







NRC 20th Annual Regulatory Information Conference (RIC)
2008 Conference Program
 March 11 – 13, 2008

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| Track 1 | General Plenary Sessions |  |
| Track 2 | Operating Reactors |  |
| Track 3 | Reactor Research |  |
| Track 4 | New Reactors |  |
| Track 5 | Security, Emergency Preparedness, Fuel Cycle |  |
| Track 6 | Regional Breakout |  |

Tuesday, March 11, 2008

** Please note that all session titles, dates, times, and locations are tentative and subject to change. Please check back frequently as updated information will be posted as it becomes available*

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| 7:00 am – 5:00 pm Lower Level | - Registration Service Desk - - Internet & Print Center - |
| 7:00 am – 5:00 pm Grand Ballroom Foyer | - Technical Poster Presentations - |
| 9:00 am – 12:00 pm Grand Ballroom | <p style="text-align: center;">Opening Session</p> <p style="text-align: center;">- Welcome and Introductions - Jim Dyer, Director, NRC/NRR and Luis A. Reyes, Executive Director for Operations, EDO/NRC Keynote Address: Dale E. Klein, Chairman of the U.S. NRC</p> <p style="text-align: center;">- Keynote Speaker – Senator Jeff Sessions</p> <p style="text-align: center;">- Director's Panel - Luis A. Reyes, NRC/EDO, Jim Dyer, NRC/NRR, Brian Sheron, NRC/RES, Bill Borchardt, NRC/NRO, Roy Zimmerman, NRC/NSIR, Michael Weber, NRC/NMSS, Charles Miller, NRC/FSME</p> |
| 12:00 pm – 1:00 pm | LUNCH BREAK |
| 1:00 pm – 2:00 pm Grand Ballroom | <p style="text-align: center;">Commissioner Plenary</p> <p style="text-align: center;">- Gregory B. Jaczko - <i>Being a Decisive Regulator</i></p> |

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| 2:00 pm – 2:30 pm | Break |
| 2:30 pm – 3:30 pm Grand Ballroom | Commissioner Plenary - Peter B. Lyons - <i>Focus on Safety and Security - How We Make A Difference</i> |
| 3:30 pm – 4:00 pm | Break |
| 4:00 pm – 5:30 pm Salon F-H | <p style="text-align: center;">Emerging Issues: Materials and Mechanical Track 2 – Operating Reactors</p> <p>A panel session will be held by the Division of Component Integrity (DCI) on “Emerging Issues: Materials and Mechanical,” that will be chaired by Michele G. Evans, Director of DCI. The potential topics to be presented include: dissimilar metal butt welds, operational leakage, PTS rulemaking, in-service testing of snubbers, cranes, and industry initiatives. The actual topics for this session will be finalized a few weeks prior to the RIC to ensure focus on issues of most current interest.</p> <p>Session Chair: Michele Evans, NRC/NRR Panelists: - Introduction to Emerging Issues: Materials/Mechanical, (PowerPoint) Michele Evans, NRC/NRR - Dissimilar Metal Butt Welds, (PowerPoint) Edmund Sullivan, NRC/NRR - Operational Leakage, (PowerPoint) Timothy Lupold, NRC/RES - PTS Rulemaking, (PowerPoint) Matthew Mitchell, NRC/NRR - In-Service Testing of Snubbers, (PowerPoint) Jack McHale, NRC/NRR - Cranes, (PowerPoint) Steve Jones, NRC/NRR - Industry Initiatives, (PowerPoint) Alex Marion, Nuclear Energy Institute (NEI) Session POC: Leslie Miller, NRC/NRR, tel: (301) 415-1037 e-mail: LSM2@nrc.gov</p> |
| 4:00 pm – 5:30 pm Salon D | <p style="text-align: center;">Environmental Reviews for New Reactors: Looking Back and Looking Forward Track 4 – New Reactors</p> <p>This session will address recent experiences with the environmental reviews of new reactor applications. Discussions will include lessons learned from pre-application interactions between NRC staff and potential applicants, along with insights gained during acceptance reviews of new reactor applications received. A panel session involving various stakeholders is planned to cover topics including cumulative effects, review changes related to the new Limited Work Authorization rule, the alternative site selection process, and other current issues. The NRC will also present insights from a workshop conducted on improving the efficiency of the environmental review process.</p> <p>Session Chair: Jim Lyons, NRC/NRO Panelists: - Looking Back and Looking Forward: Environment Reviews for New Reactors, (PowerPoint) Jim Lyons, NRC/NRO - Site Selection: Strategic and Regulatory Considerations, (PowerPoint) Kyle Turner, McCallum-Turner, Inc - Cumulative Effects, (PowerPoint) Edward Boling, Council on Environmental Quality - LWA Rule and Implications for Environmental Reviews, (PowerPoint) Richard Emch, NRC/NRO Session POC: Tamsen Dozier, NRC/NRO, tel: (301) 415-2272 e-mail: TSD2@nrc.gov</p> |
| 4:00 pm – 5:30 pm Brookside | Emergency Preparedness and Incident Response Track 5 – Nuclear Security, Emergency Preparedness, Fuel Cycle |

Over the years, the combined efforts of the Nuclear Regulatory Commission, Federal Emergency Management Agency, licensees, State and local officials, as well as thousands of volunteers and first responders (such as police, firefighters, and medical response personnel), have produced comprehensive emergency preparedness programs that assure the adequate protection of the public in the event of a radiological emergency. Emergency plans are dynamic and routinely updated to include experience from drills, exercises, and actual events. Discussions in this session will address enhancements being considered, based on these experiences, to help avoid anticipatory responses due to the pre-conditioning of exercise participants and thereby providing more realistic and challenging scenarios. Discussions will also include efforts underway to address hostile action-based scenarios and the unique challenges these events pose to existing EP programs.

