safeguards and nuclear medicine

The signing ceremony:
from left to right Ambassador Vishnu Trivedi,
Dr. Eklund, Ambassador T. Keith Glennan.
Photo: IAEA/Preuschl

Safeguards help
to prevent the spread of
nuclear weapons;
nuclear techniques have an
established place
in the diagnosis and
treatment of disease.
A link between the two
was established
in successive ceremonies
at Agency headquarters,
when an agreement
to apply safeguards
to the Tarapur power station was signed,
and the 1000th research contract
was passed formally
to Ambassador Vishnu Trivedi
for work to be performed
at the
Bhabha Atomic Research Institute,
Bombay.

The Tarapur nuclear power station, with an electrical output of 400 megawatts from two reactors, is the largest in Asia and the first such installation to come into commercial operation in a developing country. An agreement to apply Agency safeguards to this installation was signed by Ambassador Trivedi, for India; Ambassador T. Keith Glennan, for the United States, which supplied the first charge of enriched uranium fuel elements for the station; and Dr. Sigvard Eklund, Director General of the IAEA. Conclusion of the agreement was approved by the IAEA Board of Governors, of which Ambassador Trivedi is present chairman, in February last year, in accordance with the terms of a bilateral agreement for co-operation in the peaceful uses of atomic energy signed by India and the USA in 1963.

Ambassador Trivedi recalled that at the time the bilateral agreement was signed the Agency safeguards system was not sufficiently developed to extend to power reactors such as the Tarapur installation; but it did stipulate that India and the USA would request the IAEA to enter into an agreement of the kind which is now to apply to Tarapur. He expressed the hope that the co-operation between India and the USA exemplified by that early agreement would continue, and that it would now be strengthened with additional co-operation and assistance from the Agency.

Ambassador Glennan, in turn, underlined "the great confidence which my Government places in the Agency's ability to undertake its safeguards role, which has been so clearly identified in the (Agency's) Statute as one of its major roles". Those taking part in the ceremony, he said, were "very much aware of this function in view of the discussions currently in progress concerning the safeguards agreements to be negotiated between the Agency and Parties to the Non-Proliferation Treaty".

Dr. Eklund noted that the conclusion of this safeguards agreement "constitutes an important contribution to the expanding scope of application by the Agency of safeguards throughout the world". With this agreement, the total number of safeguards agreements actually in force was brought to 43, in more than 32 member States.

The Thousandth Contract

In the second ceremony Dr. Eklund passed to Ambassador Trivedi an offer to the Bhabha Atomic Research Centre, Bombay, of a one-year contract for research on the development of procedures for the production and control of short-lived radiopharmaceuticals.

This contract, he said, was notable both because it was the thousandth awarded by the Agency, and "because it goes to a developing country in the economic sense, and a very developed one in the atomic energy sense".

Dr. Eklund recalled that when research contracts were first introduced by the Agency about ten years ago most were awarded to institutes in developed countries. Since then there had been an obvious trend to give more and more support of this sort to research in developing countries; in 1970 no less than three-quarters of the funds available for this purpose — a total of $ 600 000 from the research contract appropriation of $ 800 000 — were awarded to research institutes in those countries. And they did some valuable work.

Speaking in particular of the Bhabha Centre, Dr. Eklund continued: "You have, out of your own efforts, done something most remarkable — you have created a centre of excellence, among the most remarkable centres in this field in the world."

Ambassador Trivedi agreed that this was a milestone in "the commendable history of the Agency's promotional activities". He went on: "We have stressed repeatedly the extremely important catalytic role played by the Agency's research contract programme in encouraging nuclear research in developing countries, and we are particularly happy that under your enlightened leadership the Agency has been fulfilling admirably its role in accelerating and enlarging the contribution of atomic energy to peace, health and prosperity throughout the world, bearing in mind the special needs of developing countries.

"When so much public attention is focussed these days on control and regulation and safeguards, it is necessary to stress with even greater force the constructive and developmental activities of the Agency, promoting the peaceful uses of the atom. India is happy to contribute its share in this task."

Radioisotopes are now used extensively in many branches of medicine in diagnosis and therapy. The project to be undertaken at the Bhabha Centre, under the direction of Dr. V. K. Iya, is an integral part of the Agency's co-ordinated programme of research on radiopharmaceuticals which is to be carried out in close consultation with the World Health Organization.

Among those present at this second ceremony was Dr. Henry Seligman, who played a major role in initiating the research contract programme during his term of office from 1958 to 1969 as Deputy Director General, IAEA Department of Research and Isotopes.