

STEAM TURBINE AND GENERATOR USER GROUP 2017

Institution of
**MECHANICAL
ENGINEERS**

22-23 March 2017

The Birmingham Conferences
and Events Centre, Birmingham

Power Industries Division
Conference

More details available at
www.imeche.org/STUG2017

KEY SPEAKERS INCLUDE:

David Stephen Geoffrey Pollock (Viscount Hanworth)
Member
**European Energy and Environment Sub-Committee,
House of Lords**

Graham Hartley
Managing Director
**Siemens Power Generation Services,
Power and Gas**

Antoine Pfister
Rotating Equipment and Turbomachinery Engineer
**EDF CIT -Generation-
Thermal Engineering Department**

Tim Shurrock
Manager, Mechanical Design and Integrity
GE Power

Hideyuki Nakamura
Chief Specialist
Toshiba International Corporation

**SAVE
UP TO 10%
OFFER ENDS
27 JANUARY 2017**



LANYARD SPONSOR:



EVENT PARTNER:



EXHIBITORS:



SUPPORTING ORGANISATIONS:



**BOOK EARLY AND SAVE UP TO 10%
OFFER ENDS 27 JANUARY 2017**

**TERMS AND
CONDITIONS
APPLY**

STEAM TURBINE AND GENERATOR USER GROUP 2017

22–23 March 2017

The Birmingham Conferences and Events Centre, Birmingham

THE INSTITUTION'S POPULAR STEAM TURBINE AND GENERATOR USER GROUP RETURNS FOR TWO FULL DAYS OF PEER-REVIEWED PRESENTATIONS AND CASE STUDIES.

This user group will enable those involved in the management, operation and maintenance of steam turbines, generators and large motors to discuss common problems and issues, exchange ideas, identify potential solutions and learn about new developments. Attendees will hear directly from OEMs, service providers and end users about the latest technologies, case studies in plant operations and best practice in steam turbine, generator and large motor service.

This user group encourages open debate and problem solving, using peer-reviewed presentations and promotes the sharing of experience among the steam turbine generator community. Join to engage and network with thought leaders and decision makers across the industry.

WHY ATTEND:

- **Network** with leading manufacturers, operators and service providers within the steam turbine and generator community
- **Gain insight** into the current position of the UK power generation industry from policy advisors, major utility companies and manufacturers
- **Learn** from real-life case studies illustrating project experience and best practice
- **Discover** the latest developments and technologies
- **Hear** advice from leading specialists on a wide number of issues
- **Understand** how to manage and minimise plant risks and improve the performance of your plant

ORGANISING / ADVISORY COMMITTEE:

Fossil Power Committee

The Institution of Mechanical Engineers

MEMBERS' CREDITS:

Andrew Laycock
Centrica Energy

Ben Adams
Engie

Colin Caldwell
Scottish Power

Dave Wallis
Rendcomb Consultancy

Dave Ward
Toshiba

Geoff Horseman
Siemens

Ian Rowntree
Uniper Energy

James Hough
SSE Engineering Centre

James Fogden
Toshiba International (Europe)

Matthew Patch
SSE Engineering Centre

Mike Jones
GE Power

Nigel Carter
Engie

Paul Cooper
GE Power

Richard Martin
Turbine Engineering Consultants

Richard Stewart
EDF Energy

KEY PROGRAMME HIGHLIGHTS:

- Hear about the latest industry trends from both a **regulatory** and **industry** perspective
- Learn about the latest available **steam turbine** and **generator technologies**
- Gain insights from case studies regarding steam turbine and generator integrity, including **design, manufacture, repair** and **refurbishment methods**
- Get the latest updates on approaches to **plant operations**
- Attend key presentations including **inspection** and **monitoring techniques**

