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President: Mr. XUTO (Thailand)

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GENERAL DEBATE AND ANNUAL REPORT FOR 1980 (GC(XXV)/642, 642/Corr.1, 642/Corr.2) (continued)

- 1. Mr. NEUMANN (Czechoslovakia) said that 25 years had passed since the basic principles underlying the activity of the Agency, one of the most important specialized agencies of the United Nations, had originally been established, and that his country was proud to have been among the first to join it. Since that time the Agency had evolved rapidly from the standpoint of the scope of the problems it tackled in connection with the peaceful application of nuclear energy, as well as in terms of its importance for the preservation of peace and security. Credit for the fact that it had discharged its functions so effectively was due to the Director General, who had so skilfully combined the features of a leading scientist with the ability of an efficient administrator.
- 2. Czechoslovakia was systematically devoting considerable attention to the peaceful use of nuclear energy, first and foremost in the area of nuclear power production. That development, however, would not have been possible without the help of the Soviet Union and the co-operation of the Member States of the Council for Mutual Economic Assistance (CMEA), which over the past ten years had put into effect an ambitious programme for the peaceful use of nuclear energy, more especially nuclear power. By 1990 the countries of the socialist community would be producing more than 100 million kW of electricity at their own nuclear power stations. A further important fact in that connection was the serial manufacture of WWER-1000 reactors, in which Czechoslovakia was also taking part. Major problems in the area of the fuel cycle were also being dealt with, and specialization in the production of radionuclides was being extended at the same time.
- 3. Czechoslovakia attributed great importance to the physical protection of nuclear materials. That approach was evidenced by the fact that it had been one of the countries to sign the relevant convention and had likewise adopted a series of measures within the country aimed at putting the convention into effect.
- 4. A broad programme for the peaceful use of atomic energy, especially electricity generation, had been initiated, with a view to more than three quarters of the planned increase in electricity between 1981 and 1990 being accounted for by the nuclear power stations to be constructed.

- 5. As part of the scientific-technical co-operation with the Soviet Union and other countries of the Socialist community, the leading Czechoslovak metallurgical and machine-building plants had begun production of equipment for WWER-440 power plants and were completing preparations for the manufacture of a similar type of equipment for WWER-1000 power plants. The first part of the reactor vessel for a power station in Hungary had already been delivered, and in October 1981 the vessel and steam generator components for the W-2 power station at Jaslovské Bohunice would reach the site; in addition, various types of specialized equipment were being produced for light-water and other types of nuclear power stations.
- 6. The nuclear power station at Jaslovské Bohunice, containing two WWER-440 reactors, was operating satisfactorily and had already generated more than 10 TWh of electricity. The next two WWER-440 units were now being constructed there, the first of which was at the stage of installation of the specialized equipment. Construction work on the four WWER-440 units at the Dukovana power station was in full swing. At Mochovec in Slovakia excavation work had begun in order to prepare a site where it was planned to set up four WWER-440 units and which would later be expanded to accommodate further units with a total capacity of ~2000 MW.
- 7. As a country that was actively developing nuclear power, Czechoslovakia was fully aware that the main condition for development in that area and for the preservation of world peace was prevention of the diversion of nuclear energy for military purposes. It was for that reason that Czechoslovakia was systematically following the Agency's activities involved in the implementation of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), the implementation of safeguards agreements arising out of NPT, and all that it was doing to effectively strengthen the non-proliferation regime and ensure the universal nature of NPT. The urgency of that problem had become all the clearer with the aggressive attack by Israel on a nuclear facility in Iraq that was under Agency safeguards. Czechoslovakia resolutely condemned Israel's aggression, which had been perpetrated not only against a country that had friendly relations with his own country but also against the entire safeguards system and the Non-Proliferation Treaty. His country supported all action that would help to put a stop to such acts of international terrorism and intended to take up the matter again at a later stage.

- 8. The fact remained that since the Board's meeting in June, when it discussed the attack by Israel on nuclear facilities in Iraq, a number of other acts had been committed which did not assist the preservation of peace. Czechoslovakia and other Socialist countries were making all possible efforts in the interests of the consistent and peaceful resolution of international conflicts and tension and had proposed specific measures at the congresses of their Communist and Workers' parties over the previous year. Particular mention should be made in that connection of the peace initiative of the Soviet Union announced at the twenty-sixth Congress of the Communist Party of the Soviet Union, which was entirely supported by the other Socialist countries. Czechoslovakia fully supported the Soviet Union's proposal for an international conference on the Middle East, its initiative in relation to disarmament in outer space and other Soviet proposals designed to maintain peace throughout the world.
- 9. In addition to safeguards, Czechoslovakia traditionally paid great attention to the Agency's other technical activities. In his opinion the present organization of the Department of Technical Operations would assist the efficient functioning of the Agency's work on nuclear power and nuclear safety. In addition, Czechoslovakia fully supported the further development of the International Nuclear Information System (INIS). It was in those spheres that the Agency could, however, make more use of its international reputation by influencing the public in countries in which there were still certain fears about the development of nuclear power because elements of the public were insufficiently and inaccurately informed and unqualified persons were making anti-nuclear propaganda. The Agency should not merely continue with existing activities such as the holding of meetings on specific topics relating to nuclear power and its fuel cycle, since such meetings were attended only by informed members of the public who were in any case in favour of nuclear power. The Agency's work on nuclear safety was of equal importance. However, despite the Agency's efforts in that sphere over many years (for example, in the development of nuclear safety standards), there was still considerable scope for expanding its activities. In his view no technical meeting organized by the Agency should be permitted to become a forum for the pronouncement of views against the peaceful uses of nuclear energy.

- 10. It was desirable that the proposed improvements in quality and reorganization of the work of the Agency's laboratories should be carried out; the laboratories met the requirements of the Agency and of Member States more fully than they had a few years earlier.
- 11. The proposed budget for 1982 was another important matter. Despite the economies that had been made, it amounted to some \$99 million, i.e. it was \$11 million higher than the budget for 1981. Only a small part of the increase represented an expansion of programmes; the main part was due to inflation. The Czechoslovak delegation considered that budgetary increases should be accompanied by an expansion of the Agency's work and of the meetings held by it for Member States in such a way that all resources were used in the most economical and effective way. He supported as a whole those parts of the budget which related to safeguards, nuclear power, nuclear safety, the further development of the INIS system and technical assistance.
- 12. Czechoslovakia paid considerable attention to technical assistance and endeavoured to utilize as far as possible its own resources for providing such assistance, especially where the training of professionals from developing countries was concerned. With regard to the proposed target for voluntary contributions for technical assistance in 1982. Czechoslovakia was increasing its contribution in national currency by a factor of nearly five. In that connection it would actively co-operate with the Secretariat with a view to using those funds for the maximum benefit of recipient countries. Czechoslovakia wished to repeat its view that funds for technical assistance should be used, first of all, for the economically least developed countries and, secondly, for those developing countries which had signed NPT. In addition to those funds his Government was providing fellowships at various Czechoslovak institutions and would host various technical Agency meetings in 1982. The Czechoslovak delegation continued to favour the principle that contributions to the Technical Assistance Fund should be voluntary. In recent years considerable successes had been achieved in the use of contributions, including those made in nonconvertible currencies. He was convinced that with maximum co-operation between Member States and the Secretariat it would be possible to achieve entirely satisfactory results in that connection.

- 13. The Committee of the Whole was again to examine a proposal by developing countries of Africa and the Middle East and South Asia in connection with the amendment of Article VI.A.2 of the Statute. The view of his Government had not changed: it opposed any amendment, in order to preserve the effectiveness of the Board and not to upset the existing balance in the representation of various geographical areas and States where nuclear programmes were at different levels of development.
- 14. Mr. YAMATO (Japan), expressing pleasure at Zimbabwe's admission to the Agency, said that his Government was willing to co-operate with that country in the nuclear as well as in other fields.
- 15. Stable energy supplies in the long term and at appropriate prices were essential for economic growth. In that connection, the rise in the price of oil by 24% in 1980 and by 180% during the preceding five years made it increasingly important to promote the peaceful uses of nuclear energy as the most promising alternative source.
- 16. Not being endowed with indigenous energy resources, Japan was making continuous efforts to develop nuclear power. It had currently in operation 22 nuclear power reactors with a total generating capacity of approximately 15.5 million kW(e), accounting for about 12% of its total generating capacity. Furthermore, 11 power reactors with a total capacity of some 10 million kW(e) were under construction and five reactors with a total capacity of 5.3 million kW(e) were being planned. It was envisaged that nuclear power capacity would rise to 53 million kW(e) by 1990.
- 17. In order to maximize the utilization of the potential energy from uranium, Japan had from the outset been making efforts to develop the advanced thermal reactor and the fast breeder reactor. In that connection, the establishment of a nuclear fuel cycle was of importance: the Tokai-mura spent fuel reprocessing plant started full operation in January 1981, and a new reprocessing plant with a capacity large enough to meet his country's future needs was being promoted in the private sector. As far as enriched uranium was concerned, it was being produced in small quantities by the pilot plant at Nin-gyo-toge, and the technical prospects for commercial-scale production were bright.

