

## **THAILAND** (Updated 2014)

### **1. GENERAL INFORMATION**

#### **1.1 Country overview**

##### **1.1.1 Governmental System**

Democracy (Constitutional Monarchy). Thailand is a constitutional monarchy with the King as the ruling monarch. King Bhumibol Adulyadej, the ninth king of the House of Chakri, has reigned for more than sixty-six years, making him the longest reigning Thai monarch and the longest reigning current monarch in the world. The King is recognized as the Head of State, the Head of the Armed Forces, the Upholder of the Buddhist religion, and Defender of the Faith. Thailand is the only country in Southeast Asia that has never been colonized by a European power.

##### **1.1.2 Geography and Climate**

Geographically, Thailand is situated at Southeast Asia with bordering the Andaman Sea and the Gulf of Thailand and the southeast of Myanmar. The geographic coordinate is 15 00 N and 100 00 E. The total area is 514,000 km<sup>2</sup> including the land 511,770 km<sup>2</sup> and water 2,230 km<sup>2</sup>. It is bordered by Myanmar 1,800 km, Cambodia 803 km, Laos 1,754 km, Malaysia 506 km. The climate is tropical. The rainy season is during middle May to September and the winter season is dry and cool during November to middle March). The southern part of Thailand is always hot and humid

Thailand terrain is generally composed of a central plain with Khorat Plateau in the east and mountains elsewhere. The lowest elevation is Gulf of Thailand 0 m and the highest elevation is Doi Inthanon 2,576 m. The natural resources include tin, rubber, natural gas, tungsten, tantalum, timber, lead, fish, gypsum, lignite, fluorite. Agricultural lands and irrigation land is 49,860 km<sup>2</sup> which covers 27.54% with the permanent crops 6.93%.

##### **1.1.3 Population**

The population of Thailand is 64,631,595, estimates for this country explicitly take into account the effects of excess mortality due to AIDS; this can result in lower life expectancy, higher infant mortality and death rates, lower population and growth rates, and changes in the distribution of population by age and sex than would otherwise be expected.

**TABLE 1. POPULATION INFORMATION**

							<b>Average annual growth rate (%)</b>
<b>Year</b>	<b>1970</b>	<b>1980</b>	<b>1990</b>	<b>2000</b>	<b>2010</b>	<b>2013</b>	<b>2000 to 2013</b>

<b>Population (millions)</b>	35.56	46.96	56.3	61.88	63.88	64.79	0.35%
<b>Population density (inhabitants/km<sup>2</sup>)</b>	69.32	91.54	109.75	120.62	124.52	126.27	0.35%
<b>Urban Population as % of total</b>	-	26.4	29.4	31.1	44.1		NA

Source: NESDB ([www.nesdb.go.th](http://www.nesdb.go.th))

#### 1.1.4 Economic Data

TABLE 2. GROSS DOMESTIC PRODUCT (GDP)

						Average annual growth rate (%)
	1980	1990	2000	2010	2011	2000 to 2011
<b>GDP (millions of current US\$)</b>	32,353	85,640	122,725	318,908	345,649	9.33%
<b>GDP (millions of constant 2000 US\$)</b>	37,275	79,360	122,725	187,494	187,639	4.05%
<b>GDP per capita (PPP* US\$/capita)</b>	1,090.081	2,910.226	5,007.070	9,225.881	9,396.242	6.01 %

\* PPP: Purchasing Power Parity

Source: IMF World Economic Outlook Database 2012 ([www.imf.org](http://www.imf.org))

## 1.2 Energy Information

### 1.2.1 Estimated available energy

TABLE 3. AVAILABLE ENERGY SOURCES

	Available energy sources 2013					
	Fossil Fuels			Nuclear	Renewables	
	Solid	Liquid	Gas	Uranium	Hydro	Other Renewable (contract capacity)
<b>Total amount in specific units*</b>	17.98	88	1,481.71	NA	3,436	318
	Million tons	Million bbls	Billion scf		MW	MW
<b>Total amount in Petajoule (PJ)</b>	196.18	490.92	1,537.94	NA		

Source: Fossil Fuels- Energy Statistics of Thailand 2012 by Energy Policy and Planning Office  
Renewables- Electricity Generating Authority of Thailand

