



# MULTINATIONAL DESIGN EVALUATION PROGRAMME

## 4<sup>th</sup> Conference on New Reactor Design Activities

**12-13 September  
2017**  
Queen Elizabeth II Centre  
London, United Kingdom

## PROGRAMME





## Background and objectives

The MDEP is a unique multinational initiative leveraging the resources and knowledge of national regulators to review new reactor designs. The programme recently celebrated its 10<sup>th</sup> anniversary and is recognised as an effective framework for regulatory co-operation and harmonisation.

Over the past 10 years, MDEP has published 27 common positions and 15 technical reports. In 2015, the MDEP members extended the co-operation period from the end of 2017 to the end of 2022, focusing on its core mission of collaborating on new reactor design-specific activities. The scope of MDEP has been extended in 2016 to incorporate commissioning and early phase operation as MDEP areas of co-operation.

At this important milestone, MDEP is hoping to gather feedback on its current activities and discuss its future. To this end, MDEP is organising its fourth MDEP conference. The event will provide a forum for MDEP stakeholders (including industry representatives, standard development organisations and other international organisations) to share the results of their engagement with the programme and to deliver presentations on ongoing activities related to new reactor licensing. The two-day conference will include sessions on codes and standards harmonisation, digital instrumentation and controls, supply chain regulatory issues and vendor inspection co-operation, influence of MDEP interactions on reactor designs safety, commissioning activities and perspectives for MDEP.

## Organisation and participation

### Participation

Participation is free of charge but open upon invitation only to:

- industry representatives;
- international organisations and associations;
- countries' nuclear regulatory organisations and their technical support organisations.

### Language

English.

### Organising committee

The members of the organising committee are:

- Mr Julien Collet, ASN, France, STC Chair, Chair of the organising committee
- Mr Christian Carrier, CNSC, Canada, STC member
- Mr Tapani Virolainen, STUK, Finland, STC member
- Mr Gary Holahan, US NRC, USA, STC member
- Ms Donna Williams, US NRC, USA, STC member
- Ms Anne-Cécile Rigail, ASN, France, EPRWG Chair
- Mr Lawrence Burkhart, US NRC, USA, AP1000WG Chair
- Dr Sweng Woong Woo, KINS, Korea, APR1400WG Chair
- Mr Sergei Bogdan, SEC-NRS, Russia, VVERWG Chair
- Mr Neil Blundell, ONR, UK, ABWRWG Chair
- Mr Xuejun Wei, CNSC, Canada, CSWG Chair
- Mr Ismael Garcia, US NRC, USA, DICWG Chair
- Mr Stuart Allen, ONR, UK, VICWG Chair

## Practical arrangements

### Venue

Queen Elizabeth II Centre (QEII Centre)  
Saint James room  
Broad Sanctuary  
Westminster, London  
SW1P 3EE, United Kingdom

More information is available at <http://qeicentre.london>.

### Wifi

The QEII Centre is pleased to offer complimentary open wireless internet for general browsing purposes throughout the Centre. Please, select user name QEII Guest from your mobile, laptop or tablet. No login/password is required.

### Audio recording

The conference will be audio recorded for the purpose of developing the conference proceedings only.

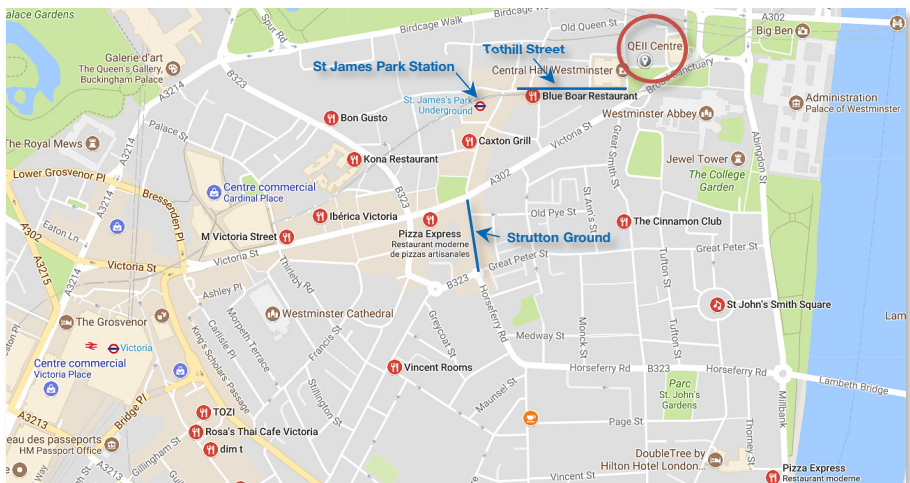
### Lunch

Lunch is not provided at the conference venue.

