

Nuclear Law and Malaysian Legal Framework on Nuclear Security

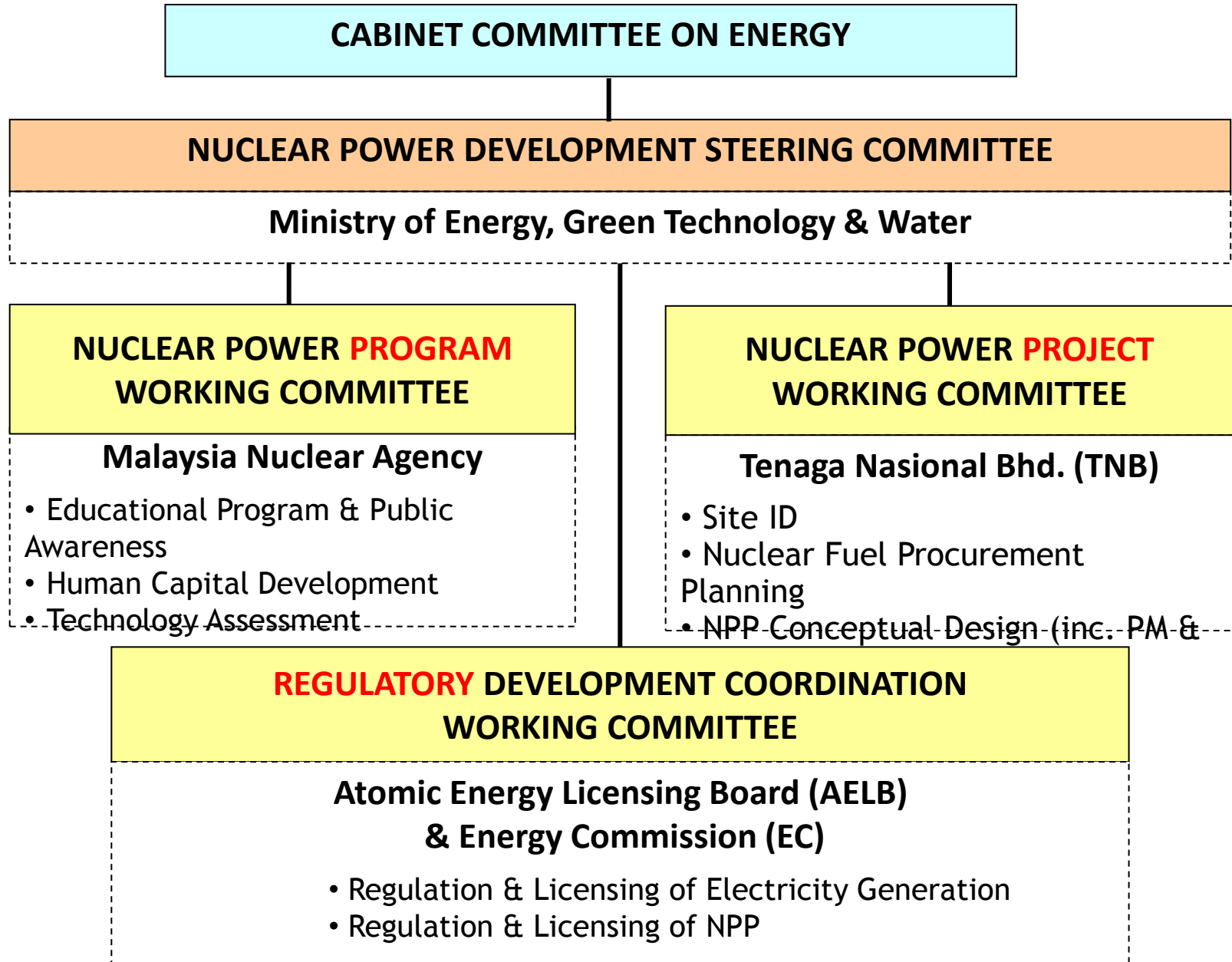
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Nuclear Law

- The body of law which governs the principles of nuclear energy and its legislative process and procedures
- Licensing, Inspection and Enforcement
- Radiation Protection and Safety
- Emergency Response and Management
- Transport of Radioactive Material
- The Management of Radioactive Waste
- Decommissioning
- Nuclear Liability in Cases of Nuclear Accidents
- International Trade of Nuclear Materials
- IAEA Guides, Standards and Codes.

NUCLEAR INFRASTRUCTURE

Issues	Milestone 1	Milestone 2	Milestone 3
National position			
Nuclear safety			
Management			
Funding and financing	Conditions	Conditions	Conditions
Legislative framework			
Safeguards			
Regulatory framework			
Radiation protection			
Electrical grid			
Human resources development			
Stakeholder involvement			
Site and supporting facilities			
Environmental protection			
Emergency planning			
Security and physical protection			
Nuclear fuel cycle	State-of-readiness assessment carried out at each Milestone		
Radioactive waste			
Industrial involvement			
Procurement			



Malaysian Legal Framework on Nuclear Energy

- **Main Legislation – Atomic Energy Licensing Act 1984 (Act 304)**
- **Regulations & Approvals**
- **Radiation Protection (Licensing) Regulations 1986**
- **Radiation Protection (Basic Safety Standard) Regulations 1988**
- **Radiation Protection (Transportation) Regulations 1989**
- **Radiation Protection (Appeal) Regulations 1990**
- **Import & Export Guidance for Radioactive Material (Category 1 & 2) including online permits**

Atomic Energy Licensing Act, 1984 (Act 304)

- **Act:** provides the basic law concerning the development and utilization of atomic energy and safety regulations.
- **Regulations:** provides more detailed provisions entrusted by the Act.
- Provides additional requirement which not stated in the regulations or special matters related to provisions entrusted by the Act
- Provides guides, codes and standards to comply with and achieve goal impose in regulations

Radiation Protection & Security Infrastructure

- Establishment of emergency planning and preparedness: cooperation with National Disaster Centre
- Lead Agency for Radiological Emergency
- Launch inter-agency National Drill
- Technical Support Organization(TSO): Nuclear Malaysia Agency
- Cooperation with relevant government agencies have been established: Ministry of Health, Royal Customs Malaysia, Royal Malaysian Police etc.

