

Excerpts from the Director General's Address to the General Conference

In his review of the year's work, made in his opening speech at the 19th General Conference, the Director General included the following points:

There is general agreement that the demand for energy, despite increasing costs, would continue to rise. Though often discussed, other forms of energy – such as fusion, geothermal, solar and wind power – still require a great deal of research and development before they can be harnessed, he said.

Although fossil fuels still form the world's largest reserve of energy, it is apparent that nuclear power will increase its share of the electrical energy supply, reaching some 20% (6000 MW(e)) in the early 1980's. Public debate in recent years had covered three major issues: firstly, the reliability of nuclear reactors as steady suppliers of power; secondly, the disposal of radioactive wastes and thirdly, the safeguarding of nuclear materials, mainly plutonium, from being diverted for military purposes of terrorist activities. Much had been achieved in those areas: the conclusions of the symposium organized by the Agency in Innsbruck this spring on the "Reliability of Nuclear Power Plants" had shown that assertions as to the unreliability of nuclear power stations are, today, simply not true. Work is proceeding on a project to provide a comprehensive system of internationally acceptable safety codes and guidelines for nuclear power plants.

However, it has become clear to the Agency that the future of nuclear power depends on achieving an integrated consideration of the whole nuclear fuel cycle at the international level – from uranium mining to the final disposal of radioactive waste. He reminded the Conference that an international symposium on Nuclear Power and its Fuel Cycle had been organized to take place in May 1977, at which this subject, the safety of nuclear facilities and management of radioactivity, and the constraints in the development of nuclear power in developing countries will be exhaustively studied.

As the concept of disposal of solidified and high-level and alpha-bearing waste in geologically stable layers was gaining increasing acceptance, the Agency was proceeding with the establishment of a standing advisory group to consider these questions.

Integrated consideration of the whole fuel cycle has highlighted problem areas such as fuel reprocessing. One approach that the Agency is investigating is the provision of regional fuel cycles. These would be operated on an international basis, serving a number of power plants and providing a common service for reprocessing and waste disposal. A particular advantage lies in the major contribution that this can make to international security; it will be easier to operate meaningful safeguards.



The 19th General Conference in session at the Hofburg, Vienna. Photo: IAEA-Schikola

The Director General added that the Final Declaration of the NPT Review Conference had expressed its strong support for effective IAEA safeguards.

A Standing Advisory Group on Safeguards Implementation had now been set up.

It was clearly essential that the Agency's safeguards be applied to all nuclear activities in the non-nuclear-weapon States. If nuclear explosive capacity spread still further, it would almost certainly be as a result of nuclear materials, plants or know-how being imported without full fuel cycle safeguards, he said.

The Technical Assistance programmes continue to put increasing emphasis on the introduction of nuclear power and the application of nuclear technology, the Director General's report stated. Targets for Technical Assistance increased from \$2 million in 1966 to \$5.5 million in 1976.

The importance of the application of isotopes was also mentioned. In a large number of Member States the chief interest of atomic energy still lies in the applications of nuclear techniques in medicine, agricultural research and the development of water resources. In this context he appealed to Member States and other UN agencies, especially WHO and FAO, to take the action needed to obtain a final decision on the international clearance of the irradiation preservation of certain major foodstuffs.