2021 North American Virtual ISOE ALARA Symposium Agenda

First ISOE Virtual Symposium, sponsored by NPRE NATC Illinois.ZOOM.US January 4-6, 2021

North American Technical Center, Department of Nuclear, Plasma & Radiological Engineering, Grainger College of Engineering, University of Illinois 216 Talbot Laboratory, 104 S. Wright Street, Urbana, Illinois, USA 61801 (contact Amy Moeller, <u>almoeller88@gmail.com +1 269 930 0753</u>) or (David W Miller <u>dmiller@illinois.edu</u>, +1 217 855 3238)

Symposium Theme- Resilience of Safe Nuclear Power Operations During COVID 19 Pandemic: Sharing of Good Practices & Lessons Learned

Monday, January 4, 2021

* Selected Presentations contain Proprietary or Restricted Information. This information will not be available to attendees outside of the NATC Symposium presentation in accord with US Government Export/Import Regulations and Counterintelligence Service instructions to the Grainger College of Engineering, University of Illinois at Urbana-Champaign. Each attendee is requested to sign and return the NPRE Non-Disclosure Form for ALARA Symposia as in past years. (Please contact Prof. Rizwan Uddin, Head- NPRE, if you have any questions.)

7:30 am CST Illinois.ZOOM.us Pre-Symposium Video & Audio Testing for Participants

Plenary Session I

Session Co-Chairs: John M. Palms, NATC Honorary Board Chair, Distinguished President Emeritus, University of South Carolina & Colin Pritchard, NATC Board Chair & Refurbishment ALARA Director, Bruce Power

8:00 am CST	Welcome to the 2021First Virtual North American ALARA Symposium,
	Information System on Occupational Exposure, Paris, Vienna, Tokyo and
	University of Illinois
	John M. Palms, Honorary NATC Board Chair & Brad Boyer, ISOE Bureau
	Chairperson & Watts Bar RPM, TVA

- 8:15 am CST **2021 Challenges for Utility Health Physicists & The Path Forward for HPS** Eric Golden, HPS President, (retired San Onofre Nuclear Station 1, 2, 3)
- 8: 30 am CST Source Term Challenges at LaSalle Station* ISOE Young Scientist Distinguished Paper Awardee Joe Jaeger, RP Program Manager, LaSalle Station, Exelon

Monday, January 4, 2021 (continued)

9:30 am CST	 2020 John M Palms Outstanding Innovation Awardees: Ultrasonic Mitigation of CRUD on Piping and Components at LaSalle County Nuclear Generating Station* John Moser, Radiation Protection Manager; Joseph Jaeger, RP Program Manager, LaSalle Station, Exelon Citations presented by John M Palms, NATC Honorary Board Chair
9:50 am CST	Vendor Update – Dominion Engineering, Inc . (presenter: Dale Vines)
10:00 am CST	Coffee Break
10:10 am CST	2020 World Class ALARA Performance Awardee Citations presented by John M Palms, NATC Honorary Board Chair Nathan Hogue, Director, Technical Support – RP & Chemistry, Palo Verde Generating Station/APS
10:40 am CST	Vendor Update – UniTech Services Group (presenter: Gregg Johnstone)
10:50 am CST	Design & Nuclear Safety Aspects of Micro-Reactor Demonstration Plant* Prof. Caleb Brooks, Dept. of Nuclear, Plasma & Radiological Engineering, University of Illinois
11:40 am CST	2020 Radiation Protection Professional of the Year Awardee: Steven Taylor, Fleet Radiation Protection Manager, Southern Company Citations presented by Colin Pritchard, NATC Board Chair & Brad Boyer, ISOE Bureau Chair
11:50 am CST	Vendor Update – Frham Safety Products, Inc. (presenter: Aaron Bell)
12:00 pm CST	Lunch Break
Monday, Janua	ary 4, 2021
Session II: Cu	rrent ALARA Topics at Nuclear Facilities
12:30 pm CST	COVID 19 Pandemic Challenges RPM Outage Challenges with COVID 19 Pandemic: Panel Discussion RPM Panel: Jerri Walters & Rick LaBurn, Fermi 2, Bob Porter, Salem/Hope Creek (invited)
1:00 pm CST	Bruce Power Refurbishment ALARA Program Highlights* Colin Pritchard, Radiation Protection Manager- MCR, Bruce Power &

1:30 pm CST Vendor Update – Westinghouse (presenter: Tom Kennedy/Lisa Cubarney)

NATC Board Chair

Monday, January 4, 2021 (continued)