Normative Role of IAEA

- **The IAEA as a Party to an Agreement**
- **The IAEA as a Forum/Depositary**
- **The IAEA as a Standard Setting Organization**

Offences related to Nuclear terrorism

- **Conventions:**
- **1980 Physical Protection of nuclear material(*in force*)**
- **1997 Terrorism Bombing Convention (*in force*)**
- **2005 Protocol to the Maritime Safety Convention**
- **2005 Protocol to the Fixed Platforms Protocol**
- **2005 Nuclear Terrorism Convention (*in force*)**
- **UN Security Council resolutions:**
- **(1373)(1456)(1624)(1822)**
- **1540 (2004)**
- **UN General Assembly resolutions inviting states to sign and ratify the**
- **Nuclear Terrorism Convention:**
- **59/290, 60/73, 62/71, 62/172 (mandates of the *Terrorism Prevention Branch of UNODC*)**

Domestic Legislations- Issues on security, liabilities and offences (19 legislations)

- Official Secret Act 1972
- Data Protection Act
- Sedition Act 1948
- Printing Press and Publication Act 1984
- Prevention of Crime Act 1959
- Criminal Justice Act 1953
- Penal Code (Act 574)
- Criminal Procedure Code (Act 593)
- Public Order Preservation Act 1958

- Immigration Act 1959
- Police Act 1967
- Official Secret Act 1972
- Mutual Assistance in Criminal Matters Act 2002
- Extradition Act 1992
- Arms Act 1960
- Firearm (Increased Penalties) Act 1971
- Explosives Act 1957

INTERNATIONAL LEGAL INSTRUMENTS

- 1) Convention on Nuclear Safety 1994;
- 2) Convention on Early Notification of a Nuclear Accident 1986;
- 3) Convention on Assistance in the case of a Nuclear Accident or Radiological Emergency 1986;
- 4) Convention on Physical Protection of Nuclear Material (CPPNM) and 2005 Amendment;
- 5) Convention on Suppression of Acts of Nuclear Terrorism (CNT);
- 6) 1963 Vienna Convention on Civil Liability for Nuclear Damage;
- 7) 1997 Protocol to amend the 1963 Vienna Convention on Civil Liability for Nuclear Damage;
- 8) Comprehensive Safeguards Agreement (CSA);
- 9) Additional Protocol pursuant to Comprehensive Safeguards Agreement;
- 10) Nuclear Non-Proliferation Treaty (NPT);
- 11) Treaty on South-East Asia Nuclear Weapon-Free Zone (SEANWFZ);
- 12) Code of Conduct on the Safety and Security of Radioactive Sources;
- 13) Code of Conduct on the Safety of Research Reactors.

Malaysia Nuclear Liability Policy and Approach

- **To adopt international best practice and international obligations;**
 - *Vienna Convention on Civil Liability of Nuclear Damage;*
 - *Convention on Supplementary Compensation for Nuclear Damage*
- **To ensure national legal framework is in place:**
 - *introduce to national legal framework - amendment of Act 304*
- **To ratify to relevant international obligations.**

Challenges

- **Strong legal and institutional framework that facilitate the production of nuclear energy**
- **Aspects on governance - independence**
- **Licensing Issues- Interface between state and federal, intergovernmental**
- **Harmonization with other acts and regulations**
- **Public acceptance**
- **Nuclear liability**
- **Waste management program**
- **Human Capital /Expertise**
- **Adherence to legal instruments relating to Nuclear Security**

Key Challenges in Nuclear Power Deployment

Challenge

Potential resolution

Public Acceptance



- Promote public acceptance

- Public opinion survey to identify priority segments & concerns
- Awareness projects
- Transparency in project implementation
- Fast-track process and make government priority

International Governance



- Sign/ratify relevant treaties & conventions

Regulatory context



- Put in place detailed regulations

- Align on international best practices
- Top-down mandate to accelerate process
- Engage foreign experts to assess site & construction permit applications

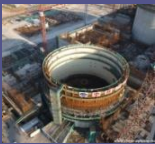
Nuclear Plant Site Acquisition



- Acquire approval for plant sites
- Obtain public support in locality

- Public information programme
- Option for localities to bid to host nuclear plants as in Japan & Republic of Korea

Construction timeline



- Require best-in-class timeline from vendors

- Negotiate with vendors based on timeline

Project Financing



- Obtain low-cost financing

- Combine low-cost & market financing (e.g. sovereign-guaranteed foreign export credits, foreign equity, commercial loans, including Islamic financing)

The Way Forward

- **Nuclear renaissance and nuclear strategic related issues;**
- **Implementing safety, security and safeguards (3S's) measures;**
- **Enhancing capability and capacity in enhancing 3S's;**
- **Transparency in nuclear security matters**
- **Strong regional network and cooperation in promoting nuclear security; and,**
- **Regional human capital development is vital in ensuring effective implementation of nuclear security initiatives**

THANK YOU

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