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## TWENTIETH REGULAR SESSION: 21-28 SEPTEMBER 1976

RECORD OF THE ONE HUNDRED AND EIGHTY-SIXTH PLENARY MEETING

Held at the Conference Centre, Hotel Nacional-Rio, Rio de Janeiro, on Wednesday, 22 September 1976, at 3.20 p.m.

President: Mr. de CARVALHO (Brazil)

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<sup>\*</sup> A provisional version of this document was issued on 8 November 1976.

<sup>\*\*</sup> GC(XX)/562 and Add. 1.

## THE RECORD

GENERAL DEBATE AND REPORT FOR 1975 (GC(XX)/565) (continued)[1]

- 1. Mr. HOUARD (Belgium) thought there was every reason to be satisfied with the Agency's achievements during the first 20 years of its existence. Among its steadily growing responsibilities, those relating to safeguards under the Treaty on the Non-Proliferation of Nuclear Weapons (NPT)[2] were of special importance in view of the growing trade in nuclear equipment and materials.
- 2. Belgium, which was in favour of an expansion of the peaceful uses of nuclear energy, had no desire to see the number of nuclear-weapon States increase and had therefore acceded to NPT, which, in its opinion, represented a step in the direction of general nuclear disarmament. It had agreed to the Agency's verifying the results of the safeguards which the European Atomic Energy Community (EURATOM) had been applying to the whole fuel cycle in its territory since 1958. It was therefore well placed to give calm consideration to the various suggestions put forward to date on ways of preventing all proliferation of nuclear weapons.
- Pursuant to paragraph 2 of Article III of NPT, a number of States, including Belgium, had established a code of conduct for countries supplying materials and equipment, at the same time endeavouring to ensure that competition between suppliers did not become distorted as a result of variable safeguards requirements. Belgium had undertaken to comply with the code and, naturally, to continue meeting its prior obligations under the EURATOM Treaty. Possibly, the code was not yet sufficiently restrictive to eliminate with certainty the danger of proliferation in the case of commercial transactions with countries not party to NPT, for once a country had acquired the requisite techniques and skills there was little to stop it building a replica of a facility under international safeguards, which could escape such safeguards unless they had been prescribed at the time the transfer of equipment or technology took place. Although restrictive clauses were becoming common in new sales contracts, it would be much simpler and safer, especially from the point of view of the supplier State, to require that the receiving State place its whole nuclear fuel cycle under Agency safeguards; that would simplify formalities, reduce far more the dangers of diversion and gradually place all States on the same footing as regards the development of nuclear energy.
- 4. There should be no discrimination against States party to NPT in the supply of nuclear materials and equipment. His country, while

[1] GC(XX)/OR.185, paras 2-134.

[2] Reproduced in INFCIRC/140.

appreciating some of the objectives underlying the suggestions made in a memorandum recently addressed to the Agency by the Resident Representative of Finland, was of the opinion that the method advocated was not the most effective way of strengthening non-proliferation.

- 5. Regional nuclear fuel cycle centres, if set up, might facilitate the application of safeguards and prevent proliferation, but their establishment should not conflict with the economic and technical interests of the countries likely to make use of them. Furthermore, it should remain possible for a State which already possessed the requisite technology and in which the scale of nuclear power generation warranted the establishment of a national nuclear fuel cycle centre to establish one, provided, of course, that the State in question accepted Agency safeguards on all its nuclear activities, thereby meeting the requirements of NPT.
- Lastly, it should be borne in mind that NPT was still the major legal instrument for preventing the proliferation of nuclear weapons. For it to have greater force, all States party to NPT should implement all the undertakings which had been entered into, including those concerning international co-operation and disarmament. The use of certain civilian nuclear techniques exclusively by nuclear-weapon States would be contrary to the spirit and letter of NPT. His country regarded NPT as just one stage on the way to full democracy - with the necessary and sufficient safeguards - in the peaceful utilization of nuclear energy; it should not be the starting point for fresh discrimination increasingly in favour of those who, in the past, had deemed it advisable to equip themselves with nuclear weapons.
- 7. He hoped that the Agency would be able to play an increasingly constructive role in the maintenance of peace and that it would help as much as possible those Member States which looked to it for development assistance. He would like to see all Member States taking a positive part in the attainment of the Agency's objectives.
- 8. Mr. MOROKHOV (Union of Soviet Socialist Republics) read out the following message to the participants in the General Conference from Mr. Kosygin, Chairman of the Council of Ministers of the Union of Soviet Socialist Republics:

"Mr. President,

"Permit me to transmit through you my wishes for a fruitful twentieth regular session to the General Conference of the International Atomic Energy Agency - an important international organization whose activities are very directly linked with the maintenance of peace and the strengthening of co-operation between States.

"In the present international situation, for those interested in the maintenance of peace there is no more urgent task than putting an end to the arms race and achieving disarmament. It is incumbent on the Agency to help in achieving these aims, and all people of good will wish the participants in the Conference every success in this noble cause. This is also the wish of all Soviet citizens.

