

# 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.

### 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

### 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**

### ORGANISING / ADVISORY COMMITTEE:

Fossil Power Committee, Power Industries Division  
**Institution of Mechanical Engineers.**

### ORGANISING COMMITTEE:

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

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# 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  
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## 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  
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# PROGRAMME

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

# PROGRAMME

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

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

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

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Delegate Type	STANDARD RATE
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Non-member	£795 + VAT = £954
Student/Retired	£215 + VAT = £258

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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.

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