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“Thailand’s Nuclear Program”

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Thailand's Nuclear Program

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World Map



Nuclear Energy Development in Thailand

- 1954 : Thai Atomic Energy Commission was initiated.
- 1961 : Atomic Energy for Peace Act was enacted.
- 1961 : Office of Atomic Energy for Peace was established.
- 1966 : Nuclear Electricity Sub-committee was set up.
- 1976 : Cabinet approved NPP 600 MW.
(the project was opposed by public)
- 1984-88 : Economic aspect of NPP was studied with support from IAEA.
- 1992-96 : NPP policy was put in the National Development Plan 7.
- 1997 : Study for NPP in Thailand was re-initiated,
NPP are not suitable during economic crisis.
- 2002 : Restructuring into Office of Atoms for Peace .

Roles of Office of Atoms for Peace (2002)

- **Regulatory Body for Safety of Users & Operators.**
(Radiation Safety & Nuclear Safety, Including NPP)
-
- **Research & Development of
Nuclear Technology & Utilization.**
- **Co-ordination Role in Nuclear Science & Technology.**
(will be separated to the Public Agency)

Nuclear Energy for National Development (1)

User Statistics

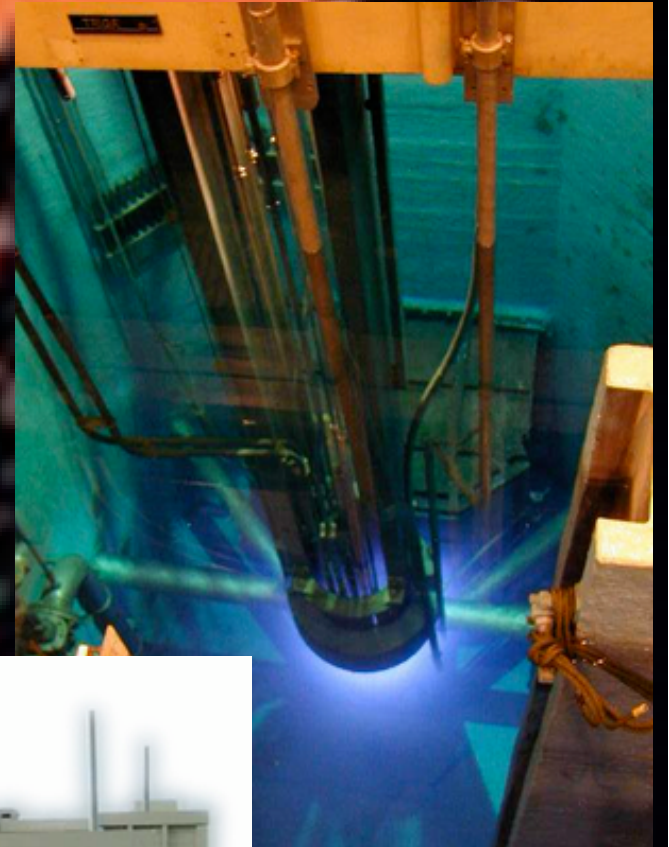
Medicine	100	Institutes
Education	150	Institutes
Industry	267	Factories

Lightning Arrestors	333	Sets
Smoke Detectors	959	Sets
Electrostatic Eliminators	4,000	Sets
X-ray Machines	6,500	Sets

Nuclear Energy for National Development (2)

Main Nuclear Facilities

- ⌚ 2 MW Thai Research Reactor:TRR1/M1
- ⌚ (10 MW TRR 2)
- ⌚ Gamma Irradiators(^{60}Co)
- ⌚ Electron Beam Accelerators(10-40 MeV)
- ⌚ Synchrotron(1 GeV)
- ⌚ Neutron Generators
- ⌚ Radioactive Sources