Session Chair: Mel Leach, NRC/NSIR

Panelists:

- [Introduction/Historical Perspective, \(PowerPoint\)](#) Mel Leach
- [Industry Perspective, \(PowerPoint\)](#) James Meister, Exelon Midwest
- [A State Perspective, \(PowerPoint\)](#) Martin Vyenelo, Pennsylvania Department of Environmental Protection-Bureau of Radiation Protection
- [FEMA Perspective, \(PowerPoint\)](#) Dennis Schrader, Federal Emergency Management Agency

Session POC: Ned Wright, NRC/NSIR, tel: (301) 415-5563 e-mail: NXW1@nrc.gov

4:00 pm – 5:30 pm
Salon E

Getting Ahead of Performance Issues

Track 2 – Operating Reactors

The ability to discover potential performance issues before they manifest into operational concerns is one of the key objectives of the Reactor Oversight Process (ROP). Both the nuclear power industry and the NRC are challenged with this effort and the NRC continually evaluates possible changes to the ROP to improve its ability to detect declining licensee performance. This session is intended to encourage an exchange of stakeholder views on how to identify declining performance early.

Session Chair: Fred Brown, NRC/NRR

Panelists:

- [Way Before the Renaissance, \(PowerPoint\)](#) Frank Miraglia Jr., Independent Consultant
- [Getting Ahead of Performance Issues, \(PowerPoint\)](#) Victor McCree, NRC/R-II
- [Getting Ahead of Performance Issues – Industry Perspective, \(PowerPoint\)](#) Allan Haeger, Exelon
- [Getting Ahead of Performance Issues – Whose Job Is It?, \(PowerPoint\)](#) Tony Pietrangelo,

Nuclear Energy Institute

Session POC: Steve Vaughn, NRC/NRR, tel: (301) 415-3640 e-mail: SJV1@nrc.gov

4:00 pm – 5:30 pm
Salon A-C

State of the Art Reactor Consequence Analysis (SOARCA)

Track 3 – Reactor Research

The NRC is conducting a 3-year State-of-the-Art Reactor Consequence Analysis (SOARCA) project to evaluate severe accident initiation and progression, radiological release, and offsite consequences for nuclear power plants. The assessments include design, operation, and emergency preparedness improvements over the past 25 years and use the latest computer code models to accurately reflect more realistic plant performance and emergency response activities in the unlikely event of a nuclear power plant accident.

Session Chair: Farouk Eltawila, NRC/RES

Panelists:

- [SOARCA: Mitigative Measures, \(PowerPoint\)](#) Robert Prato, NRC/RES
- [SOARCA: Accident Analysis, \(PowerPoint\)](#) Randall Gauntt, Sandia National Laboratories and

[Charles Tinkler](#), NRC/RES
 - [SOARCA: Emergency Preparedness, \(PowerPoint\)](#) Randolph Sullivan, NRC/NSIR
 - [SOARCA: Sequence Selection, \(PowerPoint\)](#) [Richard Sherry](#), NRC/RES
 - [Charles Tinkler](#), NRC/RES
Session POC: Alison Rivera, NRC/RES, tel: (301) 415-5059 e-mail: ALD2@nrc.gov

Wednesday, March 12, 2008

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| 7:00 am – 5:00 pm Lower Level | - Registration Service Desk - - Internet & Print Center - |
| 7:00 am – 5:00 pm Grand Ballroom Foyer | - Technical Poster Presentations - |
| 9:00 am – 10:00 am Grand Ballroom | General Plenary Session - James O. Ellis , Institute of Nuclear Power Operations - Ensuring Excellence in a Global Nuclear Power Industry |
| 10:00 am – 11:00 am | Break |
| 11:00 am – 12:30 pm Salon D | Construction Inspection Program Track 4 – New Reactors A comprehensive update on regulatory activities will be presented in the areas of construction and vendor inspection program development and implementation, including: Manual chapters and procedures; inspection planning, scheduling and documentation; verification and closure of Inspections, Tests, Analysis, and Acceptance Criteria (ITAAC) and Design Acceptance Criteria (DAC); oversight of first-of-a kind engineering; assessment and enforcement processes and policies; and cross-cutting areas of performance assessment. Relevant current insights from domestic and international construction activities, fuel fabrication facilities and advanced reactors will be provided and discussed, incorporating historical perspectives and issues. Important insights and current initiatives by the reactor industry and vendors will be presented and discussed. Session Chair: Glenn Tracy, NRC/NRO and Loren Plisco , NRC/R-II Panelists: - Construction Inspection Program, (PowerPoint) Loren Plisco, NRC/R-II - Construction Inspection Program, (PowerPoint) Glenn Tracy, NRC/NRO - New Plant Deployment: Then Versus Now, (PowerPoint) Bryan J. Dolan , Duke Energy - Construction Inspection Program: Planning for the Not So Distant Future, (PowerPoint) Russell Bell, Nuclear Energy Institute - INPO New Plant Deployment Activities, (PowerPoint) James E. Maddox , Institute of Nuclear Power Operations - NUPIC and New Plant Issues, (PowerPoint) Sherry J. Grier, Nuclear Procurement Issues Committee Session POC: Roger Rihm, NRC/NRO, tel: (301) 415-7807 e-mail: RXR3@nrc.gov |
| 11:00 am – 12:30 pm Salon E | Lessons Learned from International Operating Experience Track 2 – Operating Reactors The sharing of operating experience and lessons learned among regulators and utilities is essential for the continued safe operation of the world's nuclear power plants. This session will provide recent operating experience from several of the NRC's international regulatory counterparts and will focus on how the lessons learned from operating experience have been applied to enhance nuclear safety in their countries. This |

exchange of operating experience will allow the NRC, other regulators, and the nuclear industry to gain a better understanding of how members of the international community act on issues of potential safety significance.