### 1.2.2 Energy Statistics

TABLE 4. ENERGY STATISTICS

Unit: Petajoule					Average annual growth rate (%)
	1990	2000	2010	2013	2000 to 2013
<b>Energy consumption**</b>					
- Total	1,254.84	2,403.71	3,758.89	4,213.91	4.41
- Solids***	163.42	330.14	653.81	659.13	5.46
- Liquids	806.63	1,212.85	1,375.57	1,537.08	1.84
- Gases	236.90	795.40	1,653.26	1,921.68	7.02
- Nuclear					
- Hydro	47.90	65.32	76.25	96.02	3.01
- Other Renewables	-	-	-	-	
<b>Energy production</b>	-	-	-	-	
- Total	518.85	1,226.16	2,082.17	2,275.69	4.8
- Solids***	149.77	217.05	209.11	196.18	-0.84
- Liquids	86.71	220.95	492.99	490.92	6.26
- Gases	236.90	733.52	1,330.01	1,537.94	5.79
- Nuclear					
- Hydro	45.47	54.64	50.06	50.65	-0.65
- Other Renewables	-	-	-	-	
<b>Net import (Import - Export)</b>					
- Total	741.31	1,434.36	2,109.54	2,360.72	3.84

\*\* Energy consumption = Primary energy consumption + Net import (Import - Export) of secondary energy.

\*\*\* Solid fuels include coal, lignite

Source: Energy Policy and Planning Office

### 1.2.3 Energy Policy

Thailand's energy policy was delivered by P.M. Yingluck Shinawatra on August 23, 2011. The main points are as follow:

- Promote and drive the energy sector to generate income for the country. As a strategic industry, investment in energy infrastructure will be increased to make Thailand a regional center for the energy business, building upon the competitiveness of its strategic location.
- Reinforce energy security through development of the electrical power grid and exploration of new and existing energy sources, both in Thailand and abroad. Energy sources and types will also be diversified so that Thailand will be able to meet its energy needs from a variety of sustainable energy sources.
- Regulate energy prices to ensure fairness as well as reflect the production costs by adjusting the role of the Oil Fund into a fund which ensures price stability. Subsidies will be available for vulnerable groups.
- -The use of natural gas in the transport sector will also be promoted, while the use of gasohol and biodiesel will be promoted for use in the household sector.

- Support the production, use, research and development of renewable and alternative energy sources, with the objective of replacing 25% of the energy generated by fossil fuels within the next decade. Comprehensive development of the energy industry will also be promoted.
- Promote and drive energy conservation through the reduction of power usage in the production process by 25 % within the next two decades. The use of energy efficient equipment and buildings will be promoted, while Clean Development Mechanisms (CDM) will be used to reduce emission of Green House Gases and tackle global climate change. Systematically raise consumer awareness to use energy efficiently in order to conserve power in the production and transport sectors, as well as in the household.

### 1.3 The Electricity System

#### 1.3.1 Electricity policy and decision making process

Electricity Authority of Thailand (EGAT) formulated a national power development plan for the period of 2010-2030, known as PDP 2010, within the framework of the Ministry of Energy's policies. This PDP is dubbed the "green" PDP as it incorporates more green energy into the plan. It replaces the former PDP 2007 plan and its revisions. The plan was first approved by the National Energy Policy Council (NEPC) and the Cabinet in November, 2010. After the Fukushima Nuclear Power Plant Accident, the plan has been revised twice. The third and current (as of March 2013) revision was approved by the Cabinet in June, 2012. The plans have been used as a guideline for planning the construction of EGAT's new power plants, power purchase from independent power producers (IPPs), small power producers (SPPs) and neighbouring countries, as well as transmission system development to accommodate those new power capacities. According to the current revision of PDP2010, the net additional capacity during 2012-2030 is 55,130 MW (this amount includes the additional capacity from new power plant projects and some power purchased from SPPs and VSPPs). When adding the net additional into the current installed capacity as of December 2011 subtracting the capacity of retired power plant from the system, the total installed capacity becomes 70,686 MW in 2030.