A number of places offer options for lunch in the surrounding area:

- Some coffee outlets (Prêt à Manger, Costa's and Starbucks) from the centre towards Tothill Street which leads to St James Park Station. Some independent coffee outlets and restaurants inside and near St James Park Station.
- A number of food outlets from the centre towards Victoria Street and Victoria Station. Some food outlets at Strutton Ground.
- A number of hotels with restaurant facilities near QEII Centre.

### Restaurants and cafés in the Queen Elizabeth II Centre surrounding area



## Programme

### Day 1 – Tuesday 12 September

9.00-9.30: Registration and welcoming coffee

#### 9.30-10.50: Welcome and opening of the conference

Chair: Mr Petteri Tiippana, MDEP Policy Group (PG) Chair and Finland PG member, STUK Chairman

##### Welcome and introductory remarks

- Mr Petteri Tiippana, PG Chair
- Mr William D. Magwood, Director General, NEA

##### 10 years of MDEP achievements

- Mr André-Claude Lacoste, MDEP co-founder, Former ASN Chairman, France – *The creation and development of MDEP*
- Mr Gary Holahan, MDEP STC member, Chief Technical Advisor to the Executive Director for Operations, NRC, USA – *10 years of MDEP achievements*
- Ms Agneta Rising, Director General, World Nuclear Association – *10 years of cooperation between MDEP and CORDEL*

#### 10:50-12:35: Session 1 – Codes and standards harmonisation

Chair: Mr Peter Elder, Canada PG member, Acting Vice-President Technical Services Branch, CNSC

##### Introduction of the session

##### Panellists presentations

- Mr Xuejun Wei, Chair of CSWG, CNSC, Canada – *MDEP activities, achievements and challenges in codes harmonisation*
- Mr Shane Turner, Principal inspector, ONR, UK – *Approach to codes and standards in the UK*
- Mr Andrey Obushev, Deputy Director for Development, VO Safety, Russia – *The use of MDEP products for Russian national standards development*
- Dr Nawal Prinja, Chairman of the Codes and Standards Task Force, CORDEL – *Harmonising nuclear codes and standards for mechanical components*
- Mr Philippe Malouines, Standard Development Organisations (SDO) board member – *SDO mechanical codes Convergence Board: achievements and perspectives*
- Mr Hongwei Zhang, Engineer, Institution for Standardization of Nuclear Industry, China – *Application of nuclear codes and standards in China*

##### Panel discussion

##### Closing remarks of the session

12:35-14:00: Lunch

## 14:00-15:45: Session 2 – Digital instrumentation and controls: Current and emerging technical challenges

Chair: Mr Michael Knochenhauer, Sweden STC member, Director of Department of NPPs Safety

### Introduction of the session

#### Panellists presentations

- Mr Ismael Garcia, DICWG Chair, NRC, USA – *Digital instrumentation and controls activities and challenges*
- Mr Stephen Wardle, DICWG Member, ONR, UK – *Digital instrumentation and controls: current and emerging technical challenges in the UK*
- Mr Jean-Paul Bouard, IEC/SC45A Secretary, International Electrotechnical Commission – *IEC/SC45A, standards for instrumentation, control and electrical power systems for nuclear facilities*
- Mr Johannes Pickelmann, Chairman of the CORDEL Digital I&C Task Force – *Current status and outlook of WNA CORDEL DICTF workload on digital instrumentation and controls topics*
- Dr Darren Cofer, Fellow at the Rockwell Collins Advanced Technology Center, Aircraft Industry – *Safety assurance in software systems: from airplanes to atoms*
- Mr Ma Shihong, I&C Manager of Commissioning Department, Sanmen Nuclear Power Co., Ltd., China National Nuclear Cooperation – *Challenges of I&C commissioning to first AP1000 unit*

#### Panel discussion

#### Closing remarks of the session

15:45-16:15: Break

## 16:15-18:00: Session 3 – Supply chain regulatory issues and vendor inspection co-operation

Chair: Mr Pierre-Franck Chevet, France PG Member, ASN Chairman

### Introduction of the session

#### Panellists presentations

- Mr Stuart Allen, VICWG Chair, ONR, UK – *MDEP current activities and challenges in vendor inspection*
- Mr Dejun Wang, Project Officer, NNSA, China – *The construction of nuclear safety culture for equipment vendors in China*
- Mr David Emond, Component Manufacturing Business Unit Senior Executive Vice President, AREVA NP, France – *Quality audit and quality improvement plan at AREVA NP Le Creusot forging facility*
- Mr Randy C. Ivey, Supplier Quality Oversight Director, Westinghouse Electric Company, USA – *AP1000® nuclear power plant squib valve design challenges and regulatory interface*
- Mr Greg Kaser, Senior Project Manager, WNA – *The nuclear supply chain: an update on World Nuclear Association activities*

