# HEAT RECOVERY STEAM GENERATOR USER GROUP 2017



Institution of MECHANICAL ENGINEERS

Power Industries Division **Conference** 

**21-22 November 2017**Nottingham Belfry Hotel, Nottingham

#### **KEY SPEAKERS INCLUDE:**

Stephen Kimpton, Mechanical Engineer Centrica

Chris Ward, Lead Inspection Management Engineer (Compliance)
RWE Generation Ltd.

Bob Anderson, Consultant Competitive Power Resources Corporation

Syed Nabeel Jamali, Plant Performance Engineer **VPI Immingham** 

Mario Farrugia, Senior Lecturer, Mechanical Engineering Department University of Malta



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EVENT PARTNER:

## HEAT RECOVERY STEAM GENERATOR USER GROUP 2017

21-22 NOVEMBER 2017, Nottingham Belfry Hotel, Nottingham

#### ENJOY PEER-REVIEWED TECHNICAL PRESENTATIONS AND LEARNING OPPORTUNITIES AT THIS YEAR'S HRSG USER GROUP.

Join the Heat Recovery Steam Generator User Group to understand how to keep your technology up-to-date and remain competitive in the energy market.

Find out how to enhance the efficiency and effectiveness of your heat recovery steam generation system through presentations from experts in the field. Discover how to better manage technical issues including problems with corrosion, inspection, design and maintenance.

This unique event provides a perfect forum to meet like-minded professionals, including boiler and heat recovery experts, plant engineers and HRSG development engineers. Attend this user group and join the conversation, share your experience and learn from industry thought-leaders.

#### **KEY PROGRAMME HIGHLIGHTS:**

- Gain insights into the management of fabricated T pieces operating in the creep range from Centrica
- Hear from VPI Immingham about HRSG operational performance optimisation using thermoflex model
- Competitive Power Resources Corporation share key causes of thermally induced HRSG tube failures
- Hear about the use of phased array ultrasonic testing of welds in small bore tubing from RWE Generation Ltd and Uniper UK Ltd.
- Learn about managing flexible operation of HRSGs from Uniper Technologies

#### ATTEND THIS EVENT TO:

- Take away valuable lessons about Heat Recovery Steam Generation from key organisations including Uniper Technologies, Centrica, RWE Generation Ltd and VPI Immingham
- Join the conversation and share your experience during interactive question and answer sessions and panel discussions
- Learn the latest **testing and inspection strategies** to take back to your organisation
- Gain unique insights into how to better maintain and perform repairs to your heat recovery steam generators
- Network with a diverse audience including energy providers, contractors and thought-leaders

