# NUCLEAR LIFTING 2018 INNOVATIVE LIFTING STRATEGIES FOR THE NUCLEAR INDUSTRY





Power Industries Division **Seminar** 

**29 November 2018** 

Old Trafford, Manchester United Football Club

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

Dai Davies, Principal Inspector,
Nuclear Safety Office for Nuclear Regulation

Iain Phimister, Senior Engineering Manager Radioactive Waste Management

Shane Lloyd, Lead Mechanical Engineer **Horizon Nuclear Power** 

Jim Spencer, Lifting Handling and Fuel Storage, Technical Management and Acceptance, **HPC EDF Energy** 

John McGibbon, Senior Safety Assessor **Sellafield Ltd** 



EXHIBITORS:

















SUPPORTING ORGANISATIONS:











# NUCLEAR LIFTING 2018 INNOVATIVE LIFTING STRATEGIES FOR THE NUCLEAR INDUSTRY

29 NOVEMBER 2018, MANCHESTER UNITED FOOTBALL CLUB

DISCOVER ENGINEERING
SOLUTIONS TO THE TECHNICAL
AND ENVIRONMENTAL
CHALLENGES FACING THOSE
CONDUCTING HIGH RISK
LIFTING AT THE INSTITUTION OF
MECHANICAL ENGINEERS' 7TH
NUCLEAR LIFTING SEMINAR.

Attend this unique event to continue the discussion around lifting projects for decommis-sioning, operational and new build nuclear sites.

Explore long term strategies, unique safety cases and cost-effective design that meet regu-lated standards.

Understand how best to conduct complex and high risk lifts and benefit from the combined experience and knowledge of this specialised engineering community.

#### **KEY TOPICS INCLUDE:**

- The Office of Nuclear Regulation (ONR) provides a detailed overview of all the relevant good practice within UK Law, approved codes and practice and British and European Standards
- Radioactive Waste Management Ltd (RWM)
  discuss their latest vertical shaft hoist
  implementation for up to 65 tonne lifts in an
  underground disposal facility
- Dounreay Site Restoration Ltd share the lessons learned from the rail failure of a nuclear polar crane
- Sellafield Ltd will outline their fresh approaches for assessing and carrying out challenging lifts at their site
- EDF Energy present best practice and insights during the procurement and design of the polar crane in use at Hinkley Point C

#### WITH THANKS TO:

Roger May, Former Shift Charge Engineer  ${f Magnox\ Ltd}$ 

Sam Lacey, Senior Engineering Manager  $\mathbf{AWE}$ 

Dai Davies, Principal Inspector, Nuclear Safety Office for Nuclear Regulation

Shane Lloyd, Lead Mechanical Engineer

**Horizon Nuclear Power** 

Shaun M Kelso, Senior Policy Adviser **Sellafield Ltd** 

#### ATTEND NUCLEAR LIFTING TO:

- Hear a unique presentation from the Office of Nuclear Regulation for clarity on expectations from those operating lifting equipment on a nuclear site
- Network with engineering thought leaders in nuclear lifting strategies and safety cases
- Develop cost effective strategies to comply with regulation with insights from ONR, the RWM and industry experts
- Understand the role of **asset maintenance** and **human factors** in a nuclear lifting environment
- Hear about how to lift safely in complex and high risk lifting operations at power generation, decommissioning and military sites

#### FEEDBACK FROM PREVIOUS SEMINAR:

"A good range of topics with interesting points to consider" Senior Mechanical Engineer, Sellafield Ltd

"A great day covering diverse aspects of nuclear lifting."
Senior Project Engineer, BOC Ltd

"A great event with some very informative and interesting presentations."

Mechanical engineer, EDF

"A thrilling ride through the highs and lows of Nuclear Lifting"