Session Chair: Mary Jane Ross-Lee, NRC/NRR

Panelists:

- [NRC Application of Operating Experience, \(PowerPoint\)](#) Mary Jane Ross-Lee, NRC/NRR
- [What We Could Learn from the Forsmark Unit 1 Event \(PowerPoint\)](#) Per Bystedt, Swedish Nuclear Power Inspectorate
- [NRC Response to Forsmark and Lessons Learned, \(PowerPoint\)](#) Thomas Koshy, NRC/RES
- [Using Operating Experience to Secure Improvements in Safety, \(PowerPoint\)](#) Mike Weightman, HM Chief Inspector of Nuclear Installations - United Kingdom
- [Use of Operating Experience from Nuclear Facilities Licensed by Rostekhnadzor, \(PowerPoint\)](#) Sergey Adamchik, Russian Federal Service for Environmental, Technological, and Nuclear Supervision
- [Use of Lessons Learned from Operating Experience - IAEA Perspective, \(PowerPoint\)](#) Neil Henderson, International Atomic Energy Agency

Session POC: Greg Bowman, NRC/NRR, tel: (301) 415-2939 e-mail: GTB1@nrc.gov

11:00 am – 12:30 pm
Lower Level Entrance
Marinelli & Executive
Blvd

Incident Response Experience (registration required; no fee)
Track 5 – Nuclear Security, Emergency Preparedness, Fuel Cycle

Attendees are invited to experience the inner workings of the NRC Operations Center which serves as the focal coordination point for communicating with NRC licensees, State entities, and other Federal agencies regarding operating events in both the nuclear reactor and materials industry. This session will address the roles and responsibilities of the various teams that comprise the NRC response organization when it is staffed during an emergency involving a NRC licensed facility. It will also address the resources that the NRC utilizes when communicating information to external stakeholders and receiving information from the licensees during an emergency. A shuttle service will be available from the Conference Center to U.S. NRC Headquarters. Please note that each Incident Response Experience session is limited to 20 attendees and registration is free and required. **Please note that the shuttle will depart on the Lower Level entrance promptly at 11:00 am.*

Session Chair: Brian McDermott, NRC/NSIR

Session POC: Janelle Jessie, NRC/NSIR, tel: (301) 415-6775 e-mail: JRB6@nrc.gov

11:00 am – 12:30 pm
Brookside

Aging and Life Beyond 60: The Next License Renewal Period(s)
Track 3 – Reactor Research

The NRC is investigating areas that may need additional research in order to confirm the ability of currently licensed commercial nuclear power plants to continue safe operation beyond the initial license renewal period (i.e., beyond 60 years). This includes identifying technical issues that may require resolution to support long-term operations of light-water reactors (LWRs); identifying prioritized research areas; and, identifying appropriate roles and responsibilities for industry, the U.S. Department of Energy, and NRC for a potential collaborative research program that will ensure continued safe LWR operation in the second, and subsequent, license renewal periods.

Session Chair: Jennifer Uhle, NRC/RES

Panelists:

- C.E. Gene Carpenter, NRC/RES
- Samson Lee, NRC/NRR
- Tom Miller, U.S. Department of Energy
- Julie Keys, Nuclear Energy Institute

Session POC: Gene Carpenter, NRC/RES, tel: (301) 415-7333 e-mail: CEC@nrc.gov

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| <p>11:00 am – 12:30 pm Salon F-H</p> | <p style="text-align: center;">Emerging Issues: Electrical – Generic Circuit Breaker Issues Track 2 – Operating Reactors</p> <p>A panel session will be held by the Division of Engineering (DE) on “Emerging Issues: Electrical Maintenance and Operating Issues Associated with Circuit Breakers,” that will be chaired by Patrick Hiland, Director of DE. The panel session will discuss performance problems, maintenance practices, and operating issues associated with circuit breakers.</p> <p>Session Chair: Patrick Hiland, NRC/NRR Panelists: - Summary of Recent Circuit Breaker Issues, (PowerPoint) George Wilson, NRC/NRR - Industry Circuit Breaker Maintenance Guidance and User Group Activities, (PowerPoint) Jim Sharkey, Electric Power Research Institute - Circuit Breaker Reliability, (PowerPoint) James Ellis, Dresden Station - Exelon Generation Session POC: Kerby Scales, NRC/NRR, tel: (301) 415-1369 e-mail: KVS1@nrc.gov</p> |
| <p>12:30 pm – 2:00 pm</p> | <p style="text-align: center;">LUNCH BREAK NEI Luncheon – (registration required - \$65.00 per person) Contact: Ella McDowell @ (202) 739-8026</p> |
| <p>2:00 pm – 3:30 pm Salon D</p> | <p style="text-align: center;">International Activities on New Reactors Track 4 – New Reactors</p> <p>Around the globe, there has been a resurgence of interest in nuclear power. This session will include discussions of the various initiatives to cooperate among regulators on new reactor design reviews and inspections. These initiatives include: the Multinational Design Evaluation Program; multinational cooperation on inspections of component manufacturers and plant construction; and the sharing of information on specific design reviews. By sharing such information, we hope to create an environment where regulators can learn from each other, and where lessons learned can be incorporated into developing programs.</p> <p>Session Chair: Gary Holahan, NRC/NRO Panelists: - The Multinational Design Evaluation Program (MDEP), Phase II Status, (PowerPoint) Javier Reig, NEA - The Finish Experience with International Cooperation with the EPR Design, (PowerPoint) Jukka Laaksonen, STUK, Finland - The French Experience with International Cooperation on the EPR, (PowerPoint) Guillaume Wack, ASN, France - Activities of the MDEP Working Group on Component Manufacturing Oversight, (PowerPoint) Sung Ho Yang, MOST, South Korea Session POC: Robert Elliott, NRC/NRO, tel: (301) 415-1397 e-mail: RBE@nrc.gov</p> |
| <p>2:00 pm – 3:30 pm Lower Level Entrance Marinelli & Executive Blvd</p> | <p style="text-align: center;">Incident Response Experience (registration required; no fee) Track 5 – Nuclear Security, Emergency Preparedness, Fuel Cycle</p> <p>Attendees are invited to experience the inner workings of the NRC Operations Center which serves as the focal coordination point for communicating with NRC licensees, State entities, and other Federal agencies regarding operating events in both the nuclear reactor and materials industry. This session will address the roles and responsibilities of the various teams that comprise the NRC response organization when it is staffed during an emergency involving a NRC licensed facility. It will also address</p> |

the resources that the NRC utilizes when communicating information to external stakeholders and receiving information from the licensees during an emergency. A shuttle service will be available from the Conference Center to U.S. NRC Headquarters. Please note that each Incident Response Experience session is limited to 20 attendees and registration is free and required. **Please note that the shuttle will depart on the Lower Level entrance promptly at 2:00 pm.*

Session Chair: Brian McDermott, NRC/NSIR

Session POC: Janelle Jessie, NRC/NSIR, tel: (301) 415-6775 e-mail: JRB6@nrc.gov

2:00 pm – 3:30 pm
Salon E

Digital Instrumentation and Control Licensing for Power Reactors Track 2 – Operating Reactors

A panel session will be held by the Division of Engineering that will discuss the development process for the digital I&C Interim Staff Guidance (ISG) with a brief discussion of the ISG for each Task Working Group, and how the ISG and licensing criteria apply to operating reactors and new reactors. The industry will discuss how they are implementing the ISG's. This session also include presentations by General Electric-Hitachi Nuclear on the ESBWR instrumentation and control; and by the German regulatory agency on their Licensing Criteria for Digital I & C Safety Systems.