"The Agency is rightly regarded as the centre for co-ordinating the efforts of States in the peaceful utilization of atomic energy - in the development of nuclear power generation, the exchange of scientific and technical information, the use of underground explosions for peaceful purposes, environmental protection and controlled thermonuclear fusion.

"One should not forget for a moment, however, that the energy of the atomic nucleus can also be used as the most destructive weapon mankind has ever known. That is why the efforts deployed by the Agency to prevent the proliferation of nuclear weapons acquire special importance. Although the field of application of the Treaty on the Non-Proliferation of Nuclear Weapons has recently expanded, new and even more effective measures are necessary to stop the further spread of nuclear weapons on our planet. This is one of the most important tasks before the Agency.

"The Soviet Union has rendered considerable and varied assistance to the Agency ever since it was established and I should like to assure the participants in the Conference that our country intends to continue contributing to the conduct of the work of this influential international organization, which is so valuable to the cause of peace.

"Permit me to express the hope that the twentieth regular session of the Agency's General Conference will help in strengthening collaboration between States in the interests of maintaining peace.

"A. Kosygin"

Recalling that under Article II of its Statute the Agency was required to "seek to accelerate and enlarge the contribution of atomic energy to peace, health and prosperity throughout the world", he said that one of the Agency's primary tasks was to help in bringing about lasting peace. The twentieth session of the General Conference was taking place in a climate characterized by a continuation of détente, and the Soviet Union would continue to do its utmost in the interests of détente and disarmament. In that connection, the 25th Congress of the Soviet Communist Party had announced that the Soviet Union was determined to strive for peace, for greater international cooperation and for the freedom and independence of all peoples.

- 10. During the past year, the Soviet Union had concluded with several other States agreements aimed at checking the arms race; they included the Treaty between the United States of America and the Union of Soviet Socialist Republics on Underground Explosions for Peaceful Purposes (the PNE Treaty) and an agreement with France on the prevention of the accidental or unauthorized use of nuclear weapons.
- 11. It should not, however, be forgotten that certain forces in the world were opposed to a normalization of international relations and were constantly seeking to intensify the arms race. If the latter was to be stopped and true disarmament initiated (objectives which determined the main lines of the Soviet Union's foreign policy), new measures had to be taken. Mr. Brezhnev, Secretary General of the Central Committee of the Soviet Communist Party, on the occasion of the signing of the PNE Treaty, had announced that the 25th Congress of the Soviet Communist Party had formulated a programme whose implementation would make it possible to stop the arms race and initiate true disarmament.
- In that context, great importance attached to the non-proliferation of nuclear weapons. The Soviet Union welcomed the widening of the scope of NPT resulting from the recent accession to it of the Federal Republic of Germany, Italy and Japan; nevertheless, further effective measures were needed if the proliferation of nuclear weapons was to be averted. NPT could play an even greater role if all States ratified it. As many States as possible should therefore be induced to ratify NPT and, at the same time, steps should be taken to ensure that those countries which did not accede to NPT were unable to manufacture nuclear weapons. The agreement reached by the Soviet Union and 21 other countries to the effect that all nuclear materials and equipment supplied by them should be subject to Agency safeguards was of great importance in that respect. The next step was to make as many countries as possible partners in that agreement and to expand the "trigger list".
- The exporting States had special responsibilities and, in his opinion, strict safeguards were necessary if the proliferation of nuclear weapons was to be prevented. The export of nuclear equipment and materials was not a simple commercial transaction; it was closely linked with the maintenance of peace. The Soviet Union's export policy was based on adherence to strict rules which precluded all possibility of proliferation. It was essential that the Agency's safeguards cover the whole fuel cycle of non-nuclear-weapon countries which were not parties to NPT, and no nuclear materials or equipment should be supplied to such countries unless they undertook not to use them in the production of nuclear explosive devices.
- 14. The Soviet Union also attached great importance to the physical protection of nuclear materials, in which field there was a pressing

need to strengthen current measures. It required from countries to which it supplied nuclear materials that they ensure the physical protection of those materials in accordance with Agency recommendations and was ready to participate in the drawing-up of an international agreement.

- 15. Drawing attention to the risks, from the standpoint of proliferation, associated with the establishment of enrichment and reprocessing plants, he said his country supported the Agency's study of multinational nuclear fuel cycle centres; it believed that participants would benefit from such centres, in particular economically. Furthermore, safety would be greater and effective control by the Agency easier if radioactive wastes were concentrated at a few points.
- The Soviet Union was making a determined effort to achieve a total ban on nuclear weapon tests and in that spirit, it had in 1974 concluded the Treaty between the United States of America and the Union of Soviet Socialist Republics on the Limitation of Underground Nuclear Weapons Tests.[3] Nevertheless, the need for an international agreement on the universal and complete banning of nuclear tests still remained, and the Soviet Union had, at the thirtieth session of the General Assembly of the United Nations, submitted a proposal and a draft treaty. The latter provided for the banning of nuclear weapons tests, and the idea was that it should be signed by all countries whether or not they possessed nuclear weapons. Such a treaty would do much to check the arms race and strengthen world peace and international co-operation.
- While continuing to strive for non-proliferation, the Soviet Union was in favour of maximum development of the constructive applications of nuclear energy, including nuclear explosions for peaceful purposes. In accordance with the PNE Treaty, concluded during the current year, underground nuclear explosions were to serve peaceful purposes only and to comply with the provisions both of the Treaty Banning Nuclear Weapons Tests in the Atmosphere, in Outer Space and Under Water (The Partial Test Ban Treaty)[4] and of NPT. Compliance with the provisions of the PNE Treaty would be verified through national monitoring systems, the exchange of information and occasional onthe-spot visits by observers. the PNE Treaty was of importance from the standpoint of arms limitation, and the Agency might well take advantage of its provisions in organizing international co-operation in the field of peaceful nuclear explosions pursuant to Article V of NPT.
- 18. The Soviet Union was the only major industrial power which was meeting its energy needs from its own resources. Hydropower and

