

# Power Delivery & Utilization 2017 European Advisors Meeting

## Co-hosts

Electric Power Research Institute (EPRI) – <http://www.epri.com>

International Institute for Energy Systems Integration (iiESI) – <http://iiesi.org/>

National Grid UK – <http://www2.nationalgrid.com/uk/>

UK Power Networks – <http://www.ukpowernetworks.co.uk/>

## iiESI Coordination

A pre-meeting workshop will be hosted by iiESI on Tuesday, May 16th. This workshop will address **The Value Proposition for Energy Systems Integration** and the research coordination that is needed to realize this value proposition. Attendance is limited and will be coordinated by iiESI. Important topics include:

### Morning

- Economic Assessment Framework
- Integration of Renewables – Central and Distributed Resources
- Electrification of Transportation and Heating – Value Assessment
- The Business Case for Net Zero Energy Buildings
- Meeting Flexibility Requirements – the Economics of Energy Storage
- Flexibility from Customer Connected Technology Integration
- The Economics of Microgrids and Resiliency
- Infrastructure Investment Requirements – Grid Modernization
- Market Design Implications – Realizing the Value Proposition

### Afternoon

- Example case studies from around the world

These are global issues and different priorities and solutions are being implemented around the world. Understanding the value proposition taking into account all perspectives is critical as a starting point. This workshop will help characterize the approaches for assessing the value proposition and the needs for basic research, standards development, demonstrations, etc., to validate the value proposition. iiESI will help provide coordination of these research efforts from around the world.

The workshop will be held at Imperial College. Contacts:

**Goran Strbac**, [g.strbac@imperial.ac.uk](mailto:g.strbac@imperial.ac.uk) – technical questions

**Kathryn Avedon**, [Kathryn.Avedon@nrel.gov](mailto:Kathryn.Avedon@nrel.gov) – registration and logistical questions

On behalf of the Electric Power Research Institute (EPRI) and co-hosts National Grid UK and UK Power Networks (UKPN), it is a great pleasure to extend an invitation to EPRI's first European Advisors meeting for the Power Delivery and Utilization (PDU) research sector to be held in London, England, May 17-18, 2017. The International Institute for Energy Systems Integration (iiESI) will also be a sponsor of the meeting and will host a workshop at Imperial College prior to the EPRI meeting.

The EPRI PDU 2017 European Advisors meeting will focus on challenges in the European electricity industry and associated opportunities for research collaboration across seven research tracks:

- Overhead Transmission
- Substations
- Grid Operations and Planning
- Distribution Operations and Integration of DER
- Integrating the Customer
- Information and Communication Technology
- Cyber Security

The meetings will focus on opportunities for increased collaboration between EPRI research activities and research efforts in Europe to address critical issues facing the industry. Along with experts from the EPRI research programs, the agenda will feature leading experts from European research efforts as well as experts from European member companies and guests that can describe important demonstrations and technology applications.

Advisors from all EPRI member companies and iiESI members are welcome as well as guests that are interested in exploring collaboration opportunities.

To register for this event and for detailed event information, please visit the event website at <http://integratedgrid.com/power-delivery-and-utilization-2017-european-advisory-meeting/>.

Please contact Arlette Haddad, 1-865-218-8122 ([ahaddad@epri.com](mailto:ahaddad@epri.com)) with questions.

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### Electric Power Research Institute

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## Power Delivery & Utilization 2017 European Advisors Meeting

**May 17-18, 2017**  
**Amba Hotel Charing Cross**  
**The Strand**  
**London WC2N 5HX**

# Power Delivery & Utilization 2017 European Advisors Meeting

Opening Plenary: Welcome and Introduction, UKPN, National Grid, iiES (Bryan Hannegan) and EPRI (Mark McGranaghan)  
with discussion of the role of demonstrations and pilots and the opportunities for collaboration.

