10. URANIUM AND TRITIUM EXPORTS

BACKGROUND

Canada is one of the world's largest suppliers of uranium. During World War II it was involved in the research and development of the atomic bomb, and supplied uranium for atomic weapons from Port Radium in the Northwest Territories. Canada continued to provide uranium and plutonium for the weapons programmes of the United States and Britain for twenty years, although it renounced any intention of developing its own atomic weapons. In 1965, Canada's uranium export policy was altered when Prime Minister Lester B. Pearson announced that, henceforth, Canadian uranium exports would be used for peaceful purposes only.

The Non-Proliferation Treaty (NPT) ushered in greater restrictions on the uses of nuclear material internationally. In addition to agreeing not to develop nuclear weapons, non-nuclear-weapon states party to the Treaty, are required to submit to full safeguards by the International Atomic Energy Agency (IAEA) over their nuclear programmes. In turn, those nuclear-weapon states, party to the Treaty, agree to work toward halting the proliferation of their own arsenals ("vertical" proliferation), and are required to cooperate with their non-nuclear counterparts in the development of the uses of nuclear energy for peaceful purposes.

India's explosion of its "peaceful nuclear device" in 1974 served as the harbinger of change in Canadian policy on the export of nuclear material and equipment. After the Indian Government admitted that the plutonium used in its "device" had been produced in the Canadian-supplied CIRUS reactor, Canada suspended all nuclear cooperation with India, and later that year announced more stringent safeguards on its nuclear exports.

Natural uranium is not classified as a strategic material. A blend of uranium 235 (U235) and uranium 238 (U238), natural uranium contains less than one percent U235--a quantity too low to generate a nuclear explosion.

Approximately eighty percent of the uranium exported from Canada goes to the United States, Great Britain and France. There it is enriched for use in light-water nuclear reactors. Because these reactors require uranium with a three-percent concentration of U235, the natural uranium must be enriched to this level by increasing the percentage of U235 isotope. Elaborate and expensive, the enrichment process was, until recently, confined to those countries possessing nuclear weapons programmes, as only they could afford the cost of such large operations.

The Canada-United States Nuclear Cooperation Agreement, signed in 1955 and most recently renewed in 1980, stipulates that uranium of Canadian origin cannot be used for military purposes. Similar conditions govern uranium exports to Britain and France under the Canada-Euratom Agreement (1978).

Since enrichment plants have both civilian and military uses, the separation of materials for either application occurs only as a bookkeeping procedure. Imported uranium effectively goes into a large "pot" and is not kept separate according to the country of origin or its intended use. In a letter to NDP Leader Ed Broadbent in October 1985, External Affairs Minister Joe Clark stated: