

# HEAT RECOVERY STEAM GENERATOR USER GROUP 2019

Institution of  
**MECHANICAL  
ENGINEERS**

4-5 December 2019  
**Nottingham Belfry Hotel, Nottingham**

Thermal Power Committee, Power Industries  
Division  
**Conference**

## KEY SPEAKERS INCLUDE:

Bob Anderson, Consultant  
**Competitive Power Resources Corporation**

Lee Warren, Head of Thermal Power  
**Drax Power**

Simon Dawes, Head of the Capacity Market  
**Department of Business, Energy & Industrial  
Strategy**

Jack Abbott, Regulatory Manager,  
Wholesale Energy Markets  
**Centrica**

Paul Grady, Mechanical Inspector  
**Health and Safety Executive**



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# HEAT RECOVERY STEAM GENERATOR USER GROUP 2019

4-5 December 2019, Nottingham Belfry, Nottingham

**THIS INDUSTRY RECOGNISED, BI-ANNUAL CONFERENCE FEATURES TWO DAYS OF PEER-REVIEWED PRESENTATIONS ON MARKET CHANGES, UPGRADES AND NEW TECHNOLOGIES IMPACTING HEAT RECOVERY STEAM GENERATORS (HRSGs). JOIN END-USERS, INDUSTRY EXPERTS AND SOLUTION PROVIDERS FOR ROBUST DISCUSSIONS ON HOW TO MAXIMISE THE PERFORMANCE OF YOUR EQUIPMENT.**

You will hear presentations from key stakeholders on trends in the power market and their impact on generators. Engage in these conversations to improve your understanding and prepare for continued disruption as the energy system transitions.

Hear case studies on cutting edge refurbishments and developments in existing plants to understand the challenges faced. Leverage this experience to ensure that your future projects are delivered on time and on budget.

Take advantage of networking opportunities including a complementary drinks reception and dinner to deepen relationships with key industry contacts and clients. This unique event is the perfect opportunity to keep in touch with technological developments, industry trends, and HRSG thought leaders.

## KEY PROGRAMME HIGHLIGHTS:

- Gain an update on the global energy market from **Competitive Power Resources**
- Hear **Drax Power** and **RWE Generation UK PLC's** end-user perspectives on HRSG projects
- Discover lessons learned from the world-first high-efficiency gas turbine upgrade from **Uniper Technologies**
- **Hartford Steam Boiler** and **British Engineering Services** share best practices on written schemes and HRSG certification
- **Frazer-Nash Consultancy** explores the potential of digital twins to improve economic outcomes

## ATTEND THIS USER GROUP TO:

- Keep abreast of **new developments** in Heat Recovery Steam Generation
- Make the most of **over seven hours of networking time** including a **networking drinks reception** and **dinner open to all**
- Hear **expert speakers** share their experience delivering **upgrades and refurbishments**
- Network with exhibitors across both days of the conference to learn about **innovative products and solutions**
- Come armed with questions to pose during **question and answer sessions for each topic**

## ORGANISING COMMITTEE:

Thermal Power Committee  
Power Industries Division  
**Institution of Mechanical Engineers**

## MEMBER CREDITS:

Chris Dometakis  
**Centrica**

Joanne Kehoe  
**Uniper**

David Bogert  
**RWE**

Graham Sorbie  
**SSE**

Toby Lant,  
**Centrica**

Alan Fitzpatrick  
**CNA Hardy**

Matthew Coates  
**Uniper**

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TERMS AND  
CONDITIONS  
APPLY