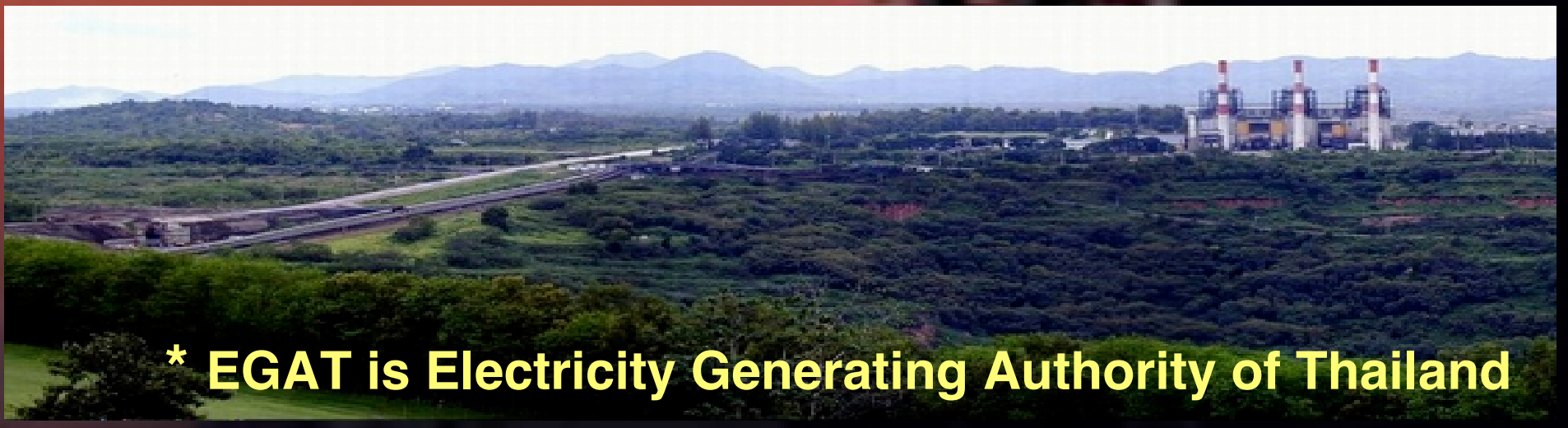


Energy Generation in Thailand (2002)

 **Installed Capacity : 23,754 MW**

 **EGAT*** : 15,000 MW (63%)

 **Private Producers** : 8,754 MW (37%)



*** EGAT is Electricity Generating Authority of Thailand**

Natural Resources of Electricity Generation

- **Gross Energy Generation 108,389 M-kWh**

EGAT's Power Plant	M-kWh	%
- Natural Gas	35,607	33.80
- Lignite	16,890	15.58
- Hydro	6,480	6.00
- Fuel Oil	2,024	1.82
- Diesel Oil & etc.	257	0.24
Subtotal	61,264	57%
Purchase	47,410	43%

Current Status of Nuclear Program (1)

- FS: The consideration on NPP is postponed to the next 5 years from 2003.
- Siting, EGAT - 4 candidate sites were selected.
- EIA Studies to be pursued.
- Nuclear Regulatory Body was established.
- Nuclear Legislation has been prepared.

Current Status of Nuclear Program (2)

Human Resource Development

In nuclear field has been delayed owing to the uncertainty of nuclear policy.

Public Understanding / Public Acceptance

People must be educated about nuclear.

Safety Control & Waste Management

Government must ensure these aspects to public.

Nuclear Energy Prospective for Thailand (1)

- **Within the next 10 years, increased confidence in economical and safe operation of nuclear plants will likely be demonstrated and recognized. This in turn will also increase confidence in nuclear waste disposal.**
- **Natural Resource (Gas, Lignite) have been diminished.**

Nuclear Energy Prospective for Thailand (2)

- **As the concern over the global climate change grows in magnitude, nuclear power become an environmentally desirable source of energy.**
- **Nuclear energy should remain as an option in the long-term energy strategies.**




Nuclear Society of Thailand; NST

 **Established 1993**

 **Objectives**

- 1) Promoting the peaceful uses of nuclear energy**
- 2) Providing interdisciplinary forum**
- 3) Dissemination of nuclear technology information**

 **Members (2002) 700**

**Academies, Research Centers, Power Industries,
Authorities, Nuclear Medicine, and etc.**



NST Supporters

MOST	=	Ministry of Science and Technology
NRC	=	The National Research Council
COSTAT	=	The Council of Scientific and Technological Associations of Thailand
EGAT	=	Electricity Generating Authority of Thailand



NST Activities (1)

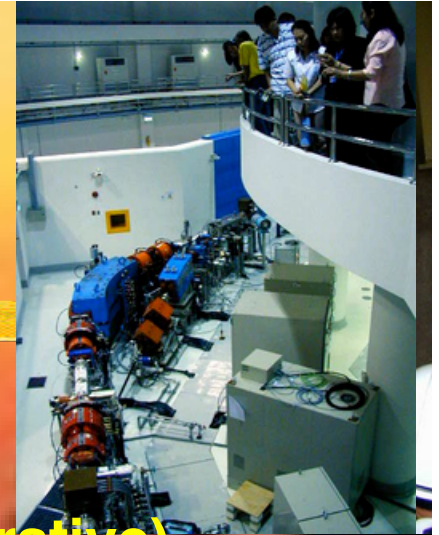
1. Academic Affairs

1.1 Conferences (Annual , Cooperative)

1.2 Exhibition (Science Week, Thai Tech., Univ.)

1.3 Training & Workshop

1.4 Publication (Journal, Articles)



2. Excursion / Tour of Energy in Thailand.

2.1 Power Industries (Gas, Oil, Coal, Hydro)

2.2 Nuclear Energy (Reactor, Accelerator)





NST Activities (2)



3. Public Information

3.1 Printed Matter (Newsletter, Pamphlet)

3.2 VDO (Nuclear Series)

3.3 Radio/TV Program

3.4 Press Release

3.5 Web site

(www.geocities.com/nuclearthai)

4. Interdisciplinary Forum

- Coordinating with Societies

สมาคมนิวเคลียร์แห่งประเทศไทย
Nuclear Society of Thailand

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วิสัยทัศน์
คณะกรรมการ
กิจกรรม
วิชาการ
เอกสารเผยแพร่
สมาชิก
ข่าว
อามปัญหา
Link

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Maehongsorn province
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Water fall
Trang province
Thailand



Constitution Monument Thailand



Royal Barge Thailand





ขอบคุณครับ

*Thank you
for your kind attention*