



EPRI Power Quality Applications (PQA) and Advanced Distribution Automation (ADA) 2007 Joint Conference and Exhibition

Transforming Power Systems to Ensure Power Quality and Reliability





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Renaissance Long Beach Hotel, Long Beach, California June 11–13, 2007

# Transforming Power Systems to Ensure Power Quality and Reliability

The Electric Power Research Institute (EPRI) and Southern California Edison are pleased to announce the 2007 EPRI Power Quality Applications (PQA) and Advanced Distribution Automation (ADA) Conference. PQA/ADA 2007 will provide an unparalleled forum for electric power end-users, distribution engineers, reliability and power quality professionals, and related technology manufacturers to gather, share experiences, and learn from one another in a highly efficient and focused environment. The conference will explore enhancing productivity and profitability through improved understanding of electric power PQ, reliability, advanced distribution automation and related management and strategic issues.

#### Week of Events

The week of events will begin with an open forum to review and provide an update to include pre-conference tutorials/workshops including Advanced PQ Monitoring and the Emergence of DC in End Use Power. There will also be an open forum to review and provide an update on the Department of Energy (DOE) Project, "Development and Demonstration of Advanced Monitoring Systems for Fault Location, Analysis, and Prediction."

Participants will also enjoy an evening sponsored by Southern California Edison, Dranetz-BMI, and EPRI featuring food and fun on board the legendary Queen Mary cruise ship docked at Long Beach. The Queen Mary's newly-restored Verandah Grill will play host to an evening of fun, food and nostalgic music that will take you back to a long-lost and glamourous era. Join us for guided tours of the historic ocean liner and World War II troopship, and see restored areas that have been under wraps since the final voyage in 1967, including the Isolation Wards and the aft Machine Rooms.

Following the technical conference, EPRI will hold working group meetings for utility funders of the EPRI PQ (Program 1), ADA (Program 124), and Distribution (Programs 30 and 128).



# Day 1, Monday, June 11, 2007

Morning Meeting	DOE Project Update Meeting — Development and Demonstration of Advanced Monitoring Systems for Fault Location, Analysis, and Prediction; Mark McGranaghan, Dan Sabin of EPRI			
Concurrent Afternoon Tutorial	PQ Monitoring Instructors: Mark McGranaghan, Dan Sabin of EPRI	Concurrent Afternoon Tutorial	Emergence of DC in End Use Power (Was Edison Right?) Instructors: Brian Fortenbery, Mark Stephens, Doug Dorr of EPRI	
Evening Reception	Welcome Recention Featuring 2007 Exhibitors			

#### Day 2, Tuesday, June 12, 2007

Day 2,	luesday, June 12, 2007				
Plenary 1	Power System Transformation Chair: Mark McGranaghan, EPRI New Tools for New Times: Maintaining Reliability in an Unreliable World Jim Kelly, Vice President of Engineering and Technical Services, SCE PQ, Reliability, and the Distribution System in a Carbon-Constrained World Arshad Mansoor, Vice President, Power Delivery Markets, EPRI				
Track 1:	Track 1: Power Quality Track		k 2: Advanced Distribution		
	Economic Evaluation of Power Quality and Reliability Chair: Bill Howe, EPRI	Concurrent 2 A	Advanced Distribution Technologies Chair: Bob Yinger, SCE		
rent	An Economic Framework for Voltage Quality Bill Howe, EPRI		Integrated Distribution Management System Joe Schatz, Chuck Wallis of Southern Company		
Concurrent 1 A	End User Perceptions of Power Quality - A European Perspective Roman Targosz, European Copper Institute		Fast Simulation and Modeling for Advanced Distribution Automation Olivier Huet, EDF		
	New Approaches for Customer PQ Services  Xavier Yang, Gerard Tanneau of EDF		Advanced Fault Analysis System (or AFAS) for Distribution Power Systems  Laurentiu Nastac, Concurrent Technologies Corp.		
	Power Quality and Reliability Standards and Benchmarking Chair: John McDaniel, National Grid USA (Invited)		Integrated Monitoring for Automation Chair: Georges Simard, Hydro Quebec		
Concurrent 1 B	Update on Adoption of IEEE 1366 Major Event Definition for Reliability Indices Calculations John McDaniel, National Grid USA (Invited)	Concurrent 2 B	Performance of Today's Intelligent Controllers and Meters, Elements of an Integrated Monitoring System for ADA Mario Tremblay, Francisc Zavoda of Hydro Quebec		
	Developments on Standards for Voltage Quality  Dennis Hansen, Pacificorp and Russ Ehrlich, PEPCO Holdings  (invited)		Integrated Monitoring for Fault Location  Joe Frani, SDG&E		
	Effect of Component Variation On Voltage Sag Ride- Through: Implication on Voltage Sag Standard Test Methods Satish Rajagopalan, Mark Stephens of EPRI and Deepak Divan, GA Tech		Application of MultiSpeak and CIM for Integration of Monitoring Infrastructure with Distribution System Operations  Bob Saint, NRECA		
	Dealing with Harmonics and Neutral-to-Earth Voltages in Distribution Systems  Chair: Marty Page, Southern Company	Concurrent 2 C	Integrated Distributed Resources - Resolving Issues Chair: Stephanie Hamilton, SCE		
Concurrent 1 C	Bulk System Harmonics Study Theo Laughner, TVA		Impact on Short-Term Flicker Using Energy Storage and Either a Fuel Cell or Utility Power as Electric Source Ib I. Olsen, Gaia Power Technologies; Jeffrey D. Lamoree, EnerNex Corp.; and Mark Hilson Schneider, Delaware County Electric Cooperative, Inc.		
	Effects of Harmonic Neutral Currents on Mutligrounded Distribution Systems Suhag Patel, Juan Menendez of SCE		Status on IEEE SCC21 Standard 1547 on DER Interconnection to the Electric Grid and Associated Body of 1547 Standards Dick DeBlasio, Tom Basso, NREL		
	Advanced Harmonic Assessment Module for Power Quality Monitoring Systems Surya Santoso, University of Texas		DTE Energy's Use of DG to Manage Circuit Loading and DEW for Circuit Modeling  Haukur (Hawk) Asgeirsson, Power System Technologies,  Richard Seguin, EDD		
Evening Social Event	_		ieen Mary ison, Dranetz-BMI, and EPRI		