The strategies of PDP 2010 focused on

- Security and adequacy of power system following the policies of the Ministry of Energy (MoEN) on environmental concerns;
- Promotion of energy efficiency and renewable energy to be in line with the Energy Efficiency Development Plan (EE Plan 2011-2030) and the Alternative Energy Development Plan (AEDP 2012 - 2021);
- Promotion of cogeneration system as the efficient electricity generation.

#### 1.3.2 Structure of electric power sector

Thailand has adopted the enhanced single buyer model (ESB) in which EGAT is the sole buyer of electricity as shown in Figure 1. In the generation system, EGAT is in charge of a dominant electricity supply which presently owns approximately 47% (as of December 2011) of total power plants capacity in the country and the rests are owned by private power companies in three categories; Independent Power Producers (IPPs), Small Power Producers (SPPs), Very Small Power Producers (VSPPs). In addition to the electricity generation and acquisition, EGAT is also

responsible for the country's transmission system as well as national and regional control centers. There are two distributing utilities in the Thai electricity system, namely the Metropolitan Electricity Authority (MEA) and the Provincial Electricity Authority (PEA). The MEA is responsible for the distribution, sales and provision of electric energy services in Bangkok Metropolis, Nonthaburi and Samut Prakran provinces and the PEA serves the rest of the area in the country.

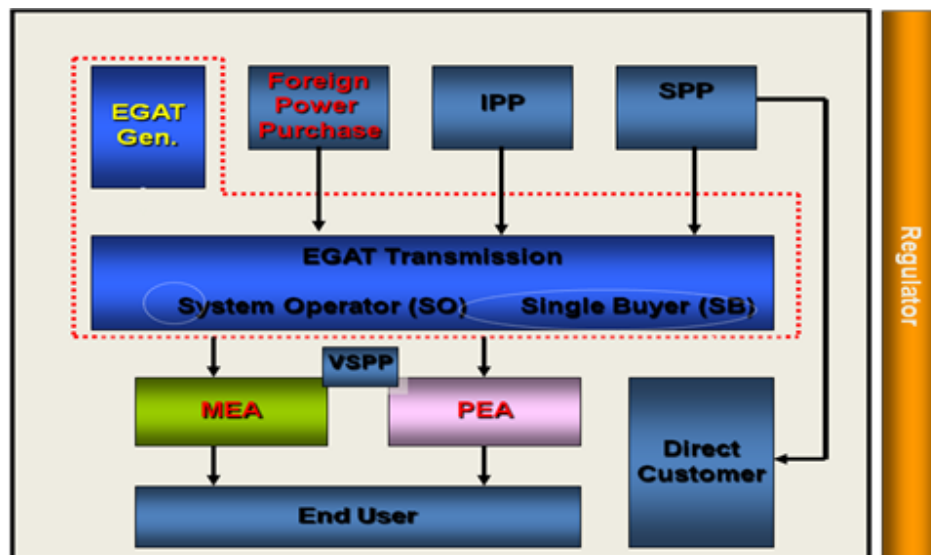


FIG 1. Enhanced Single Buyer Model

### 1.3.3 Main indicators

TABLE 5. ELECTRICITY PRODUCTION, CONSUMPTION AND CAPACITY

	1970	1980	1990	2000	2010	2013	Average annual growth rate (%) 2000-2013
<b>Capacity of electrical plants (MWe)</b>							
- Thermal-EGAT	519	1,977	5,755	12,964	11,569.40	11,569.40	-0.87
- IPP				3,456	12,152	12,742	10.56
- SPP				1,433	2,182	3,525	7.17
- Hydro	451	1,269	2,236	2,880	3,488	3,436	1.37
- Purchased				340	1,588	2,405	16.24
- Nuclear							
- Renewable and other				0.53	29	318	63.57
- Total	970	3,246	7,992	21,073.53	31,008.40	33,995.40	3.75
<b>Electricity production (GWh)</b>							
- Thermal-EGAT	2,518	12,347	37,614	61,213.76	65,906.59	66,718.07	0.66

	1970	1980	1990	2000	2010	2013	Average annual growth rate (%) 2000-2013
<b>Capacity of electrical plants (MWe)</b>							
- IPP				18,212.92	74,448.13	77,928.52	11.83
- SPP				10,175.54	13,897.30	22,608.15	6.33
- Hydro-EGAT	1,577	1,653	4,858	5,891.44	5,325.20	5,390.33	-0.68
- Nuclear							
- Renewable and other				527	2,266	3,238	14.99
- Purchased		753	717	2,966.25	7,253.78	13,200	12.17
- Total	4,095	14,754	43,190	98,986.91	169,097	189,083.07	5.10
<b>Total Electricity consumption (GWh)</b>	3,805	13,601	38,203	88,021	149,320	164,341	4.92

Electricity transmission losses are not deducted.