- 18. In promoting the peaceful uses of nuclear energy, it was important to ensure, through various international co-operation efforts, that those uses were compatible with the non-proliferation of nuclear weapons. In that context, the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) provided the legal framework. Welcoming the accession to NPT of Barbados, Turkey and Egypt, and the conclusion by Spain and the Agency of an agreement under which all nuclear facilities in Spain were placed under Agency safeguards, he appealed to all countries which had not yet acceded to NPT to do so immediately. However, for NPT to be truly effective, the inequalities in the Treaty must be rectified. In that regard, he was encouraged by the entry into force of the Voluntary Submission Agreements concluded by the United States and France, following that concluded by the United Kingdom. He strongly urged other nuclear-weapon States to take similar steps.
- 19. The Agency's safeguards system played a key role in ensuring nuclear non-proliferation and, at the same time, in promoting the peaceful uses of nuclear energy. Japan had been among the first countries to accept Agency safeguards and was also among the countries which had taken the initiative in creating the Standing Advisory Group on Safeguards Implementation (SAGSI).
- 20. Since 1978 Japan had been involved with the United States, France and the Agency in the project on the technical amelioration of safeguards for reprocessing plants; the report of that project, entitled "Tokai Advanced Safeguards Technology Exercise" (TASTEX), had been finalized in May 1981.

 Desirous of making Agency safeguards more effective, Japan was co-operating with the Agency in promoting research and development in that field, and in particular on the application of safeguards to sensitive facilities like reprocessing and enrichment plants. Japan aimed at the further improving of Agency safeguards through its support programme for Agency safeguards, which would take into consideration the results of TASTEX. Furthermore, in order to facilitate safeguards activities, it had agreed to inspectors staying for longer periods in Japan; currently there were three inspectors on long-term assignments in his country.

- 21. In connection with safeguards, he deeply regretted the air raid carried out by Israel on the Iraqi nuclear research centre. Immediately after the raid, the Japanese Foreign Minister had strongly condemned it. Japan had supported the relevant resolution adopted by the Board of Governors in June and that adopted subsequently by the United Nations Security Council, for Japan considered the attack to be a serious challenge to the Agency's safeguards system and hence to NPT.
- 22. While it was essential to ensure nuclear non-proliferation for the promotion of the peaceful uses of nuclear energy, he wished to emphasize that unnecessarily strict non-proliferation measures should not hamper the development of the peaceful uses of nuclear energy. In that context, he welcomed the policy of the new United States Administration calling for the promotion of international co-operation in peaceful nuclear activities that had no nuclear proliferation impact; he hoped that the policy would be reflected in concrete measures. Also, he supported the recent movement, in line with the conclusions of the International Nuclear Fuel Cycle Evaluation (INFCE), to make the exercise of the "prior consent right" more predictable and comprehensive, as that would lend greater stability to international co-operation in the peaceful uses of nuclear power.
- 23. In the matter of making the peaceful utilization of nuclear energy compatible with nuclear non-proliferation objectives, the Committee on Assurances of Supply (CAS) had an important part to play. When CAS met in November to discuss the principles of international co-operation in the field of nuclear energy in accordance with its mandate, and emergency and back-up mechanisms it should hold discussions in a careful and measured manner and avoid undue haste.

- 24. Japan was participating in the studies, undertaken within the framework of the Agency, on the concepts of International Plutonium Storage (IPS) and International Spent Fuel Management (ISFM). Although the establishment of an IPS system would contribute to nuclear non-proliferation, it must be borne in mind that the IPS study should not only lead to ensuring non-proliferation but also help in facilitating the peaceful uses of nuclear energy. As for ISFM, constructive results were expected from the work being done by various experts.
- 25. Recalling that the resolution on the United Nations Conference for the Promotion of International Co-operation in the Peaceful Uses of Nuclear Energy to be held in 1983, of which Japan had been a co-sponsor, had stressed that progress in the work of CAS would greatly contribute to the success of the Conference and had invited the Agency to fulfil its appropriate role within the scope of its responsibilities at all stages of preparation of the Conference, he called for careful discussions bearing in mind that the peaceful uses of nuclear energy and nuclear non-proliferation were two sides of the same coin and recognizing the complexity of the problem.
- 26. The physical protection of nuclear material was also important for preventing the dangers which might result from the misuse of such material. The physical protection standards drafted in Japan satisfied the requirements contained in the Agency's recommendations (INFCIRC/225/Rev.1). As for the Convention on the Physical Protection of Nuclear Material (CPNM), his Government would accede to it as soon as it had completed the necessary internal legal measures.
- 27. Nuclear safety was another major problem involved in, and a basic prerequisite for promoting, the development of nuclear energy, and Japan had always attached great importance to it. There had been an accident at the

Tsuruga Nuclear Power Plant earlier in the year. However, it had had no effect on human beings; in fact, it had provided an opportunity to improve the safety of nuclear power plants and to strengthen systems for operational control and supervision, measures by which his Government was endeavouring to win greater popular confidence in the development of the peaceful uses of nuclear energy.

- 28. He commended the Agency's important role in establishing safety standards for such things as radiation protection, the operation of nuclear facilities, and the treatment and disposal of radioactive wastes.
- 29. The international Conference on Current Nuclear Power Plant Safety Issues, held in Stockholm in October 1980, which had stressed the importance of training operators and of improving control equipment, had come to the general conclusion that there was no factor relevant to safety which limited the use and development of nuclear power.
- 30. He considered that the benefits of the peaceful uses of nuclear energy should be available to all peoples. The technical assistance provided by the Agency to developing countries in that field was of vital importance and should be strengthened. Japan was assisting by among other things providing experts and granting fellowships. It had in the past contributed 100% of its share of voluntary contributions, or sometimes even more, to finance the Agency's technical assistance programmes, and would endeavour to continue making such contributions in the future. As for its voluntary contribution for 1982, the necessary procedures were under way in Japan.

- 31. His country had become a party in 1978 to the Regional Co-operative Agreement for Research, Development and Training Related to Nuclear Science and Technology (RCA), the programmes under which were being implemented with enthusiasm by the participating countries. His Government laid emphasis on assistance to the participating countries in the solution of their most urgent problems in the fields of food, industry and medicine, and was making positive contributions to projects concerning isotope technology and its applications in industry and the radiation preservation of food; a report on the progress of the last-mentioned project would be presented at a research co-ordination meeting to be held in Tokyo in November. Considerable progress had been made under the sub-project on radiation processing, part of the UNDP-financed RCA project on industrial applications. Meetings of the Working Group on Non-Destructive Testing Practice and of the UNDP Workshop on Maintenance of Nuclear Instruments for Industrial Applications were to be held in Tokyo. It was desirable to establish such groups in other regions for the benefit of economic and social development in developing countries in those regions.
- 32. At no time in its history had the International Atomic Energy Agency faced so many diverse problems as it did today in carrying out its work, nor had the nations of the world ever expected as much from the activities of the Agency as they did now. There had never been a confrontation even when there had been differences, or conflicts of interests, among the Members of the Agency, and solutions had been explored in a spirit of co-operation. He was confident that that valuable tradition would be maintained in the future.

