

Technology Transfer Awards 2014



Together ... Shaping the Future
of Electricity



EPRI's 2014 Technology Transfer Awards

recognize the leaders and the innovators who have transferred research into applied results. The 2014 award winners have shown exceptional application of EPRI research and technology to solve a problem of size and significance, to champion a technology both within their companies and across the industry, to drive progress in the electricity sector, and to provide meaningful benefits for its stakeholders and for society.

The 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, more efficient, more affordable, and more environmentally responsible.

Alabama Power

- ◆ First Installation of Hydrolux Molded Polymer Traveling Water Screens in a Cooling Water Intake Structure
Justin Mitchell, Jonathan Ponstein

Ameren

- + Collaboration and Coordination on Smart Grid Demonstrations
Rod Hilburn, Tamer Rousan

American Electric Power

- + BOLD Transmission Line Design and Testing
Eric Engdahl, Carol Liu
- ▲ Comprehensive Cycle Chemistry Guidelines for Combined Cycle / HRSGs
Jordan Douglas Cupples, Phillip Dees, Frank (Buck) Whitehead
- ◆ Energy-Economy Modeling and Development of the US-REGEN Model
Bruce Braine, Scott Weaver
- + Improving Distribution Grid Resiliency
Matt Shellenberger, Chuck Talley
- ▲ SAP (Sorbent Activation Process)
John Philip Duffee, Richard M. Osborne, Michelle Reed
- + Supporting Development of Industry Standards for Minimum Vegetation Clearance Distances
Eric Engdahl, Kevin Patton

Arizona Public Service

- Use of EPRI Mockups and Guidance to Support Nozzle Inspection
Brad Berles, Mike DiLorenzo, Edison Fernandez, Doug Hansen, Ken Schrecker

Atomic Energy of Canada Ltd.

- Application of Materials Degradation Matrix to CANDU Reactors
Mike Wright

Bonneville Power Administration

- + Supporting Development of Industry Standards for Minimum Vegetation Clearance Distances
Mike Staats

Bruce Power

- Application of Materials Degradation Matrix to CANDU Reactors
Lesley Robertson, Ken Sedman
- Risk Assessment of External Hazards Using EPRI Guidance
Rob McLean

CANDU Owners Group, Inc.

- Application of Materials Degradation Matrix to CANDU Reactors
Steve McGee, Aki Tanaka
- Extension of Risk-Informed Inspection Methodology to CANDU Reactors
Paul Lafreniere

CenterPoint Energy

- + Smart Charging Platform with Direct and Aggregated Demand Response Capabilities
David Owen

CEZ, a.s.

- Risk Assessment of External Hazards Using EPRI Guidance
Vilém Pfützner

Chubu Electric Power Company

- Adaptation of Performance Demonstration Program to Japanese Standards
Akira Nishikawa

Chugoku Electric Power Company

- Adaptation of Performance Demonstration Program to Japanese Standards
Yasuhira Kawamoto

Consolidated Edison

- ◆ Development of a Dual Flow Traveling Water Fine Mesh Screen System for Fish Protection
Brian Brush, Gary Thorn

Consumers Energy

- ◆ Characterization of Physical and Chemical Properties of Coal Combustion Products and Their Use in Engineered/Agricultural Settings
Gary A. Dawson

Dairyland Power Cooperative

- ◆ First Installation of Hydrolux Molded Polymer Traveling Water Screens in a Cooling Water Intake Structure
Bradley P. Foss

DTE Energy

- ◆ Characterization of Physical and Chemical Properties of Coal Combustion Products and Their Use in Engineered/Agricultural Settings
Dennis Leonard
- + Smart Charging Platform with Direct and Aggregated Demand Response Capabilities
Kostas Tolios

Duke Energy

- + Collaboration and Coordination on Smart Grid Demonstrations
Mike Rowand
- ◆ Development of Ground-Based Wind Turbine Blade Inspection Technology
Scott Abramson
- ◆ Energy-Economy Modeling and Development of the US-REGEN Model
Mike Kennedy, Kevin Leahy
- + Smart Charging Platform with Direct and Aggregated Demand Response Capabilities
Steve Hinkel
- + Supporting Development of Industry Standards for Minimum Vegetation Clearance Distances
Ron Adams

EDF

- + International Application of EPRI OpenADR 2.0 Open Source Server and Client Software
Vincent Audebert, Jean-Pierre Lafargue, Bruno Prestat
- ▲ Post-Combustion Capture and Oxy-Combustion
Fabrice Chopin, Nicolas Vaissière
- Risk Assessment of External Hazards Using EPRI Guidance
Marie Gallois

Edison International

- + Distribution-Connected Energy Storage Technology and Standards
Marc Pujol

- ◆ Environment
- ▲ Generation
- Nuclear
- + Power Delivery & Utilization



Eletróbrás CEPEL – Centro de Pesquisas de Energia Elétrica

- + Operator Training Simulator Application for Brazilian Network
Joao José Oliveira, Raul Sollero

Empresa Nacional de Residuos Radiactivos S.A.

