GC

International Atomic Energy Agency

GENERAL CONFERENCE

GC(SPL.I)/8
25 September 1986

GENERAL Distr.

ENGLISH
Original: RUSSIAN

First special session

PROGRAMME FOR ESTABLISHING AN INTERNATIONAL REGIME FOR THE SAFE DEVELOPMENT OF NUCLEAR ENERGY

Proposals by the USSR

The use of nuclear energy is a reality of today. Yet nuclear power became part of the life of mankind not through creative endeavour, but through the death of hundreds of thousands of people. The sinister shadow of the tragedy of Hiroshima and Nagasaki lies between the development by Enrico Fermi of the first facility and the first industrial atomic power station designed by Igor Kurchatov.

The nuclear arsenals have now increased to such an extent that they threaten to exterminate our very life on Earth. The time has come to realise that the preservation of human civilization is a matter of concern to all States, for nuclear war will inevitably affect each and every one. While there is still time, it is imperative to put an end to the suicidal build-up of nuclear arms, to abandon the policy of catastrophic confrontation and embark upon the process of genuine disarmament.

In putting forward its programme for eliminating nuclear arms and other weapons of mass destruction throughout the world, the Soviet Union has been guided by an awareness of the reality of the danger threatening mankind. The close of the twentieth century should be marked by the complete elimination of nuclear weapons under conditions of peace and genuine and equal security for all States and peoples. The security of the peoples on our planet is inconceivable without an end to material preparations for nuclear war. The Soviet Union is convinced that the cessation of nuclear-weapon tests can become a turning point in efforts to achieve this goal. That is why the USSR announced, and has since repeatedly extended, a unilateral moratorium on all nuclear explosions.

0782e/124e
86-5027

However, even the peaceful uses of the atom are fraught with considerable hazard. This is evidenced by the effects of accidents at nuclear installations. That is why the USSR has proposed that all countries should work together with a view to minimizing any risk of a nuclear accident in the world and to ensuring the safe development of nuclear energy.

These two tasks - ensuring the safety of the peaceful uses of nuclear energy and ridding our planet of nuclear weapons - call for broad international co-operation and joint efforts by all States, first and foremost nuclear States, by international organizations and by public bodies interested in establishing a comprehensive and reliable system of international security. This applies equally to both the community of nations and each individual State.

* *
*

At present there are about 370 nuclear power reactors operating in the world. By the year 2000 nuclear power is expected to account for more than 20% of the world's total energy production. In some countries nuclear power stations already generate more than 50% of the electric energy produced. More than 30 years of experience in operating nuclear power plants have convincingly proved their viability, economic efficiency and ecological safety.

In recent years the geography of nuclear power production has considerably expanded. Nuclear power plants and research reactors are being built and operated in the developing countries of Asia, Latin America and Africa.

The time has also come to speed up the exploitation of controlled thermonuclear fusion, potentially an inexhaustible source of energy. Following the initiative by the Soviet Union, and with the participation of scientists from a number of West European countries as well as from the United States and Japan, an international fusion reactor pilot project, known as INTOR, has been under way in Vienna since 1978. Further development of international co-operation in nuclear fusion meets the interests of the overwhelming majority of countries of the world who, given the current situation, are vitally interested in obtaining new sources of energy. And what is of special importance, this trend has nothing to do with any military use. Equally significant is the fact that thermonuclear energy will have only a very slight effect on the environment compared with other sources of energy. Today we are already in a position to state that building such a reactor is feasible and that it may take only a relatively short time to do so.

Peaceful uses of the atom will make it possible to meet ever increasing needs of mankind in energy for industry, agriculture and scientific research.

At present there is no other equivalent alternative in the field of energy resources. At the same time, one cannot fail to see that in the process of developing nuclear energy mankind faces the danger that this formidable force may get out of control.

More than 150 accidents with resultant radioactive leakage have been recorded at nuclear power plants throughout the world. Some of those accidents in the United States, Federal Republic of Germany and Great Britain, and finally in Chernobyl', have been very serious and have led to grave consequences causing economic and psychological damage. Events of this kind can affect neighbouring States as well. They show how small, in fact, is the world we live in, how great is the interdependence of States. The realities of the nuclear and space ages make it imperative for the peoples to see themselves as members of one family on planet Earth.

