



nel

oil & gas services



Oil & Gas Emissions Seminar

10 June 2009

Measurement Uncertainty Training Course

11 June 2009

Thistle Aberdeen Airport Hotel, UK

Organised by

TUV NEL Ltd, EAST KILBRIDE, GLASGOW, UK

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ONLINE BOOKING: www.tuvnel.com/events.aspx

Oil & Gas Emissions Seminar

10 June 2009

Thistle Aberdeen Airport Hotel
ABERDEEN, UK



Background

Emissions measurement continues to be a major challenge for the offshore sector. As operators strive to meet the demanding EU Emissions Trading Scheme (ETS) monitoring and reporting targets, at the same time they are putting in place combustion plant monitoring to satisfy the Offshore Combustion Regulations. This is a critical time for the industry as it shapes best practice which satisfies the regulatory reporting requirements and takes account of the unique difficulties and limitations experienced offshore.

In the past, many emissions reduction technologies have been difficult to implement offshore owing to space and load restrictions, remoteness and cost. However, in recent years, developments in technology have brought about potential solutions for the offshore industry. For example, new techniques for utilising associated gas by economically bringing it to market or by using it to provide power on the installation, would significantly reduce flaring and associated emissions, conserve valuable gas reserves and reduce energy consumption on the platform.

Forthcoming Carbon Capture and Storage (CCS) legislation will also provide the offshore sector with further emissions reduction opportunities and financial incentives when CCS is included in Phase 3 of the EU ETS.

Seminar Objectives

This one day seminar will help examine the opportunities and challenges associated with emissions reduction and emissions measurement and reporting.

Attendees will be able to keep up-to-date with the latest technological developments as well as the current practices, trends and needs of the oil and gas industry.

The seminar will be accompanied by an optional training course.

Themes and Topics

Emissions reduction:

- The use of micropower to reduce gas flaring
- Energy efficient LNG for recovery of flare gas
- VOC leak detection using infrared optical imaging techniques
- Carbon Capture and Storage

Emissions measurement:

- Installation effects on flare gas ultrasonic meters
- Comparing CFD modelling with experimental data
- Using virtual sensing and PEMS technology
- Stack sampling offshore field trials
- CCS measurement issues and options

Who Should Attend

The seminar is designed for all those involved and concerned with the monitoring and reporting of atmospheric emissions in the oil and gas industry.

It is aimed at:

- Metering and measurement specialists
- Verifiers
- Equipment manufacturers and suppliers
- Service providers
- Industry experts
- Environmental reporting personnel
- Oil and gas companies
- Research establishments
- Test laboratories

TUV NEL

TUV NEL is a leading provider of pipeline fluid management services to the global petroleum industry. We have an impressive track record in the development, design and application of leading-edge technology in order to reduce production costs and increase profitability, whilst maintaining safety. We provide consulting, training, R&D and laboratory testing services in the following areas:

- Emissions Reduction
- Emissions Measurement and Reporting
- Flow Measurement (oil, gas, water, wet gas, multiphase & heavy oil)
- Environmental (produced water, emissions and oil-in-water)
- Computation Fluid Dynamics Modelling and Interpretation
- Calibration of Metering Systems

TUV NEL is part of the TÜV SÜD Group, the leading international service organisation. With over 13,000 employees, it is represented worldwide at more than 600 locations. For further details on how TUV NEL can help your business, please visit our website www.tuvnel.com or contact us directly.

Exhibition Opportunities

Suppliers of equipment and services who attend the seminar are invited to sponsor or exhibit at the seminar. This will give your company a profile in the final programme in addition to a stand at the exhibition. The cost to exhibit including a delegate place for the seminar is £785 plus VAT.

Seminar Fees

The registration fee for the seminar is £450 plus VAT. Registration fee covers delegate attendance, lunch, refreshments, seminar documentation comprising a bound set of all the papers presented and also a CD containing the proceedings.

