

SECTORAL PROFILE: NATURAL GAS

Structural Characteristics

The export of natural gas surplus to future Canadian requirements has been the country's largest energy export in terms of value in the 1980's, contributing approximately \$C 4 billion to Canada's trade balance in 1984. Approximately one-third of Canada's natural gas production is exported to numerous U.S. interstate pipelines and distributors by eleven exporters who purchase the volumes from more than 700 producers in Alberta and British Columbia. Only production from these two provinces is exported with Alberta gas representing more than 90 percent of the exported volumes. Although there are more than 700 gas producers, approximately 25 companies account for the majority of gas production. The level of Canadian ownership varies on a company-to-company basis, but overall the energy industry's ownership level is less than 50 percent. Tables 1 through 3 provide statistics on export/import volumes and gas production levels by province and by major producer.

Canadian exports have historically supplied four to five percent of the U.S. market with the key market areas being the Midwest and Pacific states. Canadian exports have generally followed changes in the U.S. market. As U.S. demand has declined since 1979, export volumes in the 1980's have been substantially below authorized levels. Exports in the 1984-85 contract year may only be in the range of 25,300 $10^6 m^3$ or 57 percent of licenced exports.

Canada has allowed short-term exports of gas to U.S. customers on a best-efforts, interruptible basis since November 1984, however, these volumes remain insignificant at less than two percent of projected 1984-85 exports.

The natural gas industry has invested approximately \$C 6 billion in production and transmission facilities to provide natural gas to export markets. Despite efforts to seek new markets, Canadian gas exports are solely to the United States. Although exports are below authorized limits, pipeline capacity would limit exports to approximately 42.5 to 48.2 $10^6 m^3$ annually. Substantial volumes authorized to flow to the U.S. Northeast will require in excess of \$C 1.2 billion in facilities additions before the exports can occur.

Construction and operating costs are estimated to be higher in Canada than in most areas in the U.S. because of our severe winter climate and transportation distances to markets. It is estimated that Canada's reserve replacement costs are lower than those in the U.S.

The Canadian gas industry differs from the U.S. gas industry in two ways. First, Canada has a significant reserves to consumption ratio, 30 years to 9 years for the United States, providing a substantial security of supply to both domestic and export consumers. Second, gas sales contracts in Canada tend to be reserves based while U.S. contracts are based on well deliverability. The former contracts are viewed as representing a more secure supply source due to the emphasis on production at a constant rate rather than production at a well's economic limit. This difference has not, however, been translated into a price premium for Canadian gas.