

STEAM TURBINE AND GENERATOR USER GROUP 2018

Institution of
**MECHANICAL
ENGINEERS**

21-22 March 2018
Old Trafford, Manchester United
Football Club

Power Industries Division
Conference

More details available at
www.imeche.org/stug

KEY SPEAKERS INCLUDE:

Barbara Vest, Director of Generation
Energy UK

Geoff Horseman, Chief Turbine Engineer
Siemens

Matthias Baca, Head Generator Design in Power and Gas
Siemens

Alessandro Calabrese, Lead Customer Support Engineer
Mitsubishi Hitachi Power Systems Europe



EXHIBITORS:

 **EthosEnergy**

 **QUARTZ ELEC**

 **NORD-LOCK GROUP**

 **KPG**
KINDENHARTZ PREMIUM GEAR

 **DEKOMTE**

 **STORK**
A Fluor Company

 **ANSALDO ENERGIA**



SUPPORTING ORGANISATION:

 **Hazard forum**

 **SOE**
Society of Operations Engineers

EVENT PARTNER:

 **topEngineer**

 **EIS**
ENGINEERING
INTEGRITY SOCIETY

Book your place today www.imeche.org/stug

STEAM TURBINE AND GENERATOR USER GROUP 2018

21-22 MARCH 2018, MANCHESTER UNITED FOOTBALL CLUB

FIND SOLUTIONS FOR KEY CHALLENGES FACING THE MANUFACTURERS AND OPERATORS OF STEAM TURBINE AND GENERATOR TECHNOLOGIES

This event will enable those involved in the management, operation and maintenance of steam turbines and generators to discuss common problems and issues. Join us to exchange ideas, identify potential solutions and learn about new developments at our leading technical event offering peer reviewed and high level content. Hear directly from OEMs, service providers and end users of steam turbines, generators and large motors about the latest technologies available. Learn from case studies in plant operations, and best practice in turbine and generator service.

The Institution's User Groups encourage open debate and problem solving to our technical and specialist communities. Hear from key peer reviewed presentations and promote the sharing of experiences among the steam turbine generator community. Engage and network with thought leaders and decision makers across the industry.

KEY PROGRAMME HIGHLIGHTS:

- Gain insight in the current trends in the energy market with presentations from **Energy UK** and **Engie**
- **EDF Energy, Siemens** and **GE Power** will deliver presentations on Steam Turbine, Generator and Large Motor Technologies
- Explore Steam Turbine and Generator Integrity with **Uniper Energy, Fraser Nash** and **Nord-Lock Group**
- Learn best practice models for Steam Turbine Service and Generator Inspection and Monitoring with **Scottish Power** and **SSE PLC**
- Hear presentations from **Mitsubishi Hitachi Power Systems Europe Ltd, Toshiba Energy Systems & Solutions Corporation** and **Shell**

ATTEND THIS CONFERENCE TO:

- **Network** at our dinner 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 steam turbine and generator 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, Power Industries Division
Institution of Mechanical Engineers.

ORGANISING COMMITTEE:

Andrew Laycock Centrica Energy	James Hough SSE Engineering Centre
Ben Adams Charles Taylor Adjusting	Mike Jones GE Power
Colin Caldow Scottish Power	Nigel Carter Engie
Christopher Whiteley SSE Engineering Centre	Paul Cooper GE Power
Dave Wallis Rendcomb Consultancy	Richard Martin Turbine Engineering Consultants
Geoff Horseman Siemens	Richard Stewart EDF Energy
Ian Rowntree Uniper Energy	
James Fogden Toshiba International (Europe)	

