

US backs nuclear safeguards

Rostow hints at new policy on plutonium

Washington

The Reagan Administration rallied behind the International Atomic Energy Agency (IAEA) last week, claiming that a strong international safeguards system was essential for the development of nuclear commerce. It argued that weaknesses in the safeguards system should be remedied by greater support for IAEA programmes, not by changing their basic objectives.

The Administration's views were given in testimony to two subcommittees of the House of Representatives' Foreign Affairs Committee. One issue was the adequacy of the Administration's proposed contribution to IAEA in the 1983 budget. Although the increase over the 1982 contribution is larger than that for any other international organization, it will still not be enough to keep up with inflation — a source of concern to some State Department officials faced with rapidly growing demands for IAEA inspection procedures.

The hearing was also an opportunity for the State Department to rebut some recent criticisms of IAEA, in particular complaints about its admission last year (in connection with a reactor in Pakistan) that it cannot always assure member countries that nuclear materials are not diverted from peaceful to military purposes.

Such criticisms, State Department officials argued last week, are not only misdirected but also potentially harmful, tending to undermine the credibility of IAEA. Mr Richard T. Kennedy, Under-Secretary of State for Management and head of the delegation to IAEA, angrily rejected charges by Congressman Richard Ottinger that the agency had been involved in a "cover-up" by not making public its concern about the possibility of the diversion of nuclear material in countries such as Iraq and Pakistan.

Mr Kennedy was accompanied at the witness table by Ambassador Richard Kirk, deputy US representative to IAEA, and Dr Eugene Rostow, head of the Arms Control and Disarmament Agency. Each spoke strongly on the theme that the agency requires as much support as possible from the industrialized nations, and that the adequacy of safeguards should not be considered in isolation, but merely as one element in the control of nuclear proliferation.

Thus Mr Rostow told the subcommittees that halting the spread of nuclear explosives was "inconceivable" without IAEA safeguards, but added that they did not prevent diversion since, for example,

they did not permit searches for clandestine materials or facilities. "In my view, it is just as wrong to overestimate the importance of safeguards in nuclear commerce as it is to denigrate the system for not accomplishing objectives for which it was not designed," Mr Rostow said.

The State Department's consensus on IAEA, however, was not shared by all members of the Nuclear Regulatory Commission (NRC). Under the terms of the Nuclear Non-Proliferation Act of 1978, the commission is responsible for checking that safeguards are applied to any foreign nuclear installation to which nuclear materials are being exported from the United States.

Mr Peter Bradford, on his last day as one of the five members of NRC, was outspoken about the difficulties experienced by both NRC and congressional committees in obtaining data by which to assess the effectiveness of the safeguards. At one point, he accused the State Department of unnecessarily censoring NRC's reply to questions submitted by Congressman Richard Ottinger.

Mr Kennedy refuted the charge of censorship, pointing out that the information was being withheld at the request of the Central Intelligence Agency — which has since offered to brief Mr Ottinger on the subjects that he had inquired about. Both he and Dr Rostow, however, declined to say whether the State Department has evidence of the diversion of nuclear materials.

Both Mr Bradford and a second NRC

commissioner, Mr Victor Gilinsky, expressed reservations about the adequacy of IAEA inspection procedures for warning about the diversion of weapons-grade plutonium from reprocessing or enrichment facilities — concerns which led the Carter Administration to attempt to dissuade other countries from adopting such technologies.

Dr Rostow in reply criticized the previous Administration's approach, suggesting that attempts to impose unilateral controls could backfire by encouraging the spread of reprocessing while making less likely the agreements on a common policy with other nuclear suppliers. The Administration's policy is soon to be defined in a new executive order which Mr Reagan is to sign; Dr Rostow said it was important to acknowledge that civil reprocessing in the stable industrial democracies did not in themselves present a proliferation risk.

On the IAEA safeguards, Dr Rostow urged that member states should provide the international safeguards system with the resources needed. Mr Kirk, however, told the subcommittees that as the number of installations under IAEA safeguards had risen from 560 in 1977 to 850 in 1981, even though the IAEA budget allowed much faster growth for safeguards than in other activities, its expansion of the safeguards system had caused "a resources pinch, growing pains in IAEA's administrative structure, and a lag in IAEA safeguards coverage".

David Dickson

Nuclear monitoring by telephone

Washington

A scheme for collecting nuclear safeguards information by means of telephone lines is to be discussed at a meeting planned for Vienna in June this year. The system, called the Remote Continual Verification programme (or "RECOVER"), which was given a systematic trial in the autumn of 1980, has grown out of the technical proposals for the remote verification of arms control agreements in the draft of the Comprehensive Test Ban Agreement, uncompleted since the end of 1980.

In evidence to the House of Representatives last week, Dr Eugene Rostow said that on the basis of a cost-benefit study carried out at Brookhaven National Laboratory, the Administration was now hoping that the system could be put into service soon, and that it might even be valuable in the verification of treaties (yet to be negotiated) on chemical and biological weapons.

In the nuclear context, the new system is a means of making sure that automatic monitoring equipment does not break down between visits by inspectors from the

International Atomic Energy Agency (IAEA). This is done by the repeated but irregular interrogation of monitoring equipment by means of signals transmitted on the international trunk telephone system. So that the authorities responsible for safeguarded nuclear installations cannot corrupt the signals received and sent, signals are encoded by means of an unbreakable code of the type developed for use in what is now called public-key cryptography.

The Brookhaven study has apparently shown that the new monitoring system is potentially most valuable in nuclear installations such as reactors which can be refuelled on load and in fast critical assemblies, to which frequent visits from inspectors are at present required. One critical assembly in Japan, containing a fixed quantity of 300 kg of plutonium and 200 kg of enriched uranium, has on present criteria to be inspected every week or two.

The new monitoring system, by reducing the frequency of inspections, would save an estimated \$200,000 a year at that installation alone. The system is, however,