

NUCLEAR INSTALLATIONS SAFETY DIVISION of the AMERICAN NUCLEAR SOCIETY

Message From the Chair By Michael Corradin

As some of you know, in April ANS President Joe Colvin asked Dr. Dale Klein, former NRC Chairman and myself to Co-Chair an ANS Special committee on Fukushima. I was honored to be asked to help the society.

Although not directly affected by this event, the U.S. nuclear power industry will take lessons from this tragic natural disaster and accident.

Our ANS special committee will provide a clear and concise explanation of the events surrounding the accident to the general public and U.S. leaders. These communications will include key events such as station blackout, the effect on the reactors and on the spent fuel stored at the plant site and the likely health effects of the radioactive substances released to the environment. In addition, the committee will evaluate recommended actions that ANS could or should consider to better communicate with the public and elected officials during a nuclear event.

The committee is made of nine members with a focus on these general areas:

- Boiling Water Reactor systems and the accident sequence analysis
- · Health physics and radionuclide release
- · Regulatory safety issues
- · Risk communication
- Accident cleanup and waste management

The special committee will meet in-person or by teleconference as needed to complete the committee assignment and deliver its report to the Society. The committee will present its draft report by the end of calendar year 2011 and the final report by the spring of 2012. The ANS special committee will continue to update its report, as appropriate, as new insights and developments are gained through 2012.

Because this is a large effort, these five areas will be constituted into five subcommittees, and I would ask that many of you consider helping in these areas. We have just begun and I would ask that you let the ANS know of your interest. In particular, contact Ms. Laura Scheele (lscheele@ans.org) and/or any of the committee members directly. We will be in touch with the NISD membership by the time of the 2011 summer meeting.

The Special Committee Members are: Dale Klein, Mike Corradini, Paul Dickman, Jacopo Buongiorno, Hisashi Ninokata, Mike Ryan, Amir Shakarami, Craig Sawyer, and Akira Tokuhiro.

Message From the Vice-Chair By Alan E. Levin

As the incoming Chair of NISD, I would first like to take this opportunity to thank Mike Corradini for his service as Chair over the past year, and to offer the Division's congratulations and support as he assumes his new responsibilities as ANS Vice President/President-Elect.

I would also like to express my appreciation to all of the people who volunteer to serve in Division governance and programmatic activities, to ensure that NISD continues to play a key role in the ANS's endeavors.

On March 8-10, I was one of more than 3000 attendees at the NRC's Regulatory Information Conference. While the atmosphere was decidedly upbeat, we also were reminded by

several speakers that the safety of operating nuclear power plants was of paramount importance, and that an accident anywhere in the world could have an impact on an international scale. Little did we imagine that the day after the conference ended, the truth of those messages would be demonstrated in such stark terms. I suspect that almost everyone reading this newsletter has been affected, directly or indirectly, by the events at Fukushima Daiichi, and that the nuclear technology community will continue to feel their effect for many years to come.

The technical focus of our Division puts us at the forefront of the ANS's Fukushima-related activities. We will need to support the ANS Special Committee on Fukushima that Mike Corradini discusses in his column, and to organize national and topical meeting sessions, as appropriate, to address the technical issues, insights, and lessons learned as we continue to study and evaluate the event. We will need the involvement of as many of our Division members as we can get to undertake these initiatives. I encourage all NISD members not only to get involved themselves, but to reach out to colleagues and coworkers who are not ANS members and encourage them to join the ANS—and NISD—so that we can fulfill our responsibilities to the ANS and the broader community.

While the follow-up to Fukushima will be a major focus over the next several years, we will continue our other activities, as well—related to the safety of currently operating nuclear installations, new plants, and advanced reactors, including SMRs. There will be other challenges as well—the ANS Board of Directors will be considering a major restructuring of the Society; see Joe Colvin's column in the March/April issue of *ANS News*. And we will, in the not-too-distant future, have a new Executive Director.

I look forward to leading the Division over the next year as we tackle these challenges and opportunities, and I look forward, as well, to your support and assistance.

Program Committee By Robert Andre

The NISD will have nine sessions at the Spring 2011 meeting, as follows:

- Highlights from PSA 2011 (Panel), Mon. p.m.
- Severe Reactor Accident Analysis, Mon. p.m.
- Fire Risk Assessment Methods, Tues. a.m.
- Fire Phenomena in Safety Assessments, Tues. p.m.
- Generic Aging Lessons Learned in the NPP License Renewal Process: The Path Forward (Paper/Panel), Wed.
- Nuclear Installations Safety: General, Wed. p.m.
- Emerging Issues and Human Factors in Nuclear Facility Safety, Thurs. a.m.
- Physics, Modeling, and Risk Assessment, Thurs. a.m.
- Monitoring and Regulatory Insights, Thurs. a.m.

The Preliminary Program for the Annual Meeting can be accessed through the ANS Website at http://www.new.ans.org/meetings/c_1



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Topical Meetings Update By Kevin O'Kula

At the request of the NISD Program Committee, the ANS National Program's Screening and International Committee awarded calendar placement for September 22-26, 2013 for the next Probabilistic Safety Assessment and Analysis topical meeting. The meeting will be held in Columbia, South Carolina and co-hosted by the Columbia and Savannah River local Sections. Dr. Shunsuke Kondo of the Japan Atomic Energy Commission is the meeting's General Chair, and Dr. Robert Bari of Brookhaven National Laboratory is the Technical Program Chair. Contact Kevin O'Kula for information about serving on the Technical Program Committee (kevin.okula@wsms.com). For more general information, see the website (www.psa2013.org) or contact Damon Bryson of the Columbia Section (dbryson@scana.com, 803-345-4814). See the following flyer for additional information.