- 33. The current economic situation in the world imposed limits on the manpower and financial resources available to the Agency, so that the Secretariat should redouble its efforts to achieve a balanced allocation and the maximum effective use of the budget. Although, in budget allocation, emphasis should be placed on the three main activities (namely, technical assistance, safeguards and safety), the strengthening of research activities was also important.
- 34. Lastly, he wished to pay a tribute to the Director General, Dr. Eklund, for his outstanding leadership of the Agency over a period of 20 years.
- 35. Mr. VAN BARNEVELD KOOY (Netherlands) said that the Agency had always constituted an example of successful international co-operation in the field of nuclear energy, and much of the credit for that had been due to the Secretariat in general and to the Director General in particular during his long and outstanding career. The latter was to be congratulated on his 20 years' devoted service to the cause of international understanding.
- 36. The Agency had now unfortunately been confronted with problems of a political nature, which tended to overshadow its proper activities on behalf of the peaceful applications of nuclear energy and in the related field of non-proliferation.

 The Netherlands was concerned about the consequences of the attack by Israel on the peaceful nuclear facilities of another Member State. The Israeli action had sapped the very basis of the Agency's safeguards system, and implicitly suggested a lack of confidence in that system. Should there have been any doubts as to the effectiveness of the safeguards system doubts which his delegation did not share they should have been raised in the forum responsible for that system, i.e. the Agency itself. It was quite inadmissible, on the other hand, for a Member State of the Agency to take the law into its own hands and to resort to military action.

- 37. He now wished to offer some remarks about what in his opinion should remain the substance of the Agency's work, namely the peaceful uses of nuclear energy on the one hand and the closely related non-proliferation effort on the other.
- 38. As has been pointed out in the past by the Netherlands delegates to the General Conference, the use on a large scale of nuclear energy in a number of countries, especially industrialized ones, had already been the subject of controversy for years past. As the Director General had observed in his statement, public acceptance played an important role in the decision-making process in most of the countries involved. The general public was very much concerned rightly or wrongly about the safety and waste aspects of nuclear power. The Agency could and should contribute to the discussions by continuing its valuable work in the sphere of nuclear safety, radioactive waste management and related problems.
- 39. Among the activities of the Agency which his Government considered to be of prime importance, he wished first to mention the preparation of a number of codes and guides governing such matters as the safety aspects of nuclear installations, the transport of nuclear materials, and radiation protection. Secondly, the Netherlands was looking forward to the implementation by the Agency of the Austrian initiative concerning nuclear installations in border regions. The Director General in his statement had suggested that that matter should be dealt with in the United Nations proper. His Government, however, still believed that the Agency would be the appropriate body to handle the question. He also wished to express support for an enhanced role of the Agency in the field of international nuclear safety.

- 40. Regarding the activities of the Agency in the field of technical assistance, it appeared that the new system of indicative planning figures represented a distinct improvement over the earlier procedure. Furthermore, his delegation had noted with satisfaction that it had been possible to meet a substantial percentage of all requests (in fact more than 85%). He sincerely hoped that that development would continue in the years to come.
- 41. Turning to the non-proliferation part of the Agency's work, he observed that, over the years, the Netherlands had been an advocate of an effective, universally applied non-proliferation system. Such a system had necessarily to rely to a large extent on technical measures developed and applied by the Agency. Recent events, however, had clearly shown that the political will to maintain and strengthen such a system was equally indispensable. Consequently, solutions for existing problems and differences of opinion would have to be found through negotiations in which the aims and the needs of all parties were taken into account.
- 42. In his view, it was the task of CAS to fabricate the building blocks for a new international nuclear consensus, whereas the 1983 United Nations Conference for the Promotion of International Co-operation in the Peaceful Uses of Nuclear Energy (PUNE Conference) would have to clarify the framework for such an international consensus. The Netherlands, as member of the Bureau of the PUNE Conference, would continue to play an active part in that process.
- 43. His Government held the view that the development of a new consensus would be greatly facilitated by the early establishment of an Agency plutonium storage scheme. Although the negotiations in the Expert Group dealing with that matter were proving to be complicated, his Government still hoped and expected that it would be possible to establish a satisfactory and generally agreed system within a reasonable time.

- 44. In conclusion, he wished to reiterate that the Netherlands continued to attach the greatest importance to the work of the Agency and would support its activities to the utmost. It sincerely hoped that, in spite of recent regrettable events and developments, it would be possible to pursue that work in an objective and responsible manner.
- 45. Mr. NIMPUNO (Indonesia), congratulating Zimbabwe on its acceptance for membership of the Agency, expressed the belief that the Government of Zimbabwe would make valuable contributions in pursuit of the Agency's goals.
- 46. During the twenty-four years since its establishment the Agency had been confronted with numerous problems and challenges. The swift progress of technology in the developing countries was causing some concern in certain quarters at the implications of the rapid changes for the relationship of developed to developing countries. However, the transfer of technology to developing countries must not become an empty phrase. The role of the Agency in that respect was encouraging, particularly now that the donor-recipient relationship implied by the term "technical assistance" had been replaced by "technical co-operation", which showed that the Agency was able to understand the feelings of Member States. The Agency's contribution towards the transfer of nuclear technology should be increased during a period in which the world would witness the transition from world-wide dependence on one energy source to the use of alternative sources, including nuclear energy. In that respect the Agency and the industrialized countries would play a very important role.
- 47. It was generally felt that assurances of supply of nuclear materials and technology were still far from satisfactory. The participants in CAS, especially those from the supplier countries, should consider the problem seriously and seek practical and workable solutions.

- 48. The Secretariat had concluded that public acceptance was an important factor in the development of nuclear power. The Agency could contribute much to the solution of the problems involved. For example, it was recognized that the human factor played an important role in nuclear safety, about which the public held a rather low opinion. The Agency's training programme in the field of safety and safety-related subjects should be expanded both qualitatively and quantitatively. During the meeting of the Preparatory Committee for the United Nations Conference on the Promotion of International Co-operation in the Peaceful Uses of Nuclear Energy, recently held in Vienna, many delegations had suggested that public acceptance of nuclear power should be one of the topics to be dealt with by that conference in 1983. The Agency should contribute actively to the effort to allay the doubts and fears of the public.
- 49. It was a cause for concern that there were still facilities in both nuclear-weapon and non-nuclear-weapon States which were being operated outside the Agency's safeguards system. In the annual report, the Secretariat often used words like "of which the Agency was aware" in reporting on the number of safeguarded and unsafeguarded facilities. That constituted a tacit acknowledgement by the Agency that its awareness still required intensification and that safeguards coverage was inadequate. Although the number of members of the NPT club had increased, certain States had not placed their facilities under NPT safeguards. One of those States was Israel, and his delegation strongly supported United Nations Security Council Resolution 487 (1981) concerning the Israeli attack on the Iraqi nuclear research centre, in which Israel was urgently requested to place its nuclear facilities under Agency safeguards. The Members of the Agency should reaffirm their confidence in the effectiveness of the Agency's safeguards system, in spite of the inadequacy of safeguards coverage.

- 50. His delegation strongly condemned the military attack by Israel on the Iraqi nuclear research centre. That attack on a sovereign State violated the inalienable right of a Member State of the Agency to develop its peaceful nuclear energy programme; moreover, Iraq had fully subscribed to the Agency's safeguards system and was a party to NPT. The attack also showed blatant contempt for the Agency's safeguards system and for the Agency as an organization promoting the peaceful uses of nuclear technology. His delegation therefore urged the General Conference to suspend Israel for the time being from the exercise of the privileges and rights of membership of the Agency.
- 51. The annual report indicated the encouraging progress made by RCA through the assistance provided by the RCA donor countries, such as Australia and Japan, the efforts of the Secretariat and the active participation of Member States. The Japanese Government was providing financial support until 1983 for an RCA project on food preservation which was of great importance to the development of the participating States; in view of the amount of work still to be done before the benefits could be fully enjoyed by the States, the project should be continued even after 1983. The joint FAO/IAEA/WHO Committee on the Wholesomeness of Irradiated Food had concluded that foodstuffs treated by irradiation with up to 10 kilogray need no longer be tested for toxicity, a conclusion which should encourage work on the application of nuclear energy to food preservation.
- 52. His delegation appreciated the Secretariat's efforts to implement the technical assistance programmes in such a way that no significant surplus would exist in non-convertible currency by the end of 1981. No doubt the various States concerned had also contributed to the encouraging results. The Secretariat's efforts to develop procedures for evaluating the implementation of technical assistance programmes were also commendable, as the evaluation of past activities was essential in planning for the future. Those efforts should not be confined to technical assistance programmes but applied to other Agency activities as well.