BOOK YOUR PLACE TODAY
WWW.IMECHE.ORG/STUG

TERMS AND
CONDITIONS
APPLY

PROGRAMME

WEDNESDAY 21 MARCH 2018	
08:30	REGISTRATION AND REFRESHMENTS
INDUSTRY TRENDS	
09:00	CHAIR'S WELCOME AND OPENING REMARKS
09:10 KEYNOTE ADDRESS	THE TRANSFORMING ENERGY INDUSTRY Barbara Vest, Director of Generation, Energy UK
09:30	DEMOLITION OF POWER PLANTS John Niemiec, Operations & Maintenance Manager - Projects - Turbine Upgrade, Engie
09:50	RECIPROCATING ENGINES Adam Wray-Summerson, Major Projects Specialist, Clarke Energy
10:10	POWER GENERATION RISKS – AN INSURERS PERSPECTIVE? John Chinnock, Account Engineer – UK (Powergen), Client Risk Services, AIG Commercial
10:30	QUESTION AND ANSWER SESSION
10:45	NETWORKING REFRESHMENT BREAK
STEAM TURBINE TECHNOLOGIES	
GENERATOR AND LARGE MOTOR TECHNOLOGIES	
11:15	HINKLEY POINT C 'ARABELLE' TURBINE – DESIGNING FOR OPERATION AND MAINTENANCE IN THE UK Edward Leach, Pre-Operations Engineer, EDF Energy
11:15	LARGE CAPACITY DOUBLE-END DRIVE GENERATOR Ryo Fuchimoto, Toshiba Energy Systems & Solutions Corporation
11:35	MITSUBISHI HITACHI STEAM TURBINE TECHNOLOGIES Alessandro Calabrese, Lead Customer Support Engineer, Mitsubishi Hitachi Power Systems Europe, Ltd.
11:35	SUITABLE GENERATOR PRODUCTS FOR HIGH OPERATIONAL FLEXIBILITY IN RENEWABLES DOMINATED POWER MARKET Matthias Baca, Head Generator Design in Power and Gas, Siemens
11:55	STEAM TURBINE OPERATIONAL FLEXIBILITY Speaker to be announced
11:55	DEVELOPMENT OF LIGHTWEIGHT TURBO-GENERATORS FOR TRAILER APPLICATIONS Roy Beardshaw, Head of Engineering, Brush Electrical
12:15	FURTHER ADVANCES IN SIEMENS STEAM TURBINE TECHNOLOGY FOR HIGHEST EFFICIENCY AND FLEXIBILITY Reinhard Kloster, Product Manager, Siemens AG Power and Gas Division
12:15	GENERATOR FOR HINKLEY POINT NUCLEAR APPLICATION Pascal Chay, Team Leader, Generator Electrical Design, GE Power Norbert Rapuzzi, Customer Project Engineer, GE Power
12:35	QUESTION AND ANSWER SESSION
12:35	QUESTION AND ANSWER SESSION
12:50	NETWORKING LUNCH
STEAM TURBINE INTEGRITY	
GENERATOR INTEGRITY	
13:50	D10/D11 ADVANCED STEAM PATH UPGRADES James M Stagnitti, Senior Engineer – Steam Turbine Systems Integration, GE Power Services
13:50	REPLACEMENT OF HYDROGEN AND WATER COOLED GENERATORS BY AIR-COOLED GENERATORS Michal Gajowy, Tendering Manager, Rotating Equipment, GE Power
14:10	IDENTIFYING AND MITIGATING A PERMANENT BEND IN AN HP/IP ROTOR Omoruyi Onobhamiukor, Condition Monitoring Engineer, Uniper Energy
14:10	SYNCHRONOUS CONDENSER OPERATION OF NEW AND EXISTING POWER STATION GENERATORS Matt Walker, Senior Engineer, Siemens
14:30	STEAM ROTOR INTEGRITY ASSESSMENTS; CASE STUDIES, RISKS AND STATION ENGAGEMENT Alan Johnson, Principal Consultant – Structural Assessment, Frazer-Nash Consultancy
14:30	PROBLEMS WITH GENERATOR HIGH CURRENT ELECTRICAL CONNECTIONS James Rollo, Electrical Fleet Lead, EDF Energy Vincent Fernagut, Charge de mission technique – Generator Expert, EDF Nuclear Engineering - CNEPE
14:50	QUESTION AND ANSWER SESSION
14:50	QUESTION AND ANSWER SESSION
15:05	NETWORKING REFRESHMENT BREAK

PROGRAMME

PLANT OPERATION	
15:35	THE VALUE OF DIGITALIZATION IN POWER GENERATION Rainer Quinkertz, Siemens AG
15:55	CCGT PLANT PRESERVATION - INVESTING IN A BETTER FUTURE? Chris Libby, Associate, Asset Risk Management, WSP
16:15	STEAM TURBINE START-UP OPTIMISATION CASE STUDY George Cleaver, Siemens
16:35	ENHANCEMENT OF LARGE STEAM TURBINE HARDWARE UPGRADES THROUGH DIGITAL SOLUTIONS Dr Xiao-Yi Zhang, Power Digital Solutions, GE Power
16:55	QUESTION AND ANSWER SESSION
17:10	CHAIR'S CLOSING REMARKS
17:20	CLOSE OF DAY ONE
18:20	DRINKS RECEPTION
19:20	NETWORKING DINNER

