



INFORMATION SYSTEM ON OCCUPATIONAL EXPOSURE (ISOE)

INTERNATIONAL WORKSHOP ON OCCUPATIONAL RADIATION PROTECTION IN SEVERE ACCIDENT MANAGEMENT *"SHARING PRACTICES AND EXPERIENCES"*

**17-18 JUNE 2014
WASHINGTON DC, USA**

Brief Biography of Speakers

Scientific Programme

TUESDAY, 17 June 2014

GLOBAL VIEW ON OCCUPATIONAL RADIATION PROTECTION IN SEVERE ACCIDENT MANAGEMENT

Plenary Session 1

Chairperson

Kazuo SHIMOMURA
OECD Nuclear Energy Agency

09:25_{/1.01}

ICRP RECOMMENDATIONS FOR OCCUPATIONAL RADIATION PROTECTION IN AN EMERGENCY

Donald COOL (*USNRC, US*)- *ICRP Committee 4*

Dr. Donald A. Cool is a member of the Main Commission of International Commission on Radiological Protection (ICRP), and Chairman of ICRP Committee 4 on Practical Applications. He is also a Council Member of the National Council on Radiation Protection and Measurements, and is the Co-Chair of the U.S. Federal Interagency Steering Committee on Radiation Standards in the United States.

Dr. Cool received his Masters and Doctorate degrees in Radiation Biology from the University of Rochester School of Medicine and Dentistry. As the Senior Level Advisor for Radiation Safety and International Liaison in the U. S. Nuclear Regulatory Commission, he is responsible for coordinating a wide range of international activities related to radiation protection, safety and security of by-product materials, decommissioning and waste management, radiation protection policy, and international standards. He has more than 31 years of experience in the NRC.

09:45_{/1.02}

PROTECTION OF EMERGENCY WORKERS AND HELPERS: RECENT DEVELOPMENTS IN INTERNATIONAL STANDARDS IN EMERGENCY PREPAREDNESS AND RESPONSE

Svetlana NESTOROSKA MADJUNAROVA (*IAEA IEC*)

Svetlana Nestoroska Madjunarova is Emergency Preparedness Officer at the IAEA's Incident and Emergency Centre. She is a physicist working in the field of radiation protection and safety and, particularly, in a nuclear and radiological emergency preparedness and response since 2006. She started her professional career in the Macedonian Radiation Safety Directorate where she was involved in the establishment of the national infrastructure for radiation protection and safety.

As a counsellor in monitoring and emergency, she coordinated the development of the national plan for a nuclear and radiological emergency adopted in 2011.

In 2012, she joined the IAEA where she has been primarily working in relation to development of IAEA's safety standards and guidance in the area of emergency preparedness and response.

10:05_{/1.03}

**CNSC RESPONSE TO FUKUSHIMA AND ENHANCEMENTS TO THE REGULATORY
FRAMEWORK FOR THE PROTECTION OF WORKERS**

Terry JAMIESON (*CNSC, Canada*)

Mr. Jamieson is the Vice-President, Technical Support Branch of the Canadian Nuclear Safety Commission.

The Technical Support Branch (TSB) supports the CNSC mission and mandate by providing leadership and specialized expertise in the areas of nuclear science and engineering, safety analysis, safety management, human factors, personnel training and certification, environmental and radiation protection, security, nuclear emergency management, safeguards, and nuclear non-proliferation.

Mr. Jamieson has been with the CNSC since 2007. He has over 31 years of experience in the Canadian nuclear safety and environmental industries, and has held technical and management positions in the areas of radiation protection, environmental protection, nuclear security and safeguards, and safety assessment.

Mr. Jamieson began his career as a nuclear design engineer at Ontario Hydro. He then worked as a researcher in the Library of Parliament's Science/Technology Research group, and subsequently became Senior Nuclear Engineer at ECS Power Systems. From 1989 to 2007, he worked at the Science Applications International Corporation, where he rose to the positions of Chief Operating Officer, Vice-President and Division Manager.

He has authored many technical publications and was a recipient of the American Nuclear Society's Best Paper Award in 1996. The Canadian Nuclear Society awarded him the J.S. Hewitt Team Achievement Award in 2000 for the creative conceptualization and innovative application of a thermal neutron-activation-based system for detecting non-metallic land mines. In 2010, he was made a Fellow of the Engineering Institute of Canada.