Session Chair: William Kemper, NRC/NRR

Panelists:

- [Development of Digital Instrumentation and Control Interim Staff Guidance \(ISG\), \(PowerPoint\)](#)

Steve Arndt, NRC/NRR

- [Digital I&C Interim Staff Guidance Applied to Priority Modules, \(PowerPoint\)](#)

Terry Jackson, NRC/NRO

- [Digital I&C Licensing for Power Reactors, \(PowerPoint\)](#) Alex Marion, Nuclear Energy Institute

- [Perspectives of ISGs to the ESBWR, \(PowerPoint\)](#) Rich Miller, General Electric-Hitachi

Nuclear Energy

- [Requirements on Software Based Digital I&C in the Safety System of German Nuclear Power Plants: \(PowerPoint\)](#) Jan Stiller, Gesellschaft für Anlagen-und

Reaktorsicherheit (GRS) mbH

Session POC: Kerby Scales, NRC/NRR, tel: (301) 415-1369 e-mail: KVS1@nrc.gov

2:00 pm – 3:30 pm
Brookside

New Reactor Siting Safety Reviews Track 4 – New Reactors

This session will address recent experiences with the siting safety reviews of new reactor applications and lessons learned from various perspectives. Specifically, the session will include discussions on seismic issues and recent staff guidance, geotechnical reviews related to soil, and approaches for modeling extreme floods.

Session Chair: Nilesh Chokshi, NRC/NRO

Panelists:

- [Current Issues in Siting Safety Reviews, \(PowerPoint\)](#) Nilesh Chokshi, NRC/NRO

- [Industry Lessons Learned for New Plant Siting Safety Reviews, \(PowerPoint\)](#) Leslie Kass, Nuclear Energy Institute

- [Challenges and Lessons Learned on Siting Issues, \(PowerPoint\)](#) Thomas McCallum, Southern Nuclear Operating Company

- [Current Research Programs and Initiatives Related to Siting, \(PowerPoint\)](#) Annie Kammerer, NRC/RES

Session POC: Zahira Cruz-Perez, NRC/NRO, tel: (301) 415-3808 e-mail: ZLC@nrc.gov

2:00 pm – 3:30 pm

Operating Reactor Licensing Track 2 – Operating Reactors

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| Salon F-H | <p>This session will discuss current issues of interest for Operating Reactor Licensing. Topics will include a division status update, an overview of the acceptance review process initiative, a discussion of the regulatory issue screening process, and an industry perspective on an extended power uprate.</p> <p>Session Chair: Catherine Haney, NRC/NRR</p> <p>Panelists:</p> <ul style="list-style-type: none"> - Operating Reactor Licensing Division Status, (<i>PowerPoint</i>) Timothy McGinty, NRC/NRR - Generic Communications, (<i>PowerPoint</i>) Michael Case, NRC/NRR - Regulatory Issue Screening Process, (<i>PowerPoint</i>) Don Woodlan, Luminant Generation - Licensee Perspective on an Extended Power Uprate, (<i>PowerPoint</i>) Michael Crowthers, PPL - Susquehanna <p>Session POC: Peter Bamford, NRC/NRR, tel: (301) 415-2833 e-mail: PJB1@nrc.gov</p> |
| 3:30 pm – 4:00 pm | Break |
| 4:00 pm – 5:30 pm Brookside | <p style="text-align: center;">LOCA: Cladding Embrittlement Track 3 – Reactor Research</p> <p>Title 10, Section 50.46, of the U.S. Code of Federal Regulations contains acceptance criteria for fuel cladding performance under loss-of-coolant accident conditions. The NRC's Office of Nuclear Regulatory Research is completing an examination of these criteria for high-burnup fuel. The adequacy of the acceptance criteria for cladding performance is important to maintain safety margins that ensure coolability of the fuel following a design basis accident. The acceptance criteria in the rule could be expressed in terms of general requirements, such as a high degree of confidence in maintaining a coolable geometry and retaining some ductility in the cladding. This panel will review international regulatory and research activities involving cladding ductility and embrittlement behavior during the loss-of-coolant accident.</p> <p>Session Chair: Farouk Eltawila, NRC/RES</p> <p>Panelists:</p> <ul style="list-style-type: none"> - LOCA Embrittlement Test Results for High-burnup Cladding Michael Billone, Yong Yan and Tatiana Burtseva, Argonne National Laboratory - IRSN Views on LOCA Acceptance Criteria, Jean-Claude Micaelli, Claude Grandjean and Sandrine Boutin, Institut de Radioprotection et de Surete Nucleaire - LOCA Criteria in Japan and Recent Test Results, Toyoshi Fuketa and and Fumihisa Nagase, Japan Atomic Energy Agency - An Industry Perspective of LOCA Acceptance Criteria, Odelli Ozer, Electric Power Research Institute and Robert Montgomery, Anatech Corporation - Strategy for Revising Fuel Cladding Acceptance Criteria, Paul Clifford, NRC/NRR <p>Session POC: John Voglewede, NRC/RES, tel: (301) 415-7415 e-mail: JCV@nrc.gov</p> |
| 4:00 pm – 5:30 pm Salon F-H | <p style="text-align: center;">Fire Protection: Recent Achievements and Remaining Challenges Track 2 – Operating Reactors</p> <p>A discussion of the recent achievements, remaining challenges, technical issues, and on-going activities associated with the resolution of pivotal long-standing fire protection issues. Topics to be addressed during the session include: NFPA 805 transition, fire-induced spurious actuations, and post-fire operator manual actions.</p> <p>Session Chair: Mark Cunningham, NRC/NRR</p> <p>Panelists:</p> <ul style="list-style-type: none"> - Fire Protection Regulatory Issues: Industry, (<i>PowerPoint</i>) Richard Muench, Wolf Creek Nuclear Operating Corporation - Fire Protection Regulatory Perspectives, (<i>PowerPoint</i>) Alexander Klein, NRC/NRR |