#### NAME OF COMMITTEE:

Power Industries Division
Institution of Mechanical Engineers

#### **ORGANISING COMMITTEE:**

Chris Dometakis, Head of Engineering Centrica Energy

Joanne Kehoe, Mechanical Engineering Consultant – Boiler Engineering

Uniper Technologies Limited

Dave Bogert, Senior Boiler Engineer **RWE Generation UK** 

Graham Sorbie, Engineer – Pressure Systems **SSE** 

Toby Lant, Pressure Systems Technical Authority

Centrica Distributed Energy and Power

Matthew Lee, Boiler, Aux and Structure Group Head

RWE

Thomas Speirs, Chief Engineer **Atkins** 

Alan Fitzpatrick, Risk Engineer

CNA Hardy Insurance Company

### **PROGRAMME**

	21 NOVEMBER 2017		
08:30	REGISTRATION AND REFRESHMENTS		
09:00	CHAIR'S OPENING REMARKS Bob Anderson, Consultant, Competitive Power Resources Corporation		
	REPAIRING AND MAINTAINING HRSG SYSTEMS		
09:15	ESB CASE STUDY: FAILURE OF HEADER ANTLERS ON THE HP SUPERHEATER AND IP ECONOMISER James Tobin, Boiler Specialist, ESB International		
09:45	CUTTING THE COST OF MAINTENANCE BUT NOT THE QUALITY Stephen Kendrick, Director Service and Sales, Spiral Weld Limited		
10:10	PENETRATION SEALS AND CASING HOT SPOT REPAIR Jake Waterhouse, UK Director, Dekomte De Temple Kompensator-Technik (UK) Ltd.		
10:35	NETWORKING REFRESHMENT BREAK		
	NON-DESTRUCTIVE TESTING AND INSPECTION		
11:05	PHASED ARRAY ULTRASONIC TESTING OF WELDS IN SMALL BORE TUBING IN-LIEU OF RADIOGRAPHY Colin R. Brett, Inspection Management, Technical Head, Uniper UK Ltd. Chris Ward, Lead Inspection Management Engineer (Compliance), RWE Generation Ltd.		
11:30	OBSERVATIONS ON HRSG TUBE MODULE WELD QUALITY Mark Taylor, Principal Engineer, Tetra Engineering (Europe)		
11:55	QUESTION AND ANSWER SESSION FOR THE MORNING PRESENTATIONS		
12:25	NETWORKING LUNCH		
	LATEST HRSG DESIGNS		
13:25	HRSG DESIGN FOR LARGE GAS TURBINES CLASS H Jean-François Galopin, Director of Technology VP, CMI Energy		
13:50	THE STEAM GENERATOR FOR CCPP DK6: MORE THAN JUST A HRSG Detlef Simon, Head of Marketing and Sales, Standardkessel Baumgarte GmbH		
14:15	HEAT RECOVERY STEAM GENERATION USING HEAT PIPES Joe Rosagro, Solutions Development Engineer, Spirax-Sarco Limited		
14:40	HRSG DESIGN CONSIDERATIONS FOR MODERN HIGH STEAM TEMPERATURE CYCLE CCGT PLANT Steve Mould, Chief Engineer in Power Generation, WSP Parsons Brinckerhoff		
15:05	NETWORKING REFRESHMENT BREAK		
	DEALING WITH CORROSION		
15:35	WHY DOES FLOW-ACCELERATED CORROSION REMAIN AS NUMBER ONE HRSG PROBLEM WORLDWIDE? Barry Dooley, Senior Associate, Structural Integrity Associates, Inc.		
16:15	QUESTION AND ANSWER SESSION FOR THE AFTERNOON PRESENTATIONS		
16:35	CHAIR'S CLOSING REMARKS		
16:45	END OF DAY ONE		
19:00	NETWORKING DINNER		

## REMEMBER TO BOOK YOUR PLACE FOR THE NETWORKING DINNER

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

<sup>•</sup> This programme is subject to change

ullet The Institution is not responsible for the views or opinions expressed by individual speakers.

### **PROGRAMME**

	22 NOVEMBER 2017		
08:30	REGISTRATION AND REFRESHMENTS		
09:00	CHAIR'S OPENING REMARKS Bob Anderson, Consultant, Competitive Power Resources Corporation		
	CHEMISTRY: GUIDANCE, DAMAGE AND FAILURE		
09:05	HRSG CYCLE CHEMISTRY UPDATE Barry Dooley, Senior Associate, Structural Integrity Associates, Inc.		
09:45	<b>DEW POINT CORROSION PREVENTION</b> Imran Naqvi, Corrosion Engineer, Lake Corrosion Engineering		
	CASE STUDIES ABOUT THE USER EXPERIENCE WITH HRSG		
10:10	MANAGING FLEXIBLE OPERATION OF HRSGS: RECENT FINDINGS AND MITIGATIONS Stuart Simpson, Technical Head, Boiler Engineering, Uniper Technologies Simon Fenton, Technical Head, Pressure Systems Compliance, Uniper Technologies		
10:35	MANAGEMENT OF FABRICATED T PIECES OPERATING IN THE CREEP RANGE Stephen Kimpton, Mechanical Engineer, Centrica		
11:00	NETWORKING REFRESHMENT BREAK		
11:30	ABERRANT GRADE 91 PIPEWORK: IMPLICATIONS FOR CREEP LIFE IN SERVICE Steve Brett, Consultant, Steve Brett Consultancy Limited		
11:55	WHAT WILL METALLURGICAL ANALYSIS OF BOILER TUBES GIVE YOU? Alexandra Simmonds, Metallurgist, RINA Consulting		
12:20	KEY CAUSES OF THERMALLY INDUCED HRSG TUBE FAILURES Bob Anderson, Consultant, Competitive Power Resources Corporation		
13:00	QUESTION AND ANSWER FOR THE MORNING PRESENTATIONS		
13:35	NETWORKING LUNCH		
	IMPROVING PLANT PERFORMANCE		
14:35	COMBINED CYCLE CALCULATIONS Mario Farrugia, Senior Lecturer, Mechanical Engineering Department, University of Malta		
15:00	HRSG OPERATIONAL PERFORMANCE OPTIMISATION USING THERMOFLEX MODEL ON A RECENTLY UPGRADED AGP UNIT Syed Nabeel Jamali, Plant Performance Engineer, VPI Immingham		
15:25	NETWORKING REFRESHMENT BREAK		
15:55	QUESTION AND ANSWER FOR THE AFTERNOON PRESENTATIONS		
16:10 Panel Discussion	<ul> <li>THE FUTURE OF HRSG</li> <li>What is the future of HRSG and how is the technology expected to change?</li> <li>How are other innovations in the energy industry affecting HRSG?</li> <li>What will be the challenges with HRSG in the coming years and how can the energy industry face them?</li> </ul>		
16:50	CHAIR'S CLOSING REMARKS		
16:55	END OF CONFERENCE		

