



# TRANSMISSION AND SUBSTATION DESIGN AND OPERATION SYMPOSIUM

## 2015 POST-CONFERENCE REPORT

SEPTEMBER 9 - 11, 2015 | EMBASSY SUITES FRISCO



DIVISION FOR ENTERPRISE DEVELOPMENT  
THE UNIVERSITY OF TEXAS AT ARLINGTON

Call: 866.906.9190  
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# OVERVIEW



## TRANSMISSION AND SUBSTATION DESIGN AND OPERATION SYMPOSIUM

### MISSION:

To promote the exchange of ideas and experience for the benefit of those people concerned with transmission and substation design and development.

### LEADERSHIP:

The primary committee was comprised of The University of Texas at Arlington along with industry leaders including representatives from: Oncor Electric Delivery, CenterPoint Energy Houston, AEP, OG&E, Brazos Electric Power Cooperative, Lower Colorado River Authority, AEP-TCC, and Lone Star Transmission, LLC.





## **KEYNOTE SPEAKER:**

### **Brian Lloyd, Executive Director Public Utility Commission of Texas**

Brian H. Lloyd joined the Public Utility Commission as Executive Director on December 1, 2010. With extensive experience in both the electric and energy industries, Mr. Lloyd had previously worked at the PUC for more than 10 years, spearheading several agency projects and working as a Director of oversight of the retail electric industry. He was the primary author of several agency reports to the Texas Legislature and testified before legislative committees, the Federal Energy Regulatory Commission (FERC) and the PUC. Prior to joining the PUC as Executive Director, Mr. Lloyd served as Deputy Director of Budget, Planning and Policy for Gov. Rick Perry and was a key contributor to the Texas State Energy Plan. Mr. Lloyd began work at the Governor's office in 2008 as an advisor on energy and utility policy. Mr. Lloyd earned a bachelor's degree in economics at Louisiana State University and graduated from the University of Texas at Austin with a master's degree in economics. The Executive Director of the PUC is an administrative position separate from the three voting Commissioners who are appointed by the Governor.

# BREAKOUT SESSIONS

## TRANSMISSION

- “HiViz” Digital Oblique Image Inspections
- Galvanized Steel Pole and Lattice Tower Corrosion Assessment and Corrosion Mitigation
- Improvements in Fault Location Capability at CenterPoint Energy to Reduce Response Time and Improve Accuracy of Fault Reporting
- A Practical Approach to Mitigating Risk Associated with Underream Foundations”
- The Critical Role Nondestructive Testing Plays in the Steel Utility Pole Industry
- Relevant Aspects for the Proper Selection and Application of Transmission Line Arresters for Improvement of the Transmission Lines Lightning Performance
- Stringing Methods and Verification
- Direct Embed Weathered Steel Floating Poles
- Challenges in Performing Engineering Analysis of Existing Lattice Towers!!!
- To Drone, Or Not To Drone? That Will Soon Become The Question!
- When to Stress Over Conductor Strains
- Near Time As Built Surveys A Quality Assurance Plan During Transmission Line Construction
- How OSHA’s New Transient Overvoltage Requirements Affect Work Practices

## SUBSTATION

- Vacuum Interrupters: Pressure vs. Age
- Correlative Analyses Considering Different Parameters In Order to Increase Reliability of Assest Health Assessment
- Permanent Solutions for Temporary Loads: An Alternate Approach to Electric System Design for Short-Term and Mobile Industrial Loading
- Capacity Testing of Stationary Batteries in Substation Switchgear Applications
- 3D in Substation Design
- Field Transformer Demagnetization
- NERC CIP-014: Physical Security – Regulatory Compliance and Real World Implementation
- Evolution of Bushing Monitoring Methods

## OPERATION

- A Case Study of the Geomagnetic Induced Current (GIC) Level from the Neighboring System
- Mobile Transformers and Substations (MTS) Flexibility and Safety



