

## Chapter 1

# The Evolution of Nuclear Non-Proliferation Safeguards

### Canada's Role in International Safeguards

Since the end of the Second World War, successive Canadian governments have been profoundly interested in the development and control of nuclear energy. In 1945 the *Declaration on Atomic Energy by the United States, United Kingdom and Canada* established two principles that have remained central to Canadian policy: the desire to prevent nuclear weapons proliferation and the need for international co-operation to promote the peaceful use of nuclear energy. This declaration was paralleled within Canada by the *Atomic Energy Control Act* of 1946, the preamble of which states: "it is essential in the national interest to make provision for the control and supervision of the development, application and use of atomic energy, and to enable Canada to participate effectively in measures of international control of atomic energy which may hereafter be agreed upon. . . ." Although not entirely foreseen at the time, the *Atomic Energy Control Act* has enabled Canada to pursue nuclear policy objectives both nationally and internationally for over 40 years.

International nuclear commerce began in a meaningful way

after the convening in August 1955 of the First International Conference on Peaceful Uses of Atomic Energy held in Geneva under United Nations auspices. It was here that the nations possessing nuclear technology indicated a willingness to share all but the most sensitive technology with others, but only for peaceful uses. Because no internationally agreed verification measures were in place at the time, early agreements between supplier and recipient countries covering transfers of nuclear items included procedures designed to verify that the peaceful uses commitment was being honoured. This was the first occasion that international nuclear co-operation agreements contained provisions designed to verify compliance, including on-site inspections. The term "safeguards," first coined in 1945, came to be used to describe these verification measures.

These bilateral safeguards arrangements continued on their own until 1957 when the International Atomic Energy Agency (IAEA) was founded. The IAEA was given two roles: the promotion of the benefits of nuclear energy and the establishment of a system of international safeguards. The first IAEA safeguards system