NISD will be one of professional divisions sponsoring an embedded topical meeting on Severe Accident and Beyond Design Basis Events in Nuclear Facilities. This is planned as an embedded topical meeting for the Winter Meeting in 2012 (San Diego, CA).

Probabilistic Safety Assessment 2011 By Phillip Ellison

The city of Wilmington, NC hosted PSA 2011 on March 13-17th 2011. The meeting was held during the critical periods of the accident response to the Fukushima accident. Many attendees were involved in both the Fukishima accident response and also played key roles in the conference. Even in light of the events taking place in Japan, the meeting was on overall success. PSA 2011 had over 300 attendees from over 20 countries with more than 250 papers presented.

A special session is being held at the 2011 ANS Annual meeting to summarize the highlights of the meeting. Unlike previous PSA conferences which are held every three years, the next NISD PSA conference will be held in 2013 in Columbia, SC to better coordinate participation with the PSAM series of meetings.

Scheduled NISD Meetings

All NISD members are welcome to attend the following NISD committee meetings at the June 2011 Meeting in Hollywood, FL:

• Executive Committee: Sunday, 7:30 P.M. – 9:00 P.M.

LOCATION: Room 213

• Program Committee: Sunday, 4:00 P.M. − 6:00 P.M.

LOCATION: Room 213

The Executive and Program Committees invite NISD members to express their interest in serving on those committees, particularly by participation in one or both of the indicated meetings.

Members may also wish to attend the Honors & Award Luncheon on Tuesday June 28, 11:30am-1:00pm in Room 307. Tickets can be purchased in advance or on-site at the ANS Registration Desk for \$50.

Student Scholarships Sponsored By NISD

The Saul Levine and Raymond DiSalvo Memorial Scholarships are fully funded. Descriptions of these scholarships can be accessed at the NISD Website (see below for address). Undergraduate students interested in applying for these scholarships can access the Eligibility Requirements and Application Form at http://www.ans.org/honors/scholarships.

NURETH-14

Canada is the hosting country for the 14th International Topical Meeting on Nuclear Reactor Thermalhydraulics (NURETH-14) on September 25-29, 2011 in Toronto. NURETH-14 will gather an international group of leading academic and industry researchers and practitioners engaged in engineering and scientific work focused on nuclear reactor thermalhydraulics. The conference website, including the call for papers can be accessed at http://www.cns-snc.ca/events/nureth-14/

NISD Website

NISD sponsored Panel Discussion at the annual meetings can be viewed on the Website by clicking on the "Panel Presentations" button. The NISD Website may be accessed directly at http://nisd.ans.org or indirectly at http://www.ans.org.



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NUCLEAR INSTALLATIONS SAFETY DIVISION of the AMERICAN NUCLEAR SOCIETY



Meeting on Probabilistic Safety Assessment and Analysis

September 22-26, 2013 in Columbia, South Carolina, USA

Sponsored by Nuclear Installations Safety Division (NISD) Co-hosted by Columbia and Savannah River Local Sections

Organizing Committee

	Name	Affiliation
Honorary Chair	Shunsuke Kondo	Japan Atomic Energy Commission
General Chair	Gerald Loignon	SCE&G
Technical Program	Robert Bari	Brookhaven National Lab
Assistant Technical Program	Kevin O'Kula	URS - Safety Management Solutions
Student Coordinator	Travis Knight	Univ of South Carolina
Finance	Damon Bryson	SCE&G
Arrangements	Duane Twining	SCE&G
Publications	Tinh Tran	URS - Safety Management Solutions
Registration/Web Site	Hanna Shapira	TICS
Publicity	Jim Bazley	SRNL
Fundraising	Bill Wabbersen	SRNL
Tours and Events	Elise Malek	Westinghouse

For More Information

Section River Section

www.psa2013.org

Damon Bryson

dbryson@scana.com

803-345-4814

Session Topics

- o Accident Analysis
- o Advanced Nuclear
- o Common Cause Failures
- o Computer Code Methods
- o Configuration Risk Management
- o Consequence
- o Cyber Risk
- o Digital I&C
- o Dynamic PSA
- o Environmental Impact
- o Fire and Implementation o NASA and Space of NFPA 805
- o Flooding PSA

- o Fuel Cycle
- o Generation Risk
- o Human Factors
- Human Reliability
- o Incorporation of Aging o Non-LWR Reactors
- o Interface Between PRA and the Safety Analysis
- o Level 2 PRA Developments o PRA Standards
- Analysis/Level 3 PRA o Low Power and Shutdown Development
 - Mitigating Systems Performance Index (MSPI) Needs
 - Applications of Risk

- Natural Hazards and External Events
- o Next Generation and Small o Risk Management
- o Nuclear Installation PRAs o Risk-Informed Plant
- Parameter and Modeling Security Uncertainty
- o Passive Systems Safety
- o Proliferation Risk
- o PSA Human Resource o Seismic PSA PSA Training and
- Education o Quantitative Risk Analysis o Software Reliability and in DOE Facilities

- Reliability Centered Maintenance
- Modular Reactors o Risk Perception and Communication

 - o Risk-Informing Regulation o State-of-the-Art Reactor and Licensing
 - Safety Culture and Organizational Factors

 - o Significance Determination Process (SDP) Issues
 - Data Analysis

- o Spent Fuel and
 - Radiological Waste Issues
- o Standardized Plant Analysis Risk (SPAR) Models Status
- Standards and Peer Reviews
 - Consequence Assessment (SOARCA) Project Lessons Learned
- o Safety Margins and PSA o Structural Reliability
 - Methods
 - o Transportation Risks
 - Waste Management and Decommissioning