Source: EPPO, EGAT

TABLE 6. ENERGY RELATED RATIOS

	1990	2000	2010	2013
<b>Energy consumption per capita (GJ/capita)</b>	22.29	38.84	58.84	65.04
<b>Electricity consumption per capita (kWh/capita)</b>	678.56	1,418	2,337.51	2,536.52
<b>Electricity production/Energy production (%)</b>	29.97	28.41	29.24	29.91
<b>Nuclear/Total electricity (%)</b>				
<b>Ratio of external dependency (%) (1)</b>	59.07	59.67	56.12	56.02

(1) Net import / Total energy consumption.

\* Latest available data

Source: EGAT, EPPO

## 2. NUCLEAR POWER SITUATION

### 2.1 Historical development and current organizational structure

#### 2.1.1 Overview

Thailand first considered a nuclear power plant in 1966. The option to build a 600 MW BWR at Aow Pai, Chonburi Province was explored. However, after the discovery of natural gas in the Gulf of Thailand in 1978, the project was postponed indefinitely.

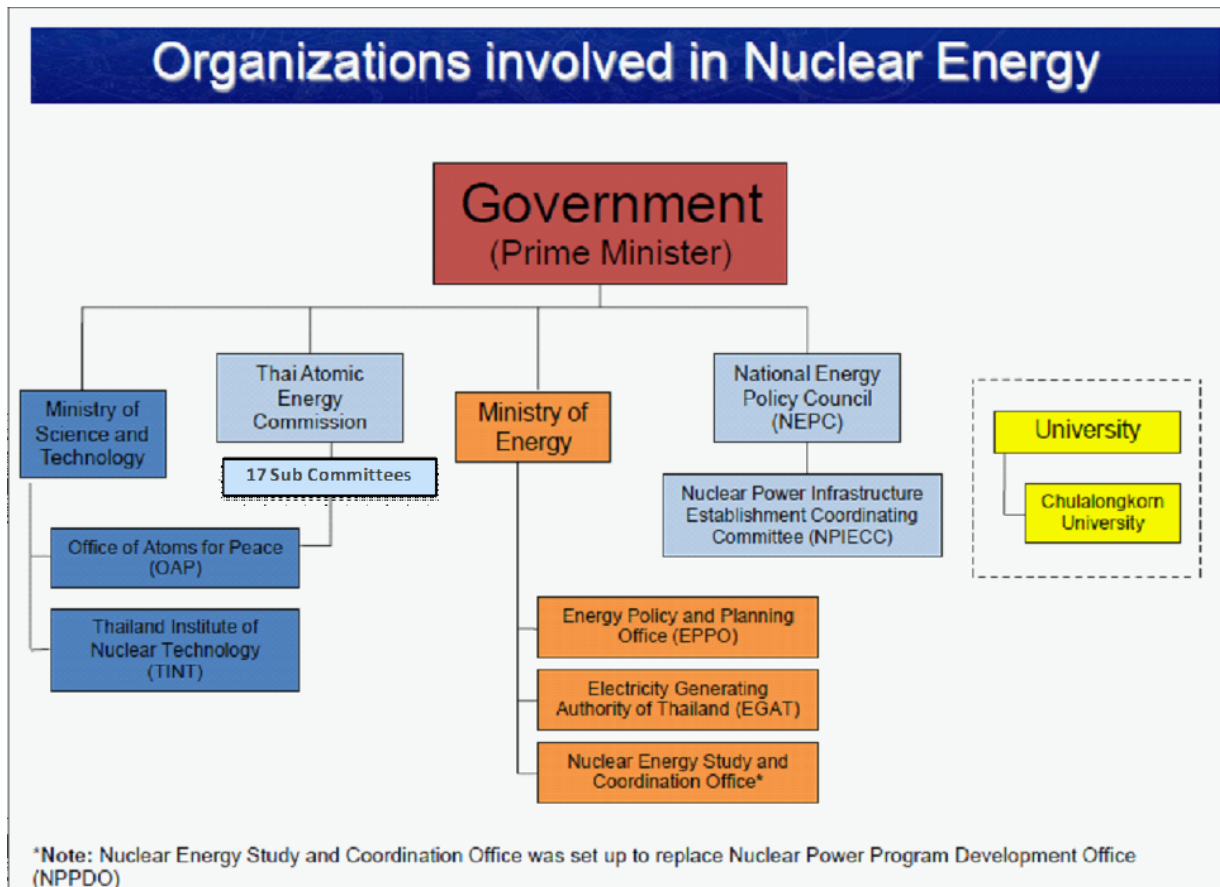
In 2007, nuclear power was reintroduced again in the PDP 2007 and in the superseding PDP 2010. The PDP 2010 originally included 5,000 MW of nuclear power, 5 plants of 1000 MW each, in the first revision.