1:40 pm CST International Exposure to LLA, Radon & Radon Progeny among Uranium Processing Workers (iPAUW) Douglas Chambers, Vice President; Senior Scientist Risk and Radioactivity, ARCADIS, Canada Douglas B. Chambers, Ph.D, Vice president; Senior Scientist Risk and Radioactivity; Director Technical Knowledge & Innovation –Radiation Services

The International Pooled Analysis of Uranium Processing Workers (iPAUW) is an international collaboration* which will assess the longterm health risks of gamma ray, long-lived radionuclides (inhalation), radon and radon progeny exposures among uranium processing workers. The joint analyses of data provided by different cohorts will need consistent exposure assessment, for example, the assessed exposures/doses of two individuals from two different cohorts should be similar if their exposures are similar. The dosimetry working group of iPAUW has done considerable work to harmonize the dose assessment protocols which may differ between cohorts on a number of factors. The harmonized protocols take account of the current state of knowledge and available data and a new set of doses will be calculated for the different cohorts using the harmonized protocol. *US,UK,France, Germany, Russia, Kazakhstan, and Canada

2:20 pm CST Vendor Update – **Mirion Technologies, Inc**. (presenter: Nick Justice)

- 2:30 pm CST **The Domination of Space Frontier in 2021** Dr. Dennis Chamberland, Principal Investigator, NASA Biomedical Engineering and Research Lab, Spaceport Integration Office, John F. Kennedy Space Center, Florida NASA
- 3:30 pm CST Vendor Update Protean Instrument Alpha/Beta Counter Products for Nuclear Power Health Physics - Ludlum Measurements, Inc. (presenter: Shawn W. Googins, MS, CHP)
- 5:00 pm CST Adjorn Day 1

Tuesday, January 5, 2021

Session III: 2020 Dose Reduction Successes, Challenges & Future

8:00 am CST	Laguna Verde Significant Reduction in BWR BRAC Point Dose Rate* Juan Jesus Giron, ALARA, Laguna Verde Nuclear Plant, Mexico
8: 30 am CST	Vendor Update – Personnel and Object Contamination Monitor Products: Introduction of Ludlum Measurements, GmbH Product Line – Ludlum Measurements, Inc. (presenter: Shawn W. Googins, MS, CHP)
8:45 am CST	Darlington Major Component Replacement Update* Scott Stafford, Darlington ALARA Refurbishment Director, OPG, Canada
9:30 am CST	Browns Ferry ALARA Program Successes & Improvements Jason Eggart, RPM, Browns Ferry, TVA (invited)
9:50 am CST	Coffee Break

Tuesday, January 5, 2021 (continued)

Session IV: Challenges in Radiation Safety

- 10:00 am CST **Trending Ag-110m in Outage Primary Coolant Using H3D CZT*** Weiyi Wang & David Goodman, H3D
- 10:30 am CST New NATC NPRE RPM Recognition Program for Annual ISOE Data Submittal: NATC NPRE RPM membership Recognition Levels of Silver, Gold & Platinum David W. Miller, NATC Director, NPRE, University of Illinois

Session V: Radiological Work Management at Nuclear Power Plants

- 11:00 am CST **Boston Dynamic Robots for ALARA and RP** Keith Lovendale, RADeCO, Inc., President
- 11:15 am CST The Shifting Dynamics of Human Space Exploration in 2021
 Dr. Dennis Chamberland, Principal Investigator, NASA Biomedical Engineering and Research Lab, Spaceport Integration Office, John F. Kennedy Space Center, Florida NASA

12:00 noon CST Lunch

Session VI: Regulatory RP Update Session Chair: U.S. Nuclear Regulatory Commission, Region III (Steven Garry)

- 12:30 pm CST NRC Headquarters' ALARA Update* Ed Stutzcage, Office of Nuclear Reactor Regulation (NRR), Division of Risk Assessment, Radiation Protection and Consequences Branch, U.S. NRC
- 1:00 pm CST **Presentation Recent US NRC ALARA & RP Findings and Observations*** Region I, III & IV Health Physics Inspectors

U.S. NRC Region I:

- 1. Anthony Dimitriadis, Branch Chief
- 2. Scott Wilson, Senior Health Physicist
- 3. Elizabeth Andrews, Health Physicist

<u>U.S. NRC Region III</u>:

- 1. Steven Orth, Branch Chief
- 2. Stephen Bell, Health Physicist
- 3. John Cassidy, Senior Health Physicist
- 4. Valerie Myers, Senior Health Physicist

Tuesday, January 5, 2021 (continued)

U.S. NRC Region IV:

