Senior Regulators’ Meeting
Vienna, 25 September, 2014

CHALLENGES FOR NEW COMERS IN REGULATING NUCLEAR SECURITY

VUONG HUU TAN, Director General
Vietnam Agency for Radiation and Nuclear Safety
1. Nuclear Power Program in Viet Nam

- Decision by Prime Minister on the approval on Master plant of National Electricity Development from 2011-2030 (Decision No. 1208 dated 21 July 2011)
  - 2020: the first Unit with capacity of 1,000 MW
  - 2025: NPPs total capacity of 8,000 MW (7% total capacity)
  - 2030: 10,700 MW (accounted for 10.1% of total electricity productivity)
- The first two NPPs in Ninh Thuan.
- New research reactor to be constructed to replace Dalat RR
2. Security in Viet Nam

<table>
<thead>
<tr>
<th>Year</th>
<th>Event Description</th>
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<tr>
<td>2006</td>
<td>Code of Conduct on Security and Safety of Radioactive Sources and Guidance on Import and Export of Radioactive Sources</td>
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<td>2012</td>
<td>Acceded to Convention on Physical Protection and Ratified its Amendment</td>
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<td>2010</td>
<td>Nuclear Security Summits</td>
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<td>2012</td>
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<td>2014</td>
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2. Security in Viet Nam

Legislation and Regulations Framework

- Atomic Energy Law
- Decree No.111/2009/ND-CP on Administrative Sanctions in the Field of Atomic Energy stipulates violations, procedures for handling violations, sanctions and fines
- Decree No. 70/2010/ND-CP specifying safety requirements on NPP (investment, siting, design, construction, installation, operation and decommissioning of NPPs)
- Circular No.38/2011/TT-BKHCN dated 30 Dec 2011 on requirements on physical protection of nuclear material and nuclear facilities (mainly based on INFCIRC 225/Rev. 5).
3. Regulating Nuclear Sector - VARANS

State Management System in Nuclear Sector

VARANS: RB on Safety, Security & Safeguards
3. Regulating Nuclear Sector - VARANS

Duty and Function of VARANS

VARANS: established in 2003, is an agency belonged to MOST and assists the Minister of S&T in State management of radiation and nuclear safety (Atomic Energy Law, Article 8);

3S: Safety, Security and Safeguards (Non-Proliferation)
4. Challenges in regulating from NS perspective

• Licensing for nuclear power plants from nuclear security perspective
  – What are regulatory requirements?
    • Licensing through different phases of NPP: siting, design, construction, operation
  – What are criteria for regulatory assessment of nuclear security plan?
  – What need in inspection checklist/procedure?

→ Not much guidance available in the subject area
4. Challenges in regulating from NS perspective

- Review and evaluation of operator submittal
  - Limited capabilities
  - Training courses on physical protection can create awareness and to some extent the design part of physical protection system

→ Regulatory part needs further development
5. Assistance from the IAEA

- At the request of Viet Nam, a comprehensive plan was developed to assist VARANS to license our 1st NPP from security perspective.
- The Action Plan include 7 Tasks:
  - Task 1: IAEA Expert Mission “What to Do to Evaluate the PPS”
  - Task 2: Review of Regulatory Framework
  - Task 3: Development of DBT
  - Task 4: Capacity Building for Establishment, Review and Assessment of Physical Protection Program for NPP
  - Task 5: Transport Security
  - Task 6: IPPAS Mission
  - Task 7: Program and Project Review Meetings
5. Assistance from the IAEA

• 02 workshops on DBT:
  • In August 2013, the first workshop was attended by various organizations of Vietnam and is considered as introductory for the participants. It is realized by the Vietnam that DBT is an important and first step to establish nuclear security regime in the country on the threat based approach.

• Therefore a 2\textsuperscript{nd} DBT workshop dedicated for the very relevant personnel of the concerned organizations was arranged in April 2014.

• The 2nd workshop included more examples and exercises on conversion of DBT into regulatory requirements and practical use of threat based approach.
5. Assistance from the IAEA

- An expert mission on physical security plan evaluation was held in March 2014 to learn experience from Hungary and Pakistan and based on that to start the process of development of regulatory requirements on physical security plan.
6. Concluding Remarks

• New comers are facing many challenges in licensing NPP from nuclear security perspective.

• Assistance from the IAEA designed specifically on the subject area can address some of these challenges.
Cooperation with Japan on improvement of national legal system on compensation for nuclear damage
On 14 August, Minister of Economy, Trade and Industry of Japan Yukio Edano came to visit and work with Minister of Science and Technology Nguyen Quan on cooperation in the field of nuclear energy.

Fourth international meeting on Next Generation Safeguards
From 3 to 5 July, the Vietnam Agency for Radiation and Nuclear Safety (VARANS) in collaboration with the U.S Department of Energy/National Nuclear Security Administration (DOE/NNSA) organized the Fourth international meeting on Next Generation Safeguards. Deputy Director General of VARANS Le Quang Hiep came to attend and address the opening speech.

- Seminar on nuclear regulatory body
- Implementing EC project on strengthening capabilities of the regulatory body
- Essential knowledge workshop on PSA
- France to support training of nuclear human resources for VN