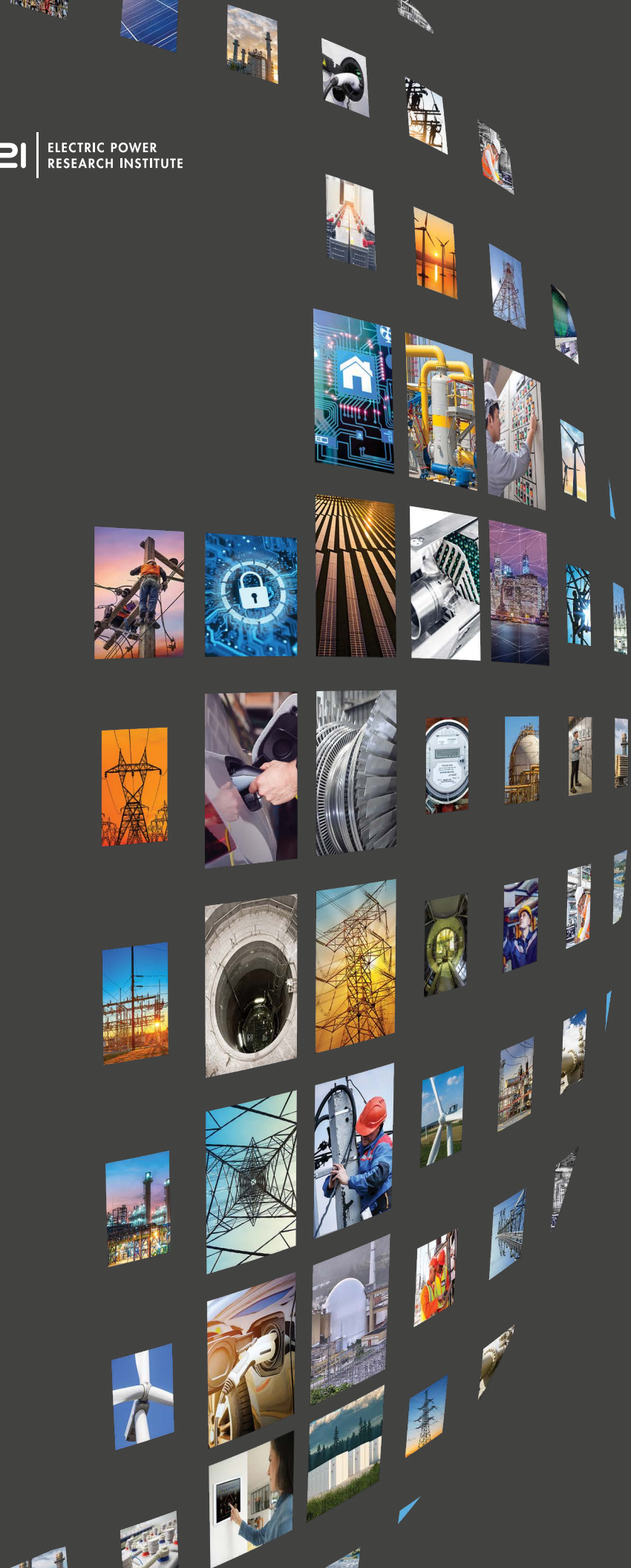




**TECHNOLOGY
TRANSFER
AWARDS**
2019



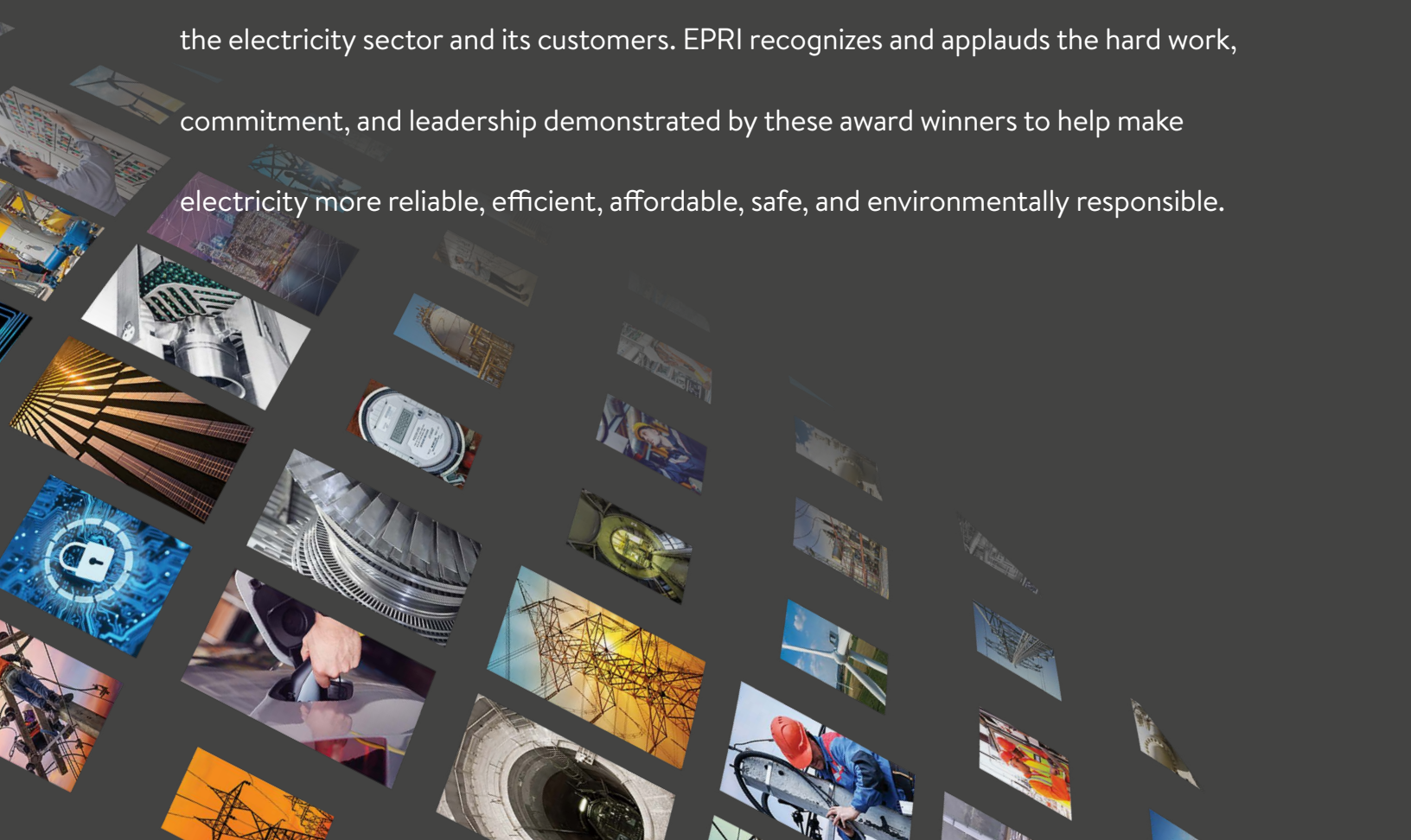


2019 TECHNOLOGY TRANSFER AWARDS

THESE AWARDS RECOGNIZE THE LEADERS AND THE INNOVATORS WHO HAVE APPLIED EPRI RESEARCH TO PRODUCE SIGNIFICANT RESULTS.

The award winners have shown exceptional application of EPRI research and technology in solving a problem of size and significance, championing a technology both within their companies and across the industry, driving progress in the electricity sector, and providing meaningful benefits for their companies' stakeholders and for society.

The EPRI Technology Transfer Awards spotlight the value of collaborative research to the electricity sector and its customers. EPRI recognizes and applauds the hard work, commitment, and leadership demonstrated by these award winners to help make electricity more reliable, efficient, affordable, safe, and environmentally responsible.





