



A Brief Country Report: Nuclear Energy Development, Recent Issues/ Concerns and Public Information Activities on Nuclear Energy in the Philippines

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Nuclear Energy Development

- 1955** - Philippine government signed a bilateral agreement with the United States on peaceful uses of nuclear energy
- 1958** - Nuclear energy development officially started with the creation of the Philippine Atomic Energy Commission



Nuclear Energy Development

- PAEC is now known as the Philippine Nuclear Research Institute or PNRI
- PNRI is tasked with the dual role of promoting, as well as regulating the peaceful applications of nuclear energy





Nuclear Energy Development

PNRI has been harnessing nuclear energy in the Philippines in many fields such as in

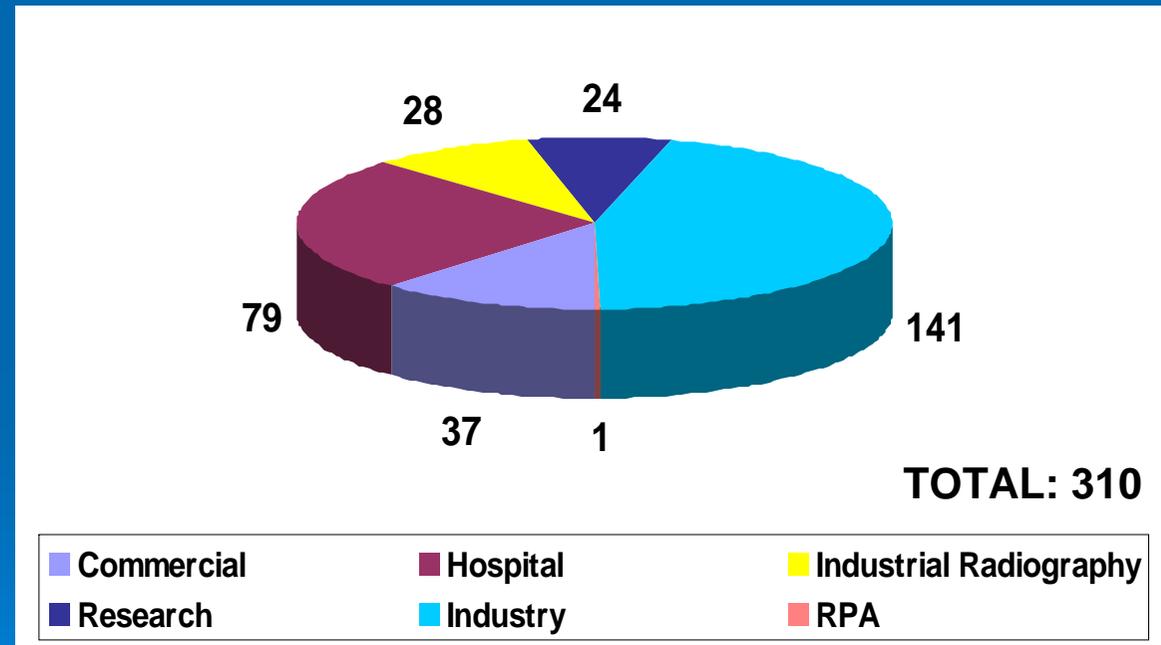
- Agriculture
- Health
- Industry
- Research
- Environment





Nuclear Energy Development

PNRI has been regulating the peaceful uses of nuclear energy in the country



Distribution of Licensed Users According to Classification as of December 2004



Nuclear Energy Development

The Nuclear Power Program

- 1960s** - Start of nuclear power program in the Philippines
- 1979** - Start of construction of the nuclear plant
- 1985** - BNPP was completed
- 1986** - BNPP was mothballed



Nuclear Energy Development

- Philippine Energy Plan (2003 – 2013) does not project the inclusion of nuclear energy in the energy mix
- Long -term Philippine Energy Plan, covering 1996 -2025, presented a window of opportunity for the nuclear power option to come in beyond 2020



The Long Term Philippine Energy Plan

The 30-year Philippine Energy Plan says that “In spite of the intensified efforts to tap indigenous energy sources, **the rapidly rising energy requirements would necessitate the higher use of imported energy**, such as oil and coal starting 2001 and **possibly nuclear beyond 2020, after conducting full blown information campaign on the merits of nuclear as an energy option**”.



Public Perception on Nuclear Energy

- The BNPP, Three Mile Island incident and Chernobyl accident generated negative perceptions and attitude in the Filipino public towards nuclear energy.
- Negative attitude can be attributed to the lack of knowledge about radiation and nuclear energy



Recent Nuclear-Related Issues/Concerns

- Keeping open the nuclear option for securing energy supply and environmental protection

MONDAY, AUGUST 22, 2005

Energy options include diplomacy, nuke power

WITH ECOLOGICAL PRICES CONTINUALLY hitting record highs, the government appears bent on looking at any and all options to mitigate the shock to the economy.

Conservation efforts have been ordered and alternative fuels are now on offer. One of the latest options on offer, however, may come as a surprise: nuclear power.

A more workable proposal, meanwhile, is that of "oil diplomacy". Among others, this means the Association of Southeast Asian Nations (ASEAN) making representations with the Organization of Petroleum Exporting Countries (OPEC) for preferential rates.

Indonesia, an ASEAN founding member, is also a full member of the OPEC cartel. The Philippines is currently ASEAN vice-chair and will assume the chairmanship next year.

Foreign Affairs Sec. Alberto G. Romulo also said he has instructed Filipino ambassadors

and diplomats worldwide to initiate oil diplomacy in a bid to obtain preferential rates from oil-rich countries.

