



2020

2020 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 COMPANY

- 🔧 UAS for Storm Response
Robert Cheney, Robert Hawthorne, Wayne Hodges

AMERICAN ELECTRIC POWER

- 🌿 Accurate Assessment of NO₂ and NO_x at Fossil Fuel Power Plants
David Long

AXPO POWER AG

- ⚙️ Deployed Steam Generator Dissimilar Metal Weld Examination Technology at Kernkraftwerk Beznau Nuclear Power Plant
Alan Guy

BALTIMORE GAS AND ELECTRIC

- 🔧 DER Integration Requirements, Practices, and Opportunities
Luke Hasemeier, James A. Mirabile, Alan M. Pressman
- 🔧 Installed Avian Diverters Using Unmanned Aircraft Systems (UAS)
John Edwards, Gregory J. Kappler, Andrew McCauley, Nathan Reim, Gabriel Rivolta
- 🔧 Vehicle Grounding and Personal Protection of Distribution System Mobile Equipment Practices
Christien D. Bellamy, Larry W. Burley Jr.

BONNEVILLE POWER ADMINISTRATION

- 🔧 Risk Based Assessment of Climate Conditions for Improved Seasonal, Regional, and Dynamic Transmission Line Ratings
Tyler Ashburn, Brett Bowers, Natasha Gentry

CENTERPOINT ENERGY

- 🔧 Electric Vehicle and Infrastructure Modeling for Deployment Programs
David Owen
- 🔧 Risk Based Assessment of Climate Conditions for Improved Seasonal, Regional, and Dynamic Transmission Line Ratings
Adam Ali, Cristal Jimenez

CEZ, A.S.

- 🌿 Innovative Weld Repair Solution for a CrMoV High Energy Piping Mixing Piece
Petr Hrdina, Karel Kaleta, Frantisek Krajca, Frantisek Leistner, Ondrej Nemec, Radovan Stastny, Jiri Valasek

CHINA NATIONAL NUCLEAR POWER COMPANY, LTD.

- ⚙️ Applied EPRI's Modular Accident Analysis Program (MAAP) and Enhanced EPRI's Severe Accident Management Guidance (SAMG) for Advanced, Passive LWR Designs Around the World
YU Shizhe, WEI Wei, WANG Wensheng, WEI Xin, TAO Yingyong, GU Yunfeng
- ⚙️ Reduced Radiation Exposure and Exam Time Through First-Ever Phased Array Ultrasonic Examination Implementation
HUANG Chao, XIE Hang, CAI Jiafa, ZHANG Yicheng, NIE Young, TU Zhixiong
- ⚙️ Used Predictive Maintenance Guidelines to Develop Standardized Approach to Condition Based Maintenance (CBM) in New Build AP1000
FAN Fuping, TAO Jialin, XIAO Ju, XU Ling, CHEN Lunshou, LI Xin, GUAN Yihao, YU Yijun, LYU Yuanliang, WANG Zihu

COMMONWEALTH EDISON COMPANY

- 🔧 DER Integration Requirements, Practices, and Opportunities
Nicholas Burica, Sean Carr
- 🔧 Installed Avian Diverters Using Unmanned Aircraft Systems (UAS)
Sara A. Race
- 🔧 Vehicle Grounding and Personal Protection of Distribution System Mobile Equipment Practices
G. Michael Martin, Eduardo F. Suarez

CONSUMERS ENERGY

- 🔧 DER Integration Requirements, Practices, and Opportunities
Rosanna Kallio, Dennis Woycehoski

DAIRYLAND POWER COOPERATIVE

- 🌿 Informed Effluent Guidelines: Bottom Ash Transport Water Management
Leif Tolokken

DOMINION ENERGY, INC.

- ⚙️ Led Establishment of Technical Bases for Long-Term Operations (LTO) Guidance Through Application of Subsequent License Renewal Applications (SLRA) Research
Paul Aitken
- 🔧 Priority Sustainability Issue Assessment Methodology
Hannah Casey, Morgan Hyatt, Zarin Mitchell, Blake O'Brien
- 🔧 State-of-the-art Line Monitoring Devices Provided Situational Awareness on Galloping, Blowout, and Vibration
Mike Lamb, Brandon Patterson



DOMINION ENERGY SOUTH CAROLINA, INC.