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| | <p>- Achievements and Challenges of Transition to NFWA 805, Jeffery Ertman, Progress Energy Session POC: Chuck Moulton, NRC/NRR, tel: (301) 415-2751 e-mail: CEM4@nrc.gov</p> |
| <p>4:00 pm – 5:30 pm Salon A-C</p> | <p style="text-align: center;">Nuclear Security Track 5 – Nuclear Security, Emergency Preparedness, Fuel Cycle</p> <p>The NRC's licensees have undergone a significant transformation concerning security since the events of September 11, 2001. This transformation started with the issuance of Orders from the NRC requiring increased levels of protection for licensees. The NRC has worked closely with Federal, State, and local agencies to ensure that the response to security events is an integral part of the planning process. The NRC is proceeding with rulemaking to ensure the new levels of security at NRC licensees and the lessons-learned over the last 6 years are integrated into regulations. During this presentation, the panelists will discuss nuclear power plant security, NRC and law enforcement agency interactions, the formation of Michigan's Rapid Response Tactical Team, and the nuclear power industry perspective on nuclear security today.</p> <p>Session Chair: Dan Dorman, NRC/NSIR and Trish Holahan, NRC/NSIR Panelists:</p> <ul style="list-style-type: none"> - Overview of Nuclear Security, (PowerPoint) Rich Correia, NRC/NSIR - Reactor Security Update, (PowerPoint) Doug Huyck, NRC/NSIR - Michigan Rapid Response Tactical Team, (PowerPoint) Mike Moll, Department of Homeland Security; Al Dibrito, Federal Bureau of Investigation; Maj Barry Getzen, Michigan State Police; Lt Steve Bower, Michigan State Police - Industry Perspective on Nuclear Security, (PowerPoint) Chris Kelley, Entergy <p>Session POC: R. John Vanden Berghe, NRC/NSIR, tel: (301) 415-7142 e-mail: RJV@nrc.gov</p> |
| <p>4:00 pm – 5:30 pm Salon D</p> | <p style="text-align: center;">New Reactor Technical Issues/Systems Track 4 – New Reactors</p> <p>The NRC's challenges in new reactor licensing reviews involve unique technical issues that arise from using passive systems. Since approving some advanced reactor designs many years ago, the NRC has spent a significant effort evaluating the effect of debris accumulation on the performance of emergency core cooling pump sump screens following a loss-of-coolant accident. The NRC is using those important findings to effectively review current design certification and combined license applications. This session will discuss some of the technical issues NRC is reviewing related to sump designs, fuel designs, and containment performance.</p> <p>Session Chair: Frank Akstulewicz, NRC/NRO Panelists:</p> <ul style="list-style-type: none"> - Fuel Design, (PowerPoint) Fred Forsaty, NRC/NRO - Containment Performance, (PowerPoint) Hanry Wagage, NRC/NRO - New Reactor Sump Design Reviews, (PowerPoint) Christopher Jackson, NRC/NRO <p>Session POC: Hanry Wagage, NRC/NRO, tel: (301) 415-1840 e-mail: HAW2@nrc.gov</p> |
| <p>4:00 pm – 5:30 pm</p> | <p style="text-align: center;">Incident Response Experience (registration required; no fee)</p> |

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| <p>Lower Level Entrance Marinelli & Executive Blvd</p> | <p style="text-align: center;">Track 5 – Nuclear Security, Emergency Preparedness, Fuel Cycle</p> <p>Attendees are invited to experience the inner workings of the NRC Operations Center which serves as the focal coordination point for communicating with NRC licensees, State entities, and other Federal agencies regarding operating events in both the nuclear reactor and materials industry. This session will address the roles and responsibilities of the various teams that comprise the NRC response organization when it is staffed during an emergency involving a NRC licensed facility. It will also address the resources that the NRC utilizes when communicating information to external stakeholders and receiving information from the licensees during an emergency. A shuttle service will be available from the Conference Center to U.S. NRC Headquarters. Please note that each Incident Response Experience session is limited to 20 attendees and registration is free and required. <i>*Please note that the shuttle will depart on the Lower Level entrance promptly at 4:00 pm.</i></p> <p>Session Chair: Brian McDermott, NRC/NSIR Session POC: Janelle Jessie, NRC/NSIR, tel: (301) 415-6775 e-mail: JRB6@nrc.gov</p> |
| <p>4:00 pm – 5:30 pm Salon E</p> | <p style="text-align: center;">Region I, II, III and IV Breakout Session Track 6 – Regional Breakout</p> <p>Session Chair: Bruce Mallett, NRC/EDO Panelists:</p> <ul style="list-style-type: none"> - Samuel Collins, NRC/R-I - Victor McCree, NRC/R-II - James Caldwell, NRC/R-III - All IPs Results for Cross Cutting Areas, (PowerPoint) Elmo Collins, NRC/R-IV - Art Stall, Florida Power and Light Company - Mike Kansler, Entergy <p>Session POC: Randy Musser, NRC/R-II, tel: (404) 562-4603 e-mail: RXM1@nrc.gov</p> |

