

Practical Exercise

Group C

Speaker: Mr. A. Hernandez Maldonado

Members:

L. S. Leopando
O. Abulgasem (Answerer)
I. Muhamad
K. Huda
L. Vinh

Moderator: Mr. I. Lund

Technical Meeting
Legal and Regulatory Aspects of Decommissioning

Research Reactor Decommissioning Demonstration Project (R2D2P)
26 - 30 June 2006, Manila, Philippines

International Atomic Energy Agency



Regulatory Issues

- **Set of Rules and Regulations (Legislative Doc) Required by the RB to support the Decommissioning Process**

Solutions

RB shall provide the following:

- **Basic Safety Standard**
- **National Guidelines on Decommissioning of RR**
- **Waste and Disposal Management Regulations**
- **Transport Regulations (exist)**
- **Radiation Protection Regulations (exist)**
- **Environmental Quality Act (exist)**
- **Occupational Health and Safety Regulations (?)**

Note : In case of the Legal Framework is not in place, the State may adopt from International Standards issued by IAEA and/or other sources.

International Atomic Energy Agency



RB Requirement for Licensing

Fuel Removal Authorization (from site)	Waste Storage	Decommissioning License
Plan for Constructing a fuel storage building Transportation procedures Criticality calculation Safety & Security	Site QA & Procedures Monitoring plan Type and Capacity Facility layout and access Potential hazards Waste characterization Safety, Security & Safeguards Engineering structure	<ul style="list-style-type: none"> •Decommissioning Plan •Decommissioning Management •Decommission Method / Strategy •Quality Assurance •Financial Assurance •Waste Management •Responsibilities of Various Parties: Operator, Contractor, Other relevant parties. •Estimation of : <ul style="list-style-type: none"> •Time •Dose •Cost •Future plan of the Site

Solution for Licensing issues

Fuel Removal Authorization (from site)	Waste Storage	Decommissioning License
The RB shall provide : Set of licensing guidance and procedures for review; Competent personnel for reviewing the application; Acceptance criteria for fuel transportation (containers) and storage authorization (licensing conditions, if any)	The RB shall provide : Set of licensing guidance and procedures for review; Competent personnel for reviewing the application; Acceptance criteria for waste storage license (licensing conditions, if any)	The RB shall provide : Set of licensing guidance and procedures for review; Competent personnel for reviewing the application; Acceptance criteria for decommissioning license. (licensing conditions, if any)

Regulatory Issues

Solutions

Licensing/Authorization

The RB issues licenses for Decommissioning

The RB shall provide:

- Set of licensing guidance and procedures ;
- Competent personnel for reviewing the application;
- Training for the personnel

International Atomic Energy Agency



Regulatory Issues

Solutions

Inspection/ Enforcement

The RB conducts inspection and enforcement

The RB shall provide :

- Set of inspection/enforcement guidelines and procedures
- Inspection plan and records
- Competent inspectors
- Training for the inspectors
- Financial resources

International Atomic Energy Agency



Regulatory Issues

Solutions

Release from control

The RB declare that the site is released from regulatory control

The RB shall provide :

- Set of guidelines and procedures for review the decommissioning and final survey report
- Independent verification
- Competent personnel
- Acceptance criteria for site release

Prioritization

1. Set of regulation and rules
2. Qualified, trained and experienced personnel (needed for all stages)
3. Acceptance criteria:
 - a) Characterization
 - b) Clearance Level
 - c) Site release
4. Licensing of decommissioning
5. Site release

References

- IAEA Technical Report Series No. 351, Planning and management for the decommissioning of RR and other small nuclear facilities.
- IAEA Safety Guides No. WS-G-2.1, Decommissioning of nuclear power plant and research reactor.
- IAEA Safety Guides No. RS-G-1.1, Occupational radiation protection.
- IAEA Technical Report Series No. 373, Decommissioning Techniques for research reactors.
- IAEA Technical Report Series No. 411, Record keeping for the decommissioning of nuclear facilities: Guidelines and experiences.
- IAEA TECDOC No. 1394, Planning, managing and organising the decommissioning of nuclear facilities: Lessons learned.
- IAEA Safety Series No. 111-F, The principles of radwaste management.
- IAEA Safety requirement WS-R-2, Predeposal management of radioactive waste including decommissioning.
- IAEA Safety Series No. 111-G-1.1, Classification of radioactive waste.

Not Considered Factors

- **Funding**
- **Future use of the site**
- **Time for completion**
- **Public information**