



ISOE European Symposium April 9/11, 2014 • Bern, Switzerland



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ISOE European Symposium

Bern, 9-11 April 2014



2014 ISOE EUROPEAN SYMPOSIUM

9-11 April 2014, Bern, Switzerland

FINAL PROGRAMME

PROGRAMME OF THE SYMPOSIUM

WEDNESDAY 9 APRIL 2014

08:00 – 08:30	Registration
08:30 – 09:00	Opening Ceremony

Session 1. Radiation Protection Management	
<i>Chairpersons</i>	<i>Serge Blond (EDF DPN, France), Thomas Taylor (Mühleberg NPP, Switzerland)</i>
09:00 – 10:45	Dose Reduction Planning at Exelon Nuclear <i>W. Harris (Exelon Nuclear), USA</i>
	Organisation of an ALARA Benchmarking in Swedish Nuclear Power Plants <i>K. Fritioff (Vattenfall Research & Development AB, Sweden), M. Carlson (Ringhals NPP, Sweden), S. Hennigor (Forsmark NPP, Sweden), S. Andresz, C. Schieber (CEPN, France)</i>
	Ringhals - ALARA Performance Indicators <i>M. Johansson (Ringhals NPP), Sweden</i>
	EDF Industrial Program of Maintenance: Impact on the Collective Dose and Subsequent ALARA Actions <i>F. Drouet, C. Pignot (EDF UNIE-GPRE), S. Blond (EDF DPN), France</i>
	Improvements in ALARA Management at Cernavoda NPP <i>V. Simionov, I. Popescu (Cernavoda NPP), Romania</i>

10:45 – 11:30	<i>Coffee-break, Visit of Exhibition, Posters</i>
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Session 2. Dosimetry and monitoring – 1	
<i>Chairpersons</i>	<i>Miska Hirvelä (Loviisa NPP, Finland), Thorsten Stahl (GRS, Germany)</i>
11:30 – 12:30	New Electronic Dosimeter System and Electronic Personal Dosimeter at Oskarshamn NPP <i>C. Bauréus Koch, M. Hjelm (Oskarshamn NPP), Sweden</i>
	Measures Taken to Avoid the Non-Perception of Alarms from EPD CEI 61526 <i>E. Canal, J. Fazileabasse, N. Valendru (EDF UNIE-GPRE), P. Romane (Chinon NPP), France</i>
	Innovation is Alive & Well in Radiation Protection - CZT with Critical Surveys <i>B. Hite (Cook NPP), USA</i>

12:30 – 14:00	<i>Lunch Break</i>
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Session 3. Radiation Protection at Design and Planning Stages <i>Chairpersons</i> <i>Olivier Couasnon (ASN, France), Lars Kämpfer (Leibstadt NPP, Switzerland)</i>	
14:00 – 15h30	Radiation Protection in Design of the UK EPR <i>H. Hale (Nuclear New Build (NNB), UK), J.B. Richard (EDF, France)</i>
	Practical Application of Computer Code PANTHERE for Workers' Radiation Protection <i>P. Carlier, X. Michoux, C. Lereculey (EDF CIPN), France</i>
	Containment Electrical Penetration Assemblies and Cable Replacement in Unit 3 NPP OKG <i>R. Hanzl (Oskarshamn NPP), Sweden <i>Cancelled</i></i>
	CERNUM: an Advanced Training Tool in The Service of Radiation Protection. 2013 First Applications: Simulation of Irradiating Source <i>E. Courageot, E. Gaillard-Lecanu, R. Kutschera, G. Le Meur (EDF R&D), France</i>
15:30 – 16:15	<i>Coffee-break, Visit of Exhibition, Posters</i>
16:15 – 16:30	Conclusions from Radiation Protection Managers and Regulatory Body Meetings

Session 4. From Decontamination to Waste Management <i>Chairpersons</i> <i>Jörg Kaulard (TÜV Rheinland Industrie Service GmbH, Germany), Madelene Johansson (Ringhals NPP)</i>	
16:30 – 18h00	Decontamination of the 4 Steam Generators, Loop Lines and Pressurizer for Decommissioning - Experience at The NPP Chooz A in France <i>S. Reymann, P. Moreira do Amaral, R. Neuhaus, L. Sempere-Belda, A. Basu (AREVA GmbH), Germany</i>
	Conditioning of Intermediate Level Resin by Dewatering: A Novel Experience for the UK <i>M. Lunn (Sizewell B NPP), UK</i>
	ALARA Management Measures and Experience in Post Handling of Replaced Pressurizer from Ringhals 4 <i>E. Hernvall, T. Svedberg (Ringhals NPP), Sweden</i>
	Design of Transport Container for the Reduction of Occupational Exposure <i>E. Neukäter (Mühleberg NPP), Switzerland</i>

THURSDAY 10 APRIL 2014

Session 5. Source-Term Management – 1

Chairpersons Gonzague Abela (EDF DIN, France), Matthew Lunn (Sizewell B NPP, UK)

08:30 – 10:00

Primary System Activity and Impact on Radiation Fields

D. Perkins (EPRI), USA

Source Term Reduction via Water Chemistry as one Part of the Integrated Regulatory Supervision of Radiation Protection in Swiss Nuclear Facilities

H. Glasbrenner (ENSI), Switzerland

Investigations into Surface Treatment Methods for Reduction of Recontamination of BWR Reactor Systems

B. Stellwag (AREVA GmbH, Germany), J. Sanchez Zapata (Cofrentes NPP, Spain), A. Basu, S. Hoffmann-Wankerl, L. Sempere Belda (AREVA GmbH, Germany), Tomas Berasaluce (Cofrentes NPP, Spain)

