STEAM TURBINE AND GENERATOR USER GROUP 2015

Institution of MECHANICAL ENGINEERS

25-26 March 2015
Warwick Conferences, The University of Warwick, Coventry
www.imeche.org/events/C6170

Power Industries Division **Conference**









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6677

THE TWO-DAY STEAM TURBINE AND GENERATOR USER GROUP 2015 IS THE NEXT IN THIS POPULAR SERIES OF THE INSTITUTION'S POWER GENERATION USER GROUPS.

This event will enable those involved in the management, operation and maintenance of steam turbines and generators to discuss common problems and issues, exchange ideas, identify potential solutions and learn about new developments.

The Institution's User Groups encourage open debate and problem solving, using informal presentations and discussion forums to promote networking and sharing experiences among the steam turbine generator community.

BENEFITS OF ATTENDANCE:

- Learn from real-life case studies illustrating project experience and best practice
- **Improve** the performance of your plant
- Discover updates on the latest industry developments and technologies
- Hear advice from leading specialists on a wide number of issues
- Understand how to manage and minimise plant risks

KEY TOPICS COVERED INCLUDE:

- Plant operation and ownership
- Turbine and generator failures, case studies and repair methods
- Steam turbine technologies
- Generator technologies
- Turbine and generator auxiliary systems and condensers
- Turbine overhauls and life extension
- Generator overhauls and life extension
- Plant condition monitoring and control
- Industrial/CHP/renewables turbine generators
- Steam turbine and generator projects
- Steam turbine last stage blading

SPONSORSHIP AND 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.

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

BENEFITS OF SPONSORING

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

For more information please call +44 (0)20 7973 1309 or email sponsorship@imeche.org

PROGRAMME

DAY 1	WEDNESDAY 25 MARCH 2015	
DATI	WEDNESDAT 25 MARCH 2015	
08:30	REGISTRATION AND REFRESHMENTS	
09:00	CHAIR'S WELCOME AND INTRODUCTION	N
	SESSION 1 - PLANT OPERATION AND OW	NERSHIP
09:10	KEYNOTE: HIGH LEVEL POWER INDUSTI Don Schubert, Senior Vice President, Mars	
09:30	POWER PLANT PERFORMANCE ASSESSI Tim Eastwood, Business Development Dire	
09:50	BLACKBURN MEADOWS RENEWABLE EN CONSTRUCTION AND COMMISSIONING GENERATOR SYSTEMS Paul Housley, Steam Turbine Engineer, ET	OF THE STEAM TURBINE AND
10:10	Q&A SESSION	
10:30	NETWORKING REFRESHMENT BREAK	
	SESSION 2 - PARALLEL SESSIONS	
	2A STEAM TURBINE TECHNOLOGIES	2B GENERATOR TECHNOLOGIES
11:00	RECENT ADVANCES IN COMBINED CYCLE STEAM TURBINE TECHNOLOGY Rainer Quinkertz, Product Manager, Siemens	LATEST GENERATOR TECHNICAL DEVELOPMENTS Andrew Crosby, Section Head, Generator Engineering Scott Robinson, Generator Frame Owner, Siemens
11:20	FORCED MISTUNING APPLIED TO FREE-STANDING LAST STAGE BLADES OF THE CP2-1300 MW LOW PRESSURE STEAM TURBINES Sébastien Roques, Senior Engineer, EDF	SHAFT-LINE MODELS AND TORSIONAL NATURAL FREQUENCIES FOR A GRID SUB-SYNCHRONOUS RESONANCE STUDY Nik Zelenovic, Principal Engineer, Alstom
11:40	LAST STAGE STEAM TURBINE BLADE VIBRATION ASSESSMENT AND DESIGN MODIFICATIONS TO ELIMINATE THE CRITICAL WHEEL RESONANCE Mehran Zanjani, Structural Analysis Engineer, ETG, EON	A CASE STUDY OF RETAINING RING CRACKS FROM GRID TRANSIENTS Neil Kilpatrick, Principal Expert Engineer, Siemens
12:00	STEAM TURBINE LOW PRESSURE LAST-STAGE BLADE ROOT NON-DESTRUCTIVE TESTING INSPECTIONS - PRACTICAL EXPERIENCE Paul Crowther, Group Head - Inspection Management, RWE npower	CONVERSION OF ROTATING EXCITATION SYSTEMS TO STATIC Doug Cope, Electrical Engineer, Excitation and Engineering Services
12:20	Q&A SESSION	
12:40	NETWORKING LUNCH	

