



BADAN PENGAWAS TENAGA NUKLIR
Indonesian Nuclear Energy Regulatory Agency



GOVERNMENT REGULATION(GR) ON LICENSING OF NUCLEAR INSTALLATION AND UTILIZATION OF NUCLEAR MATERIAL



**Directorate for Nuclear Installation and Nuclear Material Regulation
Nuclear Energy Regulatory Agency (BAPETEN)**

Yogyakarta , 19 March 2014



Scope

- **Legal Basis**
- **Licensing of Nuclear Installation and Utilization of Nuclear Material**
- **References**
- **Content of Government Regulation**



Legal Basis

As implementing article 17 paragraph (3) Act No. 10 Year 1997 on Nuclear Energy

Pasal 17

- (1) Setiap pemanfaatan tenaga nuklir wajib memiliki izin, kecuali dalam hal-hal tertentu yang diatur lebih lanjut dengan Peraturan Pemerintah.
- (2) Pembangunan dan pengoperasian reaktor nuklir dan instalasi nuklir lainnya serta dekomisioning reaktor nuklir wajib memiliki izin.
- (3) Syarat-syarat dan tata cara perizinan sebagaimana dimaksud pada ayat (1) dan ayat (2) diatur lebih lanjut dengan Peraturan Pemerintah.



References of drafting GR

- IAEA Standards and Guide*
- International Workshop*
(Licensing of Nuclear Fuel Cycle Facility)
- IAEA Expert Mission*
(best practice from NPP's countries)
- Document academic paper of draft of Government Regulation (2010)



Content of GR

8 Chapters, 134 Articles

I. General Provisions

II. NUCLEAR REACTOR LICENSING : LICENSING REQUIREMENTS (ADMINISTRATIVE, TECHNICAL, FINANCIAL REQUIREMENTS) , APPLICATION SUBMISSION AND LICENSING ISSUE, VALIDITY AND LICENSING RENEWAL, LICENSE REVISION, TERMINATION OF LICENSE, LICENSING FEE

III. NUCLEAR INSTALLATION NON-REACTOR LICENSING : same as above

IV. NUCLEAR MATERIAL UTILIZATION LICENSING: LICENSING REQUIREMENTS (ADM, TECH.), VALIDITY AND LICENSING RENEWAL, SPENT FUEL REEXPORT APP., EXPORT AND IMPORT APPROVAL, , LICENSE REVISION, TERMINATION OF LICENSE, LICENSING FEE

V. INSPECTION

VI. ADMINISTRATIVE SANCTION

VII. TRANSITIONAL PROVISION

VIII. FINAL PROVISION



GENERAL PROVISIONS

- **Definition : (26)**

Power Reaktor is a nuclear reactor utilizing thermal energy for generating power (including Nuclear Power Plant-NPPs)

Non-Power Reaktor is a nuclear reactor utilizing neutron and radiation results from nuclear fission reaction.