The conclusion that the Soviet Union has come to, following the Chernobyl' accident, is clear and unambiguous: the nuclear power industry should develop under conditions ensuring maximum safety for people and the environment. The accident has shown that wide-ranging international co-operation and joint efforts are necessary to guarantee nuclear safety in the broad sense of the word.

Convinced of the necessity to tackle, without delay and in a practical manner, the task of ensuring the safe development of nuclear energy, the Soviet Union wishes to propose to the international community of States a programme of action for establishing an international regime for the safe development of nuclear energy on the basis of close co-operation between all States. This programme envisages the creation of a material, scientific and technological base for the safe development of nuclear energy, supplemented with international regulations and agreements.

First: It is necessary to set up, in the immediate future, a system of early notification of nuclear accidents or breakdowns at nuclear power plants with concomitant radioactive discharges that may involve the risk of a transboundary release. The objective of such a system would be to minimize the consequences of such accidents for other countries and to take timely measures to protect the health and safety of the population, as well as property and the environment.

The draft international convention on early notification of a nuclear accident, worked out at the IAEA meeting, could lay the basis for such a system. The Soviet Union is prepared to become party to that convention. It would strictly comply with all its provisions, including those that envisage notification of all nuclear accidents, particularly, nuclear weapons- and nuclear test-related accidents, and it calls upon all other States to do likewise.

The establishment of an international data bank on radiation background levels in some agreed geographical areas could be an important component of that system, thereby supplementing the convention. Those data could be used to assess the effects of a possible transboundary release in the event of a nuclear accident. Data could be collected by national centres and subsequently transmitted to a single international centre or centres. A significant role in this context could be played by the World Meteorological Organization.

In view of the fact that the scope of the protective measures is determined by the concentration of radioactive substances in the environment, there is a need to agree upon common international standards for accident-induced concentrations of radionuclides and levels of radioactive contamination of the affected area. Such internationally agreed standards and norms could be used both for the adequate application of protective measures by all States as well as for the justification of claims for damages in connection with a transboundary release of radioactivity.

Second: Since many States are not able to cope with a major accident on their own, it is proposed to set up a well co-ordinated mechanism for providing assistance in emergencies and accidents as a component of the international regime for the safe development of nuclear energy.

The draft convention on assistance in the event of a nuclear accident or radiological emergency worked out at the special IAEA meeting of government experts could be an important part of that regime.

The drafting of international recommendations on methodological principles for eliminating the consequences of nuclear accidents and for emergency planning could be a part of the mechanism for assistance to States in eliminating the consequences of accidents.

Third: Another component of the international regime for the safe development of nuclear energy could be agreement that all States in their nuclear activities should be guided by the recommendations formulated by the IAEA on the safety of nuclear installations. Those recommendations could cover, in particular, such questions as the siting of a facility, its design, construction, exploitation and decommissioning, and the treatment of the radioactive waste.

A first step in that direction could be the reaching of an agreement between States exporting nuclear installations and nuclear fuel to observe IAEA recommendations on the safety of nuclear power plants in their exports.

To render practical assistance, the IAEA might send, at regular intervals and at their request, groups of competent experts on nuclear safety to States party to the agreement.

Fourth: An essential element in the system of accident-prevention measures is the collection, processing and exchange of information on nuclear plant accidents, their causes, their development and their consequences.

The IAEA workshop on enhancing nuclear energy safety, held in late August, was of great importance for strengthening international co-operation in this field. The objective and detailed information provided by the Soviet Union concerning the causes, evolution and consequences of the Chernobyl' accident, as well as an exchange of information about accidents and clean-up operations in other countries, make it possible to draw up major guidelines for international co-operation in technical arrangements to ensure the safe development of nuclear energy.

The Agency's system for nuclear power plant incident reporting is a good basis for establishing a data bank on nuclear accidents to be used by all nuclear energy countries. It is desirable that this system be further expanded and developed.

Fifth: Joint elaboration of a project or projects related to new generation reactor systems based both on thermal and fast neutrons could be an important element in focusing the efforts of countries aimed at ensuring nuclear plant safety. Those projects could incorporate the most up-to-date safety technology when dealing with problems such as reducing the sensitivity of a reactor system to operator error, or, in other words, taking into account the "human factor", reducing the possibility of a meltdown, and monitoring hydrogen formation.