ALABAMA POWER

- Implementation of Advanced PQ Monitoring and Analysis Tools
Steve Pierre, Steven Tatum

ALLIANT ENERGY

- Integrated Security Operations Center (ISOC)
John Kotolski, Lisa Moller
- Integrating Technical Analyses of Climate-Related Science into Company Climate Risk Assessment, Planning, Greenhouse Gas Goal Setting, and Outreach
Michele Pluta

AMEREN

- Integrating Technical Analyses of Climate-Related Science into Company Climate Risk Assessment, Planning, Greenhouse Gas Goal Setting, and Outreach
Rick Smith
- Smart Inverter Impacts on Feeder Voltage Optimization (VO)
Cody Davis, Midhat Mafazy

AMERICAN ELECTRIC POWER

- Geotechnical Stability of Coal Ash Ponds During and After Closure
Pedro Amaya
- Integrating Technical Analyses of Climate-Related Science into Company Climate Risk Assessment, Planning, Greenhouse Gas Goal Setting, and Outreach
Scott Weaver
- Validation of Overhead Distribution Designs for Improved Reliability and Resiliency
Matt Shellenberger
- Weak Grid Assessment Using EPRI's Grid Strength Assessment Tool and Detailed Modeling Studies
Rob O'Keefe

ARIZONA PUBLIC SERVICE

- Integrating Technical Analyses of Climate-Related Science into Company Climate Risk Assessment, Planning, Greenhouse Gas Goal Setting, and Outreach
Charlene Saltz

BC HYDRO

- Implementation of Advanced PQ Monitoring and Analysis Tools
Scott C. Merriman
- Validation of Overhead Distribution Designs for Improved Reliability and Resiliency
Brittany Ewert

CENTERPOINT ENERGY

- Fleet Management Approach to Structure and Foundation Corrosion Management of Steel Poles
Victor Espino
- Impact of Cellular Antenna Attachments on Overhead Transmission Line Structures
Victor Espino, Mike Pakeltis
- Novel Transformer Dehydration Using Membranes
Qasim Aziz
- Testing and Validation of Advanced Approaches for Detecting Live Downed Conductors
Alireza Mehr

CENTRAL HUDSON GAS & ELECTRIC CORPORATION

- Validation of Overhead Distribution Designs for Improved Reliability and Resiliency
William Brosnahan

CGN POWER CO., LTD.

- First Dispersant Application in China for Mitigation of Fouling in Steam Generators
Chen Yue, Fang Jun, Han Wentao, Liang Yicai, Liu Heng, Qiao Hang

CHINA NATIONAL NUCLEAR POWER COMPANY, LTD.

- CNPP and NDE Successfully Pilot Application of RI-ISI Methodology from VVER to PWR Plant
Xue Xin Cai, Huang Chao, Yu Wen Ge, Liao Ze Jun, Yang Xing Wang, Li Shi Wei, Luo Yang

CHUGOKU ELECTRIC POWER COMPANY, INC.

- Chugoku and BWRVIP Collaborate to Adapt ECT Array Exam Technology for Repair
Hiroomi Kato, Keita Naito, Junji Nakagawa

COMMONWEALTH EDISON COMPANY





- Smart Inverter Impacts on Feeder Voltage Optimization (VO)
Pablo Jover, Aleksi Paaso, Vincent Westfallen

CONSOLIDATED EDISON COMPANY OF NEW YORK


- EPRI Ergonomic Handbooks: Manhole, Vault and Conduit Application, Direct-Buried Cable Applications, and Electrical Workers in Fossil-Fueled Power Plants
Prakash Kothari, Samuel Ng
- Radiofrequency Field Levels from Advanced Metering Infrastructure Meter Banks
William Azzoli, Benjamin Choi, William Fairechio, Charles Feldman, Victor Gallo, Steven Go, Prakash Kothari, Gregory Koumoullas, Costas Magoulas, Adam Miller, Hugh O'Neill, Simon Odie, Michael Parobek, William Slade, Yuseph Sleem, Benjamin Tannen, Artem Teplov, Chun Sing Wu





CONSOLIDATED EDISON, INC.