BOOK YOUR PLACE TODAY

WWW.IMECHE.ORG/STUG2017

TERMS AND
CONDITIONS
APPLY

PROGRAMME

DAY 1	22 MARCH 2017	
08:30	REGISTRATION AND REFRESHMENTS	
	INDUSTRY TRENDS	
09:00	CHAIR'S WELCOME AND OPENING REMARKS	
09:10	KEYNOTE ADDRESS: PAST TRIUMPHS AND PRESENT CHALLENGES IN THE UK ENERGY INDUSTRY David Stephen Geoffrey Pollock (Viscount Hanworth), Member, European Energy and Environment Sub-Committee, House of Lords	
09:30	AN OEM'S PERSPECTIVE ON THE UK ELECTRICITY INDUSTRY Graham Hartley, Managing Director, Siemens Power Generation Services, Power and Gas	
09:50	EDF ENERGY: A VISION FOR THE UK'S FUTURE POWER MARKET Alistair Davies, Head of Strategic Analysis and Modelling, EDF Energy	
10:10	QUESTION AND ANSWER SESSION	
10:30	NETWORKING REFRESHMENT BREAK	
	STEAM TURBINE TECHNOLOGIES	GENERATOR AND LARGE MOTOR TECHNOLOGIES
11:00	LATEST UPDATE ON SIEMENS STEAM TURBINE PORTFOLIO Reinhard Kloster, Product Manager, Siemens AG Power and Gas Division	ADVANCED AIR PRESSURIZED COOLING TECHNOLOGY Matthias Baca, Head Generator Design, Siemens AG Power & Gas Division
11:20	GEOHERMAL TURBINES: TECHNOLOGY OPTIONS TO MATCH GEOHERMAL RESOURCE CHARACTERISTICS Gary Byak, Geothermal Representative, Toshiba International Corporation	LARGE CAPACITY INDIRECTLY HYDROGEN COOLED GENERATOR Hideyuki Nakamura, Chief Specialist, Toshiba International Corporation
11:40	THE EFFECT OF PARTIAL STEAM ADMISSION AND MISSING BLADES ON STEAM TURBINE FATIGUE LIFE John McGill, Senior Engineer, Frazer Nash Consultancy	HV MOTORS AND DESIGN IMPACT BY CHOICES Colin D Cairney, Business Development Manager, Siemens PLC
12:00	QUESTION AND ANSWER SESSION	QUESTION AND ANSWER SESSION
12:20	NETWORKING LUNCH	
	STEAM TURBINE INTEGRITY	
13:20	LONG TERM MANAGEMENT OF STRESS CORROSION CRACKING IN SHRUNK-ON TURBINE DISKS Ronnie Scheepers, Corporate Consultant, Structural Integrity Noel Lecordier, Senior Consultant, ESKOM	
13:40	LP LAST STAGE BLADES: INTEGRITY RISKS, DESIGN, FAILURE AND MECHANISMS INSPECTION METHODS Steve Turner, Manager of Fleet Management, GE	
14:00	LP DISC 'T' SLOT UPSTAND RECOVERY Owyn Wallace, EDF	
14:20	DETERMINATION AND CONTROL OF AXIAL CLEARANCES Tim Shurrock, Engineering Manager, GE Power	
14:40	QUESTION AND ANSWER SESSION	
15:00	NETWORKING REFRESHMENT BREAK	
	GENERATOR AND LARGE MOTOR INTEGRITY	
15:30	UNDERSTANDING YOUR GENERATOR – WHAT COULD POSSIBLY GO WRONG? David Wallis, Director, Rendcomb Consultancy Limited	

For the most up-to-date and detailed programme for the event, please visit:
www.imeche.org/stug2017

- This programme is subject to change.
- The Institution is not responsible for the views or opinions expressed by individual speakers.

