

doing, acquire the skills and technology in energy development that could be applied in other countries as well.

While Canada was a net exporter of energy, oil was still imported and, therefore, Canada was not isolated from the energy concerns that affected most countries. The recently formulated National Energy Program in Canada emphasized a reduction in oil consumption through substitution of other energy resources with which Canada is blessed, and the encouragement of oil production through pricing and government incentives for exploration. The program also recognized the importance of renewable energy resources, such as hydro-electricity, and the necessity for energy conservation. The Canadian goal was to phase out offshore oil imports by 1990. In addition, a national oil company, Petro-Canada, was created under the program to provide a dynamic public-sector presence in the petroleum industry.

A significant aspect of the National Energy Program was the creation of Petro-Canada International as a subsidiary of Petro-Canada. The purpose of Petro-Canada International was to assist developing countries in becoming more energy self-reliant by reducing or

eliminating their dependence on imported oil. Petro-Canada International would work toward this objective in two ways. It would act as a direct delivery mechanism for Canadian development assistance, and it would act as an agent for and partner with other development assistance institutions, such as the Canadian International Development Agency (CIDA), the International Bank for Reconstruction and Development (IBRD), and the Asian Development Bank (ADB), which operates extensively in the ASEAN countries. Under the National Energy Program, funds of \$250 million were allocated to Petro-Canada International for a four-year period ending in 1985.

In determining whether an individual project qualified for assistance, several factors would be considered by Petro-Canada International: geological potential, the economics of developing a hydrocarbon discovery, the energy needs of the recipient country and its potential to develop an oil industry, the likelihood of exploration and development being done without outside assistance, and the potential for utilization of Canadian goods and services. Petro-Canada International was now assessing numerous requests for

assistance that had been made to it from a number of countries and it was hoped that decisions on project proposals would be announced early in 1982.

Prime Minister Pierre Trudeau had indicated in his keynote address to UN Energy Conference in Nairobi that Canada attached the utmost importance to the area of energy development assistance. He had also said that Canadian bilateral assistance in the energy sector was expected to total \$1 billion over the next five years or close to 25 per cent of Canada's bilateral program. This was part of a major effort by Canada to substantially increase official development assistance. In addition, Canada had strongly supported the idea of an expanded World Bank energy program and continued to endorse the concept of a World Bank energy affiliate. Canada would be prepared to contribute financially to such an affiliate if it were possible to achieve a consensus on the funding arrangements.

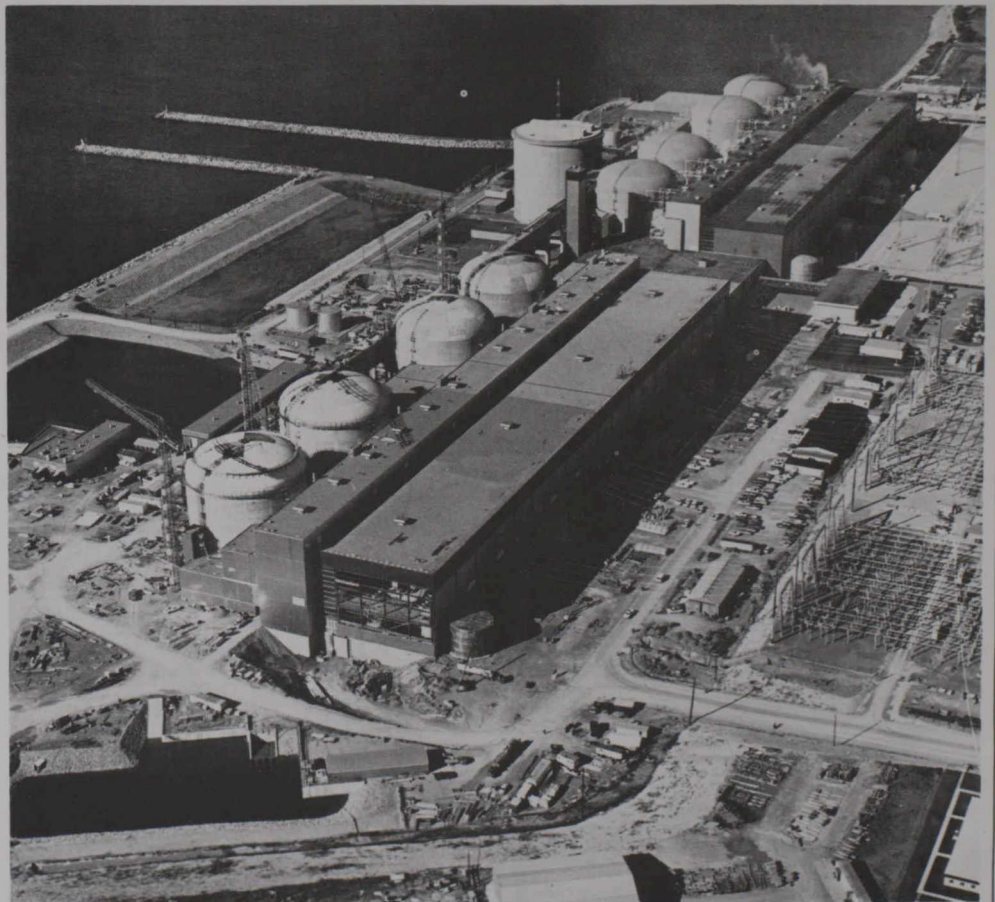
Canadian companies and consultants had been deeply involved for many years in ASEAN energy development projects—from oil exploration in Indonesia and the Philippines to hydro-electric engineering work in Malaysia and Thailand and studies on thermal power plants in

The Candu Reactor

Atomic Energy of Canada Ltd. (AECL) organized a display booth at the ASCOPE conference to provide information on Canadian nuclear technology.

While nuclear generating stations still only produce a limited amount of power on a world basis, the CANDU system, with its many advantages, has created interest because of its tremendous potential. The CANDU reactors currently operating in the Province of Ontario have a lifetime average capacity factor of 77 per cent, the highest of any reactor type. In an evaluation of performance of 100 nuclear reactors above 500 megawatts around the world, the CANDU held six of the top 10 places.

The CANDU uses natural uranium as a fuel, which means wider sources of supply and obviates the need for expensive enrichment technology. Because of its unique design it uses 15 per cent less fuel than other reactors and can be refuelled on-line, thereby sharply reducing shutdown time. Many of the components included in the CANDU can be manufactured by any country with reasonable technical capability. Its computer-controlled systems are very advanced and ensure an efficient and safe operation.



The CANDU nuclear power generating station at Pickering in the Province of Ontario.