- 53. The Board of Governors had in 1981 exhaustively discussed the subjects referred to it by the General Conference at its twenty-fourth regular session, but it did not seem to have reached acceptable solutions to issues which had been dragging on for a long time and which were of great importance to the developing countries. Those issues were the financing of technical assistance by means other than voluntary contributions, how to achieve parity between the safeguards and technical assistance activities, and the amendment of Article VI.A.2 with a view to improving geographical representation on the Board of Governors. Vested interests seemed to be preventing the Board from solving them satisfactorily. The General Conference should try to avoid referring them to the newly elected Board without concrete recommendations on how they should be solved.
- 54. The Agency's achievements in promoting the peaceful uses of nuclear energy were great, although there was still room for improvement.
- 55. His country, which had confidence in the Agency's safeguards system, had placed all its nuclear facilities under that system by becoming a party to NPT. As NPT was intended to be a means of preventing nuclear weapons proliferation, and as most Members of the Agency were party to it, all States should be guided by it in their conduct and actions.

- 56. Mr. MIHULECEA (Romania), noting that the peaceful utilization of nuclear energy was today one of the key features of the social and economic development programmes of all nations and that, in the context of the deepening world economic crisis, science was able to play an extremely important part in the discovery and exploitation of new sources of energy and raw materials for the benefit of the peoples, recalled that the President of the Socialist Republic of Romania, Mr. Ceausescu, in a message addressed to the participants of an international symposium on "Scientists and Peace" held in Bucharest, had stated: "The most noble mission of scientists and researchers in all fields throughout the world is to ensure that the full potential of modern science and technology are devoted to the progress, welfare, liberty and independence of peoples, and to guaranteeing the supreme right of mankind to life and peace". Under the direct influence of science, the conditions governing the production of goods were undergoing constant change, natural resources were being exploited in an ever more effective manner; the future of mankind was inconceivable without the great achievements of scientific thought.
- 57. As the arms race had deeply harmful consequences for the economic and social progress of all countries, particularly developing ones, the Romanian delegation wished to insist on the urgent need to put an end to it and to start concrete negotiations on disarmament, particularly nuclear disarmament including stopping production of the neutron bomb.
- 58. Faithful to the principle of solving problems at issue between States exclusively by peaceful means, Romania had strongly condemned the Israeli air attack on the Iraqi nuclear research centre. That inadmissible act of aggression on facilities placed under Agency safeguards represented a gross violation of the rules of international law.
- 59. Romania shared the view that it was necessary to intensify efforts to strengthen the role of the United Nations specialized agencies in eliminating underdevelopment and establishing a new international economic order, involving the peaceful utilization of nuclear energy. At the same time Romania was strongly in favour of the unhindered transfer of nuclear technology, equipment and materials to non-nuclear States, so that they would have broad access to all the advantages of atomic energy.

- 60. While his Government considered that Member States should make fresh efforts to strengthen the role of the Agency in promoting co-operation along the above lines, it looked askance at a process whereby control measures were being extended beyond the provisions of NPT, involving what his delegation considered to be unjustified attempts to establish a monopoly of nuclear technology on the pretext of preventing the proliferation of nuclear weapons.
- 61. The Romanian delegation took a positive view of the Agency's overall activities during the past year. Of particular note had been the results obtained under the programmes concerned with nuclear power, the provision of technical assistance (within the limits of available funds), personnel training, nuclear safety including the preparation of codes and guides, controlled thermonuclear fusion and the applications of isotopes and radiation in national economies.
- 62. Regarding the Agency's Regular Budget for the coming year, the Romanian delegation was prepared to approve it and fully appreciated the efforts made by the Secretariat to reduce the expenses met from the assessed contributions of Member States. At the same time, his delegation stressed the need, during the years to come, to maintain the budget within limits as acceptable as possible for all Member States.
- 63. Romania was pursuing its economic and social development by placing particular stress on a continuing increase in overall economic efficiency. In that context the peaceful utilization of nuclear energy, particularly for purposes of power generation, would make an important contribution to meeting the increasing demands on the national economy, raising the material and moral level of the people, and introducing technical progress on a large scale.
- 64. The Romanian national nuclear power programme was based on the need to ensure a supply of energy for the accelerated social and economic progress of the country and on the requirement that during the current decade Romania should become independent as regards fuel and energy. Thus, construction of the country's first nuclear power station had begun two years previously and the work was proceeding according to plan. Specific measures had been taken to enhance the contribution of research and development and to promote techniques for the expanded production of fuel, equipment and moderator material on a national basis.

- 65. He wished to take the opportunity to refer to the valuable support extended to Romania by the Agency and UNDP under a technical assistance project for the development of nuclear technology in Romania. That project had enabled the country to acquire certain new fuel fabrication technologies and had furnished means of obtaining equipment and of training specialists.
- 66. In conclusion, after welcoming Zimbabwe to membership of the Agency, he wished to state that Romania would continue to support the Agency in solving the tasks assigned to it by its Member States.
- 67. Mr. BELODED (Ukrainian Soviet Socialist Republic) said that the problems facing the world, particularly that of peace, were greater now than ever before. In view of the seriousness of the world situation, the Soviet Union had issued an appeal to the parliaments and peoples of the world, calling for negotiations which would lead to a ban on nuclear missiles. There was an even greater need today to stop the nuclear arms race and ensure the non-proliferation of nuclear weapons. It was in precisely that area that the Agency should play a positive role.
- 68. The world had recently witnessed yet another example of Israel's growing aggression in the form of the attack on the Nuclear Research Centre in Baghdad. That act was a blatant violation of international law and had been strongly condemned by the United Nations Security Council. It showed that the Israeli Government had raised international terrorism to the level of State policy. The use of American-produced aircraft in the attack demonstrated that the United States Government was the real inspiration behind that policy and practice of international terrorism. It was well known that the Iraqi nuclear facilities and fuel at the research centre were subject to Agency safeguards by virtue of a safeguards agreement between Iraq and the Agency in connection with the Non-Proliferation Treaty. In the latest inspection of the Iraqi nuclear centre, in January of the current year, all nuclear material including the fuel for the two Tamuz reactors had been accounted for by the Agency's inspectors. The attempts by Israel to present its unprovoked attack as a pre-emptive

strike were absurd. Such aggressive actions hampered the achievement of an equitable and stable peace in the Middle East. Furthermore, that act of terrorism constituted a threat to the Agency's safeguards system, and the United Nations Security Council had therefore been right to demand that safeguards be extended to cover all nuclear facilities in Israel. The Ukrainian delegation fully supported Iraq's position regarding the attack and its demand for sanctions to be applied to Israel under Chapter VII of the United Nations Charter.

- 69. The Ukrainian Soviet Socialist Republic intended to raise its production of electrical power substantially under the current five-year plan, with nuclear power stations accounting for most of the increase. Their share of overall power production was to rise from 6% to 26%. It was planned to introduce in the near future additional capacity at the Chernobyl, South Ukraine and Rovno nuclear power stations and to construct the first units of the Khmel'nitsk, Zaporozh'e, and Crimean nuclear power stations and of the Odessa nuclear power and heat-generating station.
- 70. The Khmel'nitsk and South Ukraine stations were being constructed in conjunction with the Council for Mutual Economic Assistance. A 750 kW power transmission line stretching from the Khmel'nitsk station to the Polish town of Rzeszów would provide a reliable supply of electrical energy from the Soviet Union to Poland, Hungary and Czechoslovakia. Romania was participating in the construction of the South Ukraine station under a bilateral agreement. It was planned to increase electricity production in the Ukraine to 280-290 10 kWh by 1985, with nuclear power stations accounting for most of the increase.
- 71. There were altogether six large nuclear power stations in the Ukraine, one with RBMK (boiling-water) reactors and the other five with WWER reactors. In terms of their thermal and technical parameters and, more importantly, their reliability record. WWER reactors were on a par with world standards.
- 72. The use of nuclear reactors to generate heat for urban heating and industrial applications as well as to generate electricity was another area in which work was being carried out in his country. When the Odessa nuclear power and heat-generating station came into operation, it would be possible to dispense with uneconomic individual generators using fossil fuels within towns. First estimates showed that the cost of electricity and heat generation would be lower at such nuclear stations than at even the most economical conventional dual-purpose stations.