-  Electrification Scenarios for New York's Energy Future
Gurudatta Nadkarni
-  EPRI Technical Assessment Methodology (TAM) Implementation
William Vesely
-  Impact of Cellular Antenna Attachments on Overhead Transmission Line Structures
William Fairechio, Robert Shuman, Jade Wong
-  Novel Transformer Dehydration Using Membranes
Sergo Sagareli




CONSUMERS ENERGY

-  Integrating Technical Analyses of Climate-Related Science into Company Climate Risk Assessment, Planning, Greenhouse Gas Goal Setting, and Outreach
Linda Hilbert





CPS ENERGY

-  Electrification 2020 and Regional Electrification Conferences
Jo Ann Gutierrez, Kelly Kuhle, Jason Scarlett, Jonathan Tijerina
-  Testing and Validation of Advanced Approaches for Detecting Live Downed Conductors
Rick Maldonado, Zuber Vohra






DOMINION ENERGY

-  Implementation of Advanced PQ Monitoring and Analysis Tools
Luis Vega
-  Validation of Overhead Distribution Designs for Improved Reliability and Resiliency
Jason Beck
-  Voltage Control Area and Reactive Power Assessment Software (VCA Studio)
Mike Barmer, Gerald Warchol

DTE ENERGY


-  Addressing Environmental Compliance Challenges at Monroe Power Plant
Matt Shackelford
-  Advanced Performance and Health Data Monitoring Techniques for Wind Turbines
Matthew Beemer, Sumanth Makunur
-  Integrating Technical Analyses of Climate-Related Science into Company Climate Risk Assessment, Planning, Greenhouse Gas Goal Setting, and Outreach
Greg Ryan
-  Methods to Account for CO₂ Embedded in Wholesale Power Purchases
Joyce Leslie, Laura Mikulan, Sharon Pfeuffer
-  Testing and Validation of Advanced Approaches for Detecting Live Downed Conductors
Mark Aitken, Hassan Fawaz, Jeffery Klepadlo, Yong Li, Scott Pifer, Sandeep Sarna
-  Validation of Overhead Distribution Designs for Improved Reliability and Resiliency
Nelu Andrei

DUKE ENERGY


-  Advanced Distribution Planning Foundational Tool
Cliff Cates, Mike Grant, Wally Guthrie, Will Lowder, Gene Moore
-  Advanced Performance and Health Data Monitoring Techniques for Wind Turbines
Dustin Wambeke
-  Electrification 2020 and Regional Electrification Conferences
Jennifer Zajac
-  EPRI Technical Assessment Methodology (TAM) Implementation
Mistie Cantey, Joey L. Ward
-  Fleet Management Approach to Structure and Foundation Corrosion Management of Steel Poles
Prasad Yenumula

-  Impact of Cellular Antenna Attachments on Overhead Transmission Line Structures
Dan Chapoton, Andrew Gould, Prasad Yenumula
-  Implementation of Advanced PQ Monitoring and Analysis Tools
Joe Grappe
-  Integrating Technical Analyses of Climate-Related Science into Company Climate Risk Assessment, Planning, Greenhouse Gas Goal Setting, and Outreach
Vicky Sullivan
-  Novel Transformer Dehydration Using Membranes
Hugh Irwin
-  Optimizing HRSG Startup and Shutdown to Mitigate Cyclic Damage
William Davis Bryan, Eugene Eagle
-  Pinging Protocol to Assess Operational Risks in 7EA Fleet
Lisle E. Harris, Dennis Long, William Lester Wheeler
-  Purgeless Root Pass Welding
Scott H. Bowes
-  Validation of Overhead Distribution Designs for Improved Reliability and Resiliency
Jonathan Haynes


ELECTRIC POWER BOARD OF CHATTANOOGA

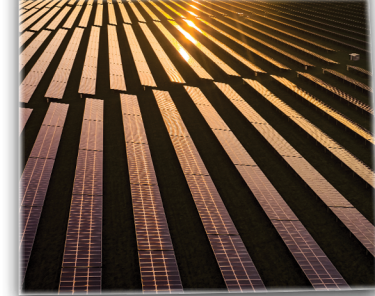
-  Implementation of Advanced PQ Monitoring and Analysis Tools
Bob Hay

ÉLECTRICITÉ DE FRANCE

-  Electrification 2020 and Regional Electrification Conferences
Clemence Alasseur, Celine Laporte

ELECTRICITY SUPPLY BOARD OF IRELAND

-  Validation of Overhead Distribution Designs for Improved Reliability and Resiliency
Clement Power, Paul Shiel



EMIRATES NUCLEAR ENERGY CORPORATION

ENEC Barakah Site Implements SGMP Guidelines Prior to Initial Startup
Khalid Al Suwaidi, Randolph Damon, Bohyeon Han, Yong Sun Rhee, Timothy Sarette

ENEL DISTRIBUCIAN, CHILE

Advanced Flexible Demand Response Implementation
Hans Christian Rother

ENEL GLOBAL INFRASTRUCTURE AND NETWORKS SRL

Advanced Flexible Demand Response Implementation
Ricardo Perez

ENTERGY SERVICES INC.

