REPORT ON AN INTERNATIONAL SYMPOSIUM,
VIENNA, 10–13 OCTOBER 1977

The symposium was attended by 150 participants from 29 countries and 4 international organizations. Fifty-two reports were presented in 8 technical sessions.

Application of Reliability Technology to Nuclear Power Plants

The main emphasis was on the problems influencing the reliability of reactor pressure components because of their importance for the safety, reliability and economics of nuclear power plants. The subject of the reliability of reactor pressure vessels, and other pressure components is of major concern to reactor owners, designers, material suppliers, manufacturers, and regulatory and licensing bodies. The symposium gave an opportunity for these various groups to discuss technical matters and practical engineering aspects related to reliability of reactor pressure components.

The participants considered the general approaches used to evaluate the reliability of components, operating experience, failure data and its analysis, including some economic aspects. The reports presented emphasized the reliability criteria for design, materials selection, fabrication, operation and inspection of the components. The participants reviewed studies and models to evaluate potential behaviour of materials in reactor service. There was also a critical review of national and international codes and practices related to pressure components in nuclear power systems. A panel session, which summarized the discussions, was held on the last day.