- 73. In addition, work was under way in the Ukraine on the planning and design of large-capacity reactors, on the construction of fast breeder reactors, on possibilities for the use of the thorium cycle and on high-temperature, gas-cooled reactors. The Ukrainian Academy of Sciences was performing important work on fundamental problems in nuclear physics, the behaviour of materials subjected to radiation and controlled nuclear fusion.
- 74. Radioisotopes and ionizing radiation were being used in scientific research establishments and institutes of medicine in an ever-expanding number of fields. A radiological service had been set up which allowed all patients, regardless of their place of residence, to be given radiodiagnostic analyses or radiation therapy if required. In vitro radioisotope diagnostic techniques were being increasingly employed, particularly for children, in endocrinological, haematological and oncological institutions thus enabling the radiation exposure of patients to be eliminated and reliable information on the functional status of the body's organs and systems to be obtained.
- 75. Great attention was being paid to training highly skilled experts, as was witnessed by the wide range of advanced nuclear courses available at various institutes.
- 76. Co-operation between the Ukraine and the Agency was increasing, particularly in connection with the organization in the Ukraine of meetings of Agency experts and courses, particularly of the interregional type, for Agency-sponsored trainees. Such courses were beneficial and should continue to be held under the Agency's auspices.
- 77. Turning to the annual report for 1980 and budget for 1982, he pointed out that the Ukrainian Soviet Socialist Republic attached great importance to technical assistance for the developing countries. Its voluntary contribution had risen from 100 000 roubles in national currency in 1980 to 135 000 in 1981, and would rise in 1982 to 180 000 roubles.

- 78. Mr. SETHNA (India) remarked that it was heartening to note that, with the admission of Zimbabwe, the membership of the Agency had now risen to 111 and of those 111 States the majority were from the developing world. That further highlighted the need for a change in representation on the Board of Governors, which at present was not in conformity with the increasing proportion of the Agency's membership constituted by developing countries. India would, therefore, like to express its support for the proposal before the Conference for an amendment of Article VI.A.2 of the Statute.
- 79. His delegation also wished to express its appreciation of the exemplary manner in which the Director General, Dr. Sigvard Eklund, had conducted the Agency's affairs during the last year. He had brought to the Agency a farsightedness and an experience which stemmed from his long and dedicated service. India particularly welcomed his statement at the first meeting of the session regarding the proper representation of the developing countries on the staff of the Agency.
- 80. The Agency was commencing the twenty-fifth year of its existence. He could think of no better or more appropriate way of commemorating the silver jubilee of the Agency than by recalling the objectives enshrined in the Statute objectives that had in recent years been threatened with erosion through totally extraneous issues, some of which were in clear violation of the provisions of the Statute.
- 81. It was regrettable that the growth in the Agency's promotional activities had not matched the development of its regulatory functions. In fact, the proposed concept of "zero growth" would widen the gap further. Furthermore, the

promotional activities had been and continued to be subject to extraneous and restrictive considerations, such as those reflected in the Revised Guiding Principles, so that the development of atomic energy on a universal basis was being hindered. For that reason India no longer accepted the Agency's technical assistance, while continuing to participate in the programme as a donor. The question of financing technical assistance was receiving continuing attention, but a permanent solution of the problem had not been found. In the meantime India supported the target of \$16 million agreed upon for 1982; his country's voluntary contribution would amount to the equivalent of \$97 600. In addition, India would continue to make available 12 fellowships for the benefit of developing countries.

- 82. The Conference agenda contained an item relating to the highly reprehensible, unprovoked and unjustified military attack by Israel on the Iraqi nuclear research centre. His Government condemned that brutal aggression in the strongest terms.
- 83. The basic point at issue was an act of aggression which had threatened the maintenance of international peace and security, in clear violation of the United Nations Charter. The incident also represented an act of aggression by one Member of the Agency against another, and therefore called for decisive action at the present session of the General Conference.
- 84, Although during 1980 the need for nuclear power both in industrialized and developing countries had been amply reaffirmed, the opposition to nuclear power had increased through fear based on environmental and safety considerations.

The fact that no death or serious injury due to radiation had occurred at any nuclear plant since the first power reactor went critical needed to be given widespread publicity in all countries in order to dispel the fears in the mind of the public. Nuclear power was the only viable alternative to conventional sources of energy available to a number of developing countries. For that reason India warmly welcomed the proposed International Conference on Nuclear Power Experience, scheduled for 1982.

- 85. India continued actively to support the work being done under the Agency's Regional Co-operative Agreement in grain mutation, the sterilization of medical supplies, the maintenance of nuclear instruments and other fields. His Government had recently become a participant in the Regional Project on Food Irradiation and had extended its full support to the forthcoming Project on Industrial Applications of Isotopes. Perhaps the stage had now been reached when a fresh look needed to be taken at how best to attain the objectives of regional co-operation, given the limited financial and manpower resources available.
- 86. India continued to view with concern the increasing emphasis being given to the Agency's regulatory activities. The Agency was now even mobilizing itself to implement safeguards in certain nuclear-weapon States. He wished to reiterate his Government's firm belief that such limited safeguards applied to a few non-military nuclear facilities in nuclear-weapon States were pointless and in no way contributed to non-proliferation. The production, stockpiling and deployment of nuclear weapons in various geographic locations, including some in

non-nuclear-weapon States, continued unabated. As the Secretary-General of the United Nations had mentioned in his message to the General Conference, any non-proliferation regime should involve a truly world-wide system which would be generally accepted and uniformly and fairly administered. It was also not proper for the Agency to introduce a distinction in its documents, such as the annual report and the Safeguards Implementation Report, when reporting on nuclear facilities in nuclear-weapon States and in non-nuclear-weapon States.

- 87. India had been participating, with an open mind, in some of the discussions connected with the proposed scheme for international plutonium storage. His delegation believed that the present discussions were proceeding in a direction that might violate the sovereign rights of Member States as enshrined in Article XII.A.5 of the Statute. India's participation in the plutonium storage discussions was, therefore, without prejudice to its rights as a sovereign nation.
- 88. A Committee on Assurances of Supply had been established so as to permit a multilateral dialogue between suppliers and consumers. Assurances of supply were a matter of some importance to India at the present time, and he looked forward to the emergence of positive suggestions from the deliberations of the Committee. It had to be emphasized that any multilateral solution for the problems of assurances of supply had to take into account existing bilateral rights and obligations.

- 89. Mr. SHIM (Republic of Korea) welcomed the approval of Zimbabwe for membership of the Agency.
- He said that the use of atomic energy was becoming more and more attractive, particularly in regions where fossil fuels were limited. For countries in which such limits were acutely felt, a stable supply of nuclear fuel had become imperative. The uneven distribution of resources around the globe and the uncertainty about obtaining them were for many countries a matter of increasing concern. Concerted efforts should be made through international co-operation in order to provide a stable supply of nuclear fuel to those who needed it. With regard to the transfer of nuclear power generation technology to developing countries, his Government attached great importance to the necessity of transferring expertise in quality assurance. If accidents were to occur as a result of quality assurance having been neglected, the consequences in terms of safety and economics would be catastrophic not only for the developing, but also for the developed countries. That was an area in which Governments and international organizations could play complementary roles in planning and implementing nuclear power programmes. In that connection, the training of manpower for the proper management of and quality assurance for nuclear power plants in developing countries, which was beyond the capacities of developing countries, should receive the serious attention of developed countries well before actual needs arose.
- 91. Turning to the peaceful uses of atomic energy in his country, he said that in July 1981 the nuclear power programme of the Republic of Korea had reached another milestone, ten billion kilowatt-hours having been generated without a single major accident since the first pressurized-water reactor (PWR) went into commercial operation in April 1978. That plant's capacity factor had been rising steadily, from 46% in 1978 to 67% in 1980, as his country's reactor operation and maintenance experience accumulated. Eight further nuclear power plants were under construction. One of them, a pressurized-heavy-water reactor (PHWR), would be completed by early 1983 and another, a PWR, would be in operation by late 1983. By 1991, his country expected to have a total of 13 nuclear power plants, accounting for 36% of its total electrical generation capacity. By the turn of the century, it would have approximately 30 GW(e) of