- * Informed Effluent Guidelines: Bottom Ash Transport Water Management
Mike Mosley, Andrew Walker

DTE ENERGY

- * Accurate Assessment of NO₂ and NO_x at Fossil Fuel Power Plants
Thomas Durham, Michael Lebeis
- * DC Arc Flash Hazard Assessment for Large-Scale Solar Photovoltaic (PV) Plants
Anthony Morabito

- 🔧 Grid Modernization Roadmap Developed and Assessed
Richard Mueller, Yujia Zhou

DUKE ENERGY

- * Accurate Assessment of NO₂ and NO_x at Fossil Fuel Power Plants
Kris Knudsen, Erin Wallace, Randy Wooten
- * Informed Effluent Guidelines: Bottom Ash Transport Water Management
Morgan Beveridge, Nathan Craig, Michael Smallwood, Jared Troyer
- * Process Compensated Resonance Testing
Paul Keener

EMIRATES NUCLEAR ENERGY CORPORATION

- * Applied EPRI Research to Support Construction and Operation of New Plant
Hank Berry

ENEL SPA

- * Novel Inspection and Repair of Single Crystal GT Blades
Tomas Alvarez Tejedor
- * Real-Time Deposition Monitoring
Daniela Galla, Andrea Morandi

ENTERGY SERVICES

- * Flow-Accelerated Corrosion (FAC) Program for High Energy Piping
Robert Breedlove, Curtis Halverson, Glenn Hamilton, Mekonnen Sisay

EXELON CORPORATION

- * Led Establishment of Technical Bases for Long-Term Operations (LTO) Guidance Through Application of Subsequent License Renewal Applications (SLRA) Research
Michael Gallagher
- * Process Compensated Resonance Testing
Mark Lozier

EXELON GENERATION

- 🔧 Installed Avian Diversers Using Unmanned Aircraft Systems (UAS)
Paul V. Adair, Cheri Peifer

FIRST NATIONAL OPERATION & MAINTENANCE COMPANY

- * Failure Mode Effects Analysis
Lana El Chaar, Hammad Masood, Stefan Verlee

FIRSTENERGY

- 🔧 Priority Sustainability Issue Assessment Methodology
April Marx, Kimberly Pickford, Kristin Susick, Mary Treptow

FLORIDA POWER & LIGHT

- * Led Establishment of Technical Bases for Long-Term Operations (LTO) Guidance Through Application of Subsequent License Renewal Applications (SLRA) Research
William Maher

GEORGIA POWER

- 🔧 DER Integration Requirements, Practices, and Opportunities
Patrick Harris, Ben Morris

GREAT RIVER ENERGY

- * Accurate Assessment of NO₂ and NO_x at Fossil Fuel Power Plants
Adam Salzer
- 🔧 CO₂ Emission Rate Metrics Calculator
Mark Strohfus
- 🔧 Risk Based Assessment of Climate Conditions for Improved Seasonal, Regional, and Dynamic Transmission Line Ratings
Rick Jeanson, Jim McGuire



HAWAIIAN ELECTRIC COMPANY

- ✿ Accurate Assessment of NO₂ and NO_x at Fossil Fuel Power Plants
Karin Kimura
- 🔧 Applied Advanced Tools and Methods for Integrating Renewables and DER
Henry Lee, Michelle Sakata, Troy Uyehara
- 🔧 Electric Vehicle and Infrastructure Modeling for Deployment Programs
Jimmy Yao
- 🔧 Probabilistic Hosting Capacity
Alan Hirayama, Alan Lee

HYDRO ONE

- 🔧 DER Integration Requirements, Practices, and Opportunities
Adnan Akhtar, Ryan Boudreau

HYDRO-QUÉBEC

- 🔧 Grid Modernization Roadmap Developed and Assessed
Mylene Labadie

KOREA ELECTRIC POWER CORPORATION

- ✿ Study of PM_{2.5} in Korea
Sungnam Chun, Suji Kang

KOREA HYDRO & NUCLEAR POWER CO., LTD.

- ✿ Gained Approval for Decommissioning Plan and Formed First Basis in Korea for Implementation
Kwang-Ho Jo, Hye-Jin Jung, Hyun Min Kim, Young-Gook Kim, Jae Young Oh, Taesik Yun

LG&E AND KU ENERGY LLC

- ✿ Accurate Assessment of NO₂ and NO_x at Fossil Fuel Power Plants
Adam Flowers, Cindy Whitaker
- ✿ Determined Maximum Chloride Concentration for FGD at a Power Plant
Mahyar Ghorbanian, Nathan Huster, Haley Turner, Logan Waller
- ✿ Informed Effluent Guidelines: Bottom Ash Transport Water Management
Roger Medina

LINCOLN ELECTRIC

- 🔧 Electric Vehicle and Infrastructure Modeling for Deployment Programs
Marc Shkolnick

LOS ANGELES DEPARTMENT OF WATER AND POWER

- 🔧 California Electrification Assessment
Tejasree Ganapa, Bang Phung, Katherine Rubin, Mark Sedlacek
- 🔧 Strategic Landholding Analysis for LADWP
Mario Acevedo, Helen Olivares, Graham Peace, Mark Sedlacek, Maria Sison-Roces, Nancy Sutley

NATIONAL GRID UK, LTD.

