

international finance

BC Hydro cuts expenditure

Expenditures for the next ten years by BC Hydro in Canada have been cut by two-thirds from last year in response to changing provincial energy needs. A new approach to electric load forecasting, introduced last August, incorporates an Energy Planning Range (EPR) concept to accommodate the company's long-range electric load growth forecast and provide maximum flexibility for the electric system plan which flows from the forecast.

This new development in forecasting and planning resulted directly from greater recognition of economic uncertainty in the future and the increased need for flexibility in plans for new sources of electric energy. Anticipating a restrained recovery, Hydro has adopted a planning range for an annual electrical growth forecast of between 3.1 and 4.7 per cent over the next 10 years, with the probable figure expected to be 3.9 per cent.

After completion of the Revelstoke project this year, no major new plants are planned to come into service over the next decade. This means that total expenditures on fixed assets have been cut from last year's planned figure of \$12.8 billion (Canadian dollars) for the period 1983 to 1993 to \$4 billion for the period 1984 to 1994.

Commissioning dates for the Keenleyside-Murphy project have been deferred by two years, from 1992 to 1994 for the generation addition to the existing Keenleyside dam, and from 1993 to 1995 for the proposed Murphy Creek dam. The in-service date for the proposed Site C dam has been set back from 1991 to 1998.

Other than Revelstoke, project activities will focus on transmission work. The second circuit for the mainland to Vancouver Island 500 kV transmission interconnection is scheduled for service this year except for a section of the 500 kV overhead transmission between Cheekye and the Malaspina substations, which has been deferred to 1985.

Expansion of the 500 kV transmission grid for British Columbia requires additional 500 kV transmission construction to be scheduled for completion between 1 April 1984 and 31 March 1994. In addition to the mainland to Vancouver Island 500 kV interconnection this includes: the construction of a second 500 kV transmission line from Revelstoke generating station to Nicola substation; the reinforcement of the main system by a 500 kV transmission line from Nicola substation to the Kelly Lake substation in 1984, and the 500 kV transmission line to the BC/Alberta border from the Cranbrook substation to connect with the transAlta system some time in 1985.

All turbines turn at San Carlos

The last of four turbines for the San Carlos hydroelectric plant near Medellín, Colombia, went on stream in January, marking the completion of the first stage of this major energy development project.

The plant now has a capacity of 620 MW. Completion of the second stage will bring the total to 1550 MW.

The plant was financed in part by an IDB loan of \$70 million. Other financing came from the World Bank and suppliers' credits. About half of the total cost of the project is being covered by the Colombian governmental agency charged with electric power generation and the interconnection of the national grid.

A Mexican-Colombian consortium constructed the powerhouse for the scheme. The turbines and generators were supplied by Escher Wyss, of Ravensburn, West Germany. Other equipment was purchased from firms in Italy, Japan and Switzerland.

According to the Bogotá newspaper *El Espectador*, the additional electricity feeding into the national power grid is coming just in time to forestall the need for rationing to be implemented.

Bids start for Chinese dam tunnel

Bidding has opened for the construction of a 9 km-long tunnel for a key hydroelectric power station project in southwest China, according to the official Xinhua News Agency. Representatives from eight companies in Japan, France, Italy, West Germany, Yugoslavia and China attended the recent ceremony in Beijing to open bidding for the project. It is a key element of the 600 MW Lubuge hydropower station on the Huangni river along the border of Yunnan and Guizhou provinces.

Scheduled for completion in 1989, the project is being financed through a World Bank loan of US \$150 million. It comprises a dam across the Huangni river a tunnel and a powerhouse. When completed the scheme will generate 2.9 TWh of electricity annually.

According to Xinhua News Agency evaluation of the tender bids will begin shortly. The tunnel contract is expected to be awarded during the first quarter of this year.

Finance secured for Atatürk dam

Credits of \$450 million have been secured by the Turkish government for the Atatürk dam project under two agreements signed in Switzerland and West Germany, the Ankara weekly *Newspost* reported. Following the signing of a SFr 573 million (\$259 million) deal with a consortium of 16 banks in Zürich, the Treasury and Foreign Trade Under-Secretary told a press conference this was an important step towards beginning construction of the 2400 MW project, which would, when completed, supply a third as much as Turkey's total generating capacity at present. The second agreement, with public finance organizations, was signed in Frankfurt, Germany, for DM 280 million (\$100 million), the paper said. Both credits are for 18 years and envisage delivery of the machinery and equipment for the first two years.