- installed nuclear power generation capacity as a result of the construction of more than thirty nuclear power plants. In order to carry out that ambitious and essential programme successfully, his Government wished to develop an increasingly close relationship with the Agency and with many other countries.
- 92. The Republic of Korea would willingly share its technological experience of nuclear power with any of the Agency's Member States in order to promote the peaceful uses of atomic energy and to ensure nuclear safety. The fuel cycle services required to support his country's nuclear power programme represented a formidable task; in that connection, if access to essential technologies continued to be denied, workable measures could not be put into effect for the ultimate disposal of spent fuel, nor could any useful international consensus be reached on the effective management of the back-end of the fuel cycle. Complexity and uncertainty were characteristic features of the management of the back-end of the fuel cycle, but there could be no excuse for evading that important issue, which all countries generating nuclear power would inevitably face. His delegation believed that clear and positive management of the back-end of the fuel cycle had become essential in view of the need to improve environmental protection. Certainly, the importance of using effectively the limited nuclear fuel resources available could not be ignored. The assurance of uranium supplies was also very important to consumer countries. In the past decade, unilateral violations of existing fuel supply contracts had been perpetrated in the name of new non-proliferation policies. For that reason his Government attached great importance to the Committee on Assurances of Supply. It hoped that the Committee would be able to establish internationally acceptable norms with regard to nuclear trade and access to essential technologies with due regard to the findings of the International Nuclear Fuel Cycle Evaluation (INFCE), physical protection considerations and the Agency's safeguards system.
- 93. Concerning the recent Israeli military attack on the Iraqi nuclear research centre, the Government of the Republic of Korea considered that the attack could not be justified by international law and represented a threat to the Agency's safeguards system.
- 94. In connection with the Regional Co-operative Agreement for Research, Development and Training Related to Nuclear Science and Technology (RCA), the Republic of Korea had participated in a number of projects, including the five-year United Nations Development Programme (UNDP) Industrial Project, and

looked forward to taking an active part in others when they were implemented, which would presumably be in 1982.

- 95. With regard to the Agency's budget for 1982 and the target for voluntary contributions to the Technical Assistance Fund, his delegation believed that it would be very difficult to expand the Agency's activities; the only solution was to programme the Agency's activities on a very selective basis, with stringent post-programme evaluation. His delegation noted with satisfaction that the indicative planning figure of \$16 million for contributions to the Technical Assistance Fund in 1982 was receiving broad support as a target, even though it fell far short of the requirements of the developing countries. The Agency should very seriously consider ways of incorporating the Technical Assistance Fund in the Regular Budget of the Agency.
- 96. Mr. OSZTROVSZKY (Hungary) said that, despite the Agency's considerable successes, nuclear energy was by no means being used exclusively for peaceful purposes. The international situation had worsened and aggressive elements in the capitalist world were attempting to find a solution to their problems by rearmament and measures aimed at achieving military supremacy. Especially dangerous were plans and decisions relating to the stationing of new American medium-range rockets in Europe and to the production of the neutron bomb, as was the concept of a so-called "limited" nuclear war. It was necessary to unite all forces in the interests of increasing co-operation in the peaceful uses of atomic energy and of reducing the threat of nuclear war. A policy of confrontation should be avoided, and peaceful methods such as talks should be used for the resolution of differences. That was all the more necessary as a policy of threats could lead all too easily to the actual use of force, as had been occurring in local conflicts, such as the invasion of Angola by South Africa and the Israeli attack on the Iraqi nuclear research centre. The latter event was of particular relevance to the Agency, since Israel had attempted to justify its attack by claiming that the safeguards system was ineffective. That claim represented a direct attack on the Agency and an indirect one on the whole non-proliferation regime. His Government fully supported the resolutions of the Board and the United Nations Security Council in that

- connection and was confident that the General Conference would also take appropriate measures. Hungary laid great emphasis on the importance of non-proliferation and of stengthening it, and it held the safeguards system of the Agency, which played an important part in the strengthening of NPT and non-proliferation as a whole, in high esteem.
- 97. Turning to his country's nuclear power programme, he said that it was intended that the electrical generating capacity to be connected to the grid up to 1990 would be based exclusively on nuclear reactors. The first four reactor units of the Paks nuclear power station, with a total capacity of 1760 MW, were being constructed and assembled at a rapid rate. Adjustment and start-up operations were to be carried out on the first unit in the very near future, and it was scheduled to go on line in 1982. Hungary's first nuclear power station was being constructed by virtue of extensive co-operation between member countries of the Council for Mutual Economic Assistance (CMEA) in accordance with the Agreement on Multilateral International Specialization and Co-operation for Production and Mutual Supply of Nuclear Power Station Components. In 1982 the Paks nuclear power station would account for 8% of Hungary's installed electrical generating capacity. In the installation of nuclear power stations considerable attention was paid at all stages - planning, siting, construction, manufacture and assembly of components, start-up and adjustment - to safety and quality assurance. A number of research institutions were participating in that programme, while certain problems were being treated at the international level as part of scientific and technical co-operation between the CMEA Member States.
- 98. For ten years an international team of scientists from the CMEA Member States had been engaged in joint research on the physics of water-cooled water-moderated power reactors at the Central Physics Research Institute of the Hungarian Academy of Sciences. The group had started collaborating with the Finnish Technical Research Centre in 1980.

- 99. In recent years there had been considerable progress in Hungary with the application of radioisotopes. There had been a twofold increase in the quantity of radioimmunological preparations used for diagnosis of the condition of the liver, kidneys, bone marrow and tissue before operations, and wide use was being made of radioimmunoassay of the thyroid function of the newly born. In 1977 a facility for the radiation sterilization of medical supplies had been built with Agency/UNDP assistance. After four years of operation the conveyor system had been partly reconstructed and a new (100 000 Ci) source loaded in the current year. In 1980, 175 million injection needles and syringes and 800 cubic metres of other supplies had been sterilized.
- 100. Approving the Agency's annual report for 1980, he commended the Agency's fruitful work under the experienced direction of the Director General, Mr. Eklund. Hungary attached great importance to the efforts being made to improve the effectiveness of safeguards inspectors.
- 101. Apart from the safeguards system, the technical assistance provided by the Agency was of great importance, and Hungary was actively participating in that programme. It had noted with pleasure that the voluntary contributions to the Technical Assistance Fund in 1980 were being used effectively.
- 102. Aware of the importance of the Agency's technical assistance programme, his Government wished to announce that in 1982 it would make a voluntary contribution of 2 million forints in national currency, which was in excess of its share of the proposed target.

- Mr. MALDONADO MIÑO (Ecuador) stated that his Government had recognized 103. the essential role that atomic energy had to play in the overall development of his country and, to that end, had strengthened the Ecuador Atomic Energy Commission five years previously. A development plan had been approved which his country intended to carry through, with the generous co-operation of the Agency and of Spain, Argentina and other countries. In addition to the Atomic Energy Commission, various other governmental and higher education institutes were engaged in projects closely related to the country's agricultural industry. Preparations were being made for various joint projects involving the Ministry of Agriculture and the Faculties of Veterinary Medicine and Agricultural Sciences of the Central University. With the co-operation of the Soviet Union, a highenergy electron generator was to be installed in one of the higher education institutes. The country's first secondary standards dosimetry laboratory was being opened in 1981. The activities in question testified to the effectiveness of the technical assistance provided through the Agency. It was to be hoped that assistance would not only continue but be extended. The secondary standards dosimetry laboratory would be used in some of the agricultural projects to which he had referred; also it formed an integral part of his country's radiological safety programme. The setting-up of the laboratory had made it possible to begin negotiations with the Ministry of Public Health and the Institute of Social Security with a view to finding appropriate solutions to the safety problems facing radiation workers in Ecuador.
- 104. Exploration for radioactive minerals was another activity to benefit from the Agency's technical assistance, and it was possible that the United Nations Development Programme would give favourable consideration to a project for that purpose. The Ecuador Atomic Energy Commission was ready to begin the project as from 1 October 1981.
- 105. In the context of the peaceful uses of nuclear energy, access to high neutron fluxes was essential in order to acquire a better understanding of their dynamics, to manufacture short-lived radioisotopes and to make full use of neutron activation analysis techniques. With the kind co-operation of the Spanish Nuclear Energy Board, design work had begun on a 3-MW power reactor and the associated laboratories. It was intended to complete that work at the beginning of 1982 and then to commence the construction phase.

106. The Atomic Energy Commission had received considerable support for the training of the staff required for its various programmes; it was particularly indebted to Argentina, Brazil and Chile for their generous co-operation.