10:25_{/1.04}

**LESSONS LEARNED FROM TMI AND HOW IT CHANGED THE REGULATORY
FRAMEWORK IN THE US**

Roger PEDERSEN (*USNRC, US*)

Mr. Pedersen is a Senior Health Physicist at the US Nuclear Regulatory Commission (NRC). He holds a Bachelor of Science in Nuclear Engineering from North Carolina State University, and a Master of Science in Radiological Health from the University of North Carolina, Chapel Hill.

Mr. Pedersen has forty years of experience in the radiation protection field including experience in the US Nuclear Navy; in Research Reactor operations at NC State University; and experience in the US commercial power industry at Carolina Power & Light, and at the NRC. Roger has been with the NRC for over thirty years, working primarily in the Office of Inspection and Enforcement, and the Office of Nuclear Reactor Regulation.

He is currently in the Office of Nuclear Reactor Regulation where he is responsible for the radiation protection technical content of the NRC's Operating Reactor Inspection and Licensing Programs.

ISOE EXPERT GROUP INTERIM REPORT

Plenary Session 2

Chairperson

Ellen P. ANDERSON
Nuclear Energy Institute

11: 15 Session start time

11:20_{/2.01} **RADIATION PROTECTION MANAGEMENT AND ORGANISATION**
~~Willie O. HARRIS (Exelon Nuclear, US), ISOE Chair~~

~~Mr. Harris is the Corporate Director of Radiation Protection for Exelon Nuclear, the largest operator of nuclear power facilities in the United States. He has been in radiation protection for over 35 years, and has served as a radiation protection manager or director for over fifteen years. He has a bachelor's degree in radiation protection and is a certified health physicist.~~

David MILLER (NATC, Cook NPP, US) - EGSAM Vice-Chair

11:30_{/2.02} **RADIATION PROTECTION TRAINING AND EXERCISES RELATED TO SEVERE ACCIDENT MANAGEMENT**
Salah DJEFFAL (CNSC, Canada), EG-SAM Vice-Chair

Dr Djeffal is a Radiation Protection Specialist in the Directorate of Environmental and Radiation Protection and Assessment of the Canadian Nuclear Safety Commission. Presently he is responsible for the assessment and evaluation of the radiation protection programs at Canadian nuclear power plants. He has a PHD in physics and over than 30 years of experience in radiation protection. He has been the Canadian regulatory authority representative at the NEA/ISOE and an active member of the ISOE program since 2008.

11:40_{/2.03} **FACILITY CONFIGURATION AND READINESS**
James P. TARZIA (RSCS, US)

Mr Tarzia is one of three Principals of Radiation Safety & Control Services, Inc. (RSCS, Inc.), a full service radiological and nuclear support company. Over the past 30 years, Mr. Tarzia has held several technical and managerial positions at operating and decommissioning nuclear sites and has successfully managed a variety of high-risk radiological projects for Government, commercial nuclear and industrial users of radioactive materials. He received a B.S. in Radiological Health Physics and a MSc. in Radiological Sciences and Protection from the University of Massachusetts – Lowell and earned a M.B.A. from New Hampshire College and has Comprehensive Certification from the American Board of Health Physics. He is the

Chairman of the New Hampshire State Radiation Advisory Committee and serves on the board of the American Board of Health Physics.

11:50_{/2.04}

OVERALL APPROACH ON THE PROTECTION OF WORKERS

Claudia SCHMIDT (*GRS, Germany*)

Dr Schmidt is a radiation protection expert at the Department of Radiation Protection of the Gesellschaft für Anlagen und Reaktorsicherheit (GRS), a non-profit German scientific-technical expert and research organisation. She has a PhD in Geoscience. Since 2007 she works in projects on behalf The Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety in the field of radiation protection in nuclear power plants and also in industry and medicine.

12:00_{/2.05}

MONITORING AND MANAGING THE RADIOACTIVE MATERIALS RELEASES AND CONTAMINATION

Karin FRITIOFF (*Vattenfall AB, Sweden*)

Ms Fritioff is a radiation protection specialist at Vattenfall, the majority owner of the Swedish NPP's Forsmark and Ringhals. She has been in the radiation protection field for about 10 years, including 7 years at the Swedish Radiation Safety Authority.

