Nuclear Nonproliferation, Safeguards, & Security





Transition of the Special Committee on Nuclear Nonproliferation (SCNN) to an ANS Technical Group

Goal and NNSS Mission

Goal

Transition the Special Committee on Nuclear Nonproliferation (SCNN) to the Nuclear Nonproliferation Safeguards and Security (NNSS) Technical Group.



NNSS Mission

Promote the peaceful use of nuclear technology while simultaneously preventing the diversion and misuse of nuclear material and technology through appropriate safeguards and security, and promotion of nuclear nonproliferation policies.

NNSS Objectives

- Promote and facilitate dissemination of research regarding technology and policy to safeguard and secure nuclear material.
- Promote policy that discourages the proliferation of nuclear technology and material to inappropriate entities.
- Provide information to ANS members, the technical community at large, opinion leaders, and decision makers to improve their understanding of nuclear nonproliferation, safeguards, and security issues.
- ✓ Become a recognized technical resource on nuclear nonproliferation, safeguards, and security issues.
- Work cooperatively with other ANS divisions to achieve these objectives.



NNSS Origins

Special Committee on Nuclear Nonproliferation (SCNN) History

- Originated in 1993 (~18 years ago)
- ANS Washington DC Local Section
- Vanice Perin was the driving force in SCNN formation
- Due to urgency, ANS created a Special Committee



SCNN Past - Activities

Early Activities

1994

- Panel on
 Disposition of Excess Plutonium
- Session on NPT Renegotiation and Cooperation with the Former Soviet Union for Nuclear Materials Safeguards

1996

• Embedded Topical Meeting on International Policy Issues





SCNN Past - Activities

1995

Blue Ribbon Panel – issued report on Protection and Management of Plutonium



SCNN Past - Activities

1995

Blue Ribbon Panel – members

Vanice Perin (Executive Secretary), Glenn Seaborg (Honorary Chairman and panel member), Sir John Hill (England), Richard Wilson, Russian translator

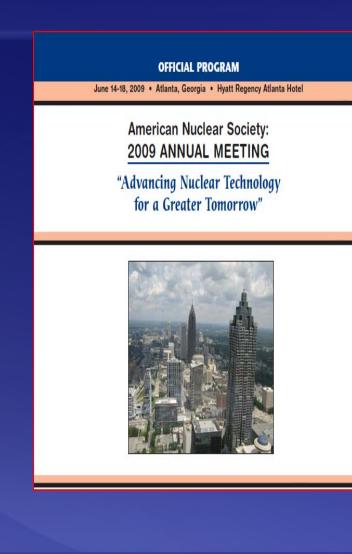
Bertrand Goldschmidt (France), Stanley Hatcher (Canada), Marcus Rowden (USA), Nikolai Ponomarev-Stepnoi (Russia), Harold Bengelsdorf (USA), Ambassador Richard Kennedy (Co-Chairman), Pat Murphy (not a panel member);

Frank Kennelly (SCNN member), Gerald Tape (USA), Myron Kratzer (Co-Chairman), Harold Agnew (USA), Kenneth Davis (USA), Peter Jelinek (URENCO/USA), Rudolf Rometsch (IAEA), Alan Waltar (ANS President at the time, not a panel member).

More Recent Activities (2009-2010) 15 Sessions at ANS National Meetings

June 2009

- Securing the Renaissance: Responsible Stewardship of the Global Nuclear Enterprise
- MOX Gateway: Roadmap to Human Resource Development for the Nuclear Renaissance
- Advanced Fuels and Recycle
- Export Control Compliance in Emerging Nuclear Markets
- Nonproliferation Technology and Used
 Fuel Repatriation
- Disseminating a Nonproliferation Culture through Education

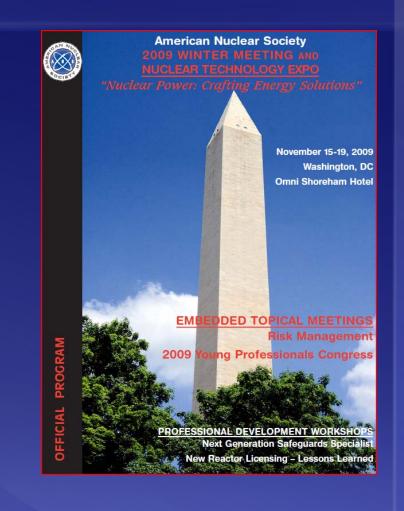


November 2009

- International Programs to Enhance Safeguards Education for the Next Generation of Future Safeguards Professionals
- Advances in Safeguards Technologies
- U.S. Commitment to Implement and Promote Adherence to the International Atomic Energy Agency Additional Protocol
- Summer Internship Projects from the Next Generation Safeguards Initiative

