

1) The International Nuclear Fuel Cycle Evaluation
(INFCE)

INFCE was an international technical evaluation carried out between October 1977 and February 1980. The evaluation, in which 46 countries and five international organizations participated and which resulted in eight Working Group Reports and a Summary and Overview Report totalling 1 600 pages, was not a political negotiation (no treaty or agreed upon arrangements could be formulated in INFCE) and its results or findings were merely to be transmitted to governments for their consideration. Three basic elements provided the focus for the study. The participants:

"were conscious of the urgent need to meet the world's energy requirements and that nuclear energy for peaceful purposes should be made widely available to that end;

were convinced that effective measures can and should be taken at the national level and through international agreements to minimize the danger of the proliferation of nuclear weapons without jeopardizing energy supplies or the development of nuclear energy for peaceful purposes;

recognized that special consideration should also be given to the specific needs of and conditions in developing countries".

In the end, INFCE recognized the general principle that assurances of supply and assurances of non-proliferation are complementary and identified nine "fundamental matters the relevance, importance and acceptability of which should be considered" in common approaches to establishing assurances of non-proliferation. These were:

- a) undertakings on the peaceful uses of nuclear materials, equipment and technology and verification of these;
- b) undertakings not to develop or acquire nuclear weapons or nuclear explosive devices;
- c) undertakings not to acquire, manufacture or store nuclear weapons or to help any country to do so;
- d) undertakings with respect to the application of IAEA safeguards, including the requirements for nuclear materials accountancy and control and the implementation of any eventual IAEA system for storage of excess plutonium;