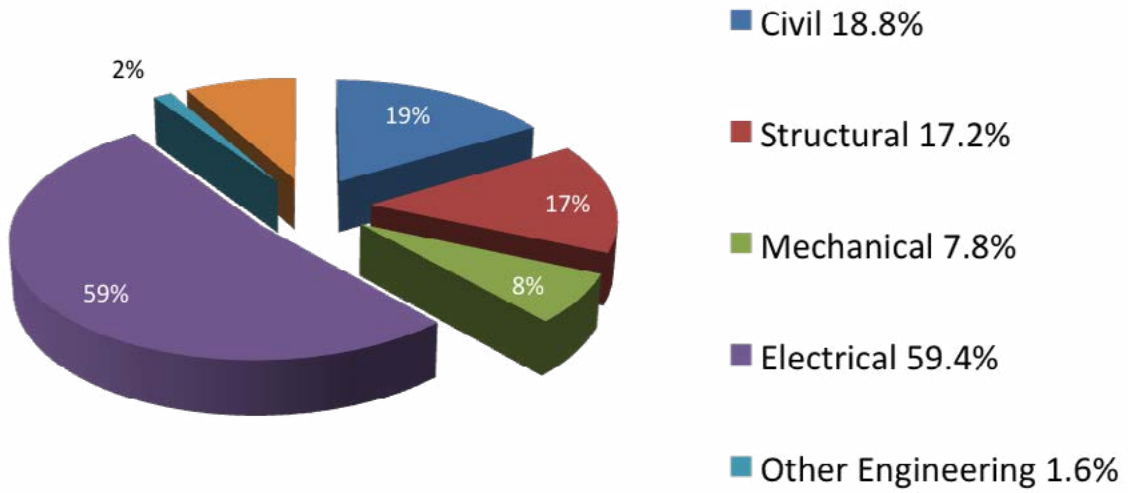
## CONFERENCE DETAILS

Number of Attendees .....719  
Attendees from.....36 States & the United Kingdom  
Number of Vendors .....63

## PRESENTATION SUMMARY

Keynote Speakers.....1  
Breakout Sessions.....23  
Workshops.....3

## CONFERENCE DEMOGRAPHICS



# 2015 VENDORS



Aldridge Construction Inc.  
All-Pro Fasteners, Inc.  
American Wire Group  
ASEC Inc.  
Butler and Land, Inc.  
Cardno, Inc.  
CBS ArcSafe, Inc.  
CDS Muery  
Chain Electric Company  
Circuit Breaker Analyzer, Inc.  
City Transformer Service Co.  
Data Com Power  
DIS-TRAN Steel, LLC  
Double E Engineering Sales  
EC Source Services, LLC  
Electrical Consultants, Inc.  
Elgin B. Robertson, Inc  
Energy Reps  
E V Smith Sales Co.  
Falcon Steel Co.  
Fred Oberlender & Assoc.  
Fugro Consultants, Inc.  
Great Southwestern Construction, Inc.  
Hargrove Power Inc.  
House Of Threads  
Hubbell Power Systems  
Irby Utilities IEEE  
JH Davidson & Associates, LLC  
Jones Companies, Inc.  
Jordan Transformer  
K D Johnson Inc.  
Keasler Associates  
MATCO Services, Inc.  
MYR Group Inc.  
Newpark Mats & Integrated

Services  
Nolan Power Group, LLC  
OMICRON electronics  
PPC Insulators  
Preferred Sales  
ProgUSA  
ReliaPOLE Inspection Services Co.  
Remote Solutions, LLC  
ROHN Products, LLC  
“The New” Sabre-FWT  
Schneider Engineering, Ltd.  
Sempco Surveying, Inc  
Shermco Industries  
Southwire Company  
SPX Transformer Solutions  
Surveying and Mapping, LLC (SAM)  
TCORR  
TAPP, Inc.  
TE Connectivity  
The TurnerCo.  
Travis Pattern  
TRC  
Trinity Meyer Utility Structures  
UC Synergetic, LLC  
Ulteig  
Utility Sales Agents of North Texas  
Vacuum Interrupters, Inc.  
Valmont Newmark  
Virginia Transformer  
Willbros T&D Services