# PROGRAMME

## WEDNESDAY 4 DECEMBER 2019

- 08:30 REGISTRATION AND REFRESHMENTS
- 09:00 **CHAIR'S OPENING REMARKS**  
Bob Anderson, Consultant, Competitive Power Resources Corporation
- MARKETS**
- 09:05 **KEYNOTE PRESENTATION: AN UPDATE ON THE GLOBAL HRSG LANDSCAPE**  
Bob Anderson, Consultant, Competitive Power Resources Corporation
- 09:30 **QUESTION AND ANSWER SESSION**
- 09:35 **CHALLENGES FOR WHOLESALE POWER MARKETS OF INCREASED RENEWABLE GENERATION AT SCALE AND CHANGING ECONOMIC AND GOVERNMENTAL LEGISLATION**  
Matthew Surry, Energy Trader, SSE plc
- 10:00 **HEAT RECOVERY IN INDUSTRY FOR INDUSTRY AND DISTRICT HEATING**  
Jon Sanderson, Senior Sales Manager, Energy Services, Uniper
- 10:25 **QUESTION AND ANSWER SESSION**
- 10:30 NETWORKING REFRESHMENT BREAK
- UPGRADES AND REFURBISHMENT**
- 11:05 **HIGH EFFICIENCY (HE) GAS TURBINE UPGRADE IMPACT ASSESSMENT: FROM MEETINGS TO MEGAWATTS**  
Alexander Duncan, Integrity Engineer, Uniper Technologies
- 11:30 **HRSG UPRATING: ASSESSMENT, IMPLEMENTATION AND TESTING**  
Ryan Broughton, Principal Engineer, WSP
- 11:55 **KING'S LYNN REPLANT: HRSG MODIFICATIONS TO MATCH GAS TURBINE UPGRADE**  
Raphaël Stevens, After-sales Technical Manager, John Cockerill Energy
- 12:20 **QUESTION AND ANSWER SESSION**
- 12:35 NETWORKING LUNCH
- KEYNOTE PRESENTATION**
- 13:35 **KEYNOTE PRESENTATION: THE NEED FOR FLEXIBILITY IN THE UK ELECTRICITY SYSTEM**  
Jack Abbott, Regulatory Manager, Wholesale Electricity Markets, Centrica
- 14:00 **QUESTION AND ANSWER SESSION**
- REPAIRS**
- 14:05 **LARGE MOVEMENT PENETRATION SEALS AND INTEGRATION TO CASING**  
Jake Waterhouse, Sales & Technical Director, Dekomte
- 14:30 **START/STOP OPERATION AND IMPROVEMENTS FOR FASTER STARTS**  
Karel van Wijk, CEO, Advanced Valve Solutions USA Inc.
- 14:55 **QUESTION AND ANSWER SESSION**
- 15:05 NETWORKING REFRESHMENT BREAK
- UPGRADES AND REFURBISHMENT CONTINUED**
- 15:35 **DEVELOPMENT OF VERTICAL ONCE-THROUGH EVAPORATORS FOR LARGE GAS TURBINE APPLICATIONS**  
Lorenzo Giusti, Thermal & Hydraulic Engineer, Siemens
- 16:00 **REDUCING PROJECT COSTS THROUGH INTEGRATED PROJECT MANAGEMENT**  
Ian Brown, Vice President, Managing Director – EMEA, Hartford Steam Boiler
- 16:25 **QUESTION AND ANSWER SESSION**
- MODELLING**
- 16:35 **EXPLOITING DIGITAL TWINS FOR BETTER ECONOMIC OUTCOMES**  
Peter van Manen, Service Development Consultant, Frazer-Nash Consultancy
- 17:00 **QUESTION AND ANSWER SESSION**
- AFTERNOON KEYNOTE PRESENTATION**
- 17:05 **KEYNOTE PRESENTATION: UPDATE ON THE UK CAPACITY MARKET**  
Simon Dawes, Head of the Capacity Market, Department for Business, Energy & Industrial Strategy
- 17:30 **QUESTION AND ANSWER SESSION**
- 17:35 **CHAIR'S CLOSING REMARKS**
- 17:40 END OF DAY ONE, DRINKS RECEPTION AND DINNER