"This will be the Department of Foreign Affairs' contribution to the government's efforts at increasing our supply of oil. Either we can get lower importation rates or use for ourselves the best practices of other countries in coping with the ballooning price of oil in the world market," he said.

Former Socioeconomic Planning Secretary and now Budget chief Romulo Neri, meanwhile, raised the nuclear option given oil prices having topped \$67 per barrel and \$70 now appearing likely in the coming months.

"If oil prices keep going up at this pace, then nuclear power becomes an option," Mr. Neri said in a radio interview yesterday. "I am not saying we should do it, but we should explore it," he later told *BusinessWorld* but did not provide specifics.

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Nuclear power & bicycles

PEOPLE generally believe that the oil reserves in Saudi Arabia are vast and practically inexhaustible.

But the fact is that there is only a handful of really huge oil fields out there and the last time they found a big one was decades ago.

So even if the Saudis are pumping at full capacity, the shortage remains and oil prices are ready to climb to heights heretofore said to be unthinkable.

China is considering setting up more than 30 nuclear power plants in the coming years to join France, South Korea, and Japan as nuclear power leaders.

America, nuclear-shy after the Three Mile Island incident involving a malfunctioning nuclear plant, is now preparing to construct new nuclear plants.

That is part of these countries' efforts to reduce dependence on oil. They worry over the world's increasing demand for oil and the poor prospects of big new oil finds.

The Marcos administration tried to reduce dependence on oil in two ways.

One, it contracted Union Oil to construct the geothermal plants in Makiling and Tiwi. We like to boast that we are the second largest geothermal power producer although since Marcos left the scene, no new geothermal plants have gone up.

Two, it built the Bataan nuclear plant. But just when it was ready to go onstream, the Aquino administration came in. It abandoned the Bataan plant for being unsafe and because Westinghouse gave kickbacks. The apprehension over nuclear power remains to this day.

The nuclear plants today are far safer than the old models. Nuclear power is clean as compared to oil-burning or coal-burning plants. Nuclear fuel is practically inexhaustible.

It makes more sense to consider nuclear power than to propose half-baked schemes of oil consumption such as making a reluctant population use bicycles.



Recent Nuclear - Related Issues/Concerns

- Safety and Security of Radioactive Sources

There is a growing concern that terrorist groups can or may have access to radioactive sources and are or maybe planning attacks on nations worldwide.

The Philippines, through the PNRI and other relevant agencies, implements security and safety plans to prevent and combat acts of nuclear terrorism.



Recent Nuclear -Related Issues/Concerns

- Safety and Security of Radioactive Sources

The PNRI has developed the Philippine Action Plan for the Safety and Security of Radioactive Materials

PNRI tackles security of radioactive materials by this nationally adopted strategy which is based on the IAEA Code of Conduct on the Safety and Security of Radioactive Materials



Recent Nuclear-Related Issues/Concerns

The US and Philippine Governments signed an agreement to install special equipment at the Port of Manila to detect hidden shipments of nuclear and other radioactive material. This agreement will further strengthen their work together in the war on terrorism.



DOST Secretary Estrella F. Alabastro and United States Charge d' Affaires Joseph A. Mussomeli during the signing of the Memorandum of Agreement



Public Information (PI) Activities on Nuclear Energy

- Strategies:
 - Conduct of nuclear awareness seminars
 - Guided tour of PNRI facilities
 - Mass media linkages/media relations
 - Participation in national science & technology events such as exhibitions/fairs;
 - Nuclear information promotion and education through print and non-print materials.
 - Linkage with local and international institutions and organizations such as the **Forum for Nuclear Cooperation in Asia (FNCA)**



Public Information (PI) Activities on Nuclear Energy

- FNCA Countries: Australia, China, Indonesia, Japan, Korea, Malaysia, the Philippines, Thailand and Vietnam



The participants to the Public Information Project Leaders Meeting 2003 in Vietnam



Highlights of FNCA Public Information (PI) Activities

- The “Joint Cross-National Questionnaire Survey on the Literacy in Science and Technology and Use of Radiation Among High School Students in Seven FNCA Countries” provides valuable information that are now being used as basis for improving PI strategies and learning resource materials for Filipino students and educators





Highlights of FNCA Public Information (PI) Activities

- Regional Speakers Bureau (RSB) has provided valuable support to national PI events: Atomic Energy Week celebrations and Open Seminars/Lectures during hosting of FNCA seminars/meetings.

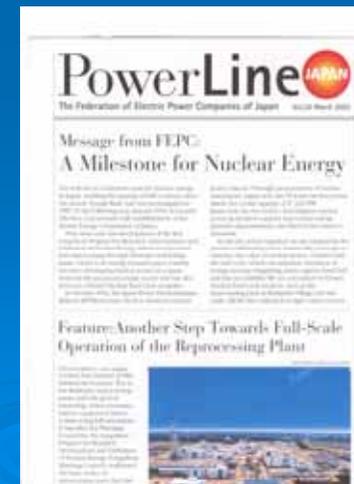


- RSB also provided support to other organizations like the WIN (Women in Nuclear) Global. The PI Project Leaders from the Philippines and Vietnam gave presentations on the PI activities in their countries during the WIN Meeting in Tokyo in 2004.



Highlights of FNCA Public Information (PI) Activities

- FNCA PI website (<http://www.fnca.jp/english/>) and exchange/provision of information materials (such as Atoms in Japan, Power Line, FNCA Newsletters) have also been very useful for obtaining and providing up-to-date and accurate information on nuclear energy related topics in the region.





Thank you !