- ✿ DC Arc Flash Hazard Assessment for Large-Scale Solar Photovoltaic (PV) Plants
Justin Woodard

NAWAH ENERGY COMPANY

- ✿ Applied EPRI Research to Support Construction and Operation of New Plant
Abdullah Omar Abdullah Al Yafei

NEBRASKA PUBLIC POWER DISTRICT

- 🔧 CO₂ Emission Rate Metrics Calculator
Jason Vanek
- 🔧 Electric Vehicle and Infrastructure Modeling for Deployment Programs
Alan Dostal

NEW YORK POWER AUTHORITY

- ✿ Accurate Assessment of NO₂ and NO_x at Fossil Fuel Power Plants
Mesa Perry, Joshua Ramos, Walter Soto
- 🔧 Algorithms for Utility Infrared Inspection and Monitoring in Substations
Atena Darvishi, Ramadan Elmoudi, Alan Ettlinger, Gregory Pedrick
- 🔧 Electric Vehicle and Infrastructure Modeling for Deployment Programs
John Markowitz
- 🔧 Resilient Communications Demonstration Project
Vic Costanza, Randy Crissman, J.T. Flick, Jaiah Gottor, Corey Peters
- 🔧 Wide Area Oscillations Damping Control
Atena Darvishi, Alan Ettlinger, George Stefopoulos

NISOURCE

- ✿ Informed Effluent Guidelines: Bottom Ash Transport Water Management
Ernie Hasselbring, Bert Valenkamph

NUSCALE POWER, LLC

- ✿ Advanced Assessment of Small Modular Reactor (SMR) Design, Safety and Cost-Effectiveness Through Integrated PWR (iPWR) Containment Aerosol Deposition and Emergency Planning Zone (EPZ) Evaluation
Steven Mirsk



OGLETHORPE POWER CORPORATION

- 🌟 Accurate Assessment of NO₂ and NO_x at Fossil Fuel Power Plants
Oglethorpe Power Corporation (company award)
- 🏠 Fatigue Management in the Electric Utility Industry: Characterization and Mitigation Approaches
Mike Pitts
- 🌟 Process Compensated Resonance Testing
Jeff Wilson

OKLAHOMA GAS & ELECTRIC

- 🏠 Grid Modernization Roadmap Developed and Assessed
Zac Gladhill, Kandace Smith

ONTARIO POWER GENERATION, INC

- 🌐 Used EPRI Seismic Probabilistic Risk Assessment (PRA) and Seismic Fragility Research to Address Change Impacts in Seismic Hazard at Darlington
Nasser Aly, Sevana Bedrossian, Katherine Gromek, Lambert Li

PECO ENERGY COMPANY

- 🏠 DER Integration Requirements, Practices, and Opportunities
Valerie Carter, George W. Sey Jr.
- 🏠 Installed Avian Diverters Using Unmanned Aircraft Systems (UAS)
Jesse Goldberg, Keith Kowalski
- 🏠 Vehicle Grounding and Personal Protection of Distribution System Mobile Equipment Practices
Kimberly Keegan, Edward M. Morson

PEPCO HOLDINGS INC.

- 🏠 DER Integration Requirements, Practices, and Opportunities
Valerie R. Carter, Bee Z. Morton, Steven J. Steffel
- 🏠 Installed Avian Diverters Using Unmanned Aircraft Systems (UAS)
Cristina Frank
- 🏠 Vehicle Grounding and Personal Protection of Distribution System Mobile Equipment Practices
Joe Cunningham, Anthony D. Harmon

PJM INTERCONNECTION

- 🏠 Resilient Communications Demonstration Project
Paul Bickel, John Ippolito, Thomas O'Brien

POWERLINK QUEENSLAND

- 🏠 Risk Based Assessment of Climate Conditions for Improved Seasonal, Regional, and Dynamic Transmission Line Ratings
David Sharp, Glenn Stapleton

SACRAMENTO MUNICIPAL UTILITY DISTRICT

- 🏠 Deployed Customer Oriented Energy Storage
Deepak Aswani, Jeanne Duvall, James Frasher, Gabriel Leggett, Jennifer Starrh
- 🏠 Electric Vehicle and Infrastructure Modeling for Deployment Programs
Dwight MacCurdy

SALT RIVER PROJECT

- 🏠 Electric Vehicle and Infrastructure Modeling for Deployment Programs
Catherine O'Brien
- 🏠 Grid Modernization Roadmap Developed and Assessed
Chris Campbell, Juan Cardona

