

**A BRIEF COUNTRY REPORT:  
Nuclear Energy Development, Recent Issues/Concerns  
and Public Information Activities in the Philippines**

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**Nuclear Energy Development in the Philippines**

The Philippines' involvement in nuclear energy development started when the Philippine government signed a bilateral agreement with the United States on July 27, 1955 under President Eisenhower's Atoms for Peace Program. The country officially started research and development activities on nuclear energy when the Philippine Atomic Energy Commission (PAEC) was created by law in 1958. The PAEC, now known as the Philippine Nuclear Research Institute (PNRI) was mandated to promote and regulate the peaceful applications of nuclear energy in the country. Since the creation of the PNRI, nuclear science and technology has been harnessed in the country in many fields such as food and agriculture, health and medicine, research, environment and industry. These beneficial applications have also been regulated by PNRI for the safety of the Filipino people.

The Philippines also planned to harness nuclear energy for electricity generation in the country. From the early 1960s until the mid 1980s, the nation undertook a nuclear power program which led to the construction of the first Philippine Nuclear Power Plant (PNPP-1), popularly known as the Bataan Nuclear Power Plant (BNPP). However, issues and controversies arose even before the BNPP started operation. A fact-finding mission on the PNPP-1 has categorized the issues surrounding the power plant as those that concern the following: (1) safety, (2) economic viability, and (3) corruption charges against the contractors and suppliers of the plant's equipment on the one hand, and against the former President Marcos' administration, on the other hand. In 1986, a change in government followed by the Chernobyl accident a few months later, led to the mothballing of the 620- megawatt power plant. Incidentally, the utility agency for the BNPP was the National Power Corporation while the PNRI served as its nuclear regulatory agency.

**Public's Perceptions of Nuclear Energy.**

The BNPP and the different issues and concerns frequently raised against nuclear energy such as safety, radioactive waste disposal, and effects to the environment and health of future generations had generated negative perceptions of a majority of the Filipino people towards nuclear energy, especially after the Three Mile and Chernobyl nuclear power plant accidents. Hence, a

majority of the public has not fully appreciated the beneficial aspects of nuclear technology in the Philippines, especially for power generation. To address public issues/concerns on nuclear energy, to increase awareness, and foster a better understanding and appreciation of radiation and nuclear technology applications, the PNRI has been implementing a nuclear information, education and communication program in cooperation with other agencies. Before I mention the components of this program, I would just like to mention two of the recent nuclear-related public issues/concerns in the Philippines which we also address in our nuclear information program. These are concerns for the safety and security of radioactive sources and nuclear power as an energy option in the future.

### **Recent Nuclear-Related Issues/Concerns in the Philippines**

**Nuclear Power as an Energy Option.** In the Philippine Energy Plan for 2004 – 2013, the inclusion of nuclear power in the energy mix has not been projected. But a window of opportunity for the nuclear option has been presented in the long term Philippine Energy Plan covering 1996 -2025. This Plan was drawn up by the Department of Energy in 1992 as a solution to the energy crisis in the late 1980s and early 1990s. The 30-year Plan states 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.”*

With the energy crisis being experienced by the country due to the increasing global oil price, the wisdom of keeping open the nuclear option for securing energy supply and environmental protection has again been pointed out by some sectors in the government. To better inform the Filipinos and improve public understanding of nuclear power as an energy option, the advantages, benefits and other aspects of this technology are discussed in public information dissemination activities of the PNRI.

**Safety and Security of Radioactive Sources.** In the Philippines, there is a now a growing concern that terrorists can and may gain access to radioactive sources that are being used for various peaceful applications and use these materials for malevolent purposes. The Philippines, through the PNRI and other relevant agencies, addresses this concern through the implementation of security and safety plans to prevent and combat acts of nuclear terrorism. The PNRI has developed the Philippine Action Plan for the Safety and Security of Radioactive Materials which is currently implemented as an integral part of the country’s efforts to combat threats to security from weapons of mass destruction. PNRI tackles security of radioactive materials by this nationally adopted strategy based on the IAEA Code of Conduct on the Safety and Security of Radioactive Materials.

## **Public Information (PI) on Nuclear Energy**

To increase awareness and understanding of the public about the various aspects of nuclear energy, the PNRI implements various activities, which include: (1) conduct of nuclear awareness seminars/lectures; (2) guided tours to PNRI facilities (3) mass media linkages; (4) participation in national science and technology events such as exhibitions/fairs; and (4) nuclear information promotion and education through print and non-print materials. Collaborative endeavors with both local and foreign institutions/organizations are also indispensable components for improving our public information efforts. The Philippines' cooperative undertakings in the area of public information, particularly under the framework of the Forum for Nuclear Cooperation in Asia (FNCA), has enhanced our public information activities. For instance, through 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" we were able to obtain valuable information that very useful as reference in improving PI strategies and learning resource materials for Filipino students and educators. The FNCA Regional Speakers Bureau has also provided valuable support to our national PI events such as the Atomic Energy Week celebrations and Open Seminars/Lectures during hosting of the FNCA seminars/meetings in the country. The RSB has 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. The FNCA PI website (<http://www.fnca.jp/english/>) and FNCA mechanisms for exchange/provision of information materials (like Atoms in Japan, Power Line) have also been very useful for obtaining and providing up-to-date and accurate information on nuclear energy related topics in the region.

The information and communication strategies being undertaken by PNRI, in cooperation with other organizations and institutions, have increased knowledge of thousands of Filipinos on nuclear energy. Through a sustained implementation of these strategies and through linkages and collaborative undertakings with both local and foreign institutions and organizations, we hope to significantly enhance public understanding/ acceptance of nuclear energy and its various peaceful applications in the Philippines.