



NPP and Safeguards Development in Vietnam

Nguyen Nu Hoai Vi, VARANS
Jeju, Republic of Korea, 5-7 July 2011



Current Nuclear Facilities

- Dalat research reactor (500 kW, pool-type):
 - Conversion, in part, of fuel from HEU to LEU in 2007
 - Receipt LEU for full conversion in 2010
 - DU recovered after the war in storage
- Small amount of nuclear material held at ITRRE for research
- Small amount of DU in storage at INST



Future Nuclear Facilities

- Ninh Thuan 1: first nuclear power plant with two 1000 MWe units, with the following proposed schedule:
 - April 2012: site approval application submitted
 - Sept 2012: site approval
 - July 2014: CP application submitted
 - Dec 2014: CP approval
 - Oct 2020: first unit in operation
 - Oct 2021: second unit in operation
- Ninh Thuan 2: two 1000 MWe units
 - In discussion
 - 2021: first unit in operation
- New research reactor to be constructed to replace Dalat RR



Recent Development (Legal)

- Atomic Energy Law:
 - Article 10: Safeguards activities shall be specified (by the Prime Minister)
- PM Decision for Regulation on Safeguards issued on 14 June 2010
- Circular on safeguards implementation issued on **16 March 2011**
- Circular on Import and Export Control of Annex II items **being developed**
- Circular on AP Requirements
- Circular on Physical Protection of Nuclear Material and Facilities **has been developed**

Toward AP Implementation

- Resource Development (in cooperation with INSEP)
 - Train-the-trainer (presentations prepared and practiced)
 - Information Document developed
 - Complementary access table top exercise (March 2011)
 - Introduced Protocol Reporter and Declaration Helper





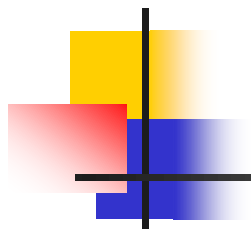
Current Staffing and Responsibilities

- Staff: 03
 - Staff background: English Linguistics, Chemistry
 - Training: SSAC courses by IAEA, Inspection by INSEP/ASNO, Nuclear security by JAEA
- Responsibilities:
 - Safeguards
 - Nuclear security
 - Export control
 - International treaties
 - Regulatory document development



SSAC Development Planning

- Technical infrastructure
 - Equipment (NDA, camera...)
 - Database (software, hardware) to handle SG/AP information; goods under SG/AP
- Staffing: 09 by 2014
 - Should be recruited with legal, technical, IT background
 - Training: SG inspection, SG report assessment (including QA), English
- Regulatory document development
 - Regulation on AP requirements
 - Inspection procedure/manual
 - SG/AP information treatment/handling



THANK YOU