

Few subjects have more immediate importance to Canadian/U.S. relations than oil and natural gas. To put it briefly, the U.S. is running out of old resources and Canada is opening up new ones. The subject is technical as well as political and therefore confusing to many. Dr. A. Seastone, Professor of Economics at the University of Calgary, discussed his own thesis and its technical underpinning in a paper delivered last spring at the biennial meeting of the Association of Canadian Studies in the United States. Some experts consider his thesis (as expressed in the first sentence quoted below) optimistic. While space has limited our excerpts to highlights of Dr. Seastone's paper, those wishing the complete paper may write to ACSUS, Center of Canadian Studies, The Johns Hopkins School of Advanced International Studies, 1740 Massachusetts Avenue, NW, Washington, D.C. 20036.

All you ever wanted to know about Canadian oil and gas

[BUT WERE TOO SHY TO ASK]

"My thesis is a simple one . . . discoveries and developments in the oil and gas fields of Canada have so rearranged the energy resources of the North American continent that the United States can look to Canada as a continuing, major, stable source of energy supply . . . (and) as a condition of this increased energy interrelationship, American buyers . . . will have to contemplate massive changes in the conditions of supply. . . .

"(First) I wish to summarize current oil and gas supply and demand conditions. . . .

"*Canadian Demand.* Canadians in 1972 used about 750,000 barrels per day of Canadian crude oil. . . . The Energy Resources Conservation Board of Alberta estimates that . . . the domestic demand (will) be 1,275,000 to 1,350,000 barrels per day by 1985.

"*Canadian Supply.* Estimates of proved (Canadian) reserves . . . not including the Mackenzie Delta nor the Arctic Islands — range from 8.3 billion barrels to about 10.2 billion. . . . The ERCBA considers it likely that total recoverable reserves . . . in Alberta will ultimately reach about 20 billion barrels. . . . The Canadian Society of Petroleum Geologists suggest that ultimately recoverable reserves . . . in 30 sedimentary regions . . . may reach 86 billion barrels.

"*U.S. Demand.* American demand . . . in 1972 increased more than 6 per cent. . . . The U.S. Department of the Interior estimates that by 1975

the American demand . . . will reach 6.34 billion barrels per year . . . by 1985, 9.1 billion barrels per year; and by 2000 about 13 billion barrels per year.

"*U.S. Supply.* Contrasted to (this) 250-280 billion barrel rest-of-the-century (U.S.) demand is the U.S. oil supply. At the end of 1972 proved reserves of conventional crude oil in the U.S. totalled less than 37 billion barrels, including an estimated 10 billion barrels on the North Slope of Alaska. . . .

"*Canadian Natural Gas.* In 1972, Canadian domestic use of natural gas was about 3.5 billion cubic feet per day or nearly 1.3 trillion cubic feet for the year. The NEB . . . estimated annual domestic demand . . . to reach about 2.8 trillion by 1990. Estimated proven reserves . . . at the end of 1972 were about 55 trillion cubic feet, not including the Mackenzie Delta and Arctic Island discoveries. The ERCBA estimates that ultimately recoverable reserves of natural gas in Alberta will approximate 100 trillion cubic feet. The study by McCrossan and Porter . . . suggests that ultimately recoverable natural gas reserves in Canada approximate 577 trillion cubic feet.

"(Canadian exports of natural gas to the U.S. in 1972 reached about 2.7 billion feet per day for an annual total of nearly one trillion cubic feet.)

"*U.S. Natural Gas.* Demand for natural gas in the U.S. reached 22 trillion cubic feet in 1971. By 1975 the U.S. Department of the Interior esti-

Known and potential reserves in Canada compared with U.S. need for oil and natural gas.



Oil in billion barrels, Natural Gas in trillion cubic feet.

■ Known Reserves ■ Potential Reserves ■ Predicted U.S. Demand to 2000 A.D.