nuclear fuel would participate in the expansion of the country's installed electricity-generating capacity, accounting for 40% in the current fiveyear period, as against 22% in the 1970-75 period. The 1976-80 nuclear power programme provided for the installation of 13-1500 MW of new generating capacity. In addition to the building of reactors with a unit capacity of 1000 MW, the Soviet Union would be working on the development of reactors with a unit capacity of 1500 MW. It would be embarking on the construction of nuclear power stations with an installed capacity of 4-800 MW based on thermal reactors with unit capacities of 1000 MW and 1500 MW. The Soviet Union would also be taking an interest in the use of nuclear energy for the production of industrial heat and intensifying its development work on fast reactors.

- 19. In addition, the Soviet Union was engaged in building up a fleet of nuclear ice-breakers; a second vessel had already gone into service and a third one would be doing so shortly.
- 20. A large nuclear power station construction programme was also being implemented in the Member States of the Council for Mutual Economic Assistance (CMEA) with the help of the Soviet Union. Enrichment services for uranium belonging to other countries were an important part of the Soviet Union's programme of international collaboration; they were being made available in accordance with the provisions of NPT.
- 21. The Soviet Union attached great importance to research on controlled thermonuclear reactions, and the experimental results were promising. His country had always advocated the strengthening of international co-operation in that field and welcomed the efforts being made by the Agency. A meeting of Agency experts on the inertial confinement of plasmas had been held in the Soviet Union in July 1976 and an Agency conference on plasma physics and controlled thermonuclear fusion was expected to be held there in 1978.
- 22. The Soviet Union had concluded 40 international agreements for co-operation in the peaceful utilization of atomic energy, and CMEA was playing an important role with regard to multilateral co-operation in that field.
- 23. The Soviet delegation believed that the Agency's programme for 1977-82 generally corresponded to the needs of the Agency's Member States and would contribute to the achievement of the objectives laid down in the Statute. The programme was well balanced financially and priority was being given to assisting developing countries with the implementation of nuclear power programmes. He complimented the Secretariat on the elaboration of the programme and paid tribute to the Director General for the important personal role he had played. Recalling that his country had always supported the Agency's activities, he stressed the important work which the Agency had accom-

<sup>[3]</sup> Reproduced in document INFCIRC/208.

<sup>[4]</sup> United Nations Treaty Series, Vol. 480, Treaty No. 6964.

plished in putting into practice the recommendations of the Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT Review Conference) [5].

- The number of safeguards agreements had now reached 130, of which about a hundred related to countries with nuclear programmes. The Agency should therefore aim at automating the treatment of safeguards information. His delegation appreciated the Secretariat's work in the field of safeguards, but wished to stress the need for greater efficiency, especially in view of the fact that the volume of inspection work was about to increase due to the accession to NPT of five Member States of EURATOM and Japan. He trusted that in those countries too the Agency would discharge its responsibilities effectively by adhering to the essential principle - its right to carry out independent inspections. In that connection, the delay in the conclusion of safeguards agreements with the EURATOM countries was a matter of great concern to the Soviet Union.
- He thought that the Agency should, in practice, make fuller use of its rights, in particular as regards inspections, in order to ensure that nuclear materials were not diverted and used for the manufacture of explosive devices. To enhance the effectiveness of safeguards, efforts should be made to standardize control procedures and improve the instruments used, measures which should be feasible within the framework of the budget. Referring to the work of Soviet experts in developing safeguards methods, he mentioned the experimental verification activities in which Agency inspectors had participated at the Novovoronezh Nuclear Power Station. As a material contribution to the furtherance of Agency safeguards, his Government had decided to make a special gift of 250 000 roubles in 1977 for the development of safeguards techniques. The gift could be used to establish a school for Agency inspectors at the Novovoronezh Nuclear Power Station, where safeguards techniques could be devised and courses and meetings held.
- 26. Recalling that, in the final declaration of the NPT Review Conference, the Agency was called upon to assist non-nuclear-weapon States in the utilization of nuclear explosions for peaceful purposes, he said that the Agency should give priority to a study of ways of carrying out such explosions safely and to the formulation of recommendations on radiological and seismic questions.
- 27. While he acknolwedged the efforts which the Agency had been making during the past year to improve the International Nuclear Information System (INIS), he felt it was important that the system embrace all pertinent publications.
- 28. He stressed the importance of the Agency's technical assistance programme for developing

countries. Referring to the assistance which the Soviet Union had already provided through the Agency, he mentioned the 14 study tours in the Soviet Union which the Agency had organized for specialists from developing countries. His Government had decided to raise its voluntary contribution to the General Fund in 1977 to 600 000 roubles, for the purchase of Soviet equipment, instruments and materials and for the organization of study tours in the Soviet Union.

29. He expressed the hope that the present session of the General Conference would contribute to the development of co-operation in the peaceful applications of atomic energy.

ELECTION OF OFFICERS AND APPOINTMENT OF THE GENERAL COMMITTEE (resumed)[6]

- 30. The PRESIDENT recalled that the election of the Vice-Presidents of the General Conference and of the Chairman of the Committee of the Whole had been deferred while certain delegations completed the consultations which they wanted to hold on the matter. Those consultations had led to the following consensus: for the present session, nine Vice-Presidents should be elected instead of the eight provided for in Rule 34 of the Rules of Procedure. It would accordingly be necessary to suspend the relevant parts of Rules 34 and 40 of the Rules of Procedure during the present session.
- 31. He proposed that the delegates of the following States be elected as the Vice-Presidents of the General Conference: Canada, France, India, Japan, Mexico, Nigeria, Romania, Thailand and the Union of Soviet Socialist Republics He proposed Mr. Malu wa Kalenga (Zaire) as Chairman of the Committee of the Whole. Lastly, as additional Members of the General Committee, he proposed the German Democratic Republic, the Federal Republic of Germany, Kuwait, the United Kingdom of Great Britain and Northern Ireland, and the United States of America.
- 32. The General Conference accepted the President's proposals.

GENERAL DEBATE AND REPORT FOR 1975 (GC(XX)/565) (resumed)[7]

33. Mr. SITZLACK (German Democratic Republic) said that, while the peaceful coexistence of States with different economic and social systems had become an important factor in international relations, one of mankind's most urgent tasks was to put a stop to the arms race. The PNE Treaty, signed in May by the Soviet Union and the United States of America, was a step in that direction.

Held at Geneva in May 1975.

[5]

<sup>[6]</sup> GC(XX)/OR. 185, para. 1.

<sup>[7]</sup> Ibid., paras 1-29.

- He was gratified to note that considerable progress had been made in the nuclear field, thanks largely to NPT to which one hundred States were parties, and he hoped that the number of corresponding safeguards agreements would increase rapidly. The Government of the German Democratic Republic fully supported the Agency's efforts to implement the provisions of NPT and considered one of the Agency's permanent tasks to be the improvement of conditions as regards staff, organization and techniques so that international safeguards could effectively meet increasingly exacting requirements. He appealed to all States which had a nuclear industry, or intended to create one in the near future, to accede to NPT, for its universality and the effective realization of its objectives were essential to the future safety of mankind.
- 35. He encouraged the Agency to continue its efforts with regard to the physical protection of nuclear materials and the use of nuclear explosions for peaceful purposes.
- 36. He said his delegation approved of the activities described in the annual report for 1975 and noted that the programme for 1977-82 embraced both traditional tasks and tasks associated with the large-scale utilization of nuclear energy. Many countries now attached great importance to nuclear power generation. In the German Democratic Republic, the proportion of electricity generation attributable to nuclear plants would increase from 17% in 1971-75 to 27% in 1976-80. In that connection, co-operation between the German Democratic Republic and the other socialist countries, especially the Soviet Union, within CMEA had been particularly fruitful.
- 37. With regard to the utilization of nuclear energy, the same vigour which had been applied in the preparation of nuclear power programmes should also go into activities relating to safety, in order to overcome the dangers associated with the widespread use of nuclear energy. The Agency's manifold activities in that field accordingly deserved particular support.
- 38. The initiative which the Agency had taken in establishing INIS merited special mention. INIS had already yielded excellent results and should continue operating on the present scale.
- 39. The German Democratic Republic was doing everything it could to support the technical assistance programme, especially in the field of training.
- 40. With regard to the proposed increase in the budget, it was still necessary to exercise strict economy and to make the most efficient use possible of all resources in implementing the programme.
- 41. In view of public attitudes towards the peaceful utilization of nuclear energy, appropriate measures should be taken not only to ensure safety but also to demonstrate it and gain public confi-