PROGRAMME

DAY 1	CONTINUED
15:50	GENERATOR HYDROGEN SAFETY Steve Kilmartin, Director of Products and Markets, Environment One
16:10	ADVANCED HYDROGEN LEAK DETECTION Christopher Markman, Product Line Manager, Inspection & Diagnostics, GE
16:30	ADDRESSING DAMAGE FROM SUDDEN TEMPERATURE INCREASE OF THE STATOR DRIVEN END OF A 450 MVA GENERATOR Arold Rustenburg, Technical Expert Generators, Energy Europe - BU Generation, Engie
16:50	QUESTION AND ANSWER SESSION
17:00	CHAIR'S CLOSING REMARKS
17:20	END OF DAY ONE
19:00	NETWORKING DINNER

DAY 2	23 MARCH 2017	
08:30	REGISTRATION AND REFRESHMENTS	
09:00	CHAIR'S OPENING REMARKS	
	PLANT OPERATION	
09:10	STEAM TURBINES AND GENERATORS: INTERACTION WITH THE INSURANCE INDUSTRY Steve Willis, Head of Loss Control, Engie	
09:30	REPLACEMENT OF FRF PACKAGE UNIT Simon Carr, Turbine Engineer, EDF Heysham 2 Power Station	
09:50	THE STORM IS COMING: ELECTROSTATIC DISCHARGE IN TURBINE OIL SYSTEMS Daniel Alessandri, Marketing Manager, Power Generation, Pall Corporation	
10:10	LOOKING AT HUMIDITY FOR PRESERVATION OF APPLICATIONS AND ENERGY SAVINGS IN THE UTILITIES INDUSTRY Emily Walker, Marketing Executive, Business Area Air Treatment, Munters Ltd	
10:30	QUESTION AND ANSWER SESSION	
10:50	NETWORKING REFRESHMENT BREAK	
	BEST PRACTICE IN GENERATOR SERVICE	BEST PRACTICE IN STEAM TURBINE SERVICE
11:20	ADVANCEMENTS IN THE INSPECTION AND SERVICE TECHNIQUES FOR LARGE TURBINE GENERATORS Scott Robinson, Engineering Manager, Global Service Market, Siemens Energy	ASSESSMENT OF A DEEP CRACK IN A STEAM TURBINE CASING Vivek Mahadevan, Senior Engineer, Siemens Power Generation Services
11:40	OBJECTIVE ASSESSMENT OF GENERATOR STATOR WINDING INSULATION CONDITION USING A VERY LARGE PARTIAL DISCHARGE TEST DATABASE Howard Sedding, Insulation Engineer, Qualitrol Iris Power	INVESTIGATION AND RECTIFICATION OF LP ROTOR BLADE CRACKING Chris Kerr, Design and Development Engineer, EDF Turbine Support Group
12:00	INTERSPACE STATOR WINDING TO REDUCE VIBRATION Hideyuki Nakamura, Chief Specialist, Toshiba and Vincent Fernagut, Head of Technical Mission, EDF Directorate of Nuclear Engineering (DIN) - CNEPE	ON-SITE SHRINK-ON ROTOR REPAIR SOLUTION FOR FAILURE OF A 60MW GEOTHERMAL STEAM TURBINE Enrico Foglino, Ansaldo Energia