In 2007, The National Energy Policy Council (NEPC) appointed the Nuclear Power Infrastructure Preparation Committee (NPIPC) and the Nuclear Power Program Development Office (NPPDO) to prepare nuclear power infrastructure establishment plans (NPIEP) and a nuclear utility plan. From 2008 to 2011, Thailand worked in the pre-project phase and conducted a feasibility studying including selection of preferred sites. Self-evaluation on 19 issues of national nuclear infrastructure was also performed, and by the end of 2010, the IAEA had conducted the Integrated Nuclear Infrastructure Review (INIR) Mission in Thailand. The results from the self-evaluation and INIR Mission suggested that Thailand was ready to make a knowledgeable commitment on nuclear power. However, there are several major gaps that should be addressed to continue overall progress in developing an appropriate national nuclear power infrastructure. In near term, the Government should make a concrete commitment for safe, secure, and peaceful implementation of nuclear power. The national nuclear legislations and regulations are needed to be enhanced to comply with international legal instruments. Also, the details of human resource development plan (HRDP) are required for supporting the nuclear power project.

In early 2011, a “readiness report” was submitted for the government to make the decision to “Go Nuclear.” However, after the accident at Fukushima Daiichi Nuclear Power Plants in March 2011, the government announced that the decision to continue with the project was postponed for 3 years, and later changed to 6 years. The PDP 2010 was revised, and nuclear power was reduced to 2,000 MW. The decision to go nuclear will be reconsidered again in 2017, and if the project is continued, the first nuclear power plant will be expected to be in operation in 2026.

#### 2.1.2 Current organizational chart(s)

EGAT, under the Ministry of Energy, will be the operator of nuclear power plants. The Office of Atoms for Peace under the Ministry of Science and Technology currently was chartered as regulatory body for all activities on radioactive sources and nuclear energy.



*FIG 2. Chart of nuclear organizations*

## 2.2 Nuclear power plants: Overview

Not applicable.

## 2.3 Future development of Nuclear Power

### 2.3.1 Nuclear power development strategy

The Nuclear Power Infrastructure Establishment Plan was put forth in 2007. The Nuclear Power Programme Implementation was commenced and planned for the operation of the first nuclear power plant in 2020, which was later postponed to 2026. The project was divided into 4 phases.

#### *Phase 1 Pre-project Activities (2008-2010)*

- Set up NPPDO
- Infrastructure work started
- Survey of potential sites
- Feasibility study completed
- Public information and participation



Phase 1 was completed, but the project was put on hold to re-evaluate safety of nuclear power and promote public acceptance. If the government decides to Go Nuclear in 2017, the following phases will take place.

*Phase 2 Programme Implementation (2017-2019)*

- Fully establish regulatory system for NPP
- Legislation and international protocol enacted
- Prepare to call for bids
- Suitable site selected for bidding
- Technology/qualified suppliers selected

*Phase 3 Construction Phase (2020-2025)*

- Bidding process completed
- Design and engineering
- Manufacturing
- Construction and installation
- Test runs and installation
- NPP commissioning license

*Phase 4 Operation Phase (2026)*

- Operation and maintenance
- Planning for expansion
- Industrial and technology development plan

TABLE 7. PLANNED NUCLEAR POWER PLANTS

Station/project name	Type	Capacity (MW)	Expected Construction Start Year	Expected Commercial Year
EGAT Nuclear Power Plant #1	LWR	1,000	2020	2026
EGAT Nuclear Power Plant #2	LWR	1,000	2021	2027

2.3.2 Project management

Ministry of Energy and EGAT are the main organizations responsible for the preparation and construction of the nuclear power plants.