#### Panel discussion

#### Closing remarks of the session

18:00: Cocktail reception and dinner platters (Westminster room, 4<sup>th</sup> floor)

## Day 2 – Wednesday 13 September

### 9:00-10:45: Session 4 – Influence of MDEP interactions on reactor designs safety

Chair: Dr Mzubanzi Bismark Tyobeka, South Africa PG Member, NNR CEO

#### Introduction of the session

#### Panellists presentations

- Ms Anne-Cécile Rigail, EPRWG Chair, ASN, France – *EPRWG: organisation and interaction with the industry*
- Dr Sweng Woong Woo, APR1400WG Chair, KINS, Korea – *APR1400WG activities and accomplishments*
- Mr Norbert Nicaise, Nuclear Safety and Licensing Manager, AREVA NP, France (EPR) – *MDEP and EPR design/licensing*
- Mr Richard J. Easterling, Vice President of Technical Services and Licensing, Westinghouse Electric Company, USA (AP1000) – *Multinational regulatory influence on new nuclear construction projects*
- Mr Yun Ho Kim, Deputy Project Manager, KHNP, Korea (APR1400) – *APR1400 safety design features and the influence of MDEP interaction*
- Mr Sergey Svetlov, Chief Expert for Design, JSC «ATOMPROEKT», Russia (VVER) – *New VVERs in Russia and abroad*
- Mr Dave Watson, Senior Regulatory Advisor, Nuclear Power Project, Hitachi Europe Ltd, UK (ABWR) – *Licensing of UK ABWR in an international environment*

#### Panel discussion

#### Closing remarks of the session

10:45-11:15: Break

### 11:15-13:00: Session 5 – Commissioning activities

Chair: Mr Christer Viktorsson, UAE PG Member, FANR Director General

#### Introduction of the session

#### Panellists presentations

- Mr Simon Yates, EPR CATESG Chair, ONR, UK – *MDEP current activities and challenges in commissioning activities*
- Mr Christer Viktorsson, Director General, FANR, UAE – *Commissioning experience in the UAE*
- Ms Lin Zhang, Deputy Director of the Department of Nuclear Power Safety Regulation, NNSA, China – *Overview of AP1000 commissioning inspection in P.R. China*
- Mr Xavier Ursat, Senior Executive Vice President, New Nuclear Projects and Engineering, EDF Group, France and Mr Ke Zhang, FPOT manager, TNPJVC, China – *Reactor pressure vessel internals vibratory behaviour test implementation*
- Mr Sang Won Lee, Principal Technical Manager, KHNP, Korea – *A brief overview of the APR1400 commissioning*
- Mr Valery S. Bezzubtsev, Director for Technological Development, JSC «Concern Rosenergoatom», Russia – *Commissioning of new nuclear power units in Russia*

#### Panel discussion

#### Closing remarks of the session

13:00-14:30: Lunch

## 14:30-16:15: Session 6 – Perspectives for MDEP

Chair: Mr Ho Nieh, NEA, Head of the Division of Nuclear Safety Technology and Regulation

### Introduction of the session

#### Panel discussion

- Mr Petteri Tiippana, MDEP PG Chair and Finland PG Member, STUK Director General
- Mr Julien Collet, MDEP STC Chair and France STC Member, ASN Deputy Director General
- Mr Liu Hua, China PG Member, NNSA Administrator
- Mr S.A. Bhardwaj, India PG Member, AERB Chairman
- Mr Alexey Ferapontov, Russia PG Member, Rostechnadzor Deputy Chairman
- Mr Zafer Alper, Turkey PG Member, TAEK President
- Mr Michael Finnerty, UK PG Member, ONR New Reactors Programme Director
- Mr Kenichi Sato, Representative of WNA CORDEL
- Ms Cornelia Spitzer, Head of the IAEA Safety Assessment Section

### Closing remarks of the session

## 16:15-16:30: Closing Session – Conclusion and closing of the conference

- Mr Petteri Tiippana, PG Chair
- Mr William D. Magwood, Director General, NEA





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