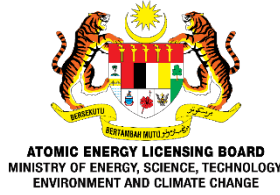


Forum for FNCA 2019 Study Panel on "Environmental impact assessment (EIA) in the legal and regulatory framework for nuclear energy-related activities, 07 March 2019, Tokyo Japan.



ENVIRONMENTAL IMPACT ASSESSMENT (EIA) IN THE LEGAL AND REGULATORY FRAMEWORK FOR NUCLEAR ENERGY-RELATED ACTIVITIES

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Ensuring Safety, Security & Safeguarding Peaceful Nuclear Activities

Presentation Outline

- ◆ Introduction
- ◆ Regulatory Body Infrastructure
- ◆ Malaysian Legal Framework
- ◆ Answering Questionnaire on EIA for nuclear-related activities (Malaysia case)
- ◆ Conclusions – A way forward

Introduction

- Environmental assessment is an important technique for **ensuring that the likely impacts** on the environment of proposed development/facility are fully understood and taken into account before such development is **allowed to go ahead**.
- **Environmental Impact Assessment (EIA)** is required for **activities prescribed** under the **Environmental Quality Act 1974 (Act 127)- Environmental Quality (Prescribed Activities) (Environmental Impact Assessment) Order 1987**.
- In addition, **Radiological Impact Assessment (RIA)** is also required for **activities associated with radioactive materials and radioactive waste** under **Atomic Energy Licensing Act 1984 (Act 304)**.

Regulatory Body Infrastructure

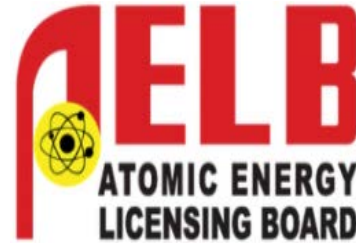


Director General
Department of Environment (DOE)



Act 127

EIA



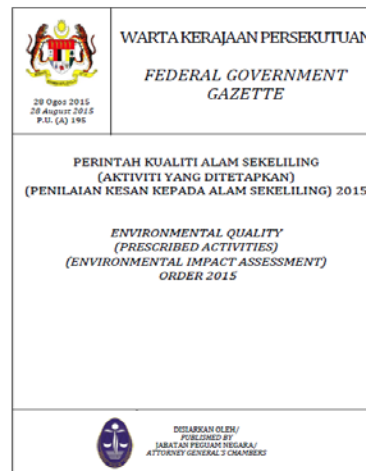
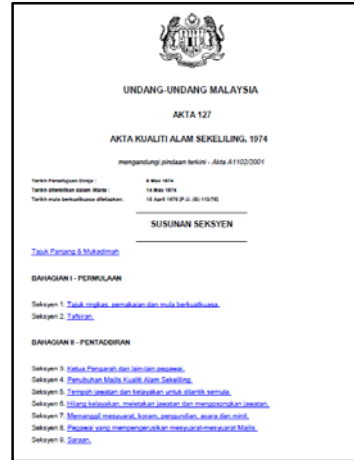
Director General
Atomic Energy Licensing Board (AELB)

Act 304

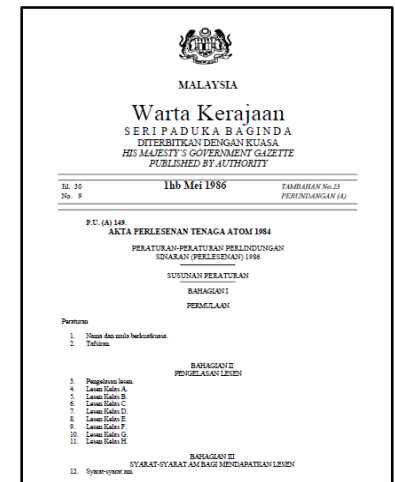
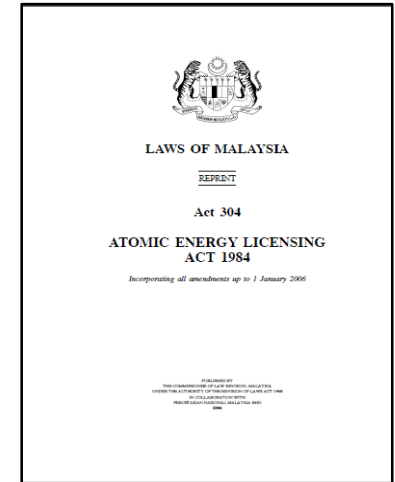
RIA