2.3.3 Project funding

Not Applicable.

2.3.4 Electric grid development

EGAT develops, owns and operates the national transmission. The current grid system covering the entire country mainly operates at 500 kV, 230 kV and 115 kV voltages. The power system

operation is divided into five geographical areas: metropolitan, central, northeastern, southern and northern regions. From the National Control Center based at EGAT's Headquarters and other five regional control centers, EGAT plans, operates and controls the least cost dispatch of generated power from its power plants as well as from private power plants to load centers via its high voltage transmission lines. The grid system is presently linked to Laos by 115 kV and 230 kV lines and to Malaysia by 115 kV, 132 kV and the new 300 kV HVDC lines. In support of the Pre-Feasibility Study 2010 for the nuclear power plant project, the Transmission System Impact Study was performed for the selected site at the time when the nuclear power plant will be built. The study analyses were done to ascertain the impact of new nuclear power plant units on the performance and reliability of the existing transmission grid system and the requirements for reinforcement.

#### **2.3.5 Site Selection**

EGAT has started a site survey. A consultant company has been engaged in surveying, collecting data and ranking the candidate sites. Originally, 17 sites were selected as potential sites. The surveys were conducted on engineering, economic and environmental aspects. The site for the first NPP has not yet been finalized due to public acceptance in the area.

#### **2.4 Organizations involved in construction of NPPs**

EGAT will undertake construction of NPP. It will be a turn-key project based on open bidding.

#### **2.5 Organizations involved in operation of NPPs**

EGAT will be the operator.

#### **2.6 Organizations involved in decommissioning**

EGAT will be the main organization to conduct the decommissioning of the NPPs. OAP as the regulatory body will approve the decommissioning plan, regulate and inspect the activities carried out by the EGAT until the plants are released from regulatory control.

#### **2.7 Fuel cycle including waste management**

Thailand does not have significant uranium deposits, so the uranium fuels will be imported. Currently, all radioactive wastes from industrial, medical and research facilities are managed by TINT. However, they are only low-level and intermediate-level wastes. The interim storage for high-level waste and spent nuclear fuels from NPP will be managed by EGAT. The long-term strategy for spent nuclear fuel has not been determined. The present intention is to store on-site until appropriate technologies are available.

## **2.8 Research and development**

### 2.8.1 R&D organizations

TINT and universities teaching nuclear sciences, technology and engineering or physics will conduct the R&D related to NPPs. OAP will also conduct research important to nuclear safety and regulatory functions.

### 2.8.2 Development of advanced nuclear technologies

Not applicable.

### 2.8.3 International co-operation and initiatives

Following is a list of national, regional, interregional activities related to the nuclear power program under the IAEA Technical Cooperation that are effective and active in terms of project implementation:

1. THA/0/011 Strengthening Nuclear Science and Technology Education
2. THA/0/012 Acquiring Regulatory Expertise in Preparation for the First Nuclear Power Plant and for a Research Reactor
3. THA/0/013 Supporting the National Nuclear Engineering Education Center
4. THA/2/014 Technical Support for Upgrading/Establishment of Infrastructure for Introduction of Nuclear Power
5. THA4015 Upgrading/Establishing the Infrastructure Required for the Introduction of Nuclear Power
6. RAS/0/047 Supporting Web-Based Nuclear Education and Training through Regional Networking
7. RAS/0/056: Providing Legislative Assistance
8. RAS/4/029 Strengthening Nuclear Power Infrastructure and Planning
9. RAS/7/016 Establishing a Benchmark for Assessing the Radiological Impact of Nuclear Power Activities on the Marine Environment in the Asia-Pacific region
10. RAS/9/042 Sustainability of Regional Radiation Protection Infrastructure
11. RAS/9/050 Education and Training in Support of Radiation Protection Infrastructure
12. RAS/9/054 Strengthening National Regulatory Infrastructures
13. RAS/9/056 Strengthening Capabilities for Protection of the Public and the Environment from Radiation Practices
14. RAS/9/057 Strengthening National and Regional Capabilities for Response to Radiological and Nuclear Emergencies
15. RAS/9/059: Strengthening Nuclear Regulatory Authorities in the Asia and the Pacific Region
16. RAS/9/060 Developing Human Resources in Nuclear Security
17. Cooperation between EGAT and Japan Atomic Power Company (JAPC)