# PROGRAMME

## THURSDAY 5 DECEMBER 2019

08:30	REGISTRATION AND REFRESHMENTS
09:00	<b>CHAIR'S OPENING REMARKS</b> Bob Anderson, Consultant, Competitive Power Resources Corporation
<b>USER EXPERIENCE</b>	
09:05	<b>KEYNOTE PRESENTATION: AN END-USER PERSPECTIVE ON THE CHANGING ENERGY MARKET</b> Lee Warren, Head of Thermal Power, Drax Power
09:30	<b>QUESTION AND ANSWER SESSION</b>
09:35	<b>HRSG MODIFICATIONS AT GREAT YARMOUTH POWER STATION</b> Jordan Gillies, Mechanical Engineer HRSG & BoP, RWE Generation UK PLC
10:00	<b>MANAGEMENT OF SMALL-BORE PIPEWORK AND TYPICAL ISSUES: ASME BUILT UNITS, HIGH TEMPERATURE SYSTEMS AND TWO-SHIFTING</b> Katherine Asvegren, Plant Integrity Engineer, Drax Power PLC
10:25	<b>QUESTION AND ANSWER SESSION</b>
10:30	NETWORKING REFRESHMENT BREAK
<b>MONITORING AND MAINTENANCE</b>	
11:05	<b>HRSG EARLY LEAK DETECTION</b> Simon Farrey, Power Key Market Driver – EMEA, MISTRAS Group
11:30	<b>OPERATIONS AND MAINTENANCE CONSIDERATIONS FOR GAS SIDE FOULING OF HRSGS</b> Michael Anderson, General Manager, KRR ProStream
11:55	<b>SUPPORTING THE CIRCULAR ECONOMY IN POWER GENERATION</b> Stephen Jones, Managing Director, SpiralWeld Ltd
12:20	<b>QUESTION AND ANSWER SESSION</b>
12:35	NETWORKING LUNCH
<b>UPGRADES AND REFURBISHMENT CONTINUED</b>	
13:35	<b>KEYNOTE PRESENTATION: SAFE INTERVENTION AND PRESSURE TESTING OF MECHANICAL SYSTEMS</b> Paul Grady, HM Principal Specialist Inspector (Mechanical Engineering), Health and Safety Executive
14:00	<b>QUESTION AND ANSWER SESSION</b>
14:05	<b>CONVERSION OF AN OPERATING SINGLE PRESSURE HRSG TO DUAL PRESSURE</b> Walter Peters, Lead Development & Project Manager, VPI Immingham Plant
14:30	<b>THOUGHTS ON GAS TURBINE HRSG/WASTE HEAT RECOVERY UNIT</b> Stephen Lloyd, CEO, Spindeep Limited
14:55	<b>QUESTION AND ANSWER SESSION</b>
15:05	NETWORKING REFRESHMENT BREAK
<b>CHEMISTRY</b>	
15:35	<b>ELIMINATION OF 2-PHASE FLOW-ACCELERATED CORROSION ON A CYCLING 800 MW CCGT POWER STATION</b> Manfred Jansen, European Operations, Anodamine Europe BV
16:00	<b>QUESTION AND ANSWER SESSION</b>
<b>REGULATION</b>	
16:05	<b>IS YOUR WRITTEN SCHEME OF EXAMINATION IN PLACE AND HAS IT BEEN REVIEWED RECENTLY?</b> Moore Holmes, Technical Specialist, British Engineering Services
17:30	<b>KNOW YOUR BOUNDARIES FOR HRSG CERTIFICATION</b> Ian Brown, Vice President, Managing Director – EMEA, Hartford Steam Boiler
16:55	<b>QUESTION AND ANSWER SESSION</b>
17:05	<b>CHAIR'S CLOSING REMARKS</b>
17:10	END OF CONFERENCE

**For the most up-to-date and detailed programme for the event, please visit:**  
[www.imeche.org/hrsg](http://www.imeche.org/hrsg)

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



# JOIN US AT THE FOREFRONT OF MECHANICAL ENGINEERING.

Institution of  
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## Featured Events

21/11



21 November 2019  
Science and Industry Museum,  
Manchester

### **INSTITUTION OF MECHANICAL ENGINEERS ANNUAL DINNER 2019**

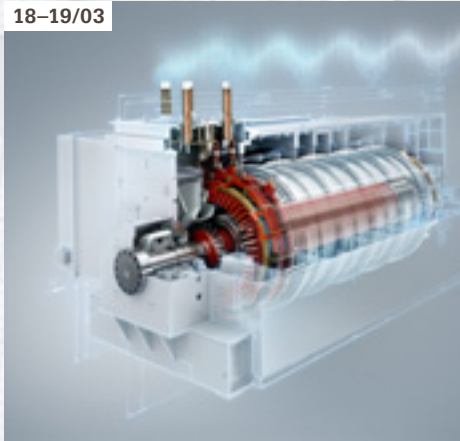
Home to a cornucopia of engineering heritage – including Whitworth's planing machine, one of the world's largest collections of working steam mill engines and one of the first ever rechargeable batteries – the Science and Industry Museum will provide an inspirational backdrop to the evening's festivities.

Why not take this perfect opportunity to entertain clients, network with colleagues and reward employees in the company of the most influential engineers and industry leaders?

There are many ways to participate, ranging from individual tickets to event sponsorship. Capacity is strictly limited, and tables and individual tickets are offered on a first-come, first-served basis, so ensure you take advantage of the early booking discount and register today to avoid disappointment.

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

18–19/03



18–19 March 2020  
Manchester United Football Ground,  
Manchester

### **STEAM TURBINE AND GENERATOR USER GROUP 2020**

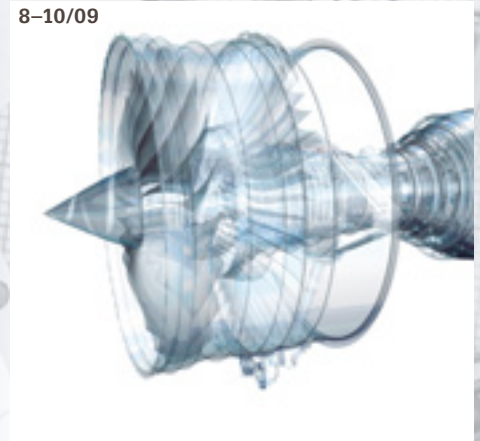
Returning in 2020, the next event in this popular series of power industry user groups will enable those involved in the management, operation and maintenance of steam turbines and generators to discuss common problems and issues. Join us to exchange ideas, identify potential solutions and learn about new developments at our leading technical event offering peer reviewed and high level content.