Malaysia Legal Framework

- Environmental Quality Act 1974 (Act 127) was established on 1974 (Act 127)
- Department of Environment (DOE) was established under Act 127
- An act relating to prevention, abatement, control of pollution and enhancement of the environment, and for purposes connected therewith or related thereto. .
- **EIA** is subjected under Section 34A (2) **Environment Quality Act 1974, 2nd Schedule*** - Environmental Quality (Prescribed Activities) (Environmental Impact Assessment) Order 2015 – using radioactive materials and generating radioactive wastes.



- Atomic Energy Licensing Act was established on 1984 (Act 304)
- Atomic Energy Licensing Board (AELB) was established under Act 304
- The act to provide for the regulation and control of atomic energy, for the establishment of standards on liability for nuclear damage and for matters connected therewith or related thereto.
- **RIA** is subjected under **Atomic Energy Licensing Act 1984, Radiation Protection (Licensing) Regulations 1986** - for nuclear installation, milling of materials containing or associated with radioactive materials/nuclear materials, waste treatment facility.



Note: *2nd Schedule = subject to public display & public comments

Questionnaire Answers

PART 2 – FNCA Member that have EIA law(s) or equivalent regardless of whether the law(s) apply(ies) to nuclear energy-related activities

NO.	QUESTION	ANSWER	REMARKS
9	Does your country's legal framework require carrying out an environmental assessment prior to making decisions on?	<ul style="list-style-type: none"> • Project activities • Programs (Projects) 	EIA - Environment Quality Act 1974 (Act 127)
10	According to your country's EIA law(s), does the EIA need to analyse?	Only national impacts	-
11	According to your country's EIA law(s), is there a requirement to notify and/or consult with?	Other national authorities	<ul style="list-style-type: none"> • Atomic Energy Licensing Board (AELB) when dealing with radioactive / nuclear materials. • To conduct RIA (once DEIA approved by DOE)

Questionnaire Answers (continue)

NO.	QUESTION	ANSWER	REMARKS
12	Does your country's EIA law include the requirement to provide an opportunity for members of the public to participate in the EIA process?	Yes, but only for domestics members of public	<ul style="list-style-type: none"> • Public display and public comments for 1 month • Apply to activities stipulated under 2nd Schedule Environmental Quality (Prescribed Activities) (Environmental Impact Assessment) Order 2015 • Or known as Detail EIA or DEIA
13	According to your country's legal framework, is there a requirement to make environmental information publicly available?	No	<p>However, for regulator assessment:-</p> <ul style="list-style-type: none"> • After submission DEIA, one month review period is provided for the public to submit their responses and comments in writing to DOE. • EIA will be displayed at selected locations (DOE state office, public libraries and local authority offices) where the public can view the documents easily. • EIA will be uploaded into the DOE website for the duration of the review period.

13(a) Specific Environmental information (in the DEIA) made public during public display & public comments:-

a) Existing environment

- ✓ site setting, climate & meteorology, land use, human environment, environmental baseline investigation, ecology, socio economic environment, nearby port, roads

b) Potential environmental impacts & recommended mitigation measures

- ✓ surface water, soil & ground water, environmental noise, solid waste, ambient air, biological resources, socio economic issues, traffic & transportation

c) Environmental Management Plan

- ✓ Water quality monitoring, boundary noise monitoring, air quality monitoring, soil & ground water monitoring

Questionnaire Answers (continue)