Track 1:	rack 1: Power Quality		Track 2: Advanced Distribution	
	Advanced Applications for Power Quality Monitoring Chair: Dan Sabin, EPRI		Case Studies in Advanced Distribution  Chair: Frank Goodman - EPRI	
Concurrent 1 D	The Importance of IEC 61000-4-30 Class A for the Coordination of Power Quality levels - Is it Important?  Robert Neumann, Qualitrol LLC	Concurrent 2 D	Circuit of the Future Ardalan Kamiab, SCE	
	Power Quality - Seeing is Believing Dan Carnovale, Aidian Graham of Eaton		Advancing the State of Looped Distribution Feeders  Christopher McCarthy, S&C Electric	
	Accurate Fault Location System Based on Distributed Voltage Sags Measurement Georges Simard, Hydro Quebec			
	Monitoring Power Quality Beyond EN 50160 and IEC 61000-4-30 Daniel Amitai, Elspec Ltd, Israel		Intelligent Feeder Automation in Tulsa, Oklahoma Bret Goodwin, Public Service of Oklahoma	
Concurrent 1 E	Case Studies in Power Quality  Chair: Juan Menendez, SCE	Concurrent 2 E	Integrating Advanced Metering with Distribution Operations Chair: Kay Clinard, UCA Users Group	
	EMTP-RV Time Domain Simulations Showing the Impact of Operating a 5MW Pulsating Linear Accelerator on a Transmission, Subtransmission, and Five Distribution Systems  Jim Rossman, TVA		A Checklist for Managing Advanced Meter Data for Distribution Operations  Debra Henderson, OSISoft	
	Power Quality in the Semiconductor Industry; Impacts and Mitigations  Alan Shiroma, Jazz Semiconductor		Scenarios for Improving Reliability and Performance by Integrating Metering and Distribution Automation Erich Gunther, Grant Gilchrist of EnerNex Corporation and Jeff Gooding, SCE	
	An Uncommon Approach to a Common Problem  Bobby Gettier, Dominion Virginia Power and  Chuck Thomas, EPRI		Using Open Standards to Facilitate Integration of Advanced Metering with Distribution Operations  Kay Clinard, UCA Users Group	
Concurrent 1 F	PQ Improvement Technologies - Latest Developments Chair: Brian Fortenbery, EPRI	Concurrent 2 F	The Business Case for Distribution Automation Technologies Chair: Bob Uluski, Enernex	
	Technology Assessment and Application Guide for an Active Voltage Conditioner with Storage Option  Tom Geist, EPRI and David Ezer, Omniverter		Cost Effectiveness of Reliability Improvement for Distribution Automation Charles Williams, S&C Electric	
	Power Quality Improvement by Dynamic Voltage Restorer with a New Control Strategy T. Kandil, Mohamde Askoura of Al-Azhar University		DA Reliability Improvement – Predicted Versus Actual Results for One Utility Bob Uluski, Enernex	
	Enhancing the Value of Distributed Energy Resources with Advanced Power Electronics  Charlie Vartanian, SCE		Business Case for ADA and Smart Grid  Ali Ipakchi, KEMA	
Plenary 2	The Quality of Electric Supply as a Strategic Business Driver  Chair: Bill Howe, EPRI  Electricity for the 21st Century, Kurt Yeager, EPRI  AC Stall - Your Pending PQ Nightmare, Bob Yinger, SCE  A Vision for Revolutionizing PQ Over the Next 10 Years, Bill Howe, EPRI			
<u></u>	Be Sure to Stay for the Raffle of an Automotive GPS Navigation System* During Closing Cere *Must be present to win			

