - Updates
- Conductor Properties & Sag Effects: A Comparison Between Traditionally Accepted and Manufacturer Values and an Innovative Approach to Combat the Difference
- A Field Study on Suspended Weights to Secure Steel Davit Arms
- Using Real Time DER Data to Improve Utility Operations
- Design and Construction Considerations Near Renewables

TRANSMISSION

- Avalanche Damage Results in Constructability Improvements
- Ameren's 237' River Crossing Towers – Structural and Wind Engineering
- Phased Array UT is Now in the AWS D1.1 Code – What Will That Change for NDT of Pole Welds?
- Risk Mitigation Planning for a Successful EPC Project
- Well Founded: Integration of Geotechnical Investigation, Foundation Design & Construction
- Performance Evaluation of Joint Use Transmission Structures
- The Impacts of NESC 250C Extreme Wind Loading on Structures Less Than 60 Feet
- Transmission Workshop

SUBSTATION

- Transformer On-line Dissolved Gas Analysis Monitoring
- Battery Testing Standards and Best Practices
- Design and Construction Solutions for 138kV/69kV Transmission Substation Cut-Ins in a Constrained Footprint
- Digital Substations
- Do's and Don'ts of Power Factor Testing (Part 1)
- Do's and Don'ts of Power Factor Testing (Part 2)
- Challenges Associated with Diagnostic Testing of PT/VT Instrument Transformers
- An Analysis of Market Variability Trends Among Copper Grounding Products
- Substation Workshop

OPERATION/OTHER

- Lubbock Power & Light (LP&L) The ERCOT Solution
- Role of Power Factor Testing and Dielectric Frequency Response Testing in Bushing Health Assessment
- Review of Integrating and Controlling Distributed Energy Resources
- TDR-Based Fault Location on Overhead Transmission Lines
- Reducing Transformer Current Inrush through Residual Flux Analysis and Precision Switch Closing
- Operations Workshop



656

LIVE AND ON-DEMAND ATTENDEES

PRESENTATION SUMMARY

65

Conference Speakers



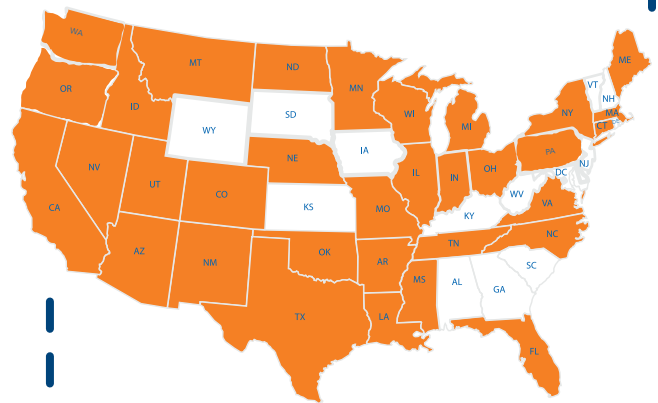
35

Sessions and Workshops

ATTENDEE DETAILS

Participants from:

32 States and Canada



656
Attendees

38
Vendors

VENDORS

- All-Pro Fasteners, Inc.
- Ampirical
- ASEC, Inc.
- Bell Lumber & Pole Company
- Black & Veatch
- Burns & McDonnell
- CEC
- DIS-TRAN Steel
- Elgin B. Robertson, Inc.
- Exo Group, LLC
- FB Timberline Construction
- FDH Infrastructure Services
- GE Grid Solutions
- Hubbell Utility Solutions
- Incab America
- J.H. Davidson & Associates, LLC
- K D Johnson, Inc.
- Keasler Associates
- Kiewit
- Kinectrics
- McCord Engineering, Inc.
- Mesa Associates, Inc.
- MICA Steelworks
- NESCO Specialty Rentals
- Newpark Mats & Integrated Services
- Oberlender & Associates
- Pike Electric, LLC
- Preferred Sales Agency
- Sabre Industries
- SAM, LLC
- Schneider Engineering, Ltd.
- Sempco Surveying
- Senstar, Inc.
- Spartan Infrastructure, Inc.
- SynchroGrid, LLC
- TAPP, Inc.
- TE Connectivity
- Texas Electric Cooperatives
- The University of Texas at Arlington
- WESCO Distribution
- YAK ACCESS

PRICING

Early Bird Attendee Registration Fee*	\$395
Attendee Registration Fee	\$495
Vendor Fee with Conference Included.....	\$995
Vendor Fee w/ Conference Early Bird*.....	\$895
Vendor Fee	\$545
Additional vendor staff.....	\$50

*This fee was honored beyond the early bird date.

ADVISORY BOARD MEMBERS



ANDREW ASTON, P.E.*
Manager
Transmission and Substation Engineering
Oklahoma Gas and Electric

WALTER BARTEL, P.E.*
Director, High Voltage Projects
CenterPoint Energy, LLC

MYTHILI CHAGANTI, P.E.*
Manager, Standards
CenterPoint Energy, LLC

TIM CRONEMEYER
Station Manager
American Electric Power

KRYSTAL DEVOS
Engineer Sr., Transmission Standards
American Electric Power

DR. REZA EBRAHIMIAN, P.E.
Director, T&D Planning
Austin Energy

MATT ESTRADA
Engineer Sr.
American Electric Power

TIP GOODWIN, P.E.
Consulting Engineer
Tip Goodwin Consulting, LLC

TIM HARTZ, P.E.
Manager, Transmission Engineering
Brazos Electric Power Cooperative

JOE HAZLEWOOD
Technical Specialist
Oncor Electric Delivery

STAN KRAUSE, P.E.
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Transmission Line Engineering
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DR. WEI-JEN LEE*
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Transmission Standards
Lower Colorado River Authority

AMIR MEMIC, P.E.
Director Development
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MATTHEW MORRISON, P.E.
Transmission Standards Manager
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DAVID SOLIS
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Director of System Planning
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RANDY WEISS, P.E.
Engineering Supervisor
Lower Colorado River Authority

The University of Texas at Arlington
Conference and Event Management

CASSANDRA SMITH*
Executive Director

STACI MOORE*
Manager

TERRE COLEMAN*
Coordinator

KIMBERLY GALE*
Coordinator

CHRIS BILARDI*
Conference Affiliate

*Not pictured

PINNACLE



TITLE



CONFERENCE BAG



BRONZE



PROGRAM



POWER BANK



SHIPPING



BREAK



CONFERENCE SPONSORS

WRAPS



PAVILION



DOOR PRIZE



LANDING PAGE



WATER BOTTLES



LOBBY



BANNER AD



CONTRIBUTING





TSD  **S** TRANSMISSION &
SUBSTATION
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THE UNIVERSITY OF TEXAS AT ARLINGTON

SAVE THE DATE
SEPTEMBER 8 - 10, 2021
EMBASSY SUITES, FRISCO

Preconference on September 7
tsdos.org | events@uta.edu