⁶⁰Co Contamination Overview on EDF Fleet

G. Ranchoux, M. Benfarah (EDF SEPTEN), F. Drouet (EDF UNIE-GPRE), F. Dacquait (CEA Cadarache), L. Guinard (EDF SEPTEN), France

10:00 – 10:45

Coffee-break, Visit of Exhibition, Posters

Session 6. Source-Term Management – 2

Chairpersons David Perkins (EPRI, USA), Gilles Ranchoux (EDF SEPTEN, France)

10:45 – 12:15

High Pressure Water Decontamination at The Nuclear Power Plant Philippsburg

M. Hellmann (Philippsburg NPP), Germany

Exelon's Careful and Critical Comparison of Two Source Term Reduction Methods Implemented at Byron-1 and Braidwood-1

B. Barton (Byron NPP), USA

Reactor Cavity Decontamination Improvements at EDF

M. Michelet (EDF UNIE-GPRE), S. Blond (EDF DPN), France

Radiation Protection Aspects of Water Chemistry and Source-Term Management

A. Rocher, G. Ranchoux, G. Abela (EDF, France), L. Vaillant (CEPN, France), D. Wells, D. Perkins (EPRI, USA), M. Olsson (Vattenfall, Sweden), I. Smieško (ENEL, Slovak Republic), D. Miller (NATC, USA), W. Harris (Exelon, USA), H.B. Okyar (OECD/NEA, France)

12:30 – 14:00

Lunch Break

Session 7. Dosimetry and Monitoring – 2	
<i>Chairpersons</i> Borut Breznik (Krsko NPP, Slovenia), Teresa Labarta (CSN, Spain)	
14:00 – 15:30	Equivalent Dose to the Lens of the Eye at Nuclear Industrial Workplaces and Shielding Factors for Protective Eye Wear - Measurements and Calculations <i>L. Bäckström, K. Andgren (Vattenfall Research & Development AB), Sweden</i>
	New Monitoring System to Detect a Radioactive Material in Motion <i>K. Boudergui, V. Kondrasovs, R. Coulon, G. Corre, S. Normand (CEA LIST), France</i>
	An Investigation of the Distribution of Alpha Airborne Radioactivity at Forsmark NPP <i>L. Ekerljung, M. Olsson (Forsmark NPP), Sweden</i>
	Polaris Gamma-Ray Imaging Spectrometers <i>Z. He (University of Michigan), USA</i>

15:30 – 16:15	<i>Coffee-break, Visit of Exhibition, Posters</i>
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Session 8. Internal Contamination	
<i>Chairpersons</i> Vasile Simionov (Cernavoda NPP, Romania), Veli Riihiluoma (STUK, Finland)	
16:15 – 18:00	EPRI Alpha Monitoring and Control Guidelines, Revision 2 <i>P. Tran (EPRI), USA</i>
	Cook Alpha Program Implementation Results & Areas for Improvement <i>B. Hite, J. Beer (Cook NPP), USA</i>
	Regulatory Supervision of Respiratory Protection <i>P. Hansson (SSM), Sweden</i>
	Sphere Cage: Reinforcement of the Means of Dynamic Containment to Guarantee the Habitability of the Reactor Building during Outages in EDF Nuclear Power Plants <i>J.E. Maurer (Tricastin NPP), P. Bignon, G. Foy, E. Piegay (DELTA NEU), France</i>

19:30	Symposium Diner at Kornhauskeller Restaurant Address: Kornhausplatz 18 - 3011 Bern Tram stop: Zytglogge	
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FRIDAY 11 APRIL 2014

Session 9. Incident Management

Chairpersons *Ľubomír Dobiš (Bohunice NPP, Slovak Republic), Ellen Anderson (NEI)*

08:30 – 10:00

Hot-Spot Management at Leibstadt NPP

L. Kämpfer (Leibstadt NPP), Switzerland

Radiation Protection Aspects of Fuel Handling Incident at Forsmark NPP

S. Hennigor, B. Brunefors, P. Brandelind, F. Svensson (Forsmark NPP), Sweden

Site-Specific Radionuclide Distribution during Refuelling Outage

B. Breznik, L. Mikelić, M. Pavlin, M. Urbanč (Krško NPP), Slovenia

Study of the ¹³³Xe Exposure

A. Perier (Subatech, Ecole des Mines), E. Courageot, E. Gaillard-Lecanu, G. Le Meur, C. Monier (EDF R&D), D. Thers (Subatech, Ecole des Mines), France

10:00 – 10:45

Coffee-break, Visit of Exhibition, Posters

Session 10. Severe Accident Management

Chairpersons *Willie Harris (Exelon Nuclear, USA), Swen-Gunnar Jahn (ENSI, Switzerland)*

10:45 – 11:45

Ongoing Work to Enhance Post-Accident Radiation Protection at Swedish Nuclear Power Plants

K. Fritioff (Vattenfall Research & Development AB), S. Hennigor (Forsmark NPP), M. Carlson (Ringhals NPP), C. Solstrand (Oskarshamn NPP), I. Svantesson (SKB AB), Sweden

US Countermeasures for Fukushima Accident Lessons Learned

D. Miller (NATC), USA

ISOE Expert Group on Occupational Radiation Protection in Severe Accident Management

H.B. Okyar, T. Lazo (OECD Nuclear Energy Agency), France

11:45 – 12:00

Closing Ceremony

Distinguished Paper & Poster

Technical Visits (optional)

- **Mühleberg NPP**
 - **Mont Terri Rock Laboratory**
- departure: 13:00 – return: around 19:00**