12:10_{/2.06}

KEY LESSONS LEARNED FROM PAST ACCIDENTS

Caroline SCHIEBER (*CEPN, France*)

Ms Schieber is working at CEPN (Nuclear Protection Evaluation Centre) since 24 years where she is mainly involved in studies related to the practical implementation of optimisation of radiation protection in nuclear power plants. She is also, since 2007, the head of the European Technical Centre of ISOE.

EXPERIENCES, VIEWS AND APPROACHES – UTILITY PERSPECTIVES

Plenary Session 3

Chairperson

Caroline SCHIEBER

Centre d'étude sur l'Evaluation de la Protection dans le domaine Nucléaire

13:30 Session start time

13:35_{/3.01} **RADIATION PROTECTION MANAGEMENT IN FUKUSHIMA DAIICHI NPS AND POST-ACCIDENT MEASURES**
Shiro TAKAHIRA (*TEPCO, Japan*)

- April 1998 joined Tokyo Electric Power Company, as radiation protection section in Fukushima Daiichi NPPs
- July 2001 worked in Head office as radiation protection section
- July 2010 worked in Fukushima Daiichi NPPs as radiation protection section, experienced the earthquake and tsunami
- February 2012 worked in Head office as radiation protection section

13:55_{/3.02} **POST-FUKUSHIMA IMPROVEMENT OF THE EMERGENCY PLAN FOR THE ELECTRABEL NUCLEAR POWER PLANTS – FOCUS ON THE RADIOLOGICAL ASPECT**
Benoit LANCE (*Electrabel, Belgium*)

- 1998 : Ph D Physics at University of Namur, Belgium
- Jan 1999 – May 2006 : Safety Engineer at BELGONUCLEAIRE (MOX fabrication facility) : radiation protection, criticality studies and reactor physics
- May 2006 : Nuclear safety advisor at Electrabel (GDF SUEZ) : independent nuclear safety oversight in the field of radiation protection, project leader for the periodic safety review of the radiological impact on the environment, support to the post-Fukushima improvements (radiological aspects)

14:15_{/3.03} **EDF FARN (FAST ACTION FORCE IN CASE OF NUCLEAR ACCIDENT) - FOCUS ON RADIATION PROTECTION OF WORKERS**
Bernard LE GUEN (*EDF, France*)

Bernard Le Guen, MD, PhD is Radiation Protection and Industrial Safety Vice President for EDF nuclear power plant operation. Since 2012, Dr. Le Guen has been International Radiation Protection Association (IRPA) Executive Officer. In 2011, he joined the International Commission of Radiation Protection (ICRP) committee 4, representing IRPA. In France, he is member of the permanent working group on radiation protection (GP RAD) of the French nuclear regulatory authority. He is in charge of RP lectures in Faculty of Medicine and in different French universities. He has More than 100 national and

international publications on radiation protection, is the co-author of the French academy of Science report on effects of low doses of ionizing radiation (2005) and coordinator of the French academy of Science report on Health consequences of the Fukushima accident in 2011. He began his career in 1989 as house physician at Paris Hospitals (radiotherapy, haematology, medical biology), then in 1992 a researcher on carcinogenesis and liver cancer at the French national institute for medical research (INSERM). In 1995, he joined the Institute for Radiation Protection and Nuclear Safety (IRSN) where he served as radiation protection expert and medical expert to occupational physicians regarding the monitoring of workers exposed to internal contamination risks until 1999. Since 1999, he has been working at Electricite de France (EDF).

14:35_{/3.04}

SEVERE ACCIDENT MANAGEMENT: RADIATION DOSE CONTROL, FUKUSHIMA DAIICHI AND TMI-2 NUCLEAR PLANT ACCIDENTS
Roger SHAW (*Shaw Partners LLC, US*)

Roger P. Shaw, CHP, RSO has over 35 years of experience in the commercial, DOE, national laboratory and legal sectors, and is the past Director of Radiation Protection at the Three Mile Island (post-accident) and Oyster Creek Nuclear Plants. He has experience in nuclear plant operations, radiation protection, radiological engineering, radiation health effects and ALARA program management. Roger is a nuclear engineer, radiological engineer, and is a Board Certified Health Physicist. He is a past President of the Health Physics Society Power Reactor Section.