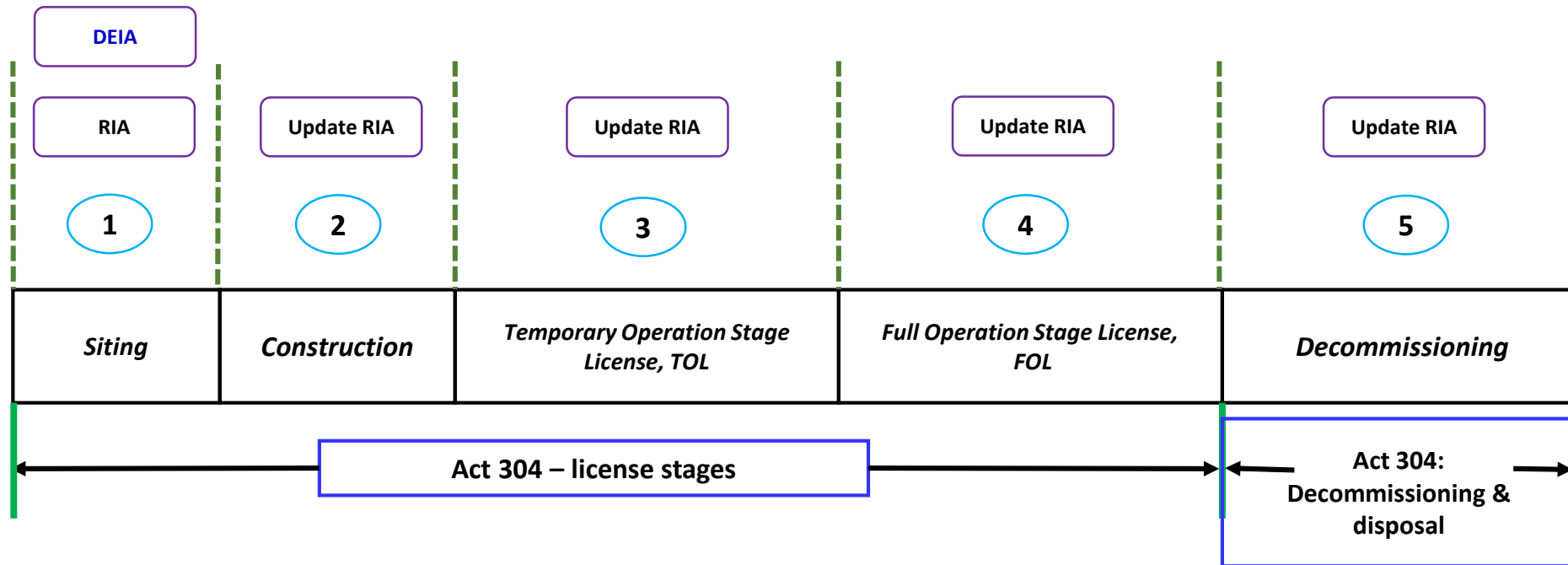
NO.	QUESTION	ANSWER	REMARKS
14	Does your country's EIA law(s) specifically apply to nuclear energy-related activities?	No	<p>There are, in total of 17 prescribed activities listed under 2nd Schedule Environmental Quality (Prescribed Activities) (Environmental Impact Assessment) Order 2015.</p> <ol style="list-style-type: none"> 1) agricultural, 2) aerodrome, 3) drainage & irrigation, 4) fisheries, 5) floristry, 6) industry, 7) land reclamation, 8) mining, 9) petroleum, 10) ports, 11) power generation & transmission, 12) development in coastal area, 13) national park & state park, 14) development in slope area, 15) waste treatment & disposal, construction of dam, 16) transportation and 17) radioactive materials & radioactive waste.

Questionnaire Answers (continue)

PART 3 – For those FNCA Member countries with an EIA law(s) or equivalent that apply(ies) to nuclear energy-related activities

NO.	QUESTION	ANSWER	REMARKS
15	<p>Does your country's legal framework require carrying out an EIA prior to making a decision on:</p> <p>If NO, would it be possible to <u>extend the application of the general EIA law(s) to nuclear energy-related activities</u> or would new legislation need to be drafted</p>	No	<p>EIA required once for any project (nuclear-related activities)</p> <p>Yes, it has been done through RIA.</p> <p>For nuclear energy-related activities i.e. license for nuclear installation / milling of materials containing or associated with radioactive materials/nuclear materials, waste treatment facility – RIA is requires at each stage of license (siting, construct, pre-operational, operational, decommissioning)</p>

Example of nuclear installation / milling of materials containing or associated with radioactive materials/nuclear materials, waste treatment facility license.



Conclusion : A way forward

- Strengthen best available techniques & best management in conducting EIA and RIA,
- Integrated communication in decision making through other agency
- Environmental & radiological safety mainstreaming
- Enhancement of EIA / RIA procedures

TERIMA KASIH



THANK YOU