- Optimization of Reactor Internals Segmentation During Decommissioning
Nieves Martin, Manuel Rodriguez, Juan Luis Santiago

Endesa S.A.

- ▲ Rotor Life Extension of High Cycles Gas Turbines
Tomás Álvarez Tejedor, Paulo Domingues dos Santos

Entergy

- ◆ Energy-Economy Modeling and Development of the US-REGEN Model
Brent W. Dorsey

Ergon Energy

- + Collaboration and Coordination on Smart Grid Demonstrations
Glenn Walden, Peter Wilson

Exelon Corporation

- + Collaboration and Coordination on Smart Grid Demonstrations
Glenn Pritchard
- + Distribution System Reliability Practices
Dan Brozman, Aleksander Pregelj, Darryl Stokes
- ◆ Pilot-Scale Demonstration of a Surfactant Enhanced In Situ Chemical Oxidation Process at a Manufactured Gas Plant Site
Peter Farrand

- Use of Mobile Work Management to Improve Maintenance Productivity
Dale Shaw

FirstEnergy

- + Distribution-Connected Energy Storage Technology and Standards
Eva Gardow
- ◆ Energy-Economy Modeling and Development of the US-REGEN Model
Michele Somerday

- ▲ Use of Preventive Maintenance Basis Database (PMBD)
Richard French

FirstEnergy Nuclear Operating Company

- Use of Gold Card Guidance to Improve Circuit Card Reliability
James Amundsen

Gas Natural Fenosa

- ▲ Use of Preventive Maintenance Basis Database (PMBD)
José Cros-Frutos, Iván Illera Vives, Marco López Fernández, Mireia Ribot, Emilio Rodríguez Santamaría

Great River Energy

- ◆ Energy-Economy Modeling and Development of the US-REGEN Model
Stan Selander

- ▲ SAP (Sorbent Activation Process)

Greg Archer, Breanna Lemer, Tim Nottestad

Hawaiian Electric Company

- + Collaboration and Coordination on Smart Grid Demonstrations
Demetrio Bucaneg, Darren Ishimura, Steven Rymsha

Hokkaido Electric Power Co., Inc.

- Adaptation of Performance Demonstration Program to Japanese Standards
Tatsuro Oosaki

Hokuriku Electric Power Co.

- Adaptation of Performance Demonstration Program to Japanese Standards
Masaki Zasu

Hydro-Quebec

- + Collaboration and Coordination on Smart Grid Demonstrations
Chad Abbey, Daniel Fournier

Japan Atomic Power Company

- Adaptation of Performance Demonstration Program to Japanese Standards
Tomokazu Iwata

Kansai Electric Power Company

- Adaptation of Performance Demonstration Program to Japanese Standards
Takehiko Sera

Kansas City Power and Light

- ◆ Energy-Economy Modeling and Development of the US-REGEN Model
Jeffrey M. Wolf

Korea Hydro & Nuclear Power Co., Ltd.

- Real-Time Remote Personal Dose Monitoring System
Moon hyung Cho, Jonh Rak Choi, Ki Doo Kang, Min Chul Kim, Jong Hyun Ko, Young Ju Lee, Sung Jun Maeng, Jung Kwon Son, Yu ho Weon

Kyushu Electric Power Co., Inc.

- Adaptation of Performance Demonstration Program to Japanese Standards
Masanori Imamura

Los Angeles Department of Water and Power

- + Distribution-Connected Energy Storage Technology and Standards
Matt Hone

Luminant

- Application of Cyber Security Procurement Methodology
Janardan Amin
- ◆ First Installation of Hydrolux Molded Polymer Traveling Water Screens in a Cooling Water Intake Structure
Gary L. Spicer

Midcontinent Independent System Operator

- ◆ Using the Electric Generation Expansion Analysis Software System (EGEAS) to Address Electric Sector Planning and Reliability Challenges
John Lawhorn

New York Power Authority

- ◆ Energy-Economy Modeling and Development of the US-REGEN Model
John Kahabka

NextEra Energy, Inc.