BOOK EARLY AND SAVE UP TO 10%
OFFER ENDS 27 JANUARY 2017

**TERMS AND
CONDITIONS
APPLY**

PROGRAMME

DAY 2	CONTINUED	
12:20	ROBOTIC VERSUS ROTOR OUT INSPECTION Mark Baumann, Inspections Integration Leader, GE	LP ROTOR SPINDLE CRACKING ASSESSMENT Wolfgang Hahn, Head of Engineering, EDF Energy - Coal, Gas and Renewables Douglas Gass, Manager Materials Engineering, Siemens Energy Service
12:40	QUESTION AND ANSWER SESSION	
13:00	NETWORKING LUNCH	
	BEST PRACTICE IN GENERATOR SERVICE	BEST PRACTICE IN STEAM TURBINE SERVICE
14:00	PRESSURE PLATE AND FLUX SHIELD OVERHEATING ON A 200 MVA, 22 KV AIR-COOLED GENERATOR: ROOT CAUSE ANALYSIS AND REPAIR DESCRIPTION Bill Moore, Director Technical Services, National Electric Coil	INVESTIGATIONS AND REPAIR OF A RATEAU SCHNEIDER STEAM TURBINE AFTER A LARGE FIRE ON AN EDF CCGT Antoine Pfister, Rotating Equipment and Turbomachinery Engineer Andrés Sanchez Roa, O&M Steam Turbine Engineer, EDF CIT - Generation - Thermal Engineering Department
14:20	WHEN DOES A GENERATOR ROTOR BECOME UNREPAIRABLE AND ULTIMATELY SCRAP? Wojciech Betlej, Lead Design Engineer, Quartzelec	SPIRAL WELDING – CUTTING THE COST OF MAINTENANCE, BUT NOT THE QUALITY Stephen Kendrick, Director Sales and Services, Spiralweld
14:40	URGENT REPLACEMENT OF DOUBLE END DRIVE GENERATOR Roy Beardshaw, Head of Engineering, Brush Electrical Machines	TURBINE LUBRICATION CHALLENGES AND HOW THESE CAN BE MET AND OVERCOME Peter Smith, Technology Manager, Shell Global Solutions
15:00	QUESTION AND ANSWER SESSION	QUESTION AND ANSWER SESSION
15:20	NETWORKING REFRESHMENT BREAK	
	INSPECTION AND MONITORING	
15:50	ELECTROMAGNETIC INTERFERENCE DIAGNOSTICS AS A CONDITION BASED MONITORING TECHNIQUE Mike Hughes-Narborough, Development Engineer, Doble PowerTest Ltd	
16:10	TORSIONAL VIBRATION MEASUREMENT AND MODEL BASED MONITORING Erik Knopf, Manager Rotordynamics, GE Power	
16:30	ON-LINE PERFORMANCE AND DIAGNOSTIC MONITORING OF TOSHIBA STEAM TURBINES Jeff Parmar, Vice President Operations, UAE, Toshiba Corporation	
16:50	QUESTION AND ANSWER SESSION	
17:10	CHAIR'S CLOSING REMARKS	
17:20	END OF CONFERENCE	

SPONSORSHIP AND EXHIBITION OPPORTUNITIES

CREATE A BESPOKE STRATEGY THAT PLACES YOUR COMPANY IN FRONT OF SENIOR DECISION MAKERS

Engage face to face with your target market of senior engineers

Extensive networking opportunities to help you forge strong long-term business relationships with leading industry players

Firmly establish thought leadership credentials within your specialist field

Use high-profile sponsored speaking platforms or focused technical workshops to effectively demonstrate your skills and expertise within a chosen sector

Deliver high-profile and relevant brand exposure

Promote your products and services as market leaders in front of our influential audiences

Generate new business leads

Capture contact data from our highly qualified delegates to fuel your sales teams

CONTACT THE SPONSORSHIP TEAM ON:

T: +44 (0)20 7973 1249

E: sponsorship@imeche.org

BOOK YOUR PLACE TODAY

WWW.IMECHE.ORG/STUG2017

TERMS AND
CONDITIONS
APPLY

HOW TO BOOK YOUR PLACE

FEES AND CHARGES

Registration fees include entry to the sessions, refreshments and a copy of the conference proceedings.

Fees and charges	Early Bird Rates until 27 January 2017	Standard Rates
Member, IMechE/supporting organisation	£569 + VAT = £682.80	£630 + VAT = £756
Non-member	£709 + VAT = £850.80	£785 + VAT = £942
Student/Retired	£215 + VAT = £258	£215 + VAT = £258

THREE WAYS TO BOOK

- 1 Online:
www.imeche.org/stug2017
- 2 Email:
eventenquiries@imeche.org
- 3 Phone:
+44 (0)20 7973 1251

Please read the information listed below as each booking is subject to the Institution's standard terms and conditions.