Thursday, March 13, 2008

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| 7:00 a m – 5:00 p m Lower Level | - Registration Service Desk - - Internet & Print Center - |
| 7:00 a m – 5:00 p m Grand Ballroom Foyer | - Technical Poster Presentations - |
| 8:00 a m – 9:30 a m Salon A-C | <p style="text-align: center;">Spent Fuel Storage and Disposal Track 5 – Nuclear Security, Emergency Preparedness, Fuel Cycle</p> <p>The development and implementation of the Nation's high-level radioactive waste policies has been challenging. The strategies for spent fuel storage, transportation, and permanent disposal have been beset by complex political, legal, budgetary, and technical issues. This session will include discussions of recent development, industry practices and experience, regulatory oversight, technical issues, and stakeholder outreach. Invited speakers will represent a broad spectrum of industry, U.S. government, and stakeholder views and comments.</p> <p>Session Chair: William Brach, NRC/NMSS and Lawrence E. Kokajko, NRC/NMSS Panelists:</p> <ul style="list-style-type: none"> - Steven P. Kraft, Nuclear Energy Institute (NEI) - Yucca Mountain Project Update, (PowerPoint) Edward F. Sproat III, Department of Energy - Yucca Mountain: The Death Watch Continues, (PowerPoint) Martin Malsch, Egan, Fitzpatrick & Malsch , PLLC - Tina Seeley, Bloomberg News <p>Session POC: Yen-Ju Chen, NRC/NSIR, tel: (301) 492-3238 e-mail: YJC@nrc.gov</p> |
| 8:00 a m – 9:30 a m Salon F-H | <p style="text-align: center;">Thermal-Hydraulic Code Development and Applications Track 3 – Reactor Research</p> <p>The NRC has recently completed development of the TRAC/RELAP Advanced Computational Engine (TRACE) code and has begun to use it in several regulatory applications. As part of the continuing improvement of TRACE and to support the evaluation of new and advanced plant designs, the NRC has also conducted experiments to provide data for new model development and code assessment. The NRC is also developing an independent capability to perform high temperature gas reactor (HTGR) analysis. This session will present recent results from these code development and experimental activities.</p> <p>Session Chair: Stephen M. Bajorek, NRC/RES Panelists:</p> <ul style="list-style-type: none"> - TRACE Version 5.0 Development Status, Stephen Bajorek, NRC/RES - BWR Stability Using TRACE/PARCS, Joseph Staudenmeier, NRC/RES - TRACE Analysis of ESBWR Pressurization Transients, Anthony Uises, NRC/RES - ROSA-V Tests and Analysis, Shawn Marshall, NRC/RES - NRC Gas Reactor Thermal Analysis Activities, Joseph Kelly, NRC/RES <p>Session POC: Daniel Forsyth, NRC/RES, tel: (301) 415-5674 e-mail: DCF1@nrc.gov</p> |
| 8:00 a m – 9:30 a m Salon D | <p style="text-align: center;">New Reactor Licensing: Matching Expectations and Reality Track 4 – New Reactors</p> <p>The Energy Policy Act of 2005 continues to spur significant interest in new reactor licensing. The NRC has received three complete combined license applications (COLAs) and one partial COLA and expects to receive at least 16 additional COLAs within the next couple of years. Based on applications received to date, have the key</p> |

"expectations" of 10 CFR Part 52 (e.g., pre-construction resolution of safety and environmental issues, and reduction of applicant and licensee financial risk through standardization of plant designs) been realized, and do they provide sought-after improvements in regulatory predictability? This session will provide industry insights on the preparation of applications for review under Part 52, the business decisions related to that process, and their impact on regulator expectations.

Session Chair: Thomas Bergman, NRC/NRO

Panelists:

- [NuStart Experience: Passive Technology, Active Interaction](#), Marilyn Kray, NuStart
- [ABWR Part 52 Experience](#), Mark McBurnett, South Texas Project Nuclear Operating Company
- [Part 52 Expectations vs. Reality Met or Not?](#), George J. Wrobel, UniStar Nuclear Energy

Session POC: Meena Khanna, NRC/NRO, tel: (301) 415-2150 e-mail: MKK@nrc.gov and James Steckel, NRC/NRO, tel: (301) 415-1026 e-mail: JAS13@nrc.gov

8:00 am – 9:30 am

Lower Level Entrance
Marinelli & Executive
Blvd

Incident Response Experience (registration required; no fee)
Track 5 – Nuclear Security, Emergency Preparedness, Fuel Cycle

Attendees are invited to experience the inner workings of the NRC Operations Center which serves as the focal coordination point for communicating with NRC licensees, State entities, and other Federal agencies regarding operating events in both the nuclear reactor and materials industry. This session will address the roles and responsibilities of the various teams that comprise the NRC response organization when it is staffed during an emergency involving a NRC licensed facility. It will also address the resources that the NRC utilizes when communicating information to external stakeholders and receiving information from the licensees during an emergency. A shuttle service will be available from the Conference Center to U.S. NRC Headquarters. Please note that each Incident Response Experience session is limited to 20 attendees and registration is free and required. **Please note that the shuttle will depart on the Lower Level entrance promptly at 8:00 am.*

Session Chair: Brian McDermott, NRC/NSIR

Session POC: Janelle Jessie, NRC/NSIR, tel: (301) 415-6775 e-mail: JRB6@nrc.gov

8:00 am – 9:30 am

Salon E

Risk Informed Regulatory Activities
Track 2 – Operating Reactors

Risk-informed activities continue to play an important role in nuclear power regulation. Continued progress has been made with approval of risk-informed technical specifications initiatives and ongoing development and endorsement of standards; nevertheless, significant challenges confront the staff and industry to maintain the momentum established with increasing expectations for PRA scope and quality. This session will cover perspectives from both the NRC and industry on current risk-informed activities, risk-informed standards, and challenges associated with implementing risk-informed initiatives.

Session Chair: Mark Cunningham, NRC/NRR

Panelists:

- [Industry Perspective on Risk Applications](#), Biff Bradley, Nuclear Energy Institute
- [BWR Owners' Group Perspectives](#), Gregory Krueger, Exelon Generation
- [PWR Owners' Group Perspective on PRA Scope and Quality](#), David McCoy, Southern Nuclear Operating Company
- [Risk-Informed Applications – Opportunities and Challenges](#), Mark Rubin, NRC/NRR

Session POC: Andrew Howe, NRC/NRR, tel: (301) 415-3078 e-mail: AJH1@nrc.gov

8:00 am – 9:30 am

Research Findings Related to NRC Revised Source Term (NUREG-1465)
Track 3 – Reactor Research