- Risk Assessment of External Hazards Using EPRI Guidance
Mark Averett

NiSource

- ◆ In Situ Stabilization of Sediments
Robert K. Cleary, Joe P. Ferry, Peter LaGoy

North American Electric Reliability Corporation (NERC)

- + Supporting Development of Industry Standards for Minimum Vegetation Clearance Distances
Neil Burbure

Oglethorpe Power

- ◆ Energy-Economy Modeling and Development of the US-REGEN Model
Richard Clark

Omaha Public Power District

- ◆ First Installation of Hydrolux Molded Polymer Traveling Water Screens in a Cooling Water Intake Structure
Russ Baker, Ron Stohlmann





Ontario Power Generation

- Application of Materials Degradation Matrix to CANDU Reactors
Otto Yong

- Extension of Risk-Informed Inspection Methodology to CANDU Reactors
Mehdi Rezaie-Manesh

Operador Nacional do Sistema Elétrico (ONS)

- + Operator Training Simulator Application for Brazilian Network
Michel Moreale, Hector Volskis

Pacific Gas & Electric

- + Distribution-Connected Energy Storage Technology and Standards
J. Henderson

PacifiCorp

- ◆ Energy-Economy Modeling and Development of the US-REGEN Model
James Campbell

Sacramento Municipal Utility District

- + Smart Charging Platform with Direct and Aggregated Demand Response Capabilities
David Hatfield

Salt River Project

- + Collaboration and Coordination on Smart Grid Demonstrations
Kyle Cormier, Joe Nowaczyk
- ◆ Energy-Economy Modeling and Development of the US-REGEN Model
Kristin L. Watt

SCANA Corporation

- ◆ Field Testing of In Situ Arsenic Groundwater Remediation
Jean-Claude Younan
- ◆ Pilot Evaluations of Flue Gas Desulfurization Wastewater Treatment Technologies
Clark Archer, Jean-Claude Younan

Sempra Energy/SDG&E

- + Smart Charging Platform with Direct and Aggregated Demand Response Capabilities
J.C. Martin

Shikoku Electric Power Company

- Adaptation of Performance Demonstration Program to Japanese Standards
Hiroshi Hamaguchi

Southern California Edison

- + Collaboration and Coordination on Smart Grid Demonstrations
Ardalan (Ed) Kamiab
- + Distribution-Connected Energy Storage Technology and Standards
Jorge Araiza, Andy Paylan, Sunil Shah
- + Smart Charging Platform with Direct and Aggregated Demand Response Capabilities
Jose Salazar

Southern Company

- + Developing and Applying a Cybersecurity Risk Assessment Methodology
Matt Bebout, Phil Marasco, Guy Palmer, Joseph Sagona, Steve Sanders, Christopher Taylor
- ◆ Development of Photovoltaic Orientation, Aging, and Forecasting Research at the Southeastern Solar Research Center
Will Hobbs
- ▲ Development of the Water Research Center (WRC)
Mark Andrew, Tim Banks, Anna-Wesley Dorsett, Morgan French, John Poole, Jason (Xinjun) Teng, Tracy Underwood, Cassie Willingham, Jeff Wilson
- ◆ Energy-Economy Modeling and Development of the US-REGEN Model
Kimberly Adelberg, Brian D. Toth
- ◆ Southeast Atmosphere Study Air Quality Campaign
John J. Jansen

- + Supporting Development of Industry Standards for Minimum Vegetation Clearance Distances
Keith Wallace

- ▲ Wearable Flexible Eddy Current Array Probe for Inspecting Complex Surfaces
Charles Boohaker

Southwest Power Pool (SPP)

- + Fast Transmission Fault Screening (FFS)
Doug Bowman

Tennessee Valley Authority

- ▲ Case Study: Systematic Approach to Lower Load Operation
Fred Carder
- Development and Demonstration of Open-Phase Detection System
Mark Bowman, Richard Brehm, Robert L. Davis, David Murray, Benny Westmoreland
- ◆ Energy-Economy Modeling and Development of the US-REGEN Model
Ed Stephens, Karen Utt
- ◆ Southeast Atmosphere Study Air Quality Campaign
Stephen Mueller

Tohoku Electric Power Co., Inc.

- Adaptation of Performance Demonstration Program to Japanese Standards
Naonari Tsuchiya

Tokyo Electric Power Company

- Adaptation of Performance Demonstration Program to Japanese Standards
Shinichi Yamazaki
- + International Application of EPRI OpenADR 2.0 Open Source Server and Client Software
Hideo Ishii, Tatsuya Kato, Shinya Sugita

Tri-State G&T Association, Inc.

- + Smart Charging Platform with Direct and Aggregated Demand Response Capabilities
Art Mander

UJV Rez, a.s.

- Risk Assessment of External Hazards Using EPRI Guidance
Ladislav Kolar

We Energies

- ◆ Characterization of Physical and Chemical Properties of Coal Combustion Products and Their Use in Engineered/Agricultural Settings
Robert Meidl

Xcel Energy

- + Improving Distribution Grid Resiliency
Kelly Bloch, Betsy Coppock, David Flaten