## SPONSORSHIPS

Title Sponsor .....	\$5,000
Program Sponsor .....	\$5,000
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Flash Drive Sponsor .....	\$4,000
Charging Station .....	\$3,000
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Hotel Key Card Sponsor .....	\$1,500
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Elevator Graphic Wrap .....	\$1,000
Mobile App Banner Ad .....	\$750
Contributing Sponsor .....	\$500

## REGISTRATIONS

Vendor Fee with Conference Included Standard .....	\$700
Vendor Fee with Conference Included Early Bird .....	\$645
Vendor Fee .....	\$350
Attendee Standard .....	\$350
Attendee Early Bird .....	\$295



# BOARD MEMBERS

**Kevin Allen**

Consulting Engineer, Transmission Engineering  
**Oncor Electric Delivery**

**Walter Bartel**

Director, Project Engineering  
**CenterPoint Energy, LLC**

**Huntis Dittmar, P.E.**

Engineering Supervisor  
**Lower Colorado River Authority**

**Matt Estrada**

Engineer Sr.  
**American Electric Power**

**Tip Goodwin, P.E.**

Consulting Engineer  
**Oncor Electric Delivery**

**Joe Hazlewood**

Technical Specialist  
**Oncor Electric Delivery**

**Tim Hartz**

Manager - Transmission Engineering  
**Brazos Electric Power Cooperative, Inc.**

**Stan Krause**

Manager T - Line Engineering  
**American Electric Power**

**Dr. Wei-Jen Lee**

Director, Energy System Research Center  
**The University of Texas at Arlington**

**Amir Memic, P.E.**

Engineer  
**Lower Colorado River Authority**

**Steven Myers**

Manager Substation Operations Support  
**Oklahoma Gas and Electric**

**Larry Plemons**

Retired  
**Brazos Electric Power Cooperative, Inc.**

**Erich Schoennagel**

Manager of Transmission Engineering  
**CenterPoint Energy**

**David Solis**

Transmission Services Station Manager  
**AEP Central Power and Light**

**David Turner, P.E.**

Director of Operations  
**Lone Star Transmission, LLC**

***The University of Texas at Arlington  
Conference and Event Management:***

**Jamie Alexander**

Exhibition Coordinator

**Carrington Franklin**

Coordinator

**Staci Moore**

Support Specialist

**Marie Peterson**

Manager

**Cassandra Smith**

Executive Director



# CONFERENCE SPONSORS

TITLE



CONFERENCE PROGRAM



CONFERENCE BAG



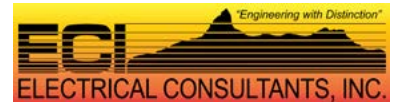
FLASH DRIVE



CHARGING STATION



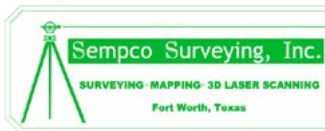
COFFEE BREAK



LANYARD



WATER BOTTLE



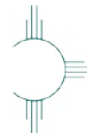
HOTEL KEYCARD



ELEVATOR WRAP



WIRELESS INTERNET



GREAT SOUTHWESTERN CONSTRUCTION, INC.



MOBILE BANNER



MOBILE SPLASH APP



CONTRIBUTING SPONSORS





# TRANSMISSION AND SUBSTATION DESIGN AND OPERATION SYMPOSIUM

## SAVE THE DATE

**49TH  
ANNUAL**

2016 TSDOS  
September  
7th - 9th  
2016

### LOCATION

Embassy Suites  
Dallas Frisco Hotel,  
Conference Center

PRECONFERENCE  
September  
6th  
2016

### LOCATION

Embassy Suites  
Dallas Frisco Hotel,  
Conference Center

**CEM** CONFERENCE &  
EVENT MANAGEMENT



THE UNIVERSITY OF TEXAS AT ARLINGTON