Seminar Technical Programme - Wednesday 10 June - 09:00 - 17:00

09:00 – 09:30	REGISTRATION AND COFFEE	12:40 – 13:40	LUNCH
09:30 – 09:40	Chairman's Welcome and Introduction Angus Laurie, DECC – UK	13:40 – 13:50	Chairman's Welcome and Introduction Gordon Harvey, BP – UK
09:40 – 10:10	Flare Gas Utilisation for Mechanical Drives and Electricity Production Jacob Klimstra, Wärtsilä Power Plants – The Netherlands	13:50 – 14:20	Installation Effect on Flare Gas Ultrasonic Meters – Comparing CFD Models with Experimental Data Jeff Gibson, TUV NEL – UK
10:10 – 10:40	NoFlare by Hamworthy Gas System Anders Sjuls Fjeld and Carl Jørgen Rummelhoff, Hamworthy Gas Systems AS – Norway	14:20 – 14:50	Virtual Sensing and PEMS Technology for Offshore Emissions Monitoring Davide Roverso, Institute for Energy Technology (IFE) – Norway
10:40 – 11:10	COFFEE AND EXHIBITION	14:50 – 15:20	COFFEE AND EXHIBITION
11:10 – 11:40	VOC Leak Detection in the Oil & Gas Industry with Infrared Optical Imaging Johan Tegstam, FLIR Systems AB – Sweden	15:20 – 15:50	Stack Sampling Field Trials Rogan Stewart, Shell UK Ltd – UK
11:40 – 12:10	Oil and Gas Emissions – a CCS Perspective Sam Gomersall and Alan James, CO2DeepStore Ltd – UK	15:50 – 16:20	CCS Metering Challenges and Options Graeme Leslie, TUV NEL – UK
12:10 – 12:40	Open Discussion Period	16:20 – 16:50	Open Discussion Period
		16:50 – 17:00	Chairman's Closing Remarks

1 Day Training Course - Measurement Uncertainty - Thursday 11 June - 09:00 - 16:30

Introduction

With measurement uncertainty underpinning the whole credibility of environmental reporting, this one-day training course is designed to equip industry personnel with the fundamentals necessary for calculating measurement uncertainty. It is vital that all those using industrial measurement recognise that measurement is not an exact science. Understanding the magnitude of the uncertainty associated with any measurement is the first step to improving accuracy. An ability to identify the key issues affecting accuracy is the crucial step in ensuring that limited resources are correctly targeted in any drive to improve accuracy.

This course will introduce delegates to the techniques required to identify what affects measurements and by how much. By ranking the effects, delegates will be able to guard against invalid conclusions and ensure that the key measurements are targeted for investment in new instrumentation.

Designed to impart an understanding of measurement uncertainty using examples relevant to emissions measurement in the oil and gas sector, delegates will learn the appreciation of the impact of measurement uncertainty on the oil and gas industry, identify the important sources of uncertainty in measurement systems and receive practical guidance on the design of measurement techniques for improved uncertainty.

Course Director

Dr Norman Glen joined TUV NEL in 1983. Since then he has worked on a wide range of projects including heat exchanger fouling, stack emissions monitoring, the application of data reconciliation techniques to flow measurement in pipe networks, and the traceable calibration of industrial densitometers, all of which require understanding of the effects of uncertainty of measurement on the results obtained. By drawing on this diverse background, he is able to illustrate key learning points relating to the use of uncertainty for system design and data analysis.

Who Should Attend

- Instrumentation engineers
- Environmental reporting personnel
- Metering specialists
- Quality managers
- Technical managers
- Verifiers
- Equipment manufacturers
- Service providers

Course Fee: £450 plus VAT

Please tick the event(s) you will be attending

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Full Name (inc. title) _____

Preferred Name for Badge _____

Job Title _____

Company _____

Address _____

Postcode _____ Country _____

Telephone _____

E-mail _____

We expect the event to be heavily subscribed. Places are strictly limited and are allocated on a first come, first served basis. Under UK excise regulations delegates from all countries are required to pay VAT at 15% on any conference/course taking place in the UK. Your place will be confirmed upon receipt of a completed booking form. If you do not receive confirmation within five working days please contact TUV NEL.

Payment Details
 (Payment by credit card only)

Seminar: £450 + VAT Measurement Uncertainty Training Course: £450 + VAT
 Seminar & Measurement Uncertainty Training Course: £850 + VAT Emissions Club Member Discount (10% - Seminar Fee Only)

Total Payable (including discounts) _____ plus VAT

Visa Mastercard Amex Diners Card Start Date _____ Expiry Date _____

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 In order to receive a partial refund, notice of cancellation must be received in writing by TUV NEL Ltd no later than 14 days prior to the commencement date of the event. All such cancellations are subject to a fee of 25% of payments received by TUV NEL Ltd prior to cancellation. No refund shall be made under any circumstances for any notice of cancellation received after this 14 day period, however a substitute delegate may be named, provided that TUV NEL Ltd is notified in writing of such substitution prior to the commencement date of the event. TUV NEL Ltd reserves the right to cancel the event due to unforeseen circumstances. TUV NEL Ltd is not liable for any expenses incurred by the delegate. This programme may be subject to change due to circumstances beyond the control of the organisers.

Venue Details
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