Integrating Technical Analyses of Climate-Related Science into Company Climate Risk Assessment, Planning, Greenhouse Gas Goal Setting, and Outreach
Rick Johnson

Voltage Control Area and Reactive Power Assessment Software (VCA Studio)
Maryclaire Peterson

EVERGY

Integrating Technical Analyses of Climate-Related Science into Company Climate Risk Assessment, Planning, Greenhouse Gas Goal Setting, and Outreach
Ben Postlethwait

EXELON CORPORATION

Exelon Enhances Plant Performance and Data Validation and Reconciliation (DVR) Models with Plant Engineering Guidance Reports
Thomas Baummer, Jeffrey Marion

Exelon, BWRVIP Develops Instrument Penetration NDE Technique and Handbook
Nick Johnson, Michelle Karasek, Robert Marcello, Christian McKean, Randal Schmidt

FIRSTENERGY CORPORATION

Impact of Cellular Antenna Attachments on Overhead Transmission Line Structures
William Broskey, Dave Kozy

Integrating Technical Analyses of Climate-Related Science into Company Climate Risk Assessment, Planning, Greenhouse Gas Goal Setting, and Outreach
Kim Pickford

Invasive Plant Species and Pollinators on Transmission Lines
Kate Bloss, Andy Liedel, Rebecca Spach, Kristin Susick, Karen Terry

Validation of Overhead Distribution Designs for Improved Reliability and Resiliency
Randal Coleman

GEORGIA POWER

Validation of Overhead Distribution Designs for Improved Reliability and Resiliency
Antonio Terry

GEORGIA TRANSMISSION CORPORATION

Implementation of Advanced PQ Monitoring and Analysis Tools
Marlin A. Browning

GREAT RIVER ENERGY

Integrating Technical Analyses of Climate-Related Science into Company Climate Risk Assessment, Planning, Greenhouse Gas Goal Setting, and Outreach
Mark Strohfus

Pinging Protocol to Assess Operational Risks in 7EA Fleet
Mike Herman, Craig Marschall

HAWAIIAN ELECTRIC COMPANY

Advanced Flexible Demand Response Implementation
Yoh Kawanami

Implementation of Advanced PQ Monitoring and Analysis Tools
Randy China

HYDRO ONE NETWORKS, INC.

Validation of Overhead Distribution Designs for Improved Reliability and Resiliency
Emre Aydin, Darren Desrosiers, Michael O'Reilly

IBERDROLA S.A.

Assessment of Air Quality Impact of Emissions from Aceca Power Plant Near Madrid
Miguel Pons

KOREA HYDRO & NUCLEAR POWER COMPANY

KHNP Avoids Millions in Costs with MRP Report Guidance of Degradation Management Strategy
Su-jin Jo, Hongdeok Kim, Ho-Yeon Lee, Jun-seog Yang, Eunsub Yun

LG&E AND KU ENERGY

Ash Pond Water Reuse Options, including Wastewater Paste Encapsulation
Mahyar Ghorbanian, Andrew Hiner, Joan S. Lipp, Roger Medina, Laura Mohn, Grant Phelps, Jennifer Stinnett, Haley Turner, Logan Waller

Geotechnical Stability of Coal Ash Ponds During and After Closure
Dave Millay

LOS ANGELES DEPARTMENT OF WATER AND POWER

Ergonomics Interventions Handbooks: Distribution Overhead Line Mechanics Handbook & Ergonomic Design for Substations
Jack Arouchian, Ryan Asanuma, Chris Cadena, Dean Elliott, Marc Hendon, Anthony Lipikorn, Don Louie, Delia Ponce, Leonard Wong

Heat Stress Management Resources and Webcasts
Hagop (Jack) Arouchian, Ryan Asanuma, Chris Cadena, Dean Elliott, Marc Hendon, Anthony Lipikorn, Don Louie, Delia Ponce, Leonard Wong



