

## Company Profile: Montreal Engineering Co.

### Monenco Provides Design and Management Services for Major Projects in ASEAN

The rapid industrial development and growth in economic power and importance of the five member countries of ASEAN offers Canadian companies numerous opportunities for the sale of services and equipment in this part of the world. Montreal Engineering Company, Limited (Monenco) has been involved in projects in the ASEAN region where ongoing projects account for some seven per cent of its annual revenues. Some 200 Monenco personnel are currently involved full-time in ASEAN projects, nearly half of whom are located in the permanent Singapore and Jakarta offices or in temporary offices at project sites. The largest Monenco presence is in Singapore, the location of Monenco Asia (Pte) Ltd., a wholly-owned subsidiary.

INDONESIA is the site of the bulk of Monenco's ASEAN activities, where the company is providing design and project management services for the first two stages (4 x 400 MW) of the Suralaya steam power plant, which has an ultimate planned capacity of 3000 MW. Situated on the northwestern tip of Java in an active seismic zone some 20 km from the now extinct Krakatoa volcano, this plant includes coal and oil handling and storage facilities, ash disposal systems, cooling water intake and discharge canals, 150 kV and EHV substations, and all ancillary buildings and structures. Initial study work on this project, the largest thermal power station in the ASEAN region, began in 1976.

Monenco is also heavily involved in water resource projects in Indonesia. One ongoing assignment is the Lombok Island high level diversion, which will utilize surplus water in the Jangkok river system by transferring it to the Renggang River.

The second water resources project, just getting underway, is the Lower Solo River Basin development project, which involves feasibility studies of new storage reservoirs and irrigation schemes, detailed designs for the rehabilitation of 40,000 ha of agricultural land and associated flood control structures, and the integration of all components of the project into an overall plan for basin development. A major element of this project is the proposed Jipang dam and reservoir.

Resource development and exploitation is not Monenco's only field of activity in Indonesia. The company, through Monenco Asia (Pte) Ltd., is currently providing engineering services for the 28-storey Bank Bumi Daya Plaza in Jakarta.



*Frontal view of the 1610 mw Senoko steam power station in Singapore, with its ornamental man-made pond.*

Monenco's staff in SINGAPORE have been continuously active since 1968, when the company undertook a study of the city's electrical distribution system. Soon afterwards, Monenco and its newly-created subsidiary Monenco Asia began providing services for the Senoko steam power station, a 1610 MW oil-fired generating plant on the Straits of Johore. Completed in 1980, it was Southeast Asia's largest thermal station at the time, and represents more than half of its owner's generating capacity. The development includes a computer-controlled automatic turbine run-up, unit loading system, and data logging facility. This was Singapore's first use of computer-based control systems for power generation.

Most of Monenco's other Singapore work involves commercial buildings, such as the 25-storey Neptune Orient Lines office tower. Other Monenco Asia assignments include condominiums, industrial and educational buildings.

MALAYSIA, while not providing as much work for Monenco as Indonesia and Singapore, is nonetheless the site of a number of interesting projects. These include two submarine electric power cables from the west coast of the peninsula to the islands of Pinang and Langkawi.

On Pinang, the 12-storey Ferrangghi Hotel is one of the Monenco Asia projects currently under construction in Malaysia.

Monenco's only assignment to date in the PHILIPPINES comprised engineering and project management services for over 1110 circuit-kilometres of 230, 115 and 69 kV transmission lines on the principal

island of Luzon. This work was undertaken between 1973 and 1976 in order to expand the island's existing electric grid and to interconnect the northern and southern power networks.

Transfer of technology is more than just an advantage to local engineering firms and Monenco's clients in the ASEAN region; it is also a way of fulfilling the intent and spirit of aid programs for developing countries. Effecting such transfer of technology is one of Monenco's prime considerations in providing consulting engineering services in this part of the world.

Formal and on-the-job training programs have been implemented on Bukit Asam and other Monenco assignments, and associations with local firms have been made to undertake such projects as the Suralaya power plant. Monenco has found that it can provide better and more comprehensive services by drawing on local expertise and products which reduces costs and broadens Monenco's base of local associates who can assist in a larger volume of work.

At a time when much of the world is struggling to cope with less than ideal economic conditions, the nations of the Pacific Rim are enjoying a period of growth and prosperity. Throughout Southeast Asia, the business atmosphere is dynamic, positive and exciting. The ASEAN market has been a rewarding one for Monenco, since the skills of Canadian professionals are highly regarded by all its member countries. The area has been and will remain a high-priority market.