June 2010

- MOX Fuel Fabrication Facility: Overcoming Supplier Qualification Challenges for the Nuclear Renaissance
- Safeguards, Nonproliferation, and Material Detection



November 2010

Advances in Safeguards TechnologyNonproliferation and the Fuel Cycle





November 2010

 Special Session: Current Efforts toward Sustainable Nonproliferation Policy

PANELISTS:

 Proliferation Pathways and Barriers
 William E. Burchill, ANS Past President (presented by Mel Buckner)

***** Status of Nonproliferation Agreements Paul Nelson, Texas A&M University

 Reducing Proliferation Risks via Nuclear Energy Assistance to Developing Countries David Boyle, Texas A&M University

 Nonproliferation Initiatives and Plutonium Disposition In Russia and the United States
 Steven P. Nesbit, Duke Energy Corporation

❖ Safeguarding and Protecting the Nuclear Fuel Cycle
 Trond Bjornard, Idaho National Laboratory

How Proliferation Resistant is Resistant Enough? Michaela E. Eddy, University of Michigan

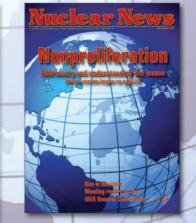
Special Panel Discussion

Current Efforts Toward Sustainable Nonproliferation Policy

Monday November 8, 2010 4:00–6:00 PM Royale Pavilion 3

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Sponsored by the ANS President's Special Committee on Nuclear Nonproliferation (SCNN)



Featuring authors of nonproliferation articles published in this month's **Nuclear News**

Position Statements

- (#45) Spent Nuclear Fuel Recycling and Reuse of Nuclear Materials
- (#72) The Use of Highly Enriched Uranium for the Production of Medical Isotopes
- (#78) The Use of Thorium as Nuclear Fuel
- (#79) International Cooperation for Expansion of Nuclear Energy
- (#42) Protection and Management of Plutonium
- (#55) Nonproliferation



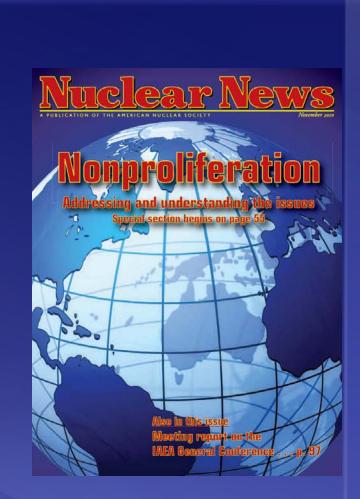
International Cooperation for Expansion

of Nuclear Energy* Position Statement

June 2006

Articles for an ANS Nuclear News Special Edition on Nuclear Nonproliferation (November 2010)

- Current Efforts toward a Sustainable
 Nonproliferation Policy
- Proliferation Pathways and Barriers
- Status of Nonproliferation Agreements
- Reducing Proliferation Risks through Nuclear Energy Assistance to Developing Countries
- Nonproliferation Initiatives and Plutonium Disposition in Russian and the US
- How Proliferation Resistant is Resistant Enough?



SCNN Current Activities

Two Sessions Organized for June 2011

- Best Practices in Interdisciplinary
 Safeguards and Nonproliferation Education
- SRS Plutonium Disposition Project



American Nuclear Society: 2011 ANNUAL MEETING

"Seizing the Opportunity: Nuclear's Bright Future"

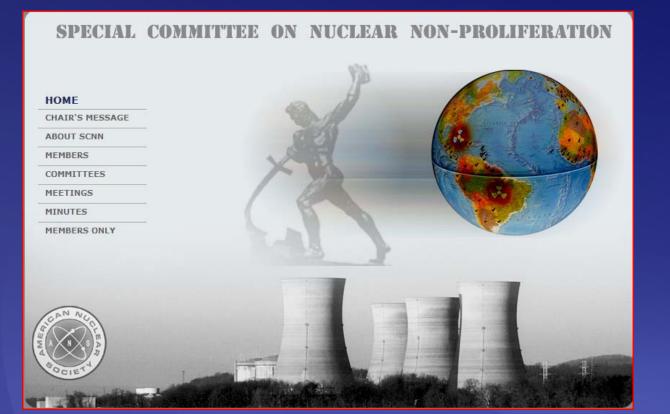
June 26-30, 2011 · Hollywood, FL The Westin Diplomat Resort and Spa



