

India has never been opposed to safeguards. It has always co-operated with the Agency and has accepted improvements in implementation measures. It has been India's approach that in safeguarded facilities, the Agency is welcome to install any proven new piece of safeguards equipment that will enable it to detect diversion, as long as the equipment does not interfere with normal operations. We believe that safeguards should be implemented in all States, wherever sensitive materials like separated plutonium or enriched uranium have been imported. But it seems beyond reason to try and extend safeguards to all the equipment at a nuclear facility. The implementation of Agency safeguards has got lost in diplomatic and legal niceties, rather than concentrating on their real purpose as enshrined in the Statute. The Agency should have a closer look at these matters and not be influenced by the views and interest of only a few member States. The Agency must commit itself to the free exchange of scientific ideas and discourage embargoes on mundane conventional equipment like pumps and pipes. To seek more cumbersome, difficult and intrusive safeguards will ultimately affect the utility and cred-

ibility of the Agency's safeguards system itself.

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In the course of implementing its nuclear power programme, India could consider supplying its know-how, equipment and materials to other developing countries for their nuclear power programme. India continues to support the promotional activities of the Agency. Our expertise and facilities will continue to be available to other developing countries through the Agency. In addition to paying its full share of the voluntary contribution to the Technical Cooperation Fund in 1985, India will make an additional contribution equivalent to US \$50,000 especially for RCA activities of particular interest to countries of the region.

In conclusion, I feel we must remind ourselves that atomic energy programmes were embarked upon by various countries to provide long term solutions to their growing energy needs. It is ultimately the Agency's contribution to meeting this need, and not its concern with peripherals, that will determine the Agency's relevance and utility to its member-states.

NEWS

USSR: LASERS IN THE ELECTRONICS INDUSTRY

Lasers, the creation of electronics, have now themselves become a major technological tool of the electronics industry. They can be applied in the most diverse operations—from the production of electronic element stock to the marking of finished goods.

One of the complex operations in this industry is the cutting of glass substrates for electronic circuits. The technology here is required to ensure special purity and high speed. The laser installation Kvant-20 guarantees both. It is based on the well-known effect—the cleavage of glass when heated fast. Focussed into a very thin beam, the light flow instantaneously heats up the glass. A crack arises. By shifting the blank beneath the laser beam, the operator manages to direct the run of this crack with unique accuracy, measured by tenth of a millimetre. And the speed is very high—almost 40 centimetres of the blank can be cut just in a minute.

It is not only high productiveness that influences the performance characteristics of the process, but also

the lasers practically rule out defects. For they cut the glass without touching it. As a consequence, glass edges are not harmed, and no chippings form on them. A once inevitable operation—additional polishing of blank edges—has been eliminated. The new method of cutting also involves no glass dust and chips. The laser beam can also cut flint, indium and gallium arsenides, glass-cloth-base laminate and glass ceramic—materials well known to modern electronics. A special installation, the Kvant-50, has been developed for soldering, the most common operation in electronics. According to the programme, it solders suspended elements to the printed circuit board with ideal accuracy.

Lasers are being used ever more widely in the Soviet electronics industry, enabling it to tackle many complex production problems, save time and labour and considerably improve the quality of output. (*Soviet Features*, Vol. XXIII, No.194, December 27, 1984.)