In organizational terms, such a project or projects for fail-safe reactors or energy centres could be implemented within the IAEA in exactly the same way as the international thermonuclear reactor project. What is more, the relevant Agency working groups could contribute to those activities.

Sixth: As is known, the deliberate destruction of nuclear power plants, research reactors and other similar facilities could trigger a release of radioactive materials and cause radioactive contamination of the terrain.

All this shows that, in terms of its effects, the destruction of peaceful nuclear plants even with conventional weapons would, in fact, be tantamount to a nuclear attack, i.e. to actions that the United Nations has already described as the gravest crime against humanity.

The Soviet Union proposes that a reliable system of measures to prevent attacks against nuclear installations should be developed. It is essential to work out a relevant international convention under which all States would undertake not to attack nuclear power facilities.

An equally sound set of measures should be devised with regard to nuclear terrorism. The instances that have occurred of deliberate damage to nuclear industrial plants as well as cases of the theft of highly concentrated fissionable materials cannot but cause concern.

The radiation hazard and high toxicity of nuclear materials make it imperative to ensure reliable protection of them against criminal designs. It is conceivable that such materials, if seized, might be used to fabricate some sort of elementary nuclear explosive device for the purposes of sabotage and terrorism, blackmail and extortion. There is urgent need to develop a reliable set of measures to prevent any form of nuclear terrorism. We are ready to work towards reaching a separate, independent agreement on this issue and addressing this matter as part of the overall efforts to combat international terrorism.

Seventh: Steps must be taken to ensure that the Convention on Physical Protection of Nuclear Materials enters into force as soon as possible. The Soviet Union has signed and ratified the Convention. We call upon other States to promptly follow suit so that it can become operational as a factor promoting nuclear safety.

Eighth: The question of liability for nuclear damage occupies an important place in activities relating to the international regulation of various aspects of nuclear power safety. Attempts have already been made to draw up international legal instruments governing those matters, but the issue of the material, moral and political damage caused by nuclear accidents has not yet been sufficiently studied; this has resulted in sporadic attempts to make use of nuclear accidents for creating tension and mistrust in relations between States.

It is essential, in the event of a nuclear accident, for States to provide free medical assistance, housing and other material support for the population concerned. A possible multilateral international legal instrument could envisage the liability of States for international damage in terms of the transboundary effects of nuclear accidents, as well as for material, moral and political damage caused by unwarranted action taken under the pretext of protection against the consequences of nuclear accidents (the spreading of untrue information, introduction of unjustified restrictive measures, etc.).

Ninth: A reliable regime for the safe development of nuclear energy will require efforts not only on the part of the States themselves, but also of international organizations and institutions that could serve as focal points in the implementation of nuclear safety measures. The IAEA should take the lead in this field. It is essential to enhance the role and potential of this unique international organization, to broaden the scope of its activity, and to make greater use of its experience in studying various aspects of the nuclear safety problem.

Specialized United Nations agencies, such as the World Health Organization, United Nations Environment Programme, UNESCO and various others, could make a substantial contribution to the regime for the safe development of nuclear energy. We believe that the UN Committee on the Effects of Atomic Radiation should be more active in making the regime efficient.

Joint co-ordinated research and exchange of views on various matters related to the development of nuclear energy should involve the active participation of international organizations; these matters should include the following:

- Development of methods related to accident prevention and clean-up operations;
- Analysis of accident causes and evolution of emergency situations, including a probability analysis;
- Development of robots, machinery and equipment to be used in clean-up operations;
- Development of effective decontamination methods, machinery and equipment as well as reliable means for protecting people against radiation;

- Development of medicines, equipment and techniques for treatment of radiation sickness;

- Development of methods for training personnel servicing nuclear power plants.

* *
*

Today, mankind faces an historic choice: either to allow itself to slide down the path of the arms race towards the abyss of a nuclear holocaust, or to bring its thinking and its actions into line with the realities of the nuclear and space ages.

The continuing arms race, above all the nuclear arms race, poses a direct threat to the existence of mankind. Guided by the philosophy of shaping a secure world, the Soviet Union advocates a broad constructive programme of action aimed at ending the arms race and at disarmament.

A regime for the safe development of nuclear energy would make a tangible contribution to ensuring universal security. Such a regime, meeting the interests of all mankind, can and must be established by the joint efforts of all States.

The Soviet Union calls upon all States and international organizations concerned to co-operate in this important endeavour, vital for the further development of human civilization.