IAEA/NEA INTERNATIONAL SYMPOSIUM, VIENNA,
28 FEBRUARY – 4 MARCH 1977

The symposium was attended by 204 participants from 39 countries and 5 international organizations. Forty-two papers were presented in 8 sessions.

The Handling of Radiation Accidents

The purpose of the meeting was to foster an exchange of experiences gained in establishing and exercising plans for mitigating the effects of radiation accidents and in the handling of actual accident situations. Only a small number of accidents were reported at the symposium, and this reflects the very high standards of safety that has been achieved by the nuclear industry. No accidents of radiological significance were reported to have occurred at commercial nuclear power plants. Of the accidents reported, industrial radiography continues to be the area in which most of the radiation accidents occur.

The experience gained in the reported accident situations served to confirm the crucial importance of the prompt availability of medical and radiological services, particularly in the case of uptake of radioactive material, and emphasized the importance of detailed investigation into the causes of the accident in order to improve preventative measures.

One of the principal themes of the symposium involved emergency procedures related to nuclear power plant accidents, and several papers defining the scope, progression and consequences of design base accidents for both thermal and fast reactor systems were presented. These were complemented by papers defining the resultant protection requirements that should be satisfied in the establishment of plans designed to mitigate the effects of the postulated accident situations.

Several papers were presented describing existing emergency organizational arrangements relating both to specific nuclear power plants and to comprehensive national schemes, and a particularly informative session was devoted to the topic of training of personnel in the practical conduct of emergency arrangements.

The general feeling of the participants was one of studied confidence in the competence and capability of the nuclear power industry to cope adequately in the unlikely event of a serious radiation accident occurring at a nuclear power plant; however, the active interest shown in the continued refinement of emergency procedures demonstrated the absence of complacency.