

# Securing the Future of Nuclear: Safety, Technology, and Leadership

## SUNDAY, MAY 12

#### 8:15–10 a.m.

Nuclear Safety and Security: How We Got Here, What We're Doing and Where We're Going – A panel discussion detailing how the ideas of safety and security in the nuclear industry have evolved over time. Panelist will talk about the genesis of these ideas, how we have gotten to where we are today and what is being done in the industry currently to mitigate these threats. We will ask them to postulate on the next generation of threats to the nuclear industry's safety and security and ultimately its future.

Breakout Sessions 1 10:30 a.m.–12:30 p.m.

Nuclear Nonproliferation, Verification and Disarmament – This session will provide participants with an overview of major topics in nonproliferation. The role of major treaties for nuclear nonproliferation and disarmament will be discussed. Experts will describe the process used to inspect weapons stockpiles to verify countries are complying with disarmament treaties. The impact of disarmament on the U.S. weapons stockpile and modernization will also be discussed.

**Develop Yourself for Career Success** – This session will provide an interactive, engaging, unforgettable workshop for young professionals to help improve their careers. Participants will leave with a set of remedies that they can share with their mentor or supervisors.

**Preserving the Safety and Security at the Back End of the Fuel Cycle** – This session will center on the safety and security concerns surrounding irradiated nuclear fuel and the technologies to address these concerns. The sessions will address the spent fuel already stored in pools and casks around the country, transportation of irradiated fuel, and repository options and reprocessing.

**Safety, Security and Safeguards Culture** – The nuclear industry places a special priority on safety –in terms of both nuclear safety and personnel safety. It is important that a good safety culture promote security and safeguards at nuclear facilities. This session will discuss the importance of culture at nuclear sites and how the importance of safety, security and safeguards can be integrated into an effective culture throughout the nuclear industry.

#### **Session Descriptions**



Breakout Sessions 2 2–3:30 p.m.

Tackling Tough Decisions: Perspectives From Industry Leaders – Leaders in the nuclear industry are required to make decisions that can have a significant impact on their organizations, the industry and beyond. In this session, a panel of experienced industry leaders will discuss specific examples of how they have led teams through difficult decisions—ranging from high-level industry issues to early career challenges.

**Nuclear Security and Material Control & Accounting** – This session will describe the fundamentals of nuclear security and how those principles are applied. Participants will hear from industry leaders on security. Experts will discuss how security may be applied to small modular reactors. Participants will also get an introduction to material control and accounting.

**Cyber Security Technology** – As the power grid and nuclear facilities plants rely more on computerized networks, digital security must evolve to accommodate these newer and broader applications. This session will provide participants with an overview of digital and cyber security with respect to nuclear power plants and the power grid.

Safety Culture: Best Practices – The importance of cultivating a strong safety culture is not limited exclusively to the nuclear industry. It is vital to maintain a broad perspective on safety culture across other industries in order to ensure the most comprehensive program is in place and in practice. This session will benchmark some aspects of safety culture in a non-nuclear industry and internationally. This session will include experience, lessons learned and significance to stimulate the thoughtful evolution of an integral part of the nuclear culture.

#### **Session Descriptions**



Breakout Sessions 3 4–5:30 p.m.

Safety and Reliability of Plant Equipment – As the nuclear fleet ages, the nuclear power industry faces a new set of challenges. Aging equipment in operational units must be maintained or replaced. New plants entering construction must also procure new equipment, including some designs that are first of a kind. In each case, we must ensure safety and reliability of plant equipment in order to continue to achieve safe and reliable nuclear power operations. This session will provide a perspective on safety and reliability for "Life After 60" nuclear energy facilities as well as new construction and design.

**Meeting Facilitation Skills** – Participants will learn appropriate meeting facilitation skills, then have an opportunity to practice what they have learned.

**Physical Security Technology** – A key component to keeping nuclear materials safe is new technology and rules to prevent malicious use of radioactive material. This session will cover the latest in physical security technologies, technology for scanning shipments for nuclear material and forensic research for tracking nuclear materials.

**International Safeguards** – This session will provide participants with an overview of international safeguards. Speakers will describe the fundamental principles behind safeguards, how the IAEA conducts inspections, and other measures to ensure countries don't proliferate, such as open source information and export controls. Topics of current interest such as Iran and North Korea will be discussed.

#### 6 p.m. – 7:30 p.m.

**NAYGN Welcome Reception** – Participants will have the opportunity to meet and mingle with fellow NAYGN members over light hors d'oeuvres and cocktails.



### MONDAY, MAY 13

#### 8 –9:30 a.m.

#### Securing the Future of Nuclear: Developing the Next Generation of Nuclear Employees - A

presentation on cultivating the next generation of leaders in the nuclear industry. The presentation will focus on the difference between a leader and a manager, what leaders do for organizations, understanding leadership style/competencies, the importance of assessing oneself as a leader, and the process used to close those identified gaps.

### 9:30–10:30 a.m.

**Keynote Speech** 

### 11:30 a.m.-5 p.m.

**Lunch and Scavenger Hunt** – Participants will compete in a cell phone-guided scavenger hunt in the heart of downtown Washington, D.C.

### 5:30-8 p.m.

**NEA Opening Reception & NAYGN Closing Reception** – Participants will join executives attending the Nuclear Energy Assembly for a joint reception. Dress: business formal.

# **TUESDAY, MAY 14**

#### 8 a.m. – 9 a.m.

Hill Day Pre-Job Brief – Prior to engaging with members of Congress for NAYGN visits, conference attendees will participate in a briefing to prepare for Hill meetings and discuss strategy, protocol and talking points.

#### 9:30 a.m. – 5 p.m.

Hill Day Visits – Participants will have the opportunity to meet and educate members of Congress on the benefits of nuclear science and technology. Participants should dress in suits and wear comfortable shoes for their visit to Capitol Hill.