- 1. Greg Warnick, Branch Chief
- 2. John O'Donnell, Senior Health Physicist
- 3. Natasha Greene, Senior Health Physicist
- 4. Bernadette Baca, Health Physicist
- 5. Eric Simpson, Health Physicist
- 6. Dominic Antonangeli, Health Physicist

2:15 pm CST NRC Regional Inspectors' Panel Discussion*

Mike Smith, NRR, Health Physicist Steven Garry, NRR, Sr. Health Physicist Anthony Dimitriadis, U.S. NRC, Region I, Branch Chief Elizabeth Andrews, U.S. NRC, Region I, Health Physicist, Div. of Nuclear Materials Safety Scott Wilson, U.S. NRC, Region I, Senior Health Physicist, Div. of Nuclear Materials Safety Steven Orth, U.S. NRC, Region III Branch Chief John Cassidy, U.S. NRC Region III, Senior Health Physicist Valerie Myers, U.S. NRC Region III, Sr. Health Physicist Steven Bell, U.S. NRC Region III, Health Physicist Gary Warnick, U.S. NRC, Region IV Branch Chief Natasha Greene, U.S. NRC Region IV, Sr. Health Physicist John O'Donnell, U.S. NRC Region IV, Health Physicist Bernadette Baca, Health Physicist Eric Simpson, Health Physicist Dominic Antonangeli, Health Physicist

3:30 pm CST Global Regulatory RP & ALARA Forum Discussions (Regulators Only)

5:00 pm CST Adjourn Day 2

Wednesday, January 6, 2021

Session VII: ALARA Program Improvements that Achieve Costs Savings

8:00 am CST	NEI RP Update Marty Phalen, RP Manager, Nuclear Energy Institute
8:30 am CST	Vendor Update – H3D, Inc. (presenter: Andy Boucher)
8:45 am CST	Clinton BWR On-line Dose Achievements* Frank Owens, RP Tech Manager, Clinton Power Station, Exelon (invited)
9:00 am CST	Switzerland ALARA Highlights Andreas Ritter, Leibstadt Nuclear Plant, Switzerland
9: 10 am CST	Vendor Update – Gamma Reality, Inc. (GRI) - Dr. Andy Heafner
9:20 am CST	Coffee Break
9:30 am CST	First US Plant-wide Radiation Monitoring System Replacement Experience & Lessons Learned* David Raye, Cook Nuclear Plant (invited)
10:00 am CST	A New Radiation Protection Project of Advanced FCVS for ALARA by Silver Zeolite Technology* Sanshiro Kobayashi, Morimura Bros and Koji Endo, RASA Industry
10:30 am CST	Vendor Update – Purolite Corporation (presenter: Chris Bailey/Nick Backman)
Session VIII: S	pring Outage COVID 19 Challenges/RPM Strategies & ISOE Country Highlights
10:45 am CST	Restart status of NPPs in Japan, Advanced FCVS Technology, Decommissioning and COVID-19 Measures* Dr. Tadashi Narabayashi, Laboratory for Advanced Nuclear Energy, Tokyo Institute of Technology
11:15 am CST	Vendor Update – Video Introduction of Model 3078 Stretch Scope & Model 30-7 Neutron Survey Meter - Ludlum Measurements, Inc., Dru Carson
11:25 am CST	New NATC NPRE RPM Recognition Program for Annual ISOE Data Submittal: NATC NPRE RPM membership Recognition Levels of Silver, Gold & Platinum David W. Miller, NATC Director, NPRE, University of Illinois

Wednesday, January 6, 2021 (continued)

11:40 am CST	Invitation to 2021 European International ISOE ALARA Symposium June 1-3, 2021 Tours, France Caroline Schieber, European Technical Center Director
11:45 am CST	2021-2022 ISOE Strategic Plan Overview Colin Pritchard, NATC Board Chair & Brad Boyer, ISOE Management Board Chairperson & Watts Bar RPM, TVA
11:55 am CST	2021 Symposium Summary & Adjournment Day 3 Colin Pritchard, NATC Board Chair, Authorized Health Physicist, Bruce Power
12:00 pm CST	Lunch (Please complete the Symposium Evaluation Form & Return to Amy Moeller, <u>almoeller88@gmail.com</u>)

Note: Region III & IV RPM Meeting will be held from 12:30 pm CST to 5:00 pm CST on Wednesday, January 6, 2021 on Illinois.ZOOM.US Meeting features neutral ground discussion on Radiation Protection topics with regulatory and utility health physics. Sixty-third regional meeting since 1988 chaired by John Moser, LaSalle County RPM. All attendees and vendors are welcome to attend at no additional costs.