- **Scope**

- 1. Nuclear Installation Licensing :**

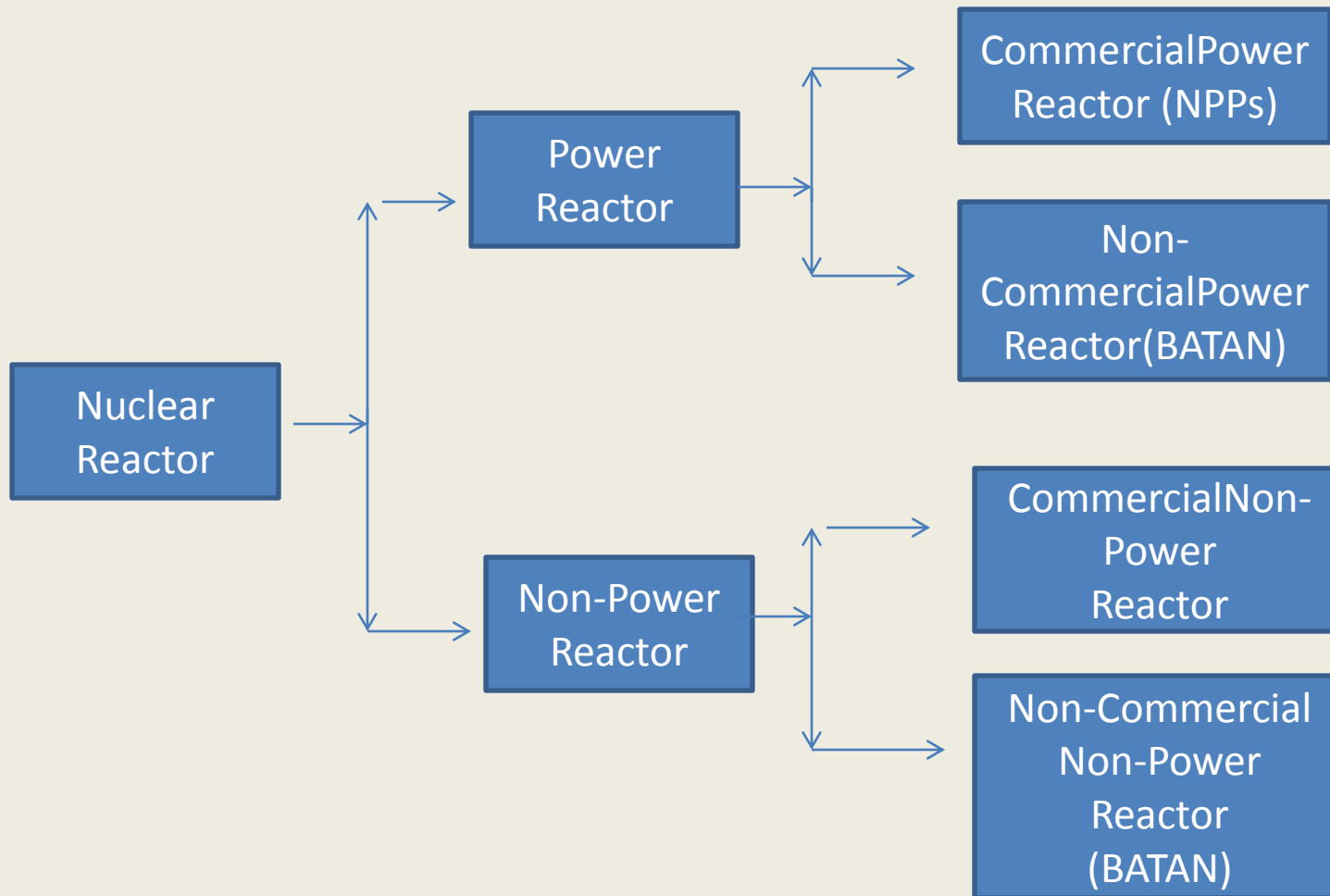
- a. Nuclear Reactor (including NPPs) Licensing; and**

- b. Other Nuclear Installation Licensing**

- 2. Nuclear Material Utilization Licensing**



Nuclear Reactor Licensing





Nuclear Reactor Licensing

Type of License

I. Nuclear Reactor Constructing Licensing

a. Site License; and

b. Construction License

II. Nuclear Reactor Operating Licensing

a. Commissioning License; and

b. Operation License

III. DECOMMISSIONING LICENSE

LICENSING REQUIREMENTS:

a. ADMINISTRATION;

d. complying to criteria (comm. Power Rx)

b. TECHNIQUE (ENVIRONMENTAL LICENSE); and

c. FINANCE (only for commercial nuclear reactor)



Nuclear Reactor Licensing

Criteria (commercial Power Reactor) :

- a. significant to safety structures, systems, and components in reactor tested in a relevant environment or in a operational condition, and applied in a prototype plant; and
- b. have commercial operation license by regulatory authority from Power Reactor built Countries

	a, b1, c, d	a, b2-b5, d	a, b6, d	a, b7, d	a, d
ECHN.	Report of Site Eval. And Manag. System	SAR, LCO, (+PSA for commercial Power Rx)	SAR, LCO, constr. Report,	SAR, LCO	
	Rx Main data Doc.	Doc. MS, SGS, PFPlan,	Doc. MS, SGS, PFP, tech. drawing.	Doc. MS, SGS, PFP	Doc. MS
	Report Manag. System	Constr prog., RPProgram, Ageing Mag, EPR, decom	Comis.Progam, Maint. Prog., RPP, Ageing Mang., EPR, decom	Mainte. Prog. RPP, Ageing Mag., EPR, decom progr.	RPP, EPT, decom
	DIQ	DIQ, Envir.Lic..	DID, lap pelks Izin Lingk/IL	Report of env. lice	
FINANCE		Financial Doc.for. constr – operati : bank of guarantee/ Insurance system	Doc. Liability decom financial doc.:		
REQUIRE	SITE EV.	DESIGN APP.	DESIGN CHANGING APP.	U/MODIFIKASI	RELEASE APP.