LUMINANT

- Determination of Maximum Chloride Concentration for an FGD Power Plant
Craig Birkenfeld, Garrett Foreman, Darren Thomas
- Pinging Protocol to Assess Operational Risks in 7EA Fleet
Matthew Ballew

MANITOBA HYDRO

- Integrating Technical Analyses of Climate-Related Science into Company Climate Risk Assessment, Planning, Greenhouse Gas Goal Setting, and Outreach
Brad Johnson

MINNESOTA POWER

- Integrating Technical Analyses of Climate-Related Science into Company Climate Risk Assessment, Planning, Greenhouse Gas Goal Setting, and Outreach
Mike Cashin

NATIONAL GRID

- Novel Transformer Dehydration Using Membranes
Gordon Wilson
- Validation of Overhead Distribution Designs for Improved Reliability and Resiliency
Paul Anundson

NATURGY ENERGY GROUP S.A.

- Assessment of Air Quality Impact of Emissions from Aceca Power Plant Near Madrid
Maria Molina

NEW YORK INDEPENDENT SYSTEM OPERATOR, INC.

- Electrification Scenarios for New York's Energy Future
Mike Swider

NEW YORK POWER AUTHORITY

- Electrification 2020 and Regional Electrification Conferences
Doug McMahon
- Electrification Scenarios for New York's Energy Future
Alan Ettlinger
- Fleet Management Approach to Structure and Foundation Corrosion Management of Steel Poles
Michael Fuchs
- Impact of Cellular Antenna Attachments on Overhead Transmission Line Structures
Michael Fuchs
- Integrating Technical Analyses of Climate-Related Science into Company Climate Risk Assessment, Planning, Greenhouse Gas Goal Setting, and Outreach
Kerry-Jane King

NISOURCE

- Integrating Technical Analyses of Climate-Related Science into Company Climate Risk Assessment, Planning, Greenhouse Gas Goal Setting, and Outreach
Keith Weber

ONTARIO POWER GENERATION

- OPG and PSEG Host EPRI SMART Chemistry PWR Online Chemistry Monitoring Demonstration
Peigang Cao, Emily Cornthwaite, Anil Garg, Ranga Santhanam, Pamela Woods
- OPG, Risk and Safety Management Adapt Fire Probabilistic Safety Analysis, Reduce Risk, Create New CANDU Approach
Shashank Gandhi

PAMPA ENERGIA S.A.

- Successful Equipment Reliability Process and Cultural Change Implementation
Gabriel Carbonelli, Gustavo Stamati, Gonzalo Suardiaz, Leandro Tudanca, Carlos Medina Villena

PNM RESOURCES

- Integrating Technical Analyses of Climate-Related Science into Company Climate Risk Assessment, Planning, Greenhouse Gas Goal Setting, and Outreach
Maureen Gannon

PORTLAND GENERAL ELECTRIC

- Heat Stress Management Resources and Webcasts
William Messner, Robert Roloson

PPL CORPORATION

- Testing and Validation of Advanced Approaches for Detecting Live Downed Conductors
Jim Conrad, Mychal Kistler, Chris Menges

PUBLIC SERVICE ELECTRIC AND GAS

- Impact of Cellular Antenna Attachments on Overhead Transmission Line Structures
Anthony Ramirez, Anthony Suppa

PUBLIC SERVICE ENTERPRISE GROUP, INC.

- OPG and PSEG Host EPRI SMART Chemistry PWR Online Chemistry Monitoring Demonstration
Joseph R. Chamy, John M. Fordham, Tom Mulholland, Leonard J. Rajkowski, Brad L. Scott

SACRAMENTO MUNICIPAL UTILITY DISTRICT

- Advanced Flexible Demand Response Implementation
Josh Rasin

SALT RIVER PROJECT

- Integrating Technical Analyses of Climate-Related Science into Company Climate Risk Assessment, Planning, Greenhouse Gas Goal Setting, and Outreach
Brendan Denker



SCANA ENERGY

- Implementation of Advanced PQ Monitoring and Analysis Tools
Joe Hodges, Jeff Inabinet

