

# Regulatory Framework for Decommissioning of RRs in Indonesia

K. HUDA and N. NABABAN

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Demonstration Project  
(R<sup>2</sup>D<sup>2</sup>P)

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## Introduction

There are three research reactors:

- Bandung Triga 2000 Reactor (2000 kW);
- Kartini Reactor (100 kW);
- Siwabessy Multipurpose Reactor (30,000 kW).

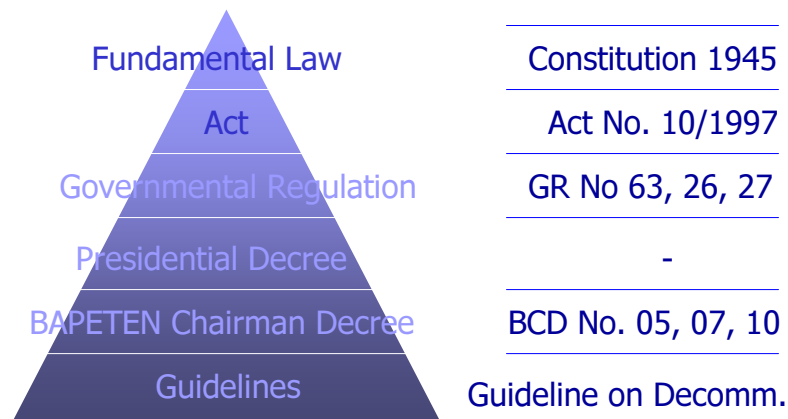
- **Operator:** National Nuclear Energy Agency (BATAN)
- **Regulator:** Nuclear Energy Regulatory Agency (BAPETEN)

## ***Data of Research Reactors***

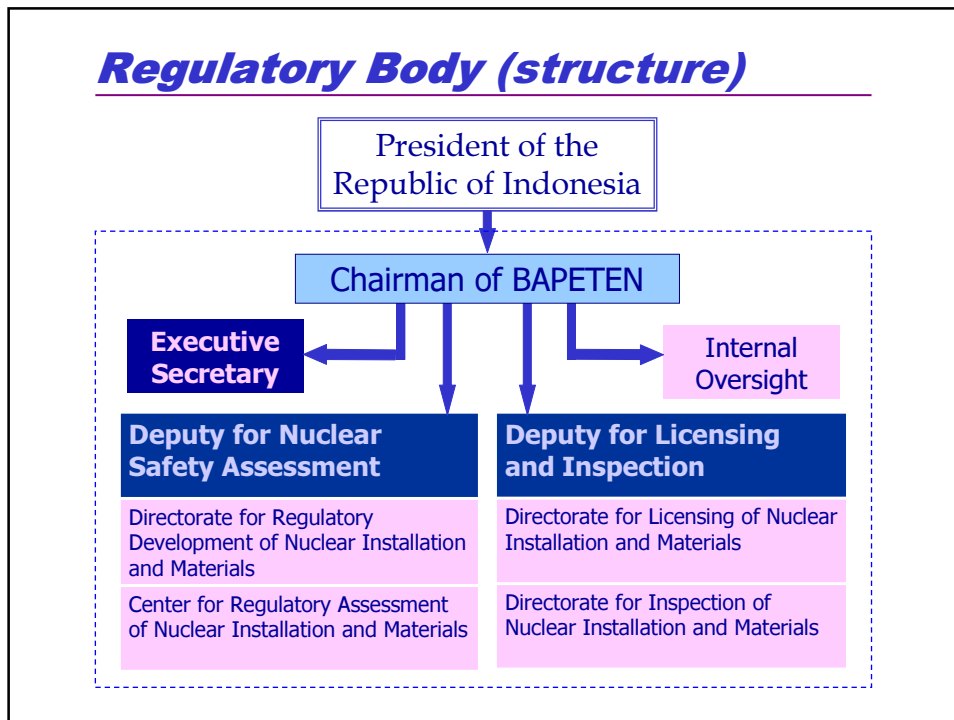
Reactor	Bandung Triga 2000	Kartini Reactor	Siwabessy Reactor
Power [kW]	2000	100	30,000
Type	Triga II	Triga II	MTR
Fuel	UO <sub>2</sub>	UO <sub>2</sub>	U <sub>3</sub> Si <sub>2</sub> -Al (plate)
First Critical	Year 1964	Year 1979	Year 1987
Operator	BATAN	BATAN	BATAN
Application	Res., Train., and Isot. Prod.	Research and training	Res., Train., and Isot. Prod.
Location	Bandung	Yogyakarta	Serpong

## ***Regulatory Framework***

### ***HIERARCHY OF LAW***



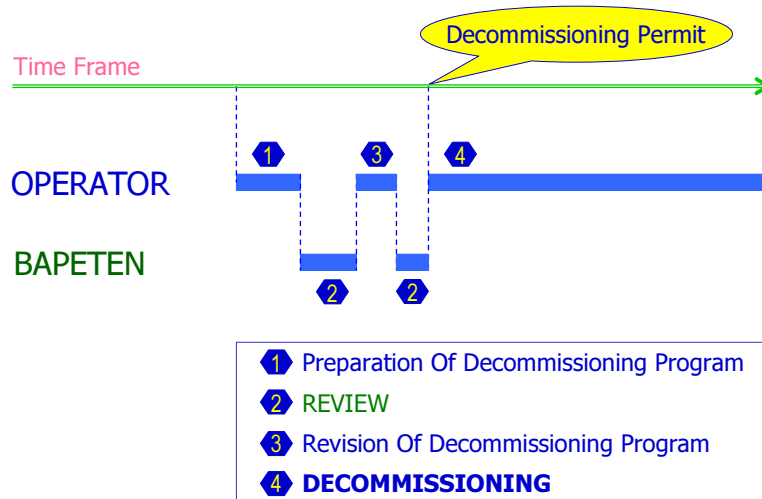
## ***Regulatory Body (structure)***



## ***STEPS OF LICENSING***

- Site Evaluation (Site Approval)
- Construction (Construction Permit)
- Commissioning (Comm. Permit)
- Operation (Operation License)
- Decommissioning (Decommissioning Permit)

## DECOMMISSIONING



## *List of Relevant Regulations*

NUMBER/YEAR	TOPICS
Act. No. 10/1997	Nuclear Energy
GR. No. 63/2000	Safety and health against the utilization of rad.
GR. No. 27/2002	Radioactive waste management
GR. No. -----	Licensing on nuclear reactor (final draft)
BCD No. 01/1999	Safety provision on working against radiation
BCD No. 07/1999	Quality Assurance on nuclear installation
BCD No. 10/1999	Safety provision on operation of research reactor
BCD No. -----	Safety provision on decommissioning of RR (plan.)
G. No. 05-P/2003	Guide on emergency response planning
G. No. -----	Guide on decomm. of research reactor (plan.)

## ***Conclusions***

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- There are three research reactors operating in Indonesia. All the reactors are operated by BATAN;
- Any activity relating to construction and operation, including decommissioning, of the reactor is controlled by BAPETEN;
- To perform the regulatory control, BAPETEN has provided several regulations. However, the regulation specifically concerning the decommissioning is not available yet.

*Thank you*