18. Cooperation between EGAT and China Guangdong Nuclear Power Holding Co., Ltd (CGNPC)
19. Cooperation between EGAT and GDF-SUEZ
20. Cooperation between EGAT and Korean Electric Power Corporation (KEPCO)

## **2.9 Human resources development**

OAP and EGAT have developed their respective human resources development plans to prepare personnel for the nuclear power program.

OAP's approaches are to improve the competency of current staff and recruit new staff in the needed expertise areas. OAP regulates a research reactor, so staffs are familiar with nuclear technology. The needs to expand and acquire more knowledge to accommodate nuclear power are recognized. Scholarships have been granted to both staff and new recruits to study overseas in nuclear-related fields. There also international and bilateral collaborations with the IAEA and nuclear-advanced countries to provide training courses necessary for nuclear power regulatory activities. OAP has also conducted Systematic Assessment of Regulatory Competence Needs (SARCON) to find and fill the gaps in HRD needs.

EGAT has developed a detailed HRDP. The human resources will mainly come from the current manpower pool at EGAT. The company has training plans to improve competency of the staff in nuclear engineering and technologies. The plan also includes recruitment of more nuclear specialists. After the bidding process, EGAT could get more training for the staff and recruits through international consultants and/or the Engineering, Procurement and Construction (EPC) vendors.

With no clear direction on the future of nuclear energy, not many universities have established a specific program for nuclear sciences and nuclear engineering. The most prominent existing program is at Chulalongkorn University's Nuclear Engineering Department. The program offers nuclear engineering degrees in graduate levels with a plan to expand to an undergraduate level in the near future.

## **2.10 Stakeholder Communication**

Public awareness and understanding is mainly conducted by OAP, EGAT, TINT, and universities for general public, media, teachers, and students. A number of activities have been arranged to involve stakeholders in nuclear activities in Thailand such as visiting the nuclear research reactor and related facilities. Representatives from local areas, opinion leaders, and government officials visited nuclear power plants in operating countries. Since the accident at Fukushima Daiichi Nuclear Power Plants, the public has lost confidence in safety of nuclear power, and it has become a major challenge to regain the confidence. A public information programme has been conducted to provide the facts of the accident and to address public concerns.

### **3. NATIONAL LAWS AND REGULATIONS**

#### **3.1 Regulatory framework**

##### 3.1.1 Regulatory authority(s)

The Atomic Energy for Peace Act 1961 established Thai Atomic Energy Commission for Peace (Thai AEC). The AEC is the regulatory authority of Thailand, issuing licenses and regulating facilities and activities on radiation and nuclear issues. The OAP acts as the secretariat of the AEC and the Secretary-General of OAP is the secretary of the Commission.

##### 3.1.2 Licensing Process

The licensing process of nuclear installations is not specified in the main law, the 1961 Act. However, it was considered that the licensing process shall include all stages of the NPPs lifecycle including site evaluation, design, construction, commissioning, operation, decommissioning and release from regulatory control.

During the licensing process, the regulatory body shall conduct regulatory reviews, assessments, and inspections to ensure that the applicant or licensee complies with licensing and design bases including safety analyses, regulations, and safety criteria.

#### **3.2 Main national laws and regulations in nuclear power**

The OAP is in a process of drafting a new Atomic Energy Act. The new act will base upon the IAEA Handbook of Nuclear Law in order to reflect all stages of the licensing process and to comply with necessary international legal instruments. The effective laws and regulations at the moment are as follows.