- dence. One such measure was the separation of research, development and other promotional activities from regulatory and control activities; it had yielded excellent results in a number of countries. At the international level, however, such separation seemed neither appropriate nor necessary, as had been shown by the extremely fruitful efforts of the Agency, where the association of all aspects of the utilization of atomic energy had been found particularly advantageous.
- 42. In conclusion, he said that the Director General's question as to whether one could be satisfied with the work done by the Agency during somewhat less than 20 years warranted an affirmative reply.
- 43. Mr. GEORGE (Australia), noting that Australia had just undertaken its first full-scale environmental inquiry into the uranium industry, said that the Agency should make its voice heard in the nuclear controversy, which was becoming increasingly intense. The Agency would accordingly do well to disseminate more widely information on questions which were at present troubling the public. The environmental effects of the nuclear industry and the limits to be set with regard to the disposal of radioactive materials into the environment should be subjects of continuous study.
- Australia greatly appreciated the guidelines which the Agency was issuing for Member States embarking on nuclear programmes. The efficient transfer of technology to developing countries and the efficient safeguarding of that technology presented the Agency with a challenging problem. In the opinion of the Australian Government, it was essential that Member States be convinced that any diversion would be promptly detected and reported. Confidence that commitments would be honoured was the cornerstone of all anti-proliferation efforts. Unfortunately, the Agency's safeguards operations were of necessity highly secret. Consequently, Australia felt strongly that the Agency should consider the possibility of instituting an audit arrangement with a view to providing reassurance that the Agency's safeguards operations were being conducted effectively.
- He urged the Member States of EURATOM which were parties to NPT to complete as soon as possible the negotiations necessary for the entry into force of their safeguards agreements with the Agency. As a party to NPT, Australia was keen to support all measures aimed at strengthening the international application of safeguards. It did not share the view that "the end of the NPT line" was nearing; accession to NPT was the most effective and constructive contribution which any State could make to nonproliferation. It was not the time to abandon the hope of ultimately seeing it accepted by all countries. Australia looked forward to the accession of many other States to NPT as they realized that their interests would not thereby be jeopardized. Australia fully supported the efforts being made to strengthen the cause of

non-proliferation through additional safeguards conditions.

- 46. Mr. SETHNA (India), congratulating the President of the Conference on his election, said it was a privilege to serve with him on the Agency's Scientific Advisory Committee (SAC), where he had learned to appreciate his professional and human qualities. His guidance would undoubtedly help the Conference to solve the complex problems before it. The Brazilian Government was to be thanked for the preparations which it had made for the present session and for its warm hospitality, as was the Director General for his efforts to ensure that the Agency extended and intensified its activities in its various spheres of competence.
- 47. Commenting on the progress made since the previous session of the Conference, he recalled, in connection with the study of regional nuclear fuel cycle centres, that his country had already provided an expert and intended to continue cooperating fully in the study, although the establishment of such centres would undoubtedly raise difficult legal, technical and political problems. With regard to the preparation of safety codes and guides, India, which had already carried out similar work at the national level, had submitted to the Agency the results of its experience and would continue to assist the Agency with a view to ensuring that the codes and guides dealt exclusively with pertinent matters.
- 48. The participation of many countries in the work of the Ad Hoc Advisory Group on Nuclear Explosions for Peaceful Purposes showed that the possible applications of nuclear explosions for peaceful purposes (PNEs) were arousing considerable interest. Accordingly, the benefits of PNEs should not be relegated to the background because of extraneous considerations. For its part, India was prepared to make the benefits of its own experience available to the Agency.
- 49. India was greatly concerned about the considerable budget increase as between 1976 and 1977. It was, of course, right and proper that activities and programmes should develop from year to year, but the Agency should take care not to allow automatic increases where they were not absolutely necessary, for a sharp increase had particularly adverse consequences for the developing countries.
- 50. On the other hand, the target for voluntary contributions to the General Fund was only \$6 million for 1977, representing only a slight increase compared with the previous year. India hoped the target would be reached and that the Agency would be able to increase its assistance, in spite of the restrictive policies which a number of industrialized countries were applying with regard to among other things the award of fellowships and the organization of study tours. India felt strongly that technical assistance should continue to be granted without discrimination to all countries needing it. For its part, his country would continue to offer through the Agency fellowships and the services of experts

to other developing countries, and for 1977 it would contribute \$74 400 to the General Fund.

- Nuclear energy was being accepted more and more as an alternative to forms of energy which had become too expensive or insufficient. and many developing countries were embarking on nuclear power programmes. The Agency was going to have to adapt to such trends in the world energy situation; it would have to concern itself with their consequences and help in finding regional or international solutions to the problems of fuel supplies, facility siting, safety and radioactive waste management; it would have to reconcile progress with safety; and, at the same time, it would have to take care not to endorse principles or adopt procedures which might retard progress, especially if those principles or procedures derived from considerations not related to either technology or economics.
- 52. In that connection, India was concerned about moves at recent meetings of the Board to introduce new safeguards principles which would only modify the Agency's safeguards system in a manner unacceptable to the Agency's membership. The interests of a group of States should not induce the Agency to impose new obligations or restrictions on all its Members. India had always urged that the Agency carry out its functions in conformity with the Statute and hoped that the Standing Advisory Group on Safeguards Implementation (SAGSI) would assess the effectiveness of safeguards without being influenced by extraneous considerations.
- 53. India's most recent achievements in the nuclear field included the solving of difficulties in connection with the Rajasthan nuclear power station, the completion of 14 years of commercial production by the Nangal heavy-water plant, the commissioning of the Baroda heavy-water plant, the progress of construction work on the Kota, Talcher and Tuticorin heavy-water plants, the entry into full commercial production of the Hyderabad fuel fabrication plant, the fabrication of fuel for two nuclear power stations and the completion of the Tarapur fuel reprocessing plant, where it would be possible to effect considerable savings.
- Emphasizing the radioactive waste management efforts which India had made so as to protect man and his environment, he refuted the erroneous press reports on the subject which had appeared in various countries. India had started to study waste management problems over ten years before its first power reactors had gone into service, and the independent body now entrusted with waste management was responsible not to the reactor operators but to the health and safety authorities. The results of waste management operations demonstrated the effectiveness of the system used, even in places where conditions were very unfavourable. and India was endeavouring to limit radioactivity releases to the point where the natural radiation background was hardly modified. During the past year, his country had been working on the