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| Brookside | <p>Several developments important to the formulation of a severe accident source term have taken place since the publication of NUREG-1465 in 1995. First is the replacement of the Source Term Code Package (STCP) - consisting of a suite of phenomenological codes use to synthesize the NUREG-1465 source term. The STCP was replaced by the integrated accident analysis code- MELCOR for severe accident analysis. MELCOR represents the state-of-the-art understanding and modeling of severe accidents for nuclear power plants. The MELCOR code was used to synthesize a revised NUREG-1465 source term for high burnup fuel (>65GWD/MtU) and for PWR mixed-oxide fuel.</p> <p>Second, additional research into the release and behaviors of radionuclides under accident conditions continued after the publication of the NUREG-1465 Source Term. Among these research programs is the Phébus-FP project carried out by an international consortium at the Cadarache Nuclear Centre in France. These experiments involved bundles of irradiated fuel heated neutronically in steam through the point of fuel liquefaction and relocation. Radionuclides released during core degradation are allowed to transport through a model of the reactor coolant system that includes a representation of a steam generator tube. Released radionuclides that successfully negotiate passage through this model of the reactor coolant system escape into a model of a reactor containment. The Phébus-FP project has completed five integral tests, and the results from these tests provide insights and a better understanding of reactor severe accident phenomena. The Phébus-FP data is suitable for validation of accident analysis codes and models, and the overall results also provide insights on iodine behavior in containment after a severe accident.</p> <p>Session Chair: Richard Lee, NRC/RES Panelists: - Revised NUREG-1465 Source Term for High Burnup Fuel and PWR Mixed-Oxide Fuel, Randy Gauntt, Sandia National Laboratories - Main Outcomes from the Phebus FP Programme, Michele Schwarz, IRSN - Iodine Behavior in Design Basis and Severe Accidents, Dana Powers, Sandia National Laboratory Session POC: Michael Salay, NRC/RES, tel: (301) 415-5603 e-mail: MAS10@nrc.gov</p> |
| 8:00 a m – 9:30 a m White Flint Amphitheater | <p style="text-align: center;">Increased Openness and Transparency in NRC Security Inspection Programs Track 5 – Nuclear Security, Emergency Preparedness, Fuel Cycle</p> <p>NRC licensees have undergone a significant transformation concerning security since the events of September 11, 2001. This transformation started with issuance of Orders from the NRC requiring increased levels of protection of nuclear power plants and radioactive material. After September 11, 2001 NRC staff limited issuing public security inspection reports with summaries of security findings. Currently, NRC staff is exploring multiple options for increasing openness and transparency in the security inspection programs. In an effort to garner insights from all stakeholders, the staff plans to issue a federal register notice to solicit input relative to these considerations. Additionally, public meetings will be scheduled during 2008 to collect insights from stakeholders. Upon completion of the public meetings staff will present to the Commission informed recommendations for increasing openness and transparency in the security inspection programs.</p> <p>This meeting is intended to reach out to stakeholders to solicit their input and thoughts. Stakeholders may read the most recent proposal to the Commission, SECY-07-0189, October 25, 2007, regarding staff considerations to increase openness and transparency, at NRC's public website:</p> <p style="text-align: center;">http://www.nrc.gov/reading-rm/doc-collections/commission/secys/2007/</p> |

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| | <p>Session Chair: Rich Correia, NRC/NSIR Panelists: - Increased Openness and Transparency in NRC Security Inspection Programs, Doug Walters, Nuclear Energy Institute - Morgan Rafferty, San Luis Obispo Mothers for Peace Session POC: Paul W. Harris, NRC/NSIR, tel: (301) 415-1169 e-mail: PWH1@nrc.gov</p> |
| 9:30 am – 10:00 am | Break |
| 10:00 am-11:30 am Salon A-C | <p style="text-align: center;">Ground-Water Contamination Assessments for NRC-Licensed Facilities Track 3 – Reactor Research</p> <p>Ground-water contamination, its characterization, prevention, and remediation, has been an issue in the decommissioning of nuclear facilities for many years. Recently it has become an item of public interest at several operating nuclear power plants. It is important for future nuclear facilities that these lessons be incorporated into new designs, operating procedures, and monitoring programs. Invited speakers and panelists will discuss their experiences and present lessons learned on issues such as contaminant and site characterization, monitoring of sites, and remediation options associated with decommissioning activities and the highly publicized contamination events at operating nuclear power plants. Related research by NRC and other federal agencies on modeling, monitoring, and remediation (e.g., monitored natural attenuation) of radionuclide transport in the subsurface and environmental assessments will be discussed. Within this context, implications of the recently published guidance for implementation of 10 CFR 20.1406, "Minimization of Contamination," will also be discussed.</p> <p>Session Chair: Sher Bahadur, NRC/RES Panelists: - Engineered In-Situ Uranium Precipitation for Groundwater Remediation, Boyce Clark, ARCADIS - <i>Indian Point - A Legacy of Positive Lessons Learned</i>, Matthew Barvenik, GZA GeoEnvironmental - Lessons Learned in Response to Ground Water Contamination at Nuclear Power Plants and the EPRI Ground Water Characterization Assistance Program, David Scott, Radiation Safety and Control Services - Research Insights into Modeling, Monitoring and Remediating Radionuclide Transport in Ground Water, Thomas Nicholson, NRC/RES - Ground Water Contamination Events – Regional Perspective, Steven Orth, NRC/R-III Session POC: Adam Schwartzman, NRC/RES tel: (301) 415-8172 e-mail: ALS2@nrc.gov</p> |
| 10:00 am-11:30 am Salon E | <p style="text-align: center;">Rulemaking Program: Looking Below the Surface Track 2 – Operating Reactors</p> <p>The process of developing regulations is called rulemaking. The NRC is engaged in evaluating improvements that would increase the safety contribution, efficiency, and timeliness of the agency's rulemaking and rulemaking petition process. Gaining the perspective of other stakeholders such as industry, public interest groups, other Federal parties, and international regulators can help the NRC to identify other potential measures that could streamline the rulemaking processes. Insightful panel presentations and active audience participation will help promote better understanding of the rulemaking program and help identify program improvements looking below the surface!</p> <p>Session Chair: Michael Case, NRC/NRR Panelists: - Improving Rulemaking AND Its Implementation, Tom Houghton, Nuclear Energy Institute</p> |

