

# PHILIPPINE EXAMPLE OF POWER STUDIES FOR DEVELOPING COUNTRIES

Additional electrical power needed because of rapidly growing requirements in the Philippines during the next decade could be met in part by the building of three nuclear plants, on which the extra initial investment would be fully recovered by 1978-79, by savings in fuel cost. After this the stations could save the country about \$14 million a year.

The above recommendations have been made in the final report following a two-year pre-investment study on power carried out for the Philippine Government by the Agency acting as executing agency for the United Nations Development Programme.\* It was presented in Manila on 29 October by Mr. Warren H. Cornwell, resident representative of the UNDP, who besides outlining the reasoning behind its recommendations said it contained much information of interest and use to other developing countries.

Dr. Sigvard Eklund, Director General of IAEA, stressed the importance attached to the project by his Agency and hoped that the Philippines would find it of assistance in the planning, development and implementation of its programme.

Mr. Rafael Salas, Executive Secretary to the President and Acting Chairman of the Philippine National Economic Council, who received the report on behalf of the Government, expressed the opinion that a significant contribution had been made to their efforts in determining the merits of nuclear power in meeting part of the country's rapidly growing power requirements. It represented the collective efforts of the UNDP, IAEA, many experts of varied specialization coming from different countries and the several agencies and organizations in the Philippines with major interests in the electric power industry. As such, the recommendations would be given due consideration, and would also be made available to interested countries, especially those contemplating similar studies.

## PROBLEMS AND PROSPECTS IN DEVELOPING COUNTRIES

Presentation of the report came during a week during which problems and prospects of nuclear power applications in developing countries were discussed by a study group organized by IAEA with the assistance of the Philippine

\* *Pre-Investment Study on Power Including Nuclear Power in Luzon, Republic of the Philippines. UNDP and IAEA, June 1966. pp. 191.*

National Science Development Board and the Philippine Atomic Energy Commission. Heads of atomic energy commissions and leaders of nuclear power programmes from twelve countries took part in what was described by Dr. Juan Salcedo, jr., Chairman of the National Science Development Board, as "yet another summit conference".

Dr. Eklund pointed out that the known reserve per capita of fossil fuels in Southern Asia and the Far East were of the order of one per cent of those in North America and three per cent of those in Europe. Nuclear energy could thus be an attractive alternative where the cost of fossil fuels was high. Plants of 200 to 300 megawatts might soon begin to find economic applications in such areas, and it was not too early for most countries which depend upon imported fuels to begin thinking about utilizing nuclear power more extensively. IAEA could give help in various stages of the development of nuclear power programmes.

Dr. H. Usmani, Chairman of the Pakistan Atomic Energy Commission, spoke of the advantages to be derived from pooling experience and information and also hoped that the Agency, by reaching understandings with financing agencies, could help in relieving Asian countries of financial problems in implementing nuclear power projects by arranging loans on suitable terms.

Dr. Salcedo was convinced that the question was not so much whether to adopt nuclear power as when and how. He was supported by Mr. Pedro G. Afable, Commissioner of the Philippine AEC, who said that his country could derive many benefits from nuclear power.

An overall picture of energy resources of the region was given in a paper presented by the Economic Commission for Asia and the Far East. Other papers included "Some Considerations in Conducting Nuclear Power Feasibility Studies" by M. Khan (IAEA); "The Philippine Project — an Illustration of a Feasibility Study" by J. Lane (USA); "Extrapolation of Cost Data From Industrialized to Developing Countries" by R.M. Sun (Philippines); and "Integration of Nuclear Power Plants in Electric Power Systems" by R. Krymm (IAEA). Regional papers dealt with problems and prospects in Australia, the Republic of China, Japan, Korea, New Zealand, Pakistan and Thailand, and there were contributions by experts from Canada, Japan, UK and USA.