Safe and Secure Nuclear Power: Building Global Confidence

Role of Nuclear Power in a Carbon Constrained World: Benefits and Barriers

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PARTNERSHIP *for* GLOBAL SECURITY
LEADING THE WORLD TO A SAFER FUTURE

The Trend

WORLD NUCLEAR ASSOCIATION

Nuclear electricity output is set to increase at a faster rate over the next five years than [has been] seen for more than two decades.

September 2015

The Challenges

- Public Confidence
- Waste Management
- Governance and Regulatory Competency
- Reliable, Sustainable Technical & Operational Workforce
- Project Cost
- Reactor Siting

4 Responses to the Challenges

- Improved Public Communication
- Strengthened Governance Structures
- Expanded, Networked Education and Training
- Industry-Policy Partnerships (Shared Value)

Public Communication

New and existing nuclear states need to address legitimate public concerns about the dual nature of nuclear technology. Operational details and radiation issues are frightening to non-technical people.

- Post-Fukushima response is failing, fanning public concerns – missed opportunity to recalibrate message about safety/security
- Need to communicate openly about risks and rewards
- Consider accepting new responsibilities beyond regulations and publicizing it
- New information technologies can quickly reach journalists and the public
  - In a Twitter world: Top 10 List of the most important pieces of information
- New partnerships can offer new communicators & messaging that could increase international confidence

Improved Governance

The long-term goal for nuclear governance is to strengthen the system, decrease the dangers, and increase global public confidence. The nuclear safety regime is stronger than nuclear security which needs improvement.

- Create an INPO-like entity to address nuclear security on a regular basis
- Create binding standards against which performance can be measured, such as elevating the IAEA Fundamentals
- Find an acceptable form of peer review
- Assess benefits of requiring nuclear security accreditations as part of national regulations
- Convene international regulators annually to allow for interaction and best practice exchanges
- Continue to respond aggressively to emerging cyber challenges

Education and Training

Nuclear newcomers need expanded, institutionalized educational capabilities both in scope and in content. Technical education dominates while policy and regulatory training are weak.

- Create a networked and balanced education and training system
  - Digital networking platform(s) to connect people and organizations
  - Link educational institutions with nuclear missions & competencies

- Create professional accreditations for disciplines like security

- Determine how best to complement IAEA education

- Use regional forums for sharing information, best practices, and agreed-upon means of demonstrating competence
  - Potential opportunity for the network of Centers of Excellence

Industry-Policy Partnership

The "shared values" between the nuclear policy and industry communities have real, untapped power to drive progress, mitigate concerns (public, financial, insurance), and exert political influence. But, there is historical antagonism on both sides to overcome.

- NSS and GNI are leading examples of new form of cooperation
- Use the 2016 NSS to create a joint expert-industry working group
- Issue a joint industry-expert statement in support of key steps for improving global nuclear security (could also include others)
- Jointly evaluate how commercial entities incentivize continuous improvement through voluntary actions (beyond regulatory mandates) to derive financial and reputational benefits

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