construction of a facility for the solar evaporation of liquid wastes which would probably be the first of its type in the world. It had been storing high-activity wastes for years and was at present constructing a plant which would make it possible to fix such wastes in glass matrices. In addition, his country was studying waste storage from the interim stage through to the disposal of solidified wastes in geological formations.

- 55. India's manifold activities showed that the developing countries needed the assistance of the Agency in intensifying their efforts and accelerating their progress. The Agency had an important international responsibility in that respect, and India, for its part, would do all it could to help.
- 56. Mr. CISSE (Senegal) said his delegation strongly supported the Board's recommendations regarding (a) better organization of assistance to developing countries, (b) changes in emphasis against a background of more ample technical assistance, with particular attention being paid to the "Food and agriculture" and "Life sciences" programmes, and (c) the establishment of a reserve fund to finance certain activities in medicine and agriculture and permit better development in those areas.
- 57. The Agency needed additional resources in order to provide more substantial assistance to the developing countries. However, the Agency's assistance in the peaceful utilization of atomic energy could have real significance only within the framework of safeguards preventing the proliferation of nuclear weapons.
- 58. Senegal had ratified NPT and believed that all Members of the Agency should submit to NPT safeguards, including those on the transfer of nuclear materials. Senegal was therefore following with great interest and supporting without reservation the Agency's efforts to acquire the means for establishing a rigorous and effective international safeguards system with a view to preventing a nuclear war.
- 59. Agency assistance, centred mainly on the utilization of radioisotopes, had enabled Senegal to make encouraging progress in agricultural research, which had given rise to great hopes not only for Senegal but for all Sahelian countries with similar climatic and medical conditions.
- 60. In that connection, the delegation of Senegal called for better co-ordination and quicker action in helping the developing countries under the joint Agency/FAO programmes relating to productivity and health protection, the urgency of which no longer needed explaining.
- 61. The Government of Senegal would like to see the Agency in a position to extend its activities forthwith to cover solar energy, which was already being exploited to some extent in Senegal, and in possession of the funds necessary for an adequate programme of work on a form of energy complementary to the conventional ones which

- were lacking in many countries of the Third World.
- 62. The delegation of Senegal was pleased by the favourable reaction of the competent Agency organs to the steps recently taken by Senegal with a view to obtaining further assistance in the form of materials and of specialists in radioisotope applications.
- 63. The Government of Senegal welcomed the increased co-operation with the Agency's Secretariat which was enabling the University of Dakar and its research laboratories and institutes to obtain better equipment, to pursue research and to train scientific and technical staff to a high level.
- Mr. SAENZ SANCHEZ (Cuba) felt that a survey of the present international situation in the light of the Agency's basic objective - the utilization of nuclear energy for peaceful purposes - was called for. The Conference was meeting at a time when peoples and Governments, in their desire for peace, were making great efforts to strengthen international co-operation. The Conference on Security and Co-operation in Europe, concluded in Helsinki during 1975, had given fresh stimulus to those efforts. On the other hand, international conflicts persisted. imperialist aggression manifested itself every day in the Middle East, in Angola and on the Korean peninsula (to give but a few examples), and the arms race was intensifying.
- 65. Within the Agency, the struggle for peace should be a constant concern and should receive the support of all delegations and of scientists and nuclear energy specialists from all parts of the world. That was why his delegation was troubled by the sale of nuclear technology to the racist régime in South Africa, whose well-known crimes had aroused universal condemnation. It felt in duty bound to draw to the attention of the international community the danger implicit in the acquisition by imperialist régimes and their allies of nuclear equipment capable of enabling them to produce nuclear weapons.
- 66. The Revolutionary Government of Cuba was participating in all activities designed to bring about international détente, the discontinuance of the testing of nuclear and other weapons and the conclusion of a world treaty on the renunciation of the use of force in international relations.
- 67. His delegation supported Iraq's proposal that the Palestine Liberation Organization (PLO) be invited to attend General Conference sessions in the capacity of observer[8]. In that connection, he recalled that the General Assembly, in its Resolution 3237 (XXIX), had invited the PLO to participate in its work with observer status.
- 68. It was well known that Cuba had embarked on an unrelenting struggle against underdevelop-

<sup>[8]</sup> See document GC(XX)/572.

ment, especially by endeavouring to promote scientific and technological progress in the light of the country's lofty economic and social aims. The use of nuclear energy for peaceful purposes was an important factor in that struggle. The advances already made were due to the determination of the Cuban people and to the help received from the socialist countries. The rapid expansion of electric power generation was a prerequisite for Cuba's economic development. Since it lacked both oil and other energy sources, nuclear power was vital for his country. That was why Cuba would start building a nuclear power station in the course of the next five years and the Revolutionary Government had decided to conclude with the Agency an agreement for the application of Agency safeguards to the country's nuclear activities where that was necessary.