#### WHO SHOULD ATTEND?

All Directors, Managers and Engineers who are involved in the following areas are strongly recommended to attend and benefit from this user group:

- Plant Engineering
- Asset Integrity

- Maintenance
- Inspections
- Safety and Risk Management
- Boiler Operation
- Engineering Development
- Performance and Efficiency

## FEEDBACK FROM PREVIOUS EVENT:

"WELL ORGANISED AND INFORMATIVE CONFERENCE" Project Engineer, Doosan Babcock

"INTERESTING AND RELEVANT REAL LIFE/REAL TIME EXPERIENCES SHARED, BOTH PROBLEMS AND SOLUTIONS FOR ALL TO SHARE AND BENEFIT"

Sales Manager, GE Power Services

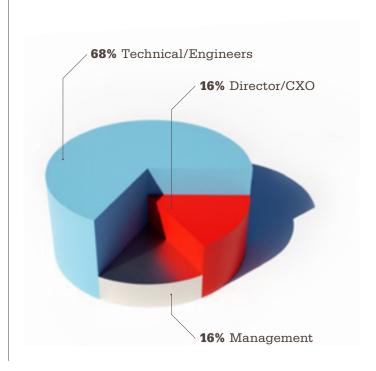
"GREAT OPPORTUNITY TO SHARE INFORMATION & EXPERIENCE & KEEP ABREAST OF DEVELOPMENTS"

Integrity Engineer, E.ON Technologies

"A GREAT CHANCE TO EXCHANGE EXPERIENCES WITH OTHER PEOPLE WORKING IN THE INDUSTRY"

Pressure Systems Engineer, Centrica Energy

#### SENIORITY OF ATTENDEES



#### 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

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#### 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

#### 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 6 October 2017	Standard Rates
Member, IMechE/supporting organisation	£395 + VAT	£480 + VAT
Non-member	£470 + VAT	£569 + VAT
Student/Retired	£165 + VAT	£200 + VAT
Networking Dinner	£35 + VAT	£35 + VAT

#### THREE WAYS TO BOOK

1 Online:

www.imeche.org/hrsg

2 Email:

eventenquiries@imeche.org

+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**

Nottingham Belfry Hotel Nottingham NG8 6PY

#### **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

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



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#### OTHER EVENTS TO LOOK FOR



#### **ANNUAL DINNER 2017**

#### 23 November 2017, London

The Institution of Mechanical Engineers Annual Dinner will take place at the Science Museum in London to celebrate the engineering profession.

www.imeche.org/annualdinner



#### **NUCLEAR VENTILATION 2017**

#### 28-29 November 2017, Manchester

The only event of its kind that enables power industry professionals and engineering practitioners from all sectors of the nuclear community to stay abreast of developments in nuclear ventilation within the UK.

www.imeche.org/nuclearventilation2017

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

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