U.S.NRC

United States Nuclear Regulatory Commission

Protecting People and the Environment

SIXTH ANNUAL Fuel Cycle Information Exchange

JUNE 7–8, 2011

Legacy Hotel and Meeting Centre • 1775 Rockville Pike, Rockville, MD

COLLABORATION AND INFORMATION SHARING ON THE NUCLEAR FUEL CYCLE

FCIX 2011

Welcome to the FCIX 2011

I welcome the opportunity to host the Fuel Cycle Information Exchange (FCIX) as part of my new assignment in the Office of Nuclear Material Safety and Safeguards at the U.S. Nuclear Regulatory Commission (NRC). Each year, the FCIX provides an open, public setting to discuss the regulation of civilian nuclear fuel cycle facilities. The attendees typically include our staff, nuclear industry representatives, licensees, Federal Government representatives, international regulators, and other stakeholders, including members of the public.

The theme for FCIX 2011 is *"Collaboration and Information Sharing on the Nuclear Fuel Cycle."* This theme reflects the NRC's commitment to effective communication among interested stakeholders for the purpose of enhancing safety through shared knowledge and experience. The FCIX is part of our ongoing effort to share information with the public, maintain transparency in our regulatory activities, and capture knowledge gained through experience within the nuclear industry. As in the past, we have assembled a variety of highly qualified experts to share their experience and knowledge as speakers and panelists.

Communication is a two-way street, and your participation is vital to the success of this information exchange. We look forward to a robust dialogue on the many topics related to our mission of ensuring public health and safety, promoting the common defense and security of our Nation, and protecting the environment.

Sincerely,

John D. Kinneman, Director
Division of Fuel Cycle Safety and Safeguards
Office of Nuclear Material Safety and Safeguards

SIXTH ANNUAL
Fuel Cycle Information Exchange

Tuesday, June 7, 2011

7:30 am–4 pm	Conference Registration and Badging
8:30 am–8:40 am	Welcome and Introductions—John Kinneman, NRC
8:40 am–9:20 am	Keynote Address: The Fuel Cycle Environment at the NRC—Bill Borchardt, NRC
9:20 am–9:55 am	Keynote Address: Measuring Success in the Fuel Cycle—Michael Weber, NRC
9:55 am–10:15 am	Fuel Cycle Regulation: Looking Back, Looking Forward—John Kinneman, NRC
10:15 am–10:40 am	Networking Break
10:40 am–12 pm	Panel: Fuel Cycle Executive Leadership Chair: John Kinneman • NRC Regulatory Perspectives—Catherine Haney, NRC • Perspectives on NRC Regional Oversight of Fuel Cycle Facilities—Victor McCree, NRC Region II • Nuclear Energy Institute (NEI) Management Perspectives—Anthony Pietrangelo, NEI • Perspectives from a Senior Industry Executive—Sam Shakir, AREVA Enrichment Services LLC
12 pm–1:20 pm	Lunch Break/Poster Session
1:20 pm–1:45pm	Analysis of Cancer Risks in Populations Near Nuclear Facilities—Phase I—Ourania Kosti, National Academy of Sciences
1:45 pm–3:05 pm	Panel: Emergency Preparedness and Incident Response Chair: Robert Johnson • Fuel Cycle Emergency Planning and Revisions to NRC Guidance—Michael Norris, NRC • Role of the NRC's Fuel Cycle Safety Team during Emergencies—Peter Habighorst, NRC • Planning, Preparing, and Responding to Chemical Releases—Christine Wagner, U.S. Environmental Protection Agency • Emergency Response at Paducah: State/Local Responder and Licensee Perspective—Jerome Mansfield, United States Enrichment Corporation—Paducah Gaseous Diffusion Plant
3:05 pm–3:30 pm	Networking Break
3:30 pm–5 pm	Panel: Inspection and Oversight Chair: Tony Gody • Construction Activities—Joe Calle, NRC Region II • Operational Activities—Manuel Crespo, NRC Region II • Preparing for Inspections: A Licensee's Perspective—Jennifer Wheeler, Nuclear Fuel Services, Inc. • Maintaining the Design Basis—Dave Sexton, URENCO USA/Louisiana Energy Services • Problem Identification and Resolution—Heather Gepford, NRC Region II

