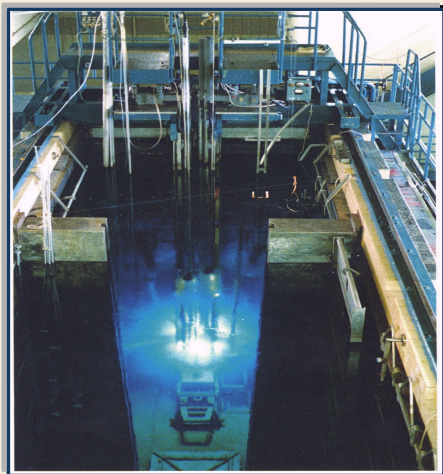


National Report of Greece



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R²D²P: Workshop on “Decommissioning Technologies”
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IAEA

International Atomic Energy Agency

Independent regulatory body

The independent regulatory body is Greek Atomic Energy Commission, a civil service governed by a seven-member board appointed by the Minister of Development.

GAEC is responsible for matters of nuclear energy, nuclear technology and radiological protection of public and workers, from ionizing and artificially produced non ionizing radiation



Legal and regulatory framework

A decommissioning plan is prerequisite to ensure safety throughout the decommissioning process

The plan, before decommissioning activities, is submitted for review and approval firstly by the facility safety committee and secondly by the regulatory body (GAEC)

License / authorisation

Greek Research Reactor (GRR-1), the only reactor in Greece, is not operational since 2004, for refurbishment purposes.

The GRR-1 will be again in operation after the approval of the new safety analysis report (SAR) by the safety committee and the regulatory body (GAEC) and the issuing of license by GAEC.

SAR re-writing will follow IAEA recommendations as they are given in No. NS-R-4, No. 35-G1 and accompanied documents.

IAEA, SS No 35-G1, Safety Assessment of Research Reactors and the Preparation of the Safety Analysis Report, 1994

IAEA, SS No NS-R-4, Safety of Research Reactors, 2005



Decommissioning planning / implementation

The decommissioning plan of the primary cooling system (PCS) is expected to be completed until Dec 2009.

The drawing up of the decommissioning plan for the whole facility will start in the last term of 2010. A cooperation has been established between TUEV NORD, Germany and NCSR Demokritos, Greece for the planning of the decommissioning of pool type research reactors.

The planning team at GRR-1 consist of:

- 3 Physicists (PhD) with experience in radiation protection, waste management and neutron activation
- 1 Physicist (MSc) in radiation protection
- 2 Nuclear Engineers (MSc)

Decommissioning cost calculation / funding

Calculation of the decommissioning cost of the whole facility will be carried out during the decommissioning planning (2010).

Funding for the decommissioning of the PCS has already been allocated by the Greek Government (part of contract 150/213/380/2009).

GRR-1 operates with the funding of Greek Government. The cost of decommissioning of the state-owned facilities is a governmental responsibility.

Progress and Achievements

Aspects of decommissioning successfully addressed to date:

- a fertilizer production plan (GAEC)
- a delay tank that was part of the primary cooling system of the research reactor (INT-RP, NCSR “Demokritos”)

Aspects of these works that would be shared with others:

- Non destructive characterization techniques
- Verification of clearance

Issues / Challenges

Issues and challenges that have been developed for the purposes of Greek decommissioning plan

- Technical:

- Non destructive characterization of PCS pipes
- Verification of the clearance of pipes
- Activation calculations in components of the reactor system