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| | <ul style="list-style-type: none"> - Rulemaking R or R: Revelation or Repetition, David Lochbaum, Union of Concerned Scientists - Raising the Rulemaking Technical Basis to the Surface, Arlon Costa, NRC/NRR - The Japanese Regulatory Regime, Zentarō Yamashita, Nuclear and Industrial Safety Agency - Japan <p>Session POC: Paulette Torres, NRC/NRR, tel: (301) 415-5656 e-mail: PAT3@nrc.gov</p> |
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| <p>10:00 am-11:30 am Brookside</p> | <p style="text-align: center;">Collaboratively Addressing PRA Challenges: Human Reliability Analysis, Fire Safety, and the Treatment of Uncertainties Track 3 – Reactor Research</p> <p>Probabilistic Risk Assessments (PRA) have been successfully used to assess the safety of nuclear power plants and to address many challenging technical issues. Over the past 25 years, PRA technology has significantly matured and is routinely used to support decision-making at the NRC and in the nuclear industry. Nevertheless, there continues to be various PRA topic areas that are difficult to address using currently available tools. This session will provide an overview of those topic areas and efforts underway to address them.</p> <p>Session Chair: John Monninger, NRC/RES Panelists:</p> <ul style="list-style-type: none"> - Human Reliability Analysis, Jeff Julius, Scientech; Erasmia Lois, NRC/RES; Ken Kiper, FPL Energy/Seabrook Station - Fire Safety, J.S. Hyslop, NRC/RES; Bijan Najafi, SAIC; Steve Nowlen, Sandia National Laboratories - The Treatment of Uncertainties, Ken Canavan, Electric Power Research Institute; Mary Drouin, NRC/RES; and Gareth Parry, NRC/NRR <p>Session POC: Lauren Killian, NRC/RES, tel: (301) 415-0029 e-mail: LAK@nrc.gov</p> |
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| <p>10:00 am-11:30 am Salon D</p> | <p style="text-align: center;">New Reactor Design Reviews and Engineering Issues Track 4 – New Reactors</p> <p>The NRC is currently reviewing multiple applications in support of the U.S. nuclear power renaissance including; Early Site Permits, Design Certifications and Combined Licenses. This discussion will focus on areas where the technology is rapidly advancing or the technical approaches/methodologies have changed substantially over the past thirty years and how this impacts the NRC's engineering review of new reactor applications. During this session, we will focus on the review of digital instrumentation and controls, mechanical components and structural engineering for the new generation of nuclear power plants.</p> <p>Session Chair: Laura Dudes, NRC/NRO Panelists:</p> <ul style="list-style-type: none"> - Impacts on Structural Design from New Ground Motion Predictions, Manas Chakravorty, NRC/NRO - Digital Instrumentation and Control - Design Acceptance Criteria, Terry Jackson, NRC/NRO - Motor-Operated Valve Performance and Lessons Learned for New Reactors, Thomas Scarbrough, NRC/NRO - Potential Adverse Flow Effects on Nuclear Power Plant Components, Patrick Sekerak, NRC/NRO <p>Session POC: Denise McGovern, NRC/NRO, tel: (301) 415-0681 e-mail: DLM7@nrc.gov</p> |
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| <p>10:00 am-11:30 am Lower Level Entrance Marinelli & Executive</p> | <p style="text-align: center;">Incident Response Experience (registration required; no fee) Track 5 – Nuclear Security, Emergency Preparedness, Fuel Cycle</p> |

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| Blvd | <p>Attendees are invited to experience the inner workings of the NRC Operations Center which serves as the focal coordination point for communicating with NRC licensees, State entities, and other Federal agencies regarding operating events in both the nuclear reactor and materials industry. This session will address the roles and responsibilities of the various teams that comprise the NRC response organization when it is staffed during an emergency involving a NRC licensed facility. It will also address the resources that the NRC utilizes when communicating information to external stakeholders and receiving information from the licensees during an emergency. A shuttle service will be available from the Conference Center to U.S. NRC Headquarters. Please note that each Incident Response Experience session is limited to 20 attendees and registration is free and required. <i>*Please note that the shuttle will depart on the Lower Level entrance promptly at 10:00 am.</i></p> <p>Session Chair: Brian McDermott, NRC/NSIR Session POC: Janelle Jessie, NRC/NSIR, tel: (301) 415-6775 e-mail: JRB6@nrc.gov</p> |
| <p>10:00 am-11:30 am Salon F-H</p> | <p style="text-align: center;">New and Advanced Reactor Research Track 3 – Reactor Research</p> <p>The NRC is reviewing applications with new light water reactor designs (such as AP-1000, ESBWR, APWR and EPR) and is preparing for potential future applications of non-light water reactor designs as part of the Next Generation Nuclear Plant (NGNP) and Global Nuclear Energy Partnership (GNEP) initiatives organized by DOE. This session will provide an overview and discuss regulatory research that provides the data, analytical tools and technical basis to support the review of these new designs.</p> <p>Session Chair: Christiana Lui, NRC/RES Panelists: - NRC Research in Support of New and Advanced Reactor Licensing, John Jolicoeur, NRC/RES - Research for the Next Generation, Tom O'Connor, Department of Energy - Development Efforts in Support of PBMR Design Certification, Ed Burns, Pebble Bed Modular Reactor (Pty) Ltd. - Research Needs to Support GNEP's Advanced Burner Reactor, Sal Golub, Department of Energy</p> <p>Session POC: Lauren Gibson, NRC/RES, tel: (301) 415-0114 e-mail: LKG1@nrc.gov</p> |
| <p>10:00 am – 4:00 pm White Flint Amphitheater</p> | <p style="text-align: center;">Post-Approval Site Inspection for License Renewal – Part I & II Track 2 – Operating Reactors</p> <p>In this session the NRC staff will present its plan for the implementation of Inspection Procedure (IP) 71-003, "Post-Approval Site Inspection For License Renewal." The session will provide information to external license renewal stakeholders in a timely fashion in order to facilitate a smooth transition into the extended period of operation. This will include NRC's expectations, inspection plans, and resource impacts on both the NRC and the licensees with plants with renewed operating licenses. The session will facilitate a common understanding of the staff's plan for verification of license conditions, licensee commitments, FSAR descriptions, and newly-identified SSCs [§ 54.37(b)]. Part I: 10:00 am – 11:30 am, Part II: 1:00 pm – 4:00 pm.</p> <p>Session Chair: P.T. Kuo, NRC/NRR Panelists: - Post Approval Inspections for License Renewal (IP-71003) - Michael R. Fallin, Constellation Energy Nuclear Group - Rajender Auluck, NRC/NRR - Richard Conte, NRC/R-I - George Hopper, NRC/R-II - Ann Marie Stone, NRC/R-III - Linda Smith, NRC/R-IV</p> |

Session POC: Ngoc (Tommy) Le, NRC/NRR, tel: (301) 415-1458 e-mail: NBL@nrc.gov