THURSDAY 22 MARCH 2018	
08:30	REGISTRATION AND REFRESHMENTS
09:00	CHAIR'S OPENING REMARKS
TURBINE GENERATOR INTEGRITY	
09:05	UNDERSTANDING YOUR GENERATOR- ROTOR WINDINGS: THE LONG AND THE SHORT OF IT David Wallis, Director, Rendcomb Consultancy Limited
09:25	COMBINED CYCLE PRODUCTS ENGINEERED FOR LOWER MAINTENANCE COSTS Flor Rivas, Product Line Leader, GE Power
09:45	BOLT TENSIONING – SUCCESSFUL APPLICATIONS ON STEAM TURBINE PLANT Peter Miranda, Business Development - Power Generation, Nord-Lock Group Steve Brown, Global Product Manager – Expansion Bolts, Nord-Lock Group Phil Jarvis, General Manager – 'Boltight' Division, Nord-Lock Group
10:05	QUESTION AND ANSWER SESSION
10:20	NETWORKING REFRESHMENT BREAK
GENERATOR INSPECTION AND MONITORING	
10:50	GENERATOR OVERHEATING/ HOTSPOT DETECTION Steve Kilmartin, Director Products & Markets, Environment One Corporation
11:10	HIGH PARTIAL DISCHARGE ON HIGH VOLTAGE IS NO LONGER CONSIDERED A DEATH SENTENCE Wojciech Betlej, Business Development Engineer, Quartzelec
11:30	COMPARING LOW AND HIGH FREQUENCY PARTIAL DISCHARGE MEASUREMENTS ON STATOR WINDINGS Mladen Sasic, Manager of Rotating Machines Technical Services, Qualitrol Iris Power
BEST PRACTICE IN STEAM TURBINE SERVICE	
10:50	RYEHOUSE LP ROTOR REPAIRS Jessica Batt, Lead Steam Turbine Engineer, Scottish Power
11:10	RECENT DEVELOPMENTS IN NONDESTRUCTIVE EXAMINATION TECHNIQUES FOR STEAM TURBINES & GENERATORS Hans Rauschenbach, Siemens AG, Power Generation Services
11:30	STRAIGHTENING A BENT HP/IP ROTOR WITHIN A LIMITED OUTAGE WINDOW Ben Morrell, Rotating Plant Engineer, Uniper Energy

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

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

BOOK YOUR PLACE TODAY
WWW.IMECHE.ORG/STUG

TERMS AND
CONDITIONS
APPLY

PROGRAMME

11:50	SWEEP FREQUENCY RESPONSE ANALYSIS (SFRA): A USEFUL TOOL FOR OFFLINE DETECTION OF SHORTED TURNS IN A GENERATOR ROTOR, OR NOT? Amitoj Singh, Senior Engineer - Electrical, SSE PLC	FAST REPAIR OF A HEAVILY RUBBED IP TURBINE ROTOR Geoff Horseman, Chief Turbine Engineer, Siemens
12:10	QUESTION AND ANSWER SESSION	QUESTION AND ANSWER SESSION
12:25	NETWORKING LUNCH	
BEST PRACTICE IN GENERATOR SERVICE		
13:20	MANAGEMENT AND MONITORING OF GENERATOR PHASE CONNECTION VIBRATION Malcolm Stein, Condition Monitoring Engineer, SSE PLC	
13:40	LOOK BACK ON UNPREPARED GENERATOR SWAP Jean-Louis Farvacque, Powertrain Technology Manager, Engie	
14:00	ON-LINE CLEAN OF GENERATOR STATOR WINDING Craig Simpson, Systems Engineer, EDF Energy	
14:20	FAST GVPI STATOR REWIND EXPERIENCE Andrew Crosby, Section Head Generator Service Engineering, Siemens	
14:40	QUESTION AND ANSWER SESSION	
14:55	NETWORKING REFRESHMENT BREAK	
TURBINE GENERATOR AUXILIARY SYSTEMS & CONDENSERS		
15:25	A BRIEF HISTORY OF TURBINE STEAM VALVE ACTUATORS Alan Lang, Lead Engineer – Mechanical Components, GE Power	
15:45	STEAM TURBINE RETURN TO SERVICE ISSUES – BARRY POWER STATION Arron Thomas, Operations Co-ordinator, Barry Power Station, Centrica	
16:05	ENHANCED PERFORMANCE OF TURBINE OILS WITH GAS-TO-LIQUID BASE OIL TECHNOLOGY Volker Null, Global Product Application Specialist Power, Shell	
16:25	SPEAKER TO BE ANNOUNCED	
16:45	QUESTION AND ANSWER SESSION	
17:00	CHAIR'S CLOSING REMARKS	
17:10	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 1309

E: sponsorship@imeche.org

BOOK YOUR PLACE TODAY
WWW.IMECHE.ORG/STUG

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.

Delegate Type	STANDARD RATE
Member, IMechE/supporting organisation	£630 + VAT = £756
Non-member	£795 + VAT = £954
Student/Retired	£215 + VAT = £258

THREE WAYS TO BOOK

- 1 Online:
www.imeche.org/stug
- 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

Old Trafford, Manchester United Football Club
Sir Matt Busby Way
Old Trafford
Manchester
M16 0RA

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 1309
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 GB29930493.

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 120,000 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



RELIABILITY OF SYSTEMS AND EQUIPMENT OPERATED IN HARSH ENVIRONMENTS

6 March 2018, London

Attend to hear how to effectively and efficiently manage your systems, products and equipment in order to maintain reliability.

www.imeche.org/reliabilityharshenvironments



POWER PLANT OPERATIONS, MAINTENANCE AND FLEXIBILITY

18 April 2018, Birmingham

Hear successful strategies and best practice from industry-leading operators and technology providers on effective operation and in-operation maintenance.

www.imeche.org/powerplant2018

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