Join us to 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.

Whether you are involved in the design, manufacture, operation, management and maintenance of steam turbine and generator assets, this is THE event to stay up to date and benefit from the shared experience of the turbine engineering community.

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

8–10/09



8–10 September 2020  
Liverpool

### **VIBRATIONS IN ROTATING MACHINERY - VIRM 12**

Since 1976, Vibrations in Rotating Machinery conferences have successfully brought industry and academia together to advance state-of-the-art research in dynamics of rotating machinery.

Join industrial and academic experts from different countries to discuss the challenges in rotordynamics, rub, whirl instability and more. This is your chance to present your work, hear from contemporary leading researchers, exchange ideas from the field and updates on the latest research findings.

Whether you are from industry or academia, involved in transport, power, process, medical engineering, manufacturing or construction, VIRM 12 will provide the latest R&D and useful guidance

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

VIEW THE FULL LIST OF MARKET LEADING EVENTS:

[WWW.IMECHE.ORG/EVENTS](http://WWW.IMECHE.ORG/EVENTS)

Online:  
[www.imeche.org/events](http://www.imeche.org/events)

Email:  
[eventenquiries@imeche.org](mailto:eventenquiries@imeche.org)

Phone:  
**+44 (0)20 7973 1251**

## WHO SHOULD ATTEND?

All engineers, OEMs, tier one suppliers and researchers involved with these assets will benefit from the content, knowledge sharing and networking opportunities, particularly:

- Engineering Manager
- CCGT Plant Chemist
- Boiler Specialist
- Integrity Engineer
- Lead Boiler Engineer
- Maintenance Engineer
- Outage Technical Engineer
- Plant Performance Engineer
- Technical Services Engineer
- Operations Engineer
- Pressure Systems Engineer
- Mechanical Projects

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## FEEDBACK FROM PREVIOUS EVENTS:

“A GREAT OPPORTUNITY TO KEEP UP-TO-DATE TO WHAT IS HAPPENING IN THE INDUSTRY.”

Integrity Engineer, Uniper Technologies

“A VERY GOOD USER GROUP TO ATTEND AND PLENTY OF USEFUL INFORMATION TO THINK ABOUT FOR FUTURE MAINTENANCE AND INSPECTIONS.”

Mechanical Technician, Seabank Power Ltd

“WELL ORGANISED AND INFORMATIVE CONFERENCE”

Project Engineer, Doosan Babcock

“VERY INTERESTING”

Director, KRR

“VERY GOOD AND WAS WELL COORDINATED”

Metallurgist, 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

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## 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

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#### CONTACT THE SPONSORSHIP TEAM ON:

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E: DANIEL.ANGLIN@IMECHE.ORG

# INSTITUTION OF MECHANICAL ENGINEERS ANNUAL DINNER 2019

Institution of  
**MECHANICAL  
ENGINEERS**

**21 November 2019**

Science and Industry Museum, Manchester



SPONSOR:



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# 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, Institution of Mechanical Engineers / Supporting Organisation	£525 + VAT = £630
Non-member	£615 + VAT = £738
Full-time Student/Retired	£245 + VAT = £294

## THREE WAYS TO BOOK

- 1 online:  
[www.imeche.org/hrsg](http://www.imeche.org/hrsg)
- 2 email:  
[eventenquiries@imeche.org](mailto: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](mailto: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  
Mellors Way  
Nottingham  
NG8 6PY

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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



### INSTITUTION OF MECHANICAL ENGINEERS ANNUAL DINNER 2019

21 November 2019, Manchester

Take this perfect opportunity to entertain clients, network with colleagues and reward employees in the company of the most influential engineers and industry leaders.

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

For more information please call

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## Institution of MECHANICAL ENGINEERS

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### STEAM TURBINE AND GENERATOR USER GROUP 2020

18-19 March 2020, Manchester

Returning in 2020, the next event in this popular series of power industry user groups will enable those involved in the management, operation and maintenance of steam turbines and generators to discuss common problems and issues.

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

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](http://www.imeche.org/events) for the complete list of events.

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