



Nuclear materials diversion safety and the long-term future of nuclear energy

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Abstract

Primarily due to irresponsible cold war politics of nuclear weapon countries nuclear proliferation situation is little short of getting out of control. In addition to five nominal nuclear weapon countries there are at present at least three more nuclear weapon countries and several countries with nuclear weapon potential. Non-proliferation treaty (NPT), signed in 1970, has been recognized by most non-nuclear weapon countries as unjust and ineffective. After the initial, deliberate, nuclear weapon developments of five nominal nuclear weapon countries, subsequent paths to nuclear weapons have been preceded by nominal peaceful use of nuclear energy. Uranium enrichment installations as well as reprocessing installations in non-nuclear weapon countries are the weakest spots of fuel cycle for diversion of nuclear materials either by governments or by illicit groups. An energy scenario, which would, by the end of century, replace the large part of fossil fuels use through extension of present nuclear practices, would mean very large increase in a number of such installations, with corresponding increase of the probability of diversion of nuclear materials. Such future is not acceptable from the point of view of proliferation safety. Recent events make it clear, that it cannot be accepted from the requirements of nuclear terrorism safety either. Nuclear community should put it clearly to their respective governments that the time has come to put general interest before the supposed national interest, by placing all enrichment and reprocessing installations under full international control. Such internationalization has a chance to be accepted by non-nuclear weapon countries, only in case should it apply to nuclear weapon countries as well, without exception. Recent terrorist acts, however horrible they were, are child's play compared with possible acts of nuclear terrorism. Nuclear energy can be made proliferation safe and diversion of nuclear materials safe, and provide clean energy for centuries, should politicians stop abusing its dark potential. Counter productivity of such politics should be even clearer after September 11 warning, and the most important countries and governments could be now more prepared to abandon their outdated notions of national interests or prestige and accept internationalization of installations for enrichment and reprocessing, in the spirit of so called "Lilienthal-Baruch" plan of 1946.

Key words :

Proliferation, Nuclear terrorism, International nuclear fuel cycle centers, INFCC,
Internationalization, Lilienthal-Baruch plan



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