## TRACK SESSIONS AND TOPICS

	Overhead Transmission	Substations	Grid Operations and Planning	Distribution and Integration of DER	Integrating the Customer	Information and Communication Technology	Cyber Security
Day 1 – Wednesday, May 17	<ul style="list-style-type: none"><li>Portfolio Introduction and Review</li><li>Lightning Performance and Grounding</li><li>Connector Performance and Management</li><li>Live Work on Overhead Lines</li><li>Conductor Corrosion Management</li></ul>	<ul style="list-style-type: none"><li>Portfolio Introduction and Review</li><li>Asset Management</li><li>Transmission Lines Asset Management Analytics</li><li>Transformer Life Management</li></ul>	<ul style="list-style-type: none"><li>Portfolio Overview</li><li>System Restoration and Resiliency</li><li>Distributed Resource Integration</li><li>Issues at the TSO/DSO Interface</li><li>Planning: Modeling and Validation</li></ul>	<ul style="list-style-type: none"><li>Introduction and Portfolio Review</li><li>Planning, Modeling, and Analytics</li><li>Issues at the TSO/DSO Interface</li><li>Grid Integration and Smart Inverters</li><li>Interconnection Standards and Grid Codes</li><li>Integration Experience – Germany and the United States</li></ul>	<ul style="list-style-type: none"><li>Introduction and Portfolio Review</li><li>Customer Characteristics, AMI and NILMS</li><li>Customer Technologies and Connected Customer Technologies Working Council</li><li>Electrification</li><li>Electric Transportation and Integration of Vehicle Charging</li><li>Next Generation Heat Pumps and Storage Heating</li></ul>	<ul style="list-style-type: none"><li>ICT Program Overview</li><li>ICT Challenges from a European Perspective</li><li>Telecommunications Initiative</li><li>IED Management System</li></ul>	<ul style="list-style-type: none"><li>EPRI Cyber Security Program Overview</li><li>Cyber Security Challenges from a European Perspective (Guest Speaker)</li><li>Incident Response and Threat Management Demonstration</li><li>Overview of UK's National Cyber Security Centre (Guest Speaker)</li><li>Improving Cyber Security Situation Awareness, Case Study</li></ul>
Day 2 – Thursday, May 18	<ul style="list-style-type: none"><li>Performance and Maintenance of High-Temperature Conductors</li><li>Management of Composite Structures</li><li>Advanced RF Sensor Development and Deployment</li><li>Roundtable Discussion</li></ul>	<ul style="list-style-type: none"><li>SF<sub>6</sub> Research for Breakers and Gas Insulated Substations and Lines</li><li>TBD</li><li>Roundtable Discussion</li></ul>	<ul style="list-style-type: none"><li>Risk-Based Planning</li><li>Operational Planning: Managing Variability and Uncertainty</li><li>Real-Time Operations Situational Awareness</li><li>Roundtable Discussion: R&amp;D Needs to Meet European Goals</li></ul>	<ul style="list-style-type: none"><li>Economics of Distribution Investment</li><li>Non-wires Alternatives</li><li>Energy Storage</li><li>Locational Value of DER</li><li>Operations – Advanced Distribution Systems</li><li>Enel Presentation</li><li>Roundtable Discussion</li></ul>	<ul style="list-style-type: none"><li>Power Quality</li><li>Documenting PQ Levels</li><li>New Compatibility Issues</li><li>Updating Compatibility Standards</li><li>Energy Storage and Microgrids</li><li>Issues in Integrating Distributed Energy Storage</li><li>The European Experience</li><li>Roundtable Discussion</li><li>A Framework for the Customer Model of the Future</li></ul>	Joint Session: ICT and Security Architecture for DER Integration	
						<ul style="list-style-type: none"><li>Enterprise Architecture, Framework for Customer Integration and Network Model Management</li><li>Advanced Metering Infrastructure (AMI)</li><li>Discussion – International Perspective: Germany, UK/Ireland</li><li>Roundtable Discussion</li></ul>	<ul style="list-style-type: none"><li>Supply Chain Security</li><li>Cyber Security Metrics</li><li>Roundtable Discussion</li></ul>
Wrap-up Discussions: Track leaders from both EPRI and members document collaboration opportunities, action items, and cross-cutting activities.							

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## Contact Information

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Matt Wakefield, Director, Information & Communication Technology, [mwakefield@epri.com](mailto:mwakefield@epri.com)

## Accommodations

Amba Hotel Charing Cross

The Strand, London WC2N 5HX

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[http://www.amba-hotel.com/hotels/united\\_kingdom/london/charing-cross/index.html](http://www.amba-hotel.com/hotels/united_kingdom/london/charing-cross/index.html)

[bookcc@amba-hotel.com](mailto:bookcc@amba-hotel.com)

EPRI contracted rate: £255.00 for a superior double room

Booking reference ELEC160517BS

Deadline for Group Rate: April 16, 2017 by 6:00 PM Local Time