

collection, therefore represents an indispensable technique for power plant design, operation and maintenance engineers to evaluate their efforts in stated objectives, and to discover weaknesses and deficiencies in design and operation practices.



REPORT OF AN IAEA ADVISORY GROUP MEETING, VIENNA, 14–18 APRIL

An Advisory Group met to consider the up-dating and extension of the Recommendations for the Physical Protection of Nuclear Material, produced in 1972. Twenty-seven experts from 11 countries and EURATOM were present.

Physical Protection of Nuclear Material

Growing concern has been expressed in many countries that nuclear material may one day be used for acts of sabotage or terrorism. Serious attention is therefore being given to the need for States to develop national systems for the physical protection of nuclear materials during use, storage and transport throughout the nuclear fuel cycle which should minimize risks of sabotage or theft.

The revised Recommendations formulated by the Advisory Group include new definitions of the objectives of national systems of physical protection and proposals for minimizing possibilities of unauthorized removal and sabotage to nuclear facilities. The Recommendations also describe administrative or organizational steps to be taken for this purpose and the essential technical requirements of physical protection for various types and locations of nuclear material, e.g., the setting up of protected areas, the use of physical barriers and alarms, the need for security survey, and the need of advance arrangements between the States concerned in case of international transportation, among others.



EIGHTH ANNUAL MEETING OF THE INTERNATIONAL WORKING GROUP ON FAST REACTORS, IAEA, VIENNA, 15–18 APRIL

The meeting was attended by 15 participants from seven countries and two international organizations.

Fast Breeder Reactor Research

The Eighth Annual Meeting of the International Working Group on Fast Reactors (IWGFR) was attended by representatives from France, Fed. Rep. Germany, Italy, Japan, United Kingdom, Union of Soviet Socialist Republics and the United States of America – countries that have made significant progress in developing the technology and physics of sodium cooled fast reactors and have extensive national programmes in this field – as well as by representatives of the Commission of the European Communities and the IAEA.

The design of fast-reactor power plants is a more difficult task than developing facilities with thermal reactors. Different reactor kinetics and dynamics, a hard neutron spectrum, larger integral doses of fuel and structural material irradiation, higher core temperatures, the use of an essentially novel coolant, and, as a result of all these factors, the additional reliability and safety requirements that are imposed on the planning and operation of sodium cooled fast reactors – all these factors pose problems that can be solved comprehensively