- 69. Cuba attached great importance to the application of nuclear techniques in agriculture, industry and medicine and to the training of nuclear specialists in those fields, the aim being to create the necessary scientific and technical infrastructure with help from the Agency and the socialist countries. It was taking part in the scientific activities of the Joint Institute for Nuclear Research at Dubna, in the Soviet Union.
- 70. There could not be significant progress in nuclear programmes in Latin America unless profound internal structural changes took place and unless an end was put to colonialist and neocolonialist relations between countries. The need to establish a new international economic order could not be over-emphasized. Cuba was ready to collaborate in every way its resources would permit with the other countries of Latin America, on either a bilateral or a multilateral basis, in nuclear research and training programmes.
- 71. Cuba would continue making voluntary contributions to the General Fund in support of the Agency's programme of assistance to developing countries. It appreciated the impartiality with which the Director General employed the Agency's resources.
- 72. Nuclear energy was capable of contributing to the well-being of mankind, but it was also capable of producing a world-wide cataclysm. The General Conference would do well to bear its dual nature in mind.
- 73. Mr. CASTRO MADERO (Argentina) said that, in order to meet Argentina's power needs, about 15 000 MW(e) of nuclear capacity would have to be installed by the year 2000, involving an investment of some \$30 000 million. The nuclear policy adopted in Argentina was a result of that situation and of the decision to achieve the greatest possible freedom of action in the nuclear field. Starting with the establishment of the National Atomic Energy Commission, the policy had been put into effect in two stages. During the first stage, lasting until 1966, the scientific and technical infrastructure necessary for the construction of nuclear power stations when the time came had been created. A synchro-cyclotron

had been acquired and significant research in nuclear physics and chemistry carried out with it. The first irradiation reactor in Latin America had been built, followed by the construction of a second, around which had been erected radio-isotope production laboratories and laboratories used for radiation protection studies. In addition, a start had been made with uranium prospecting and fuel elements had been fabricated for the irradiation reactors. Lastly, Argentina had purchased a pressurized-water natural uranium reactor under a turn-key contract.

- 74. During the second stage, the main activities had been the construction and entry into service of the Atucha nuclear power station, which had the highest availability factor in the world (83% in 1975), and the start of construction work on a second nuclear power station, at Córdoba. The decision had also been taken to build a CANDU-type reactor. Radioisotope production was meeting 90% of the national demand and an irradiation plant, designed and built with local resources, was serving 45 Argentine enterprises.
- On 24 May 1976, the new Government had initiated the third stage, in which new principles would apply. Instead of purchasing on a turn-key basis, Argentina would assume responsibility for the planning, construction, installation and entry into service of subsequent nuclear power stations and for the supply of nuclear components with the active participation of the Argentine engineering industry and of private companies - both Argentine and foreign. Such were the principles which would govern the building of the country's third nuclear power station, the planning of which formed part of a study to determine in what proportions thermal power, nuclear power and hydro power would have to be used in order to meet Argentina's needs economically.
- With regard to uranium supplies, Argentina had embarked on a programme which provided for intensive prospecting and an increase in the capacity of the country's uranium ore concentration plants. The reasonably assured reserves represented 24 000 tons of concentrate, which would be sufficient for the operation of five 600 MW(e) nuclear power stations - in addition to the Atucha plant - over a period of 30 years. The probable reserves amounted to 135 000 tons. As from 1979, Argentina would be able to fabricate the fuel elements needed for the Atucha plant and, subsequently, for the other power stations as well. A pilot plant for heavy water production had been built with the help of the private sector. In pure and applied research, which would continue, the judicious use made of the available human resources was reflected in the results obtained.
- 77. With regard to collaboration with international organizations, valuable support had been received from the Organization of American States (OAS), the United Nations Development Programme (UNDP), and above all the Agency.