## Day 4, Thursday, June 14, 2007, 8:00 a.m. – 5:00 p.m.

Concurrent Meeting	EPRI Program 1 Advisory Meetings Meeting Host: Bill Howe, EPRI	Concurrent Meeting	EPRI Distribution P30, P124, P128 Advisory Meetings Meeting Host: Matt Olearczyk, EPRI
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### Day 5, Friday, June 15, 2007, 8:00 a.m. - 12:00 p.m.

	EPRI Distribution P30, P124, P128 Advisory Meetings Meeting host: Matt Olearczyk, EPRI
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#### Focus of 2007 PQA/ADA Conference

Utilities, industry representatives and consumers will share their unique perspectives on the importance of power quality and ADA and how they currently address quality, automation, and reliability issues. Understanding the end-user perspective is critical in order to quantify the real cost of power quality and reliability problems and to develop the lowest-cost solutions that meet the needs of users and optimize efficiency on both sides of the meter. Southern California Edison and EPRI invite you to register to join in this premier event and hear from industry leaders on important issues.

#### **Exhibition**

Companies offering innovative products and services that enhance and improve electric power reliability, power quality, operating costs, and system performance are invited to participate in the 2007 PQA & ADA Exhibition. The exhibition, held in conjunction with EPRI's annual PQA/ADA Conference, showcases leading-edge power quality and advanced distribution automation technology solutions and services.

Past exhibitors have included Active Power
Corporation, Dranetz-BMI Electrotek Concepts/WPT,
Inc., EnerNex Corporation, Fluke Corporation, FLIR
Systems, Power Measurement Schneider Electric,
Power Monitors, Inc., Omniverter, Inc., Hi Tec USA,
S&C Electric Co., United Engineering, Pillar, Power
Quality Services Center, Power Standards Lab, Electro
Industries, SEA Limited, Measurlogic, Inc., Pentadyne
Power Corporation, Caterpillar and SoftSwitching
Technologies to name just a few.

For more information, contact Lisa Wolfenbarger at 865.218.8026 or <a href="mailto:lwolfenbarger@epri.com">lwolfenbarger@epri.com</a>; or register online through <a href="https://www.MyPQ.Net">www.MyPQ.Net</a> as described in the registration section.

#### **Accommodations**

The conference will be held at the Renaissance Long Beach Hotel. Attendees are responsible for making their own room reservations at The Renaissance Hotel by calling toll-free: 1.800.468.3571. To obtain the EPRI group rate of \$139 (single) or \$139 (double), mention "EPRI/SCE Joint Meeting." The room reservation deadline is May 18, 2007.

#### **Conference Logistics**

For questions or further information regarding conference logistics, contact Lisa Wolfenbarger at 865.218.8026 or <a href="https://www.lwolfenbarger@epri.com">lwolfenbarger@epri.com</a>; or go to the conference information web site as described in the registration section below.

For technical questions please contact Mark Stephens at 865.218.8022 or <a href="mailto:mstephens@epri.com">mstephens@epri.com</a>

#### Registration

For more information and to register for this event, please visit <a href="https://www.MyPQ.net">www.MyPQ.net</a>, and click "More Information" in the PQA 2007 information area. Alternatively, you can navigate directly to the conference registration page by clicking here.

#### Win an iPod!

Registrations received on or before May 15 vie for a 4GB iPod Nano

If this is your first time using the new EPRI conference registration Cvent system, you will be asked to create a new, free account. If you experience any difficulties registering for PQA/ADA 2007, please contact Brent Lancaster at 704.595.2017 or blancaster@epri.com.

An *early registration* incentive of \$100 is available until May 30th, 2007.



#### The Electric Power Research Institute (EPRI)

The Electric Power Research Institute (EPRI), with major locations in Palo Alto, California; Charlotte, North Carolina; and Knoxville, Tennessee, was established in 1973 as an independent, nonprofit center for public interest energy and environmental research. EPRI brings together members, participants, the Institute's scientists and engineers, and other leading experts to work collaboratively on solutions to the challenges of electric power. These solutions span nearly every area of electricity generation, delivery, and use, including health, safety, and environment. EPRI's members represent over 90% of the electricity generated in the United States. International participation represents nearly 15% of EPRI's total research, development, and demonstration program.

Together...Shaping the Future of Electricity

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