**Licensing of Rx
Licensing Req.**



Reactor Licensing – Application submission & License Issue

SUBJECT	SITE	CONSTRUKTI	COMISION	OPERATION	DECOMMISSIONING
Pre requir.	Site Evaluation shall be implementes	Isite Lic. <= 4 th	Shall have - Nuclear Met. Lic. - Working Lic. For Ope.Pers.		a. Iterminat of op.lic. &no renewal b. Termianting op. before licen void date c. Renewal License refusal; d. Accident happec.
Aplicant	+ . A&T Req.	+ . A, T & F Req.	+ . A, T & F req.	+ . A, T Req.	+ A, T req.
BAPETEN	Check Dok~ 30days Review~ 2 Yrs	Check Doc 30 days Review~ 2 Yr	Check Doc~ 30days Review ~ 1Yr	Chekc Doc~ 30 days Review ~ 2Yr	Chekc Doc~ 30 days Review~ 1 Yr
Applicant	Revision~ 3 Yrs	Revision ~ 2 Y	Revision ~ 6 months	Revision~ 2 Yr	Revision ~ 1 Yr
TOTAL	5 Yrs	4 Yrs	18 months	4 Yrs	2 Yrs
SUBJECT	Site Ev.	Design App	U/Modifikati	U/Modifikati	RELEASE APP.
Applicant	+ techni. Req.	+ tech. req	+ techi req.	+ tech. req	+ tech req.
BAPETEN	Check Doc~ 30days Review~ 6mont	Check Dok~ 30 days Review~ 12 mo	Check Doc ~ 30days Review~ 6 mon	Check Doc ~ 30days Review~ 6 mon	Check ~ 30 days Review~ 6 month
Applicant	Revision 6 mon	Revision ~ 6 mo	Revision ~ 6 mo	Revision ~ 6 mo	Revision ~ 6 month
TOTAL	1 Yr	18 months	1 Yr	1 Yr	1 Yr
		Design Ch. App			
		+ tech. req.			



Reactor Licensing – Validity and renewal license

	SITE	CONSTRUKTI	COMMISIONING	OPERATION	DECOMMISSIONING
Validity	Up to release approval	~ 8 yr	~ 2 yr	~ 40 yr	Up to release approval
Renewal License Req.		applied > 6 mo before valid date of lic.	applied > 3 mo before valid date of license	applied > 3 yr before valid date of license	
		Report of progress of const..	Report of progress.comisioning	SAR, PSR	
		Prog. & new schedule Constr activities	Prog. & new schedule comisioning act.	Operating report, Ageing Managemen	
BAPETEN		Review~ 6 month	Review ~ 6 month	Review ~ 2 yrs	
Validity of Re.licens		~ 2 yrs	~ 1 tyrs	~ 10 yrs each renewal	



Reactor Licensing – License Revision

SUBJECT	SITE	CONSTRUKTI	COMISIONING	OPERATION	
	Pre require, Changing data : name of legal identity of applicant ,or instlatiion address				
Applicant	Summision changig data				
BAPETEN	Check ~ 6month:				
				Chaning data of LCO = new license	



Reactor Licensing

Termination of License

Termination of Construction, commissioning, and Operation license of Nuclear Reactor when:

- I. Achieving validity date;**
- II. Company, agency or inst . terminated ;**
- III. Licensee applying termination license; or**
- IV. Revoked by Chairman of BAPETEN**

In case of termination of commissioning, operation, and decommissioning nuclear reactor, licensee shall be responsible to the management of nuclear reactor, nuclear materials,, Radioactive waste, and decommissioning act.



INSPECTION

Authorities of BAPETEN Inspector :

- a. conducting Inspection (periodically / incidently, with or without notifiation during license process, including quality verification in vendor or manufacturer;**
- b. having an access and investigating facility and/or site vicinity, during constructing, operating, decommisioning nucear installation, and closure of an final repostary installation;**
- c. Having an access and verifying Material Balance Area and Location Outside Facilities;**
- d. implementing radiation monitoring inside and outside Nuclear Installation;**
- e. conducting Inspection (periodically / incidently), with or without notification in case any emergency situation or abnormal event; and**
- f. terminating constructing, operating, and demomisioning NI, and nucler material utiliztion, when jeopardizing/endangering worker, public and evironment**

Activitiy of constructing, operating, and demomisioning NI, and nucler material utiliztion, only will terminated by inspector of BAPETEN after reporting to and having istruction from Chairman of BAPETEN.



SANCTION OF ADMINISTRATION

1. **Warning letter;**
2. **Administrative fine (decommissioning);**
3. **License Suspension; and**
4. **License Revocation**

Warning letter (example) : violating obligation of submission new license for LCO changing.

License Suspension : not applied to Decommissioning license but temporary terminating of decommissioning activity.

Administrative Fine (50 % of decommissioning budget) : applies when licensee has not implemented management of nuclear installation and nuclear materials as well as radwaste during temporary termination.



TRANSITION AND FINAL PROVISIONS

License of existing plant is still valid until the date of validity.

The implementing regulations of GR No. 43 are still applied when they are still comply to.

GR No. 43 year 2006 on licensing of nuclear reactor and GR No. 29 on licensing of nuclear materials are withdrawn.

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Thank You