SAUDI ELECTRICITY COMPANY

- 🏠 Electric Vehicle and Infrastructure Modeling for Deployment Programs
Eng. Hatim Gandayh

SOUTHERN CALIFORNIA EDISON

- 🏠 California Electrification Assessment
Maya Alunkal, Erica Bowman, Lindsay Dattels, Daniel Hopper
- 🏠 Deployed Customer Oriented Energy Storage
Mark Martinez, Navniel Pillay, David Rivers

SOUTHERN COMPANY

- 🌟 Accurate Assessment of NO₂ and NO_x at Fossil Fuel Power Plants
Ryan Fogg, Justin Walters
- 🌟 Applied Root Cause Findings to Optimize HRSG Operation
J. Scott Davis, David Downs, Andy Kilgore, Nathan Ladner, Randy Miller, Jr., Hagen Scarborough
- 🏠 CO₂ Emission Rate Metrics Calculator
Justin Walters
- 🏠 DER Integration Requirements, Practices, and Opportunities
Andrew Ingram, Beth Senkbeil
- 🏠 Grid Modernization Roadmap Developed and Assessed
Jason Autrey, Tracy West



✿ **Informed Effluent Guidelines: Bottom Ash Transport Water Management**

Donna Hill

✿ **Resilient Communications Demonstration Project**

Tyler Amberson, Donald Roberts

✿ **UAS for Storm Response**

Glenn Wilson

STATE NUCLEAR POWER TECHNOLOGY CORPORATION

✿ **Improved Risk Insights with Successful Application of EPRI Human Reliability Analysis (HRA) Guidance**

Zaiwei Fu, Jiandong He, Juntao Hu, Ge Shao, Jiaqiang Wang, Yafeng Xia, Jinquan Yan, Qinfang Zhan, Wenhui Zhan, Yucheng Zhuo

TAIWAN POWER COMPANY

✿ **Applied EPRI Technology to Repair Leakage in Fuel Transfer Pool Wall at Kuo Sheng Nuclear Power Station**

Po-Ching Chen

TENNESSEE VALLEY AUTHORITY

✿ **Accurate Assessment of NO₂ and NO_x at Fossil Fuel Power Plants**

Randall Hirsch

✿ **Advanced Assessment of Small Modular Reactor (SMR) Design, Safety and Cost-Effectiveness Through Integrated PWR (iPWR) Containment Aerosol Deposition and Emergency Planning Zone (EPZ) Evaluation**

Archie Manohara, Alex Young

✿ **Electric Vehicle and Infrastructure Modeling for Deployment Programs**

Drew Frye

✿ **Field Porewater vs Laboratory Leach Test Comparison**

Anne Aiken, Ken Dunay, Margaret Gilliland, Nicholas A. McClung

✿ **Implemented Radiation Protection Standardized Task Evaluation (STE) Program**

Jason Valtos

✿ **Informed Effluent Guidelines: Bottom Ash Transport Water Management**

Lindy Johnson

✿ **Process Compensated Resonance Testing**

Benjamin A. Holt

TERNA SPA

✿ **Wide Area Oscillations Damping Control**

Giorgio Giannuzzi, Cosimo Pisani, Roberto Zaottini

TRANSGRID

✿ **Risk Based Assessment of Climate Conditions for Improved Seasonal, Regional, and Dynamic Transmission Line Ratings**

Hoang Tong

TRI-STATE GENERATION AND TRANSMISSION ASSOCIATION

✿ **Accurate Assessment of NO₂ and NO_x at Fossil Fuel Power Plants**

Dan Casiraro

✿ **CO₂ Emission Rate Metrics Calculator**

Lyle Witham

✿ **Fatigue Management in the Electric Utility Industry: Characterization and Mitigation Approaches**

Kent Mahanna

TUCSON ELECTRIC POWER

✿ **Real-Time Deposition Monitoring**

Elyse Redford

WEC ENERGY GROUP

✿ **Accurate Assessment of NO₂ and NO_x at Fossil Fuel Power Plants**

Donna Danihel, Shelly Heston

✿ **Electric Vehicle and Infrastructure Modeling for Deployment Programs**

Pat Keily

✿ **Informed Effluent Guidelines: Bottom Ash Transport Water Management**

Alison Castronovo, Elizabeth Hellman

✿ **Priority Sustainability Issue Assessment Methodology**

Joan Bedinger, Donna Danihel, Kellie Hamilton, Leah Thomas

XM

✿ **Applied Advanced Tools and Methods for Integrating Renewables and DER**

Carlos Eduardo Borda, Neby Castrillon Gutierrez, Carlos Mario Correa Posada, Juan Carlos Morales Ruiz, Lina Ramirez Arbelez

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