

powers will eventually be followed by a halt in the production of fissile material for military purposes.

The careful accounting of nuclear material required by NPT safeguards can help to meet another growing problem. The increase in the production of fissile nuclear materials originating in nuclear-power reactors throughout the world and of transport of such materials has raised concerns about the possible theft of nuclear materials and of their use to threaten governments and societies. Although this danger is not dealt with in the Non-Proliferation Treaty, it is desirable that the conference encourage further international action to establish appropriate standards of physical security of fissile materials.

A controversial aspect of the international sharing of nuclear technology has been the question of the peaceful application of nuclear explosions. When the Non-Proliferation Treaty was negotiated, Canada was one of those countries that, while ready to give up the right to develop nuclear explosive devices, were anxious that non-nuclear-weapon states have full opportunity to share in any potential benefits from the peaceful application of nuclear explosions demonstrated by the experimentation of the nuclear-weapon states.

Considering Canada's vast size and resources, it might be thought that Canada is among the countries most likely to be able to benefit from peaceful nuclear explosions. Canadian Government experts have reviewed the economic and environmental acceptability of applying peaceful nuclear explosions in Canada. They have concluded that, generally, the experimentation so far undertaken in the United States and the U.S.S.R. holds out little promise for the practical application of nuclear explosions to resource extraction or engineering projects in Canada, at least during the next decade.

While circumstances vary from country to country, it is our view that, if there were to be a halt in the experimentation or application of peaceful nuclear explosions at this time, it is unlikely that any country would suffer significant economic disadvantage. We should think it in the interest of the non-proliferation régime and of achieving a comprehensive test-ban to halt experimentation in this area, at least until a thorough re-evaluation of the world's resource and energy needs presents a more compelling case for the use of peaceful nuclear explosions.

Some governments may have more optimistic views about the balance of potential benefits and risks of peaceful nuclear explosions. A thorough international examination of the value of continuing experimentation in the application of peaceful nuclear explosions is

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