SOUTHERN CALIFORNIA EDISON

- Advanced Flexible Demand Response Implementation
Mark Martinez

SOUTHERN COMPANY

- Advanced Performance and Health Data Monitoring Techniques for Wind Turbines
Olugbenga Ajala, Mark Wingard
- Advanced Steam Temperature Control Strategies on Combined-Cycle Units
Chethan Acharya, Mark Faurot, Daniel Smith, John Sorge
- Application of the SCICHEM Model Under the EPA Risk Management Program
Travis Hicks
- Geotechnical Stability of Coal Ash Ponds During and After Closure
Jim Pegues
- I&C Technical Assessment Methodology Assists Southern with Cyber Assessment
Eugene Pisarskiy, Bradley Yeates
- Integrating Technical Analyses of Climate-Related Science into Company Climate Risk Assessment, Planning, Greenhouse Gas Goal Setting, and Outreach
Thomas Wells
- NDE and SNC Collaboration Leads to ASME Examination Code Case Modification That Helps Entire Fleet
Kyle Caver, Gary Lofthus, Corey Thomas
- Novel Transformer Dehydration Using Membranes
Kuni Scissum
- Voltage Control Area and Reactive Power Assessment Software (VCA Studio)
Clifton Black, Shih-Min Hsu

SOUTHWEST POWER POOL

- Weak Grid Assessment Using EPRI's Grid Strength Assessment Tool and Detailed Modeling Studies
Doug Bowman, Jason Tanner

TENNESSEE VALLEY AUTHORITY

- Geotechnical Stability of Coal Ash Ponds During and After Closure
Nick McClung
- Implementation of 27 Electrification Technologies
Bonnie Latta, Jason Snyder
- Implementation of Advanced PQ Monitoring and Analysis Tools
Anthony Murphy
- Integrating Technical Analyses of Climate-Related Science into Company Climate Risk Assessment, Planning, Greenhouse Gas Goal Setting, and Outreach
Karen Utt
- Pinging Protocol to Assess Operational Risks in 7EA Fleet
Jason Barrick, Todd Bell, Houston S. McConnell

TRI-STATE GENERATION AND TRANSMISSION ASSOCIATION

- Novel Transformer Dehydration Using Membranes
Randy Popp

TUCSON ELECTRIC POWER

- Integrating Technical Analyses of Climate-Related Science into Company Climate Risk Assessment, Planning, Greenhouse Gas Goal Setting, and Outreach
Jeff Yockey

VATTENFALL

- Vattenfall Leverages Lens of Eye Dose Guidance from Radiation Safety Program
Sara Almgren, Lisa Bäckström, Madelene Johansson, Virva Nilsson, Besart Rexhaj

WEC ENERGY GROUP

- Integrating Technical Analyses of Climate-Related Science into Company Climate Risk Assessment, Planning, Greenhouse Gas Goal Setting, and Outreach
Donna Danihel

XCEL ENERGY

- Integrating Technical Analyses of Climate-Related Science into Company Climate Risk Assessment, Planning, Greenhouse Gas Goal Setting, and Outreach
Nick Martin
- Validation of Overhead Distribution Designs for Improved Reliability and Resiliency
David Flaten

The Electric Power Research Institute, Inc. (EPRI, www.epri.com) conducts research and development relating to the generation, delivery and use of electricity for the benefit of the public. An independent, nonprofit organization, EPRI brings together its scientists and engineers as well as experts from academia and industry to help address challenges in electricity, including reliability, efficiency, affordability, health, safety and the environment. EPRI also provides technology, policy and economic analyses to drive long-range research and development planning, and supports research in emerging technologies. EPRI members represent 90% of the electricity generated and delivered in the United States with international participation extending to nearly 40 countries. EPRI's principal offices and laboratories are located in Palo Alto, Calif.; Charlotte, N.C.; Knoxville, Tenn.; Dallas, Texas; Lenox, Mass.; and Washington, D.C.

Product ID: 3002017737

©2020 Electric Power Research Institute (EPRI), Inc. All rights reserved. Electric Power Research Institute, EPRI, and TOGETHER...SHAPING THE FUTURE OF ELECTRICITY are registered service marks of the Electric Power Research Institute.

3420 Hillview Avenue, Palo Alto, California 94304-1338

PO Box 10412, Palo Alto, California 94303-0813 USA

800.313.3774 • 650.855.2121 • askepri@epri.com • www.epri.com