CONDITIONS OF BOOKING

Completed application forms should be returned to the address above, along with the correct payment. Attendance at the event will be confirmed on receipt of the full balance. All participants are advised to bring a copy of their confirmation with them on the day, to ensure the fastest possible entry.

SPECIAL REQUIREMENTS

Please inform us of any special requirements, ie dietary or access, on the relevant section of the booking form or email eventenquiries@imeche.org

Cancellation

For a refund (minus £25+VAT admin charge), cancellations must be received at least 30 days prior to the event. Replacement delegates are welcome at any time. The Institution reserves the right to cancel any event. In this case, the full fee will be refunded unless a mutually convenient transfer can be arranged. In the event that the Institution postpones an event for any reason and the delegate is unable or unwilling to attend on the rescheduled date, they will receive a full refund of the fee paid. The Institution is not

responsible for any loss or damage as a result of a substitution, alteration or cancellation/postponement of an event. The Institution shall assume no liability whatsoever if this event is cancelled, rescheduled or postponed due to a fortuitous event, Act of God, unforeseen occurrence or any other event that renders performance of this conference impracticable, illegal or impossible. For the purposes of this clause, a fortuitous event shall include, but not be limited to: war, fire, labour strike, extreme weather or other emergency.

Please note that while speakers and topics were confirmed at the time of publishing, circumstances beyond the control of the organisers may necessitate substitutions, alterations or cancellations of the speakers and/or topics. The Institution reserves the right to alter or modify the advertised speakers and/or topics if necessary without any liability to you whatsoever. Any substitutions or alterations will be updated on the event's webpage as soon as possible.

LIABILITY

The organisers do not accept liability for any injuries or losses of any nature incurred by delegates and/or accompanying persons, nor for loss or damage to their luggage and/or personal belongings.

CONFERENCE VENUE

The Birmingham Conferences and Events Centre
Hill Street
Birmingham
B5 4EW

SPONSORSHIP & EXHIBITION OPPORTUNITIES

GET INVOLVED

Attending this event as either an exhibitor or sponsor will give you the opportunity to display your solutions, services and products to the right people at the right time.

BENEFITS OF SPONSORING

- **Showcase** new products
- **Raise** awareness of your operation
- **Improve** perception of your brand
- **Influence** other organisations' spending plans

This is an excellent way to enhance your company profile and communicate effectively to your target audience.

For more information please call

+44 (0)20 7973 1249

or email sponsorship@imeche.org

PE
DOWNLOAD
THE PE APP

Access
the latest
engineering
news

www.imeche.org/peapp



**Institution of
MECHANICAL
ENGINEERS**

The Institution of Mechanical Engineers is a registered charity (no 206882)
VAT No GB299930493.

1 Birdcage Walk
Westminster
London
SW1H 9JJ

T +44 (0)20 7222 7899
www.imeche.org

FORWARD THINKING

We are the market leader among professional engineering bodies. We've been supporting engineers since 1847 and have 113,000 members in over 140 countries, working in the world's most dynamic and important industries. Our comprehensive events programme brings you the latest research and best practice from industry and academia.

OTHER EVENTS TO LOOK FOR



NON DESTRUCTIVE TESTING

21-22 March 2017

**IMechE Engineering Training Centre,
Sheffield**

Gain a clear understanding of how to get the most out of NDT for your business, the new techniques available and real-time monitoring technologies to improve reliability, reduce warranty claims and achieve higher levels of customer satisfaction.

www.imeche.org/ndt2017



MIDLANDS ENGINEERING DINNER

31 March 2017

The ICC, Birmingham

The thirteenth Midlands Engineering Dinner returns on 31 March for an evening of networking and entertainment.

[www.imeche.org/
midlandsengineeringdinner](http://www.imeche.org/midlandsengineeringdinner)

The Institution of Mechanical Engineers organises over 120 events a year, including free-to-attend lectures as well as conferences, seminars, annual luncheons and dinners. Please visit www.imeche.org/events for the complete list of events.

Follow us on Twitter



twitter.com/imecheevents