SCNN Current Activities

SCNN Website

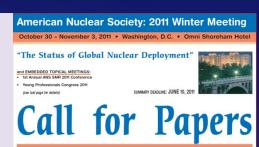
- http://committees.ans.org/nn/



SCNN Planned Activities

Ten Sessions planned for November 2011

- America's Nuclear Future Blue Ribbon Commission: The Fuel Cycle and Nonproliferation Issues
- Addressing the He-3 Alternative Shortage
- Treaty Verification and Arms Control Technologies
- Treaty Verification and Arms Control Policies
- Novel Quantitative Methods for Identifying Potential Proliferation
- Nonproliferation Topics—Student Presentations
- How Universities are Realigning Academic Programs to Address Nonproliferation Issues
- Next Generation Safeguards Technology Applications for Facilities
- International Safeguards Training Program
- Helium-3 Alternative Technologies



SCNN Planned Activities

Plans for June 2013

 Embedded Topical Meeting:
 Current Developments Toward a Sustainable Nonproliferation Regime



SCNN Organization

Special Committee

- Committee reestablished each year by the ANS President
- Members appointed each year by the ANS President
- Membership limited to 35
- Chair appointed by ANS President

1995-7 Vanice Perin, 1998 – Bill Harris, 1999-2004 Mel Buckner, 2005-7 Tom Sanders, 2008-10 Ben Cross

Operates under umbrella of the FCWM Division

Fuel Cycle and Waste Management Division

A Professional Division of the American Nuclear Society

SCNN Organization Special Committee – Current Members

Henry J. Abeyta Robert A. Bari M. (Mel) R. Buckner Maureen Clapper John N. Dewes Michaela E. Eddy Humberto F. Garcia Mark W. Goodman Linda H. Hansen Morris F. Hassler Raymond J. Juzaitis Michael J. Lineberry Michael C. Miller

Paul Nelson Vanice A. Perin Clay H. Ramsey Thomas L. Sanders Susan B. Turner Jeremy J. Whitlock Steven F. Aumeier Jim S. Bollinger C. E. (Gene) Carpenter Benjamin J. Cross Shaheen A. Dewji Herbert Feinroth Matthew J. Gidden

John E. Gunning Alan S. Hanson Caroline Jorant Stephen P. LaMont Carl A. Mazzola Stephen V. Mladineo Steven P. Nesbit Shikha Prasad Albert David Rossin Lawrence J. Satkowiak Daniel A. Vega Ned A. Wogman

Advantages of Transitioning to a Technical Group/Professional Division

- Increase visibility of the Society by providing a clear indication to an outside observer that this subject falls within ANS
- Demonstrates the importance that nuclear nonproliferation, safeguards and security are to ANS
- Attract new members by providing a self-sustaining home for practitioners of this subject
- Provide an opportunity to develop leadership in the areas of nuclear nonproliferation, safeguards, and security

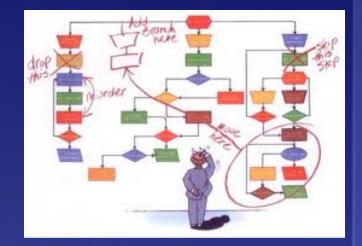


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NNSS-TG Organization

Executive Committee

- Dr. John E. Gunning
- Dr. Benjamin J. Cross
- Dr. Lawrence J. Satkowiak
- Dr. Carl A. Mazzola
- Ms. Michaela E. Eddy
- Ms. Shaheen A. Dewji
- Dr. Melvin R. Buckner



NNSS-TG Status/Progress

- SCNN initiated research on transitioning to a Technical Group in June 2009
- SCNN voted overwhelmingly to proceed with activities to become the NNSS TG in June 2010
- SCNN created petition and obtained signatures of 51 ANS members who supported the formation of NNSS-TG. (Only 20 signatures are required per ANS guidance.)
- Petition for formation of NNSS TG submitted to the Chair of the Professional Divisions Committee (PDC) on March 11, 2011. (Meets ANS guidance of submission 3 months prior to next PDC meeting.)



NNSS-TG

Thank you! Questions?

