

I. Introduction

This paper is a brief discussion of some of the implications of the worldwide expansion of nuclear power generation programmes, and the methods of control, or safeguards, developed over the years by the international community to ensure the applications of nuclear power are directed towards peaceful purposes only. The paper attempts to deal specifically with the evolution of Canadian safeguards policy.¹

II. The Context

The Growth of Nuclear Power

By the year 2000 the world's total energy requirements may be more than five times present levels. This anticipated expansion in energy demand would be the direct result of worldwide population increases (expected to double in the next twenty-five years) and projected increases in the standard of living, with a correspondingly higher per capita energy consumption level. It is quite possible that present projections of energy use will be mitigated by economic constraints and energy conservation practices. Nonetheless, it has been estimated that as much energy will be consumed in the world between 1970 and 2000 as has been consumed in the last twenty centuries.

¹ This paper has been prepared by the Department of External Affairs in consultation with other government departments and agencies concerned, including Atomic Energy of Canada Limited, the Atomic Energy Control Board, the Department of Industry, Trade and Commerce, and the Department of Energy, Mines and Resources.