107. A number of important meetings concerning the development of nuclear power in Latin America had taken place in 1981. The General Assembly of the Agency for the Prohibition of Nuclear Weapons in Latin America (OPANAL) had been held in Mexico City in April 1981 and had reaffirmed the desire of the Latin American community to keep the region free of nuclear weapons. His country held the view that all due consideration should be given to expanding the services rendered by OPANAL to the Latin American countries. Under the auspices of the Commission for the Development of the Nuclear Industry in Venezuela, representatives of the bodies responsible for implementing nuclear energy policy in the countries party to the Cartagena Agreement had met in Caracas in May 1981. Very important conclusions had been reached, and there was no doubt that nuclear power was destined to play a major role in the integration of the Andean sub-region. The twelfth meeting of the Inter-American Nuclear Energy Commission had been held in La Paz at the beginning of September 1981: important resolutions had been adopted and emphasis placed on regional programmes.

108. Lastly, he wished to pay particular tribute to Dr. Sigvard Eklund who, for so many years, had worked steadfastly to ensure that the Agency fulfilled the objectives laid down in its Statute. The people of Ecuador would always remember Dr. Eklund's visit to their country, during which he had reaffirmed the Agency's decision to support Ecuador's plans in the field of atomic energy.

Mr. AGIOBU-KEMMER (Nigeria) said he associated himself with the sentiments already expressed on the work done by Dr. Sigvard Eklund as Director General of the Agency over the past 20 years. The fact that Dr. Eklund had four times been re-appointed and was now completing his fifth term in office was itself eloquent testimony to his accomplishments both as a scientist and as an administrator. During the years which had elapsed since he was first appointed, he had stamped his personal image upon the Agency and earned for it, no less than for himself, a high reputation for efficiency and commitment to reliability and objective truth. He had recently been giving special attention to the needs of the developing countries and it was to be hoped that his successor would advance that positive trend. It would be important for the new Director General to study the Statute afresh, to interpret and implement it in the light of existing realities, and to ensure that the concerns and aspirations of all Member States were taken into account.

- 110. The Nigerian delegation welcomed the inclusion on the agenda of the present session of the item relating to the Israeli attack on the Iraqi nuclear research centre. The Security Council and the Agency's Board of Governors had taken a clear and positive stand on the issue and it was to be hoped that the General Conference would now take such measures as would deter Israel and any other like-minded adventurers from repeating acts of a similar nature.
- 111. The setting up by the Agency in June 1980 of the Committee on Assurances of Supply had been very laudable. However, it had been disturbing to find that the racist régime of South Africa, the credentials of whose representative had been rejected at the twenty-third session of the General Conference, in New Delhi, had been allowed to participate in the work of the Committee. Happily, the Board had since taken corrective action to bring itself into line with the decision of the General Conference and the relevant resolutions of the General Assembly calling for an end to all forms of co-operation and collaboration with South Africa in the nuclear field.
- 112. The Nigerian delegation believed that the promotional activities of the Agency were as important as its regulatory functions. In fact, for developing countries the former were the more important and the Agency should spare no effort in expanding them. Accordingly, Nigeria would continue to call for the resources for technical assistance to be allocated from the Regular Budget, as was the case with safeguards. Moreover, the level of funding for those two most important functions of the Agency should be comparable. His delegation also wanted to take the opportunity to draw attention to the wide disparity between the growing needs of the African countries and the amount and quality of technical assistance so far extended to that region.
- 113. Nigeria wished to express its gratitude to those developed countries which had generously placed facilities at the disposal of the Agency for the training of high-level personnel from the developing countries. The Agency should give active consideration to the idea of establishing training centres in the latter countries. He was grateful to the Agency for the technical assistance it had given and also to Belgium, the Federal Republic of Germany, Sweden and the United Kingdom for their support to Agency projects in Nigeria. His delegation welcomed the proposal to replace the term "technical assistance" by "technical co-operation" and hoped that the change would be more than cosmetic.

114. It was sad to observe that no progress has yet been made on the question of amending Article VI.A.2; apparently words such as "equity" and "balance" conveyed different meanings to different groups. It did not appear that any positive result would emerge until the major powers, in particular, decided that they really wanted to live in a peaceful world, where "man shall not be a wolf to man". The Agency ought to keep abreast of the changing realities of the day and give expression to progressive forces by reflecting the diversity in culture, scientific attainments, economic needs and technological aspirations represented by its Member States. It was to be hoped that an increasing number of competent staff from the developing world, especially from Africa, would be recruited to the policy-making levels of the Agency's Secretariat.

115. At the United Nations Conference on New and Renewable Sources of Energy, held in Nairobi, the views of the Nigerian Government on energy issues had been clearly stated. The world's petroleum reserves would not last for ever and steps would have to be taken to diversify the sources of energy without delay. For that purpose, research and development work on alternative and nuclear energy sources was being intensified. It was to be hoped that, with increasing technical assistance from the Agency and the generous co-operation of developed countries, the programme adopted in the Lagos Plan of Action during the Second Extraordinary Session of the Organization of African Unity (OAU) Summit would be realized.

- 116. Mr. COPITHORNE (Canada) said that the President of the General Conference, in his opening remarks, had given all delegates much to ponder in pointing up the need to chart a new path to meet new challenges.
- 117. He wanted to use the occasion to pay special tribute to Dr. Eklund, who had headed the Agency with such distinction over the last 20 years. Few, if any, international organizations had enjoyed such dedicated leadership as that provided by Dr. Eklund over such a long period of time.
- 118. Moreover, on behalf of the Canadian Government, he wished to welcome the approval of Zimbabwe for membership of the Agency.
- 119. The Conference was meeting at a time when the international nuclear community was confronting major challenges. The prospects for growth in the use of nuclear power remained impressive, but programmes in many countries, including

Canada, had not realized their potential. Industries which had expanded to meet earlier expectations were now facing a period of sharply reduced activity. The glow was off nuclear power, and, as Dr. Eklund had pointed out, one could ignore that situation only at one's peril.

120. As part of its normal policies in the field of energy, Canada was committed to the nuclear option. It was confident that, both domestically and around the world, nuclear power would play an increasingly important role in meeting the growing needs of the world economy for safe and reliable sources of energy at an economic price. However, that confidence was inevitably tempered by concern over the risks posed by nuclear proliferation. Unless those risks were dealt with, existing threats to global and regional stability were likely to become worse. It was in that context of widespread international instability that the Israeli attack on the Iraqi reactor, an action immediately and strongly condemned by the international community, had to be judged. Legitimate public concern over the spread of nuclear weapons would cast a lengthening shadow over the prospects for expanding the peaceful use of nuclear energy, and resistance to nuclear power would only increase. Ganada remained convinced that an effective, internationally agreed non-proliferation regime offered the best hope of containing those risks.

- 121. Thus an effective and comprehensive non-proliferation policy was necessary to maintain domestic support for nuclear exports and confidence among customers abroad. Canada's role as a reliable supplier of nuclear items was inseparable from the existence of a sound and effective international safeguards regimes, and the existence of such a safeguards regime made Canadian nuclear exports possible. Thus Canada regarded the Agency's safeguards as a key element in its own nuclear trade and welcomed the conclusion of the Safeguards Implementation Report for 1980 that "... nuclear material under Agency safeguards remained in peaceful nuclear activities or was otherwise adequately accounted for."
- 122. However, if confidence was to be sustained in such conclusions, the Agency must continue to improve the effectiveness of its safeguards, keeping them abreast of developments in nuclear technology and advances in the fuel cycle. The Director General had expressed concern to the Board about difficulties the Agency was experiencing in safeguarding reactors, particularly where there was an unsafeguarded supply of fuel. Those were serious matters requiring urgent attention as well as the co-operation of all Member States, particularly those directly involved. Canada would continue to assist the Agency in every way possible to overcome those difficulties.

123. Canada recognized that the procedures for implementing non-proliferation controls could be improved and made more efficient. Reprocessing offered a good example. Following the conclusion of INFCE in 1980, Canada had devised an approach to reprocessing material of Canadian origin under conditions acceptable to both supplier and purchaser. It believed that approach satisfied the concerns of its nuclear partners about long-term energy security, while ensuring that the reprocessing in question served only peaceful purposes. Reprocessing would be considered a generic activity. Mutual consent for a defined nuclear energy programme — of which reprocessing was an integral part — could be agreed to in advance. National reprocessing programmes would, under those conditions, be easier to plan on a long-term, predictable basis. Canada had discussed that approach with several of its nuclear partners and would be doing so with others in future.