- Atomic Energy for Peace Act (1961);
- Ministerial Regulations (2007) prescribing the conditions, procedures for license application and implementation in connection with special nuclear materials, source materials, by-products or atomic energy;
- Ordinance, Guidance and Procedures issued by OAP

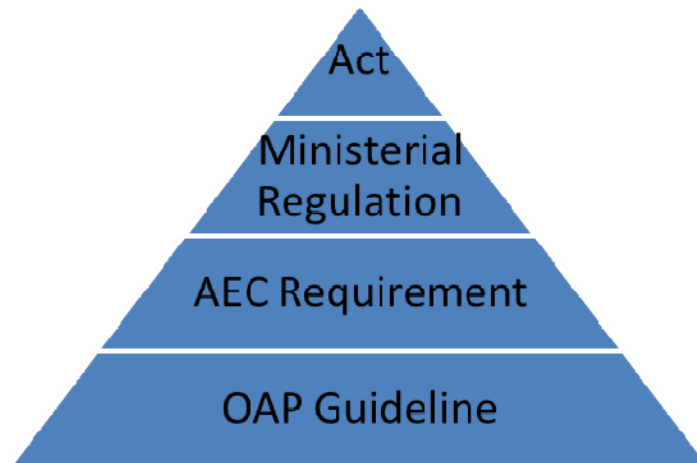


FIG 3. Hierarchy of Thai legislations

## REFERENCES

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2. Office of the Atoms for Peace (OAP), *Progress Report 2012*.
3. Office of Atoms for Peace (OAP), *Atomic Energy Acts and Ministerial Regulation*, 2007.
4. Ministry of Energy, *Power Development Plan 2007 (PDP 2007)*.
5. Ministry of Energy, *Power Development Plan 2010 Revision 3, approved 19 June, 2012*.
6. Energy Policy and Planning Office (EPPO), *Energy Statistics of Thailand 2012*.
7. Electricity Generating Authority of Thailand (EGAT), *Annual Report 2012*.

## APPENDIX 1: INTERNATIONAL, MULTILATERAL AND BILATERAL AGREEMENTS

Thailand is party to and/or has signed:

- Treaty on the Non-Proliferation of Nuclear Weapon (NPT) (signed and ratified in 1972)
- Comprehensive Safeguards Agreement (signed and ratified in 1974)
- Convention on Early Notification of a Nuclear Accident (signed in 1987 and ratified in 1989)
- Convention on Assistance in the case of a Nuclear Accident or Radiological Emergency (signed in 1987 and ratified in 1989)
- Comprehensive Nuclear-Test Ban Treaty
- The South East Asia Nuclear-Weapon-Free-Zone Treaty (signed and ratified in 1995)
- The International Convention for the Suppression of Acts of Nuclear Terrorism (signed in 2005)

To formalize nuclear safety measures, Thailand would join or sign the following conventions in the near future;

- Convention of Nuclear Safety
- Convention of Physical Protection
- Joint Convention on the Safety of Spent Fuel Management and on the Safety of Radioactive Waste Management
- Convention on Supplementary Compensation for Nuclear Damage
- Vienna Convention on Civil Liability for Nuclear Damage and Joint Protocol Relating to the Application of the Vienna Convention and the Paris Convention
- Convention on Third Party Liability in the Field of Nuclear Energy and Convention of 31st January 1963 Supplementary to the Paris Convention

## **APPENDIX 2: MAIN ORGANIZATIONS, INSTITUTIONS AND COMPANIES INVOLVED IN NUCLEAR POWER RELATED ACTIVITIES**

- Ministry of Energy [www.energy.go.th](http://www.energy.go.th)
- Ministry of Science and Technology [www.most.go.th](http://www.most.go.th)
- Ministry of Foreign Affairs [www.mofa.go.th](http://www.mofa.go.th)
- EPPO [www.eppo.go.th](http://www.eppo.go.th)
- EGAT [www.egat.co.th](http://www.egat.co.th)
- OAP [www.oaep.go.th](http://www.oaep.go.th)
- Chulalongkorn University [www.chula.ac.th](http://www.chula.ac.th)
- TINT [www.tint.or.th](http://www.tint.or.th)

<b>Name of report coordinator:</b>	Mr. Pongkrit SIRIPIROM
<b>Institution:</b>	Office of Atoms for Peace (OAP)
<b>Contacts:</b>	16 Vibhavadi Rangsit Road, Chatuchak  Bangkok 10900, Thailand  E-mail: <a href="mailto:pongkrit@oaep.go.th">pongkrit@oaep.go.th</a>