- 78. Mr. ADENIJI (Nigeria) congratulated the President of the Conference, whose election would undoubtedly contribute to a successful twentieth session of the General Conference, thanked Brazil for its warm hospitality, which was in keeping with its traditions, and recalled that his own country had both ethnic and historic ties with Brazil.
- It was to be hoped that the General Conference would soon be able to welcome the delegation of the PLO, thereby recognizing the role of national liberation movements. Although other organizations within the United Nations family had already followed the example set by the United Nations itself, the Agency had not yet enabled the PLO and the African national liberation movements to associate themselves with its work. However, no area of human activity could remain isolated from the struggle for human dignity. The Agency should therefore keep in touch with such movements, especially as many of their members would one day become the rulers of their countries. If the Agency remained aloof, it might find that newly independent countries were placing membership of the Agency low in their order of priorities.
- The developing countries, which represented two thirds of the Agency's present membership of 109 States, had joined the Agency in the belief that it would remain faithful to Article III, B of its Statute where, in paragraph 3, the Agency was enjoined to "Allocate its resources in such a manner as to secure efficient utilization and the greatest possible general benefit in all areas of the world, bearing in mind the special needs of the under-developed areas of the world;". Moreover, most of them had acceded to NPT. However, the growth of the Agency's membership had not been matched by a corresponding increase in the resources at its disposal for fulfilling its obligations toward the developing countries, with the result that the Agency, in neglecting those countries' needs, was acquiring the image of a club for rich countries.
- The Agency's budget most of which was accounted for by regulatory activities, which were mainly of benefit to the developed countries had risen from \$4 million in 1958 to \$37 million in 1976, whereas voluntary contributions for the provision of technical assistance had risen from \$1.5 million in 1959 to \$5.5 million in 1976, representing a ridiculously small increase in relation to the number of developing Member States. Moreover, one might reasonably ask why regulatory activities were financed from mandatory contributions while technical assistance depended on voluntary contributions. Such a situation was inevitably detrimental to the interests of the developing countries, and his delegation believed that part at least of the costs of technical assistance should be met from assessed contributions.
- 82. His country recognized, however, that the Agency had done much good work, for which congratulations were due to the Director General

- and the Secretariat. The demand for energy in Nigeria, as in most developing countries, was growing at an annual rate of 15-25%, due to the country's rapid economic development. The 1975-80 development plan, for example, envisaged the establishment of an iron and steel complex, of a petrochemical industry and of agriculture-based industries and also the expansion of existing industries. Such projects would require large amounts of energy. Extensive rural electrification was also planned, as a means not only of improving living conditions but also of promoting cottage industries and thereby arresting the population drift to the towns.
- By the turn of the century, even if all of the country's known hydro power resources had been harnessed, Nigeria would be faced with a severe energy shortage; that was why Nigeria was placing great hopes in nuclear power. The fact that the world's natural resources were being depleted and needed to be conserved made nuclear power even more interesting. His country had therefore to go beyond limited uses of nuclear techniques in medicine and agriculture, establishing a comprehensive nuclear energy programme based on a solid infrastructure and training the manpower needed for its implementation. That was where the collaboration of the Agency and of Member States willing to help would be of greatest use.
- 84. His country, which attached great importance to world peace and security, was concerned about the threats to which mankind might be exposed through the unscrupulous use of nuclear energy. Safeguards agreements alone would not avert such threats; the Agency would have to take political decisions if it was to avoid becoming despite itself an accomplice in possible nuclear blackmail. Referring to the Agency's relationship with South Africa and the effect of that relationship on the situation in Africa, he pointed out that South Africa had refused to accede to NPT and was now embarking on a gigantic nuclear programme which, ostensibly, was designed for peaceful purposes.
- 85. A Government which could shoot down school children in cold blood while they were demonstrating peacefully against inhuman treatment and which could condemn 87% of the population to a life of misery so that the minority might live in luxury would, if it felt itself threatened, be capable of using nuclear technology to eliminate the majority. No trust could be placed in a régime which had no hesitation in violating the territory of neighbouring countries, and the peoples of Africa could not forget the invasion of Angola, the continued occupation of Namibia in defiance of all United Nations resolutions and the backing of the minority régime in Zimbabwe.
- 86. Pointing out that the United Nations had repeatedly called for a total embargo against South Africa, he said his delegation was convinced that South Africa would divert to military uses nuclear equipment made available to it. Nigeria deeply regretted, therefore, that France a

permanent member of the Security Council - had agreed to help South Africa realize its nuclear ambitions; economic considerations had out-weighed the desire for peace. It was even more regrettable that the Board had been willing to associate the Agency with such a deal, making the Agency a participant in something of which it did not know the true nature, when opposition on its part might have dissuaded France from proceeding with the deal. The safeguards to be applied offered no guarantee against diversion; they would merely serve as a cloak for nefarious designs.

87. The Agency had no right to confine itself to a purely scientific role. The stand taken by the South African Government represented a challenge to mankind and a danger for the peoples of Africa. Obviously, South Africa was in no position to act in conformity with the Agency's objectives or with the provisions of Article IV. B of the Statute. Because of its present Government, South Africa

had been excluded from many organizations (by no means all of them political) and it had no place in the General Conference - and even less in the Board of Governors.

- 88. The Agency was the only international organization which continued to recognize a régime condemned by the United Nations for crimes against humanity and ought to rectify the situation. Firstly, the General Conference should refuse to recognize the present Government, which did not represent the people of South Africa. Secondly, it should direct the Board of Governors to desist in the future from designating South Africa to serve on the Board. Thirdly, it should direct the Board to consider whether South Africa should continue enjoying the privileges of Agency membership in view of its persistent violation of Article IV. B of the Statute and to report on the matter at the twenty-first regular session.
- The meeting rose at 6.5 p.m.