FCIX 2011

Wednesday, June 8, 2011

7:30 am–3 pm	Conference Registration and Badging
8:30 am	Welcome Back to the FCIX—John Kinneman, NRC
8:35 am–10 am	Panel: Regulatory Issues Chair: Margie Kotzalas • Performing an Integrated Safety Analysis at an Operating Fuel Cycle Facility: Approach and Challenges—Al Kennedy, Global Nuclear Fuel—Americas, General Electric (GE)-Hitachi Nuclear Energy • Lessons Learned from a Chemical Exposure Event—David Spangler, Babcock & Wilcox Nuclear Operations Group—Lynchburg • Extending Integrated Safety Analysis Requirements to 10 CFR Part 40 Licensees—Edward Lohr, NRC • Reporting 10 CFR Part 21 Deviations and Defects—Sabrina Atack, NRC • The NRC Enforcement Policy—Past, Present, and Future—John Wray, NRC
10 am–10:15 am	Networking Break
10:15 am–11:45 am	Panel: Licensing Issues Chair: Dennis Morey • Rulemaking to Clarify the Definition of "Construction" for Materials Licenses—Tracey L. Stokes, NRC • NEPA Environmental Reviews—Diana Diaz Toro, NRC • New Requirements for Decommissioning Funding for Fuel Cycle Facilities—Kenneth Kline, NRC • Changes Allowed under 10 CFR 70.72 (Regulatory Guide 3.74)—Kevin Morrissey, NRC • Experience in Developing a Nuclear Safety Culture—Jeff Reynolds and Amir Vexler, Global Nuclear Fuel—Americas, GE-Hitachi Nuclear Energy
11:45 am–1 pm	Lunch Break/Poster Session
1 pm–2 pm	Panel: Back End of the Fuel Cycle/Spent Fuel Issues Chair: Larry Campbell • Regulatory Framework for Reprocessing Used Nuclear Fuel—Bret Leslie, NRC • Extended Storage of Spent Nuclear Fuel: NRC Plans and Activities—Keith Compton and Christine Pineda, NRC • Sustainable Fuel Cycle: Regulatory Framework to Support Options to Address Used Fuel in the U.S.—Sven Bader, AREVA Federal Services LLC • Recent Developments from the Blue Ribbon Commission on America's Nuclear Future—John Kotek, Blue Ribbon Commission on America's Nuclear Future
2 pm–2:15 pm	Networking Break

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2:15 pm–3:30 pm	Panel: Security Chair: Brian Smith • Security of Chemicals at NRC-Regulated Facilities—Joe Rivers, NRC • Proposed 10 CFR Part 73 Fuel Cycle Facility Security Rulemaking—Marshall Kohen, NRC • Information Security and Fuel Cycle Facilities—Bernard Stapleton, NRC • Cyber Security—Eric Lee, NRC
3:30 pm–3:45 pm	Networking Break
3:45 pm–5 pm	Panel: International Safeguards Chair: Peter Habighorst • Historical Overview of International Safeguards—Mark Goodman, U.S. Department of State • Complementary Access—Perspectives from NRC and Industry—Thomas Grice, NRC, and Bill Sharkey, R.W. Sharkey LLC (representing AREVA Lynchburg) • U.S. IAEA Safeguards Agreement Implementation Process—Brian Horn, NRC • Export Controls and Agreement for Peaceful Nuclear Cooperation—Brooke G. Smith, NRC
5 pm	Closing Remarks and Adjournment—John Kinneman, NRC

Photos courtesy of Westinghouse

List of Speakers

Sabrina Atack, Quality Assurance Engineer, Mixed Oxide and Uranium Deconversion Branch, Division of Fuel Cycle Safety and Safeguards, Office of Nuclear Material Safety and Safeguards (NMSS)/NRC

Sven Bader, Ph.D., P.E., Advisory Engineer, AREVA Federal Services LLC

R. William Borchardt, Executive Director for Operations, NRC

Joe Calle, P.E., Branch Chief, Fuel Facility Inspection Branch 2, Division of Fuel Facility Inspection, NRC Region II

Keith Compton, Ph.D., Senior System Performance Analyst, Division of High-Level Waste Repository Safety, NMSS/NRC

Manuel Crespo, Senior Fuel Facility Inspector, Division of Fuel Facility Inspection, NRC Region II

Diana Diaz Toro, Branch Chief, Environmental Review Branch A, Division of Waste Management and Environmental Protection, Office of Federal and State Materials and Environmental Management Programs (FSME)/NRC

Heather Gepford, Ph.D., CHP, Technical Assistant, Division of Fuel Facilities Inspection, NRC Region II

Mark Goodman, Ph.D., Technical Advisor, Office of the Special Advisor for Nonproliferation and Arms Control, U.S. Department of State

Thomas Grice, Team Leader, Material Control & Accounting Branch, Division of Fuel Cycle Safety and Safeguards, NMSS/NRC

Peter Habighorst, Branch Chief, Material Control & Accounting Branch, Division of Fuel Cycle Safety and Safeguards, NMSS/NRC