124. As a major nuclear supplier, Canada had a vital stake in promoting the development of an international environment where nuclear commerce could take place on a secure and predictable basis. Canada's nuclear co-operation agreements, comprehensive in scope, were intended to facilitate as much as possible the transfer of nuclear material, equipment and technology — including fuel fabrication and heavy water production technology — to its nuclear partners. In the past year, Canada had concluded co-operation agreements with the Philippines and Australia, and a number of others were under negotiation.

125. Canada was one of the world's largest exporters of uranium. In 1980, Canadian mines had produced more than 7000 tonnes of uranium. Exports had accounted for some 5400 tonnes, mostly under long-term contracts. In 1980 more than \$125 million had been invested in Canadian uranium exploration and development. According to the most recent assessment, there had been a significant increase in Canada's known uranium resources since 1974, an increase equivalent to more than three times the amount of uranium approved for export during the period 1974-80. The country's resource base as a supplier was therefore secure.

126. As for nuclear technology, the CANDU reactor continued to enhance its reputation. CANDU nuclear power stations had produced over 200 000 million kilowatt hours for Ontario Hydro, one of North America's largest utilities. The province of Ontario had some 5500 MW of CANDU capacity in operation. In addition, 14 reactors were under construction in Ontario, Quebec and New Brunswick which, when completed, would increase Canada's total nuclear capacity

to more than 15 000 MW. CANDU 600-MW reactors were also being constructed in Argentina, Romania and the Republic of Korea, and several other countries were seriously considering their purchase. The Canadian nuclear industry was now marketing a 950-MW CANDU which combined the best features of existing designs with additional improvements. At the other end of the scale, the CANDU family had long had available reactors in the range of particular interest to the developing world.

127. The growing interest in CANDU resulted directly from the outstanding performance record of the reactors now operating in Canada. To the end of 1980, CANDUS had a lifetime average capacity factor of 77%, the highest of any reactor type in the world. The Bruce 2 unit had led the world in 1980 with a capacity factor of nearly 95%. The four leading reactors rated above 500 MW in 1980 had all been CANDUS. If one looked at the lifetime performance of individual units, Bruce 3 led the field with a capacity factor of almost 83%. CANDUS held 6 of the top 10 places among the more than 100 reactors rated above 500 MW. Even allowing for the notorious difficulty of comparing international performance figures, the exceptional record of CANDU reactors could not be seriously challenged.

128. Canada was participating in a number of multilateral bodies which could lead to improved mutual understanding and confidence in the area of nuclear trade. Canada hoped that the Agency's Committee on Assurances of Supply would justify the expectations created during INFCE and anticipated when the Board of Governors established the Committee. In the summer of 1980 Canada had participated in the first session of the Preparatory Committee for the 1983 United Nations Conference for International Co-operation in the Peaceful Uses of Nuclear Energy, a conference which was to provide a forum for the discussion of international nuclear issues. Canada was pleased to be among those assisting the Agency in planning the Conference on Nuclear Power Experience, scheduled for 1982.

129. His country viewed the question of nuclear co-operation, in particular with the countries of the developing world, in a broad context. The Canadian Government and the Canadian Prime Minister personally had devoted a large share of their attention in the field of foreign policy to the North-South dialogue during the past year. That had been true both of bilateral relations and of

the Government's contributions to the July economic summit of industrial nations held in Ottawa, to the Nairobi Conference on New and Renewable Resources of Energy and to current preparations for the forthcoming meeting of Commonwealth Heads of Government at Melbourne and the North-South summit at Cancún. Throughout the meetings held in 1981 food and energy had repeatedly been identified as sectors of primary concern for the developing nations, and in both sectors Canada was renewing and extending its long-term efforts to make a respectable contribution to the collective search for more rapid economic progress in the developing world. Canada's aim in the field of energy was to place developing countries in a better position, with Canadian help, to meet their energy needs.

- 130. Nuclear energy fell squarely within that framework. Indeed, Canada's experience in transferring nuclear technology to energy-short developing countries had, as early as the 1950s, begun to foreshadow some of the problems faced today. One factor which had made the national experience of Canada relevant to the process of development was that the chosen fuel cycle had been developed to meet the needs of what Canada had then been and in some cases still was namely a developing country.
- 131. Canada believed that nuclear power could make a significant contribution to the economic growth of developing countries and had been sharing its know-ledge and expertise with them. The Director General had pointed out that nuclear power plants were operating in only four developing Member States India, Pakistan, Argentina and the Republic of Korea. Starting with India's RAPP I reactor in the early 1960s, Canada had supplied power reactors and transferred significant nuclear technology to all four of those countries.
- 132. Canada was committed to assisting its nuclear partners in developing the infrastructure necessary to support their nuclear programmes. For example, the Canadian regulatory authority, the Atomic Energy Control Board, had set up a training and orientation unit to assist other nucelar regulatory agencies in developing the capability to ensure soundly based licensing decisions in connection with the design, construction, staffing, commissioning and operation of power reactors supplied by Canada. Canadian experts were continuing to work on Agency projects in a number of countries, while trainees from around the world were using their Agency fellowships to study at Canadian universities and

research centres. He welcomed the decision to change the name of the relevant Department of the Agency to "Department of Technical Co-operation".

- 133. Turning again to the question of public opposition to nuclear power development and the steps that were being taken to counter the inhibiting effects of that opposition, he said that Canada's experience confirmed the conclusion of the 1980 Stockholm Conference on Nuclear Power Plant Safety Issues that nuclear power was safe. Canada had accumulated nearly 100 reactor years of power reactor experience without a single fatality and not one radiation-induced injury. No member of the public had been exposed to any significant radiation as a result of nuclear generating station operation; there had been no incidents causing a significant increase in the total risk to any member of the public as a result of nuclear generating station operation.
- 134. While nuclear safety and environmental questions were primarily matters of national concern, Canada commended the Agency for expanding its efforts in those areas. Canada was taking part in a broad range of Agency activities intended to refine still further the advisory documents on the health, safety, security and environmental aspects of nuclear power. Also, Canadian experts had helped to revise the Agency's Basic Safety Standards for Radiation Protection, which had recently been approved by the Board of Governors.
- 135. Managing high-level nuclear fuel wastes was a major concern to many countries, including Canada. The CANDU programme was designed to use safe, cheap and efficient storage at the reactor site, but a more permanent solution would eventually be necessary. Research and development work on deep disposal in the stable geologic formations of the Canadian shield was already well advanced. The wastes were to be sealed from the biosphere by a series of engineered and natural barriers. In the current year, the Canadian Government had approved a five-year, \$100 million waste management programme directed towards successful demonstration by 1990. The programme would be of such a nature as to keep the reprocessing option open for Canada.
- 136. A word of caution was due on the subject of the Agency's budget. In the best of all possible worlds it would not be necessary to choose among priority activities, the peaceful uses of nuclear energy clearly being one. That freedom was unfortunately not possible in the present world, nor was it likely to be in the foreseeable future. Safeguards, technical co-operation and nuclear

safety were the Agency's priority programmes. For other programmes, priorities must be selected, results evaluated in a realistic manner and budgetary decisions made accordingly. There should be no duplication with the programmes of other international organizations and agencies. The Agency's scientific work should have clearly defined objectives relevant to its technical assistance and other promotional activities. The Director General's remarks concerning examination of the extent to which the Seibersdorf and Monaco laboratories were responding to the needs of Member States had been noted. Canada urged the Agency to apply the highest degree of restraint possible, making zero real growth the rule for the budget as a whole. Canada was firmly committed to the Agency and its objectives, but those objectives must be defined in terms of what was possible in current circumstances.

137. In conclusion, he wished to remind all of the common cause that had brought the delegations of Member States together. As the Agency entered its twenty-fifth year, all Member States and the Board of Governors should seriously consider the future prospects of the Agency, particularly its role in meeting the aspirations of the developing world. The staffing of the Agency was only one area that should be examined in that context. The Agency's role of promoting the peaceful uses of nuclear energy was nowhere more important than in the developing world. A strong Agency under imaginative leadership was a vital element in the development of the predictable, secure and progressive environment desired by all.

The meeting rose at 1.20 p.m.