	SESSION 3 - TURBINE DEGRADATION, FAILURES AND CASE STUDIES
13:40	STRATEGIC SPARES INVESTMENT Joe Eckersley, Strategic Spares Manager, EDF Energy
14:00	UNDERSTANDING VARNISH BUILD-UP MECHANISMS ON STEAM TURBINE AND GENERATOR LUBRICANTS Jo Ameye, European Sales and Marketing Manager, Fluitec
14:20	IMPORTANT ASPECTS OF LP TURBINE OPERATION John Gilroy, Senior Design Engineer, Siemens
14:40	IRONBRIDGE LP TURBINE LAST ROW BLADE FAILURE Ben Morrell, Rotating Plant Engineer, ETG, EON
15:00	Q&A SESSION
15:20	NETWORKING REFRESHMENT BREAK
	SESSION 4 - GENERATOR DEGRADATION, FAILURES AND CASE STUDIES
15:50	TOP TEN GENERATOR FAILURES AND WHAT YOU CAN DO TO PREVENT THEM Bill Moore, Director, National Electric Coil
16:10	IMPACT OF NEW FLEXIBLE LOAD OPERATION AND GRID CODES ON TURBINE GENERATORS FOCUSING ON STATOR END WINDINGS Thorsten Krol, Generator Business Development and Marketing, Siemens
16:30	GENERATOR FAULTS AND FAILURES - UTILITY/INSURERS' PERSPECTIVE Don Shubert, Senior Vice President, Marsh Energy Practice
16:50	Q&A SESSION
17:10	CHAIR'S CLOSING REMARKS
17:20	CLOSE OF DAY ONE
19:00	NETWORKING DINNER
DAY 2	THURSDAY 26 MARCH 2015
08:30	REGISTRATION AND REFRESHMENTS

DAY 2	THURSDAY 26 MARCH 2015
08:30	REGISTRATION AND REFRESHMENTS
20.00	GVA VDIG ODEWNG DEWA DUG
09:00	CHAIR'S OPENING REMARKS
	SESSION 5 - MATERIALS AND INTEGRITY ANALYSIS
09:10	1/4MPD1419 TOD 1 4D9T 9MT41/ MVDD1VD9
09:10	MATERIALS FOR LARGE STEAM TURBINES Geoff Horseman, Chief Turbine Engineer, Torsten-Ulf Kern, Principal Engineer
	Materials, Siemens Doug Gass, Section Manager Materials and Performance Testing, Siemens
	Doug Gass, Section Manager Materials and Performance Testing, Stemens
09:30	APPLICATION OF A NEW FRACTURE - MECHANICS BASED CREEP - FATIGUE
	PROCEDURE FOR STEAM TURBINE ROTORS Henning Almstedt, Principal Expert, Siemens
	Shilun Sheng, Advisory Expert, Siemens
09:50	THE INTERACTION BETWEEN SHOT PEENING AND EROSION NOTCHES ON LAST STAGE BLADE AEROFOIL SECTIONS: STRESS DISTRIBUTIONS AND
	FATIGUE RESISTANCE
	Katherine Soady, Structural Analysis Engineer, ETG, EON
10:10	Q&A SESSION
10:20	NETWORKING REFRESHMENT BREAK

	SESSION 6 - TURBINE GENERATOR AUXI	LIARY SYSTEMS
11:00	BASIC INTRODUCTION TO STEAM TURB Stuart Rowe, Manager Controls and Auxilia	
11:20	HYDRAULIC CONTROLS AND PROTECTION STEAM TURBINES Wolfgang Warmuth, Technical Sales Management of the state of	
11:40	MAIN BOILER FEED PUMP TURBINE PIPI Bob Thomson, Project Manager, EDF	EWORK REPLACEMENT
12:00	Q&A SESSION	
12:20	NETWORKING LUNCH	
	SESSION 7 - PARALLEL SESSION	
	7A TURBINE OVERHAULS AND LIFE EXTENSION	7B GENERATOR INTEGRITY MANAGEMENT
13:20	EVENT RECOVERY - MANAGING AN UNPLANNED SHUTDOWN August Pandey, Turbine and Ancillaries Plant Manager, EDF	THE INFLUENCE OF AUXILIARY SYSTEMS ON MAIN GENERATOR AVAILABILITY AND RELIABILITY David Thompson, Plant Check-Up Manager, Alstom
13:40	DRAX IP RETROFIT - IDEA CONCEPT TO PROJECT INSTALLATION Richard Armstrong, Site Manager, Siemens Mark Simmonds, Turbine Engineering, Drax Power	OFF-LINE PARTIAL DISCHARGE MEASUREMENTS ON LARGE GENERATION PLANT Chris Burtle, Senior Electrical Diagnostics Engineer, Siemens
14:00	OLKILUOTO LP TURBINE EXHAUST PERFORMANCE ENHANCEMENT PROGRAMME Phil Hemsley, Engineering Technology Manager, Alstom	ABNORMAL OPERATION OF GENERATORS Steve Mitchell, Lead Electrical Machines Engineer, RWE Generation UK
14:20	Q&A SESSION	
14:40	NETWORKING REFRESHMENT BREAK	
	SESSION 8 - INSPECTION AND MONITOR	ING
15:10	SMARTSIGNAL TECHNOLOGY: OVERVIE CENTRE John Twiddle, Equipment Performance Cer Mark Bate, Solution Consultant, Smart Sign	ntre Manager, SSE
15:30	VIBRATION MEASUREMENTS OF TURBO Peter Arend, Principal Engineer, Alstom	GENERATOR STATOR END-WINDINGS
15:50	EXPERIENCE WITH ADVANCED NDT ME Hans Rauchenbach, Head of NDT Laborator Michael Opheys, NDT Engineer, Siemens	
16:10	Q&A SESSION	
16:30	CLOSING REMARKS	
16:40	CLOSE OF USER GROUP	

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- This programme is subject to change.
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25-26 March 2015 Warwick Conferences,

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