Senior Mechanical Engineer, Atkins

#### **PROGRAMME**

THURSDAY 29TH NOVEMBER 2018			
08:30	REGISTRATION AND REFRESHMENTS		
09:00	CHAIR'S OPENING REMARKS		
	DESIGN CODES AND THE APPLICATION OF QUALITY ASSURANCE(QA) TO NUCLEAR LIFTS		
09.10	DEVELOPMENT OF RELEVANT GOOD PRACTICE WITHIN THE UK NUCLEAR INDUSTRY  Dai Davies, Principal Inspector, Nuclear Safety, Office for Nuclear Regulation Shane Lloyd, Lead Mechanical Engineer, Horizon Nuclear Power		
09.40	QUALITY CONTROL - MORE THAN JUST NDT AND MATERIAL CERTIFICATION Jon Garlick, Design Substantiation Engineer, AWE Sam Lacey, Senior Engineering Manager, AWE		
10:10	QUESTION AND ANSWER SESSION		
10:20	PANEL DISCUSSION: MOVING FORWARDS AS AN INDUSTRY Jim Spencer, Lifting Handling and Fuel Storage, Technical Management and Acceptance, HPC, EDF Energy Roger Best, Engineering Manager, AWE  • Where is harmonisation most urgently needed?  • How can the requirements of the nuclear context best be catered for?  • Safety cases VS conventional assessment: when are they required?		
10:50	10:50 NETWORKING REFRESHMENT BREAK		
	DEVELOPING SAFETY CASES FOR NEW AND OLD FACILITIES		
11:20	THE FEASIBILITY OF A 1000M NUCLEAR LIFT AT A UK GEOLOGICAL DISPOSAL FACILITY  Iain Phimister, Senior Engineering Manager, Radioactive Waste Management		
11:50	REBALANCING LIFTING SAFETY CASES TO SUPPORT DECOMMISSIONING ACTIVITIES John McGibbon, Senior Safety Assessor, Sellafield Ltd		
12:20	INTEGRATING HUMAN FACTORS INTO ENGINEERING PRACTICES		
12:50	QUESTION AND ANSWER SESSION		
13:05	NETWORKING LUNCH  MAINTENANCE AND LIFE EXTENSION OF LIFTING EQUIPMENT		
14:05	DOUNREAY AND GOLIATH: A CASE STUDY OF RAIL FAILURE IN A NUCLEAR POLAR CRANE  Jennifer Gilmour, Senior Mechanical Engineer, Dounreay Site Restoration Ltd.		
14:35	LIFTING THE BAR AT DEVONPORT  Collwyn Griffiths, IN FAP Project Manager, Marine Naval Bases, Marine & Technology, Babcock International Group		
15:05	QUESTION AND ANSWER SESSION		
15:15	NETWORKING REFRESHMENT BREAK		
	CASE STUDIES ON CURRENT AND FUTURE CHALLENGES		
15:45	THE WINDSCALE PILE CHIMNEY DEMOLITION: USE AND SAFETY CASE SUBSTANTIATION OF A CONVENTIONAL LUFFING JIB TOWER CRANE IN A NUCLEAR ENVIRONMENT  George Frost, MICE Project Engineering Manager – Demolition, Sellafield Ltd  Neil Shuttleworth, Principal Structural Engineer, AECOM		
16:15	CHALLENGES OF SPENT FUEL EXPORT Shane Lloyd, Lead Mechanical Engineer, Horizon Nuclear Power		
16:45	PROCUREMENT, DESIGN AND SAFETY JUSTIFICATION OF THE HINKLEY POINT C REACTOR BUILDING POLAR CRANE  Jim Spencer, Lifting Handling and Fuel Storage, Technical Management and Acceptance, HPC, EDF Energy		
17:15	QUESTION AND ANSWER SESSION		
17:30	CHAIR'S CLOSING REMARKS		
17:35	END OF SEMINAR		

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

#### HOW TO BOOK YOUR PLACE

Registration fees include entry to the sessions, refreshments and a copy of the conference proceedings.

#### **FEES AND CHARGES**

 $Registration \ fees \ include \ entry \ to \ the \ sessions, \ refreshments \ and \ a \ copy \ of \ the \ conference \ proceedings.$ 

Seminar	<b>Early Bird Rate</b> Available until 5 October	Standard Rate
Member, Institution of Mechanical Organisation	£299 + VAT = £358.80	£330 + VAT = £396
Non-member	£349 + VAT = £418.80	£385 + VAT = £462
Full-time Student/Retired	£85 + VAT = £102	£85 + VAT = £102

Group booking discounts are available. Contact us for more information.

#### THREE WAYS TO BOOK

1 Online:

www.imeche.org/nuclearlifting2018

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

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#### 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**

Manchester United Football Club Sir Matt Busby Way Old Trafford Manchester M16 ORA

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www.imeche.org/peapp

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#### THE INSTITUTION OF MECHANICAL ENGINEERS' ANNUAL DINNER 2018

#### 22 November 2018, Bristol

With 2018 the official Year of Engineering, the evening is the perfect opportunity for you and your organisation to celebrate and show your support for the engineering community.

www.imeche.org/annualdinner



#### **GAS TURBINE USER GROUP 2018**

#### 28-29 November 2018, Manchester

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www.imeche.org/gtug2018

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