Catherine Haney, Director, NMSS/NRC

Brian G. Horn, International Safeguards Analyst, Material Control & Accounting Branch, Division of Fuel Cycle Safety and Safeguards, NMSS/NRC

Al Kennedy, Integrated Safety Analysis Program Manager, Global Nuclear Fuel—Americas, GE-Hitachi Nuclear Energy

John D. Kinneman, CHP, Director, Division of Fuel Cycle Safety and Safeguards, NMSS/NRC

Kenneth Kline, Project Manager, Special Projects Branch, Division of Waste Management and Environmental Protection, FSME/NRC

Marshall Kohen, Security Specialist, Fuel Cycle and Transportation Security Branch, Division of Security Policy, Office of Nuclear Security and Incident Response (NSIR)/NRC

Ourania (Rania) Kosti, Ph.D., Project Officer, Nuclear and Radiation Studies Board, National Academy of Sciences

John Kotek, Staff Director, Blue Ribbon Commission on America's Nuclear Future

Eric Lee, Senior Cyber Security Specialist, Integrated Security Coordination and Policy Branch, NSIR/NRC

Bret Leslie, Senior Project Manager, Performance Assessment Branch, Division of High-Level Waste Repository Safety, NMSS/NRC

Edward Lohr, Health Physicist/Project Manager, Rulemaking Branch B, Division of Intergovernmental Liaison and Rulemaking, FSME/NRC

Jerome Mansfield, Ed.D., Environmental, Safety and Health/Emergency Management Specialist, United States Enrichment Corporation—Paducah Gaseous Diffusion Plant

Victor McCree, Regional Administrator, NRC Region II

Kevin Morrissey, Project Manager, Mixed Oxide and Uranium Deconversion Branch, Division of Fuel Cycle Safety and Safeguards, NMSS/NRC

Michael Norris, Team Leader, Operating Reactor Licensing Team, Operating Reactor and Outreach Branch, Division of Preparedness and Response, NSIR/NRC

Anthony Pietrangelo, Senior Vice President and Chief Nuclear Officer, NEI

Christine Pineda, Senior Project Manager (National Environmental Policy Act), Project Management Branch B, Division of High-Level Waste Repository Safety, NMSS/NRC

Jeff Reynolds, Fuel Cycle Environment, Health, and Safety Manager, Global Nuclear Fuel—Americas, GE-Hitachi Nuclear Energy

Joe Rivers, Senior-Level Advisor on Security, Division of Security Policy, NSIR/NRC

Dave Sexton, P.E., Chief Nuclear Officer/Vice President of Operations, URENCO USA/Louisiana Energy Services

Sam Shakir, President and Chief Executive Officer, AREVA Enrichment Services LLC

Bill Sharkey, Manager, Environment, Health, Safety and Licensing (Acting), R.W. Sharkey LLC, (representing AREVA Lynchburg)

Brooke G. Smith, J.D., Senior International Policy Analyst, Office of International Programs/NRC

David Spangler, Manager, Nuclear Safety and Licensing, Babcock & Wilcox Nuclear Operations Group—Lynchburg

Bernard Stapleton, Branch Chief, Information Security Branch, Division of Security Operations, NSIR/NRC

Tracey L. Stokes, J.D., Attorney, Reactor and Materials Rulemaking Division, Office of the General Counsel/NRC

Amir Vexler, Operations Manager, Global Nuclear Fuel—Americas, GE-Hitachi Nuclear Energy

Christine Wagner, Federal On-Scene Coordinator, U.S. Environmental Protection Agency, Region III

Michael Weber, Deputy Executive Director for Materials, Waste, Research, State, Tribal, and Compliance Programs, NRC

Jennifer Wheeler, P.E., Licensing and Integrated Safety Analysis Manager, Nuclear Fuel Services, Inc.

John Wray, CHP, P.E., Senior Enforcement Specialist, Enforcement Branch, Office of Enforcement/NRC

List of Panel Chairpersons

Larry Campbell, Branch Chief, Mixed Oxide and Uranium Deconversion Branch

Tony Gody, Director, Division of Fuel Facility Inspection, NRC Region II

Peter Habighorst, Branch Chief, Material Control & Accounting Branch

Robert Johnson, Branch Chief, Fuel Manufacturing Branch

John Kinneman, Director, Division of Fuel Cycle Safety and Safeguards, NMSS/NRC

Margie Kotzalas, Branch Chief (Acting), Technical Support Branch

Dennis Morey, Branch Chief (Acting), Conversion, Deconversion and Enrichment Branch

Brian Smith, Branch Chief, Uranium Enrichment Branch

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