14:55_{/3.05}

ONTARIO POWER GENERATION FUKUSHIMA EMERGENCY RESPONSE DRILL STRENGTHENS AND LESSONS LEARNED
David MILLER (*NATC, Cook NPP, US*) - EGSAM Vice-Chair

WEDNESDAY, 18 June 2014

**VIEWS AND APPROACHES
– REGULATORY AUTHORITY PERSPECTIVES**

Plenary Session 4

Chairperson

Marie-Line PERRIN
Autorité de Sûreté Nucléaire

08: 30 **Session start time**

08:35_{/4.01} **CNSC EOC TECHNICAL ASSESSMENT AND EVALUATION INITIATIVES**
Christopher COLE (*CNSC, Canada*)

Dr. Cole is a Technical Specialist in the Reactor Behaviour Division of the Canadian Nuclear Safety Commission. Presently he is responsible for the assessment and evaluation of SAMGs at all Canadian nuclear power stations as well as the development of the CNSC Emergency Operations Centre Technical Assessment Section. Prior to joining the CNSC in 2009, Dr. Cole spent 25 years as an officer in the Royal Canadian Navy where he was employed as a Marine Engineer, a Naval Architect and an Assistant Professor of Chemical Engineering at the Royal Military College of Canada.

08:55_{/4.02} **FRENCH REGULATORY REQUIREMENTS FOR THE OCCUPATIONAL RADIATION PROTECTION IN SEVERE ACCIDENT SITUATIONS AND POST ACCIDENT RECOVERY**
Olivier COUASNON (*ASN, France*)

Nuclear Engineer (1999)

Since 2010: project manager and radiation protection inspector within the Nuclear safety authority (ASN)

Previous position: Deputy Head of the radiation protection unit within the Institute for radiation protection and nuclear safety (IRSN)

Former member of:

- the French society for Nuclear Energy (SFEN)
- the French Society for Radiation Protection (SFRP)

Participant to the International Information System on Occupational Exposure (ISOE) from the OECD Nuclear Agency: management board (MB), working group on data analysis (WGDA) and expert group on severe accident management (EGSAM).

09:15/4.03

SEVERE ACCIDENT MANAGEMENT GUIDELINES

Jennifer UHLE (NRC, US)

Dr. Jennifer L. Uhle is the Deputy Director of the Office of Nuclear Reactor Regulation (NRR). Jennifer graduated from MIT with a B.S. and Ph.D. in nuclear engineering. She has worked at the NRC in a number of progressively more responsible positions such as the Special Assistant for Reactor Programs in former Chairman Meserve's office and Chief of the PWR Systems Section in NRR. In 2005, she was selected to the Senior Executive Service and served as the Director of the Division of Engineering and then the Director of the Division of Systems Analysis in the Office of Nuclear Regulatory Research (RES). In 2010, she served as the Deputy Director of RES until obtaining her current position in NRR. Jennifer served as the US representative to the first fact finding mission of the IAEA to Fukushima in April 2011. She has been with the NRC for over 20 years.

09:35/4.04

RADIATION PROTECTION ISSUES RAISED IN KOREA SINCE FUKUSHIMA ACCIDENT

Byeongsoo KIM (KINS, Republic of Korea)

Nationality: Republic of Korea

Affiliation: KINS (Korea Institute of Nuclear Safety)

Main Task: Inspection and safety review on the radiation safety of NPPs

Major interest: Radiation shielding and radiation protection.

09:55/4.05

FINNISH EXPERIENCE ON EMERGENCY PREPAREDNESS CO-OPERATION WORK AND RESULTS

Jukka SOVIJARVI (STUK, Finland) - EGSAM Vice-Chair

Mr Jukka Sovijärvi is Head of Radiation Protection Section at the department of Nuclear Reactor Regulation at Radiation and Nuclear Safety Authority (STUK). He has worked in STUK since 2011. From the year 1997 to 2007 he worked as a Reactor Engineer and Radiation Protection Manager at Olkiluoto NPP. Sovijärvi graduated in 1996 and he has the M.Sc. degree in Nuclear Engineering.