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RECORD OF THE TWO HUNDRED AND TWENTY-SECOND MEETING

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President: Mr. HAUNSCHILD (Federal Republic of Germany)

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The composition of delegations attending the sessions is given in documents GC(XXIV)/INF/193/Rev.3, INF/193/Rev.3/Mod.1 and INF/193/Rev.3/Mod.2.

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ELECTION OF OFFICERS AND APPOINTMENT OF THE GENERAL COMMITTEE

- 1. The <u>PRESIDENT</u> recalled that, pursuant to Rules 34 and 40 of the Rules of Procedure, the General Conference had to elect eight Vice-Presidents, the Chairman of the Committee of the Whole and five additional members of the General Committee on the proposal of the President.
- 2. As a result of consultations the day before and that morning, there appeared to be a consensus that the General Conference should by way of an exception suspend the relevant provision of Rule 40 and elect six (instead of five) additional members to form the General Committee together with the President of the Conference, the eight Vice-Presidents and the Chairman of the Committee of the Whole, it being understood that that would not constitute a precedent.
- 3. He therefore proposed that the delegates of the following Member States should be elected as Vice-Presidents of the General Conference: Japan, Saudi Arabia, Senegal, Thailand, United Kingdom of Great Britain and Northern Ireland, Union of Soviet Socialist Republics. United States of America and Venezuela.
- 4. He proposed Mr. Siazon, the delegate of the Philippines, as Chairman of the Committee of the Whole and the delegates of the following States as additional members of the General Committee: Costa Rica, France, German Democratic Republic, Hungary, India and Sudan.
- 5. The General Conference accepted the President's proposals.
- 6. The General Committee was thus duly appointed.

GENERAL DEBATE AND ANNUAL REPORT FOR 1979 (resumed)

- 7. Mr. NIMPUNO (Indonesia) said the main task facing the General Conference was to evaluate developments relating to nuclear energy for peaceful purposes, the transfer of technology and assurances of supply. Unfortunately, most developing countries were not yet fully enjoying the benefits of nuclear energy. Effective and serious co-operation between them and the technologically advanced countries was essential and should therefore be the object of further efforts.
- 8. There was no doubt as to the potential advantages of nuclear energy in a number of fields, and Indonesia was applying nuclear techniques in various sectors of agriculture under Regional Co-operation Agreement (RCA) programmes. In that way it had been able to achieve improvements in the cultivation of food products (e.g. rice) and in the processing of latex. However, most benefits of using nuclear techniques were not yet fully shared by all members of the world community.

- 9. It was an unfortunate fact that nuclear energy was still very often associated with the idea of the destructive power of the atom. It was truly regrettable in that connection that the Non-Proliferation Treaty (NPT) had not accomplished very much and that the Second NPT Review Conference had been unable to arrive at a concerted final statement. That situation would undoubtedly be an obstacle to the action to be taken during the next five years, but it was to be hoped that it would have no adverse effect on the Agency's activities. More unfortunate still was the fact that, under the pretext of preventing proliferation and contrary to its Article IV, NPT was standing in the way of the implementation of nuclear programmes of developing countries by blocking the transfer of technology and materials to them.
- 10. In the matter of implementation of the safeguards system, the reports to the Second NPT Review Conference by the Agency showed that the system had not yet been extended to new facilities which were significant from the point of view of their potential for producing materials which could be used for nuclear weapons. Indonesia, which possessed only a few small research reactors, had placed its modest nuclear programme under safeguards. It believed that good intentions should be expressed not only in words but also in deeds so as to inspire confidence and good faith and thus contribute to the cessation of nuclear arms proliferation.
- 11. As for the Agency's promotional activities, everyone recognized the importance and usefulness of the technical assistance programme. Nevertheless, there was still room for many improvements in that area. It was a regrettable fact that Agency staff members sometimes acted as if they wanted to retard the implementation of the national programmes of developing countries. Requests for assistance from those countries should be viewed in a broader context and it should be understood that those countries were emphasizing the transfer of technology in general in order to achieve the level of competence needed for realizing their national development programmes. Technology required the support of fundamental science, and that was why the Indonesian delegation had on many occasions stated its support for the activities of the International Centre for Theoretical Physics at Trieste.
- 12. With regard to the annual report for 1979, he wished to emphasize the importance of a systematic evaluation of all the activities of the Agency, and especially of the technical assistance programme, as that was the only

way to correct shortcomings, and it was necessary for the Agency to assign a sufficient number of staff to that task.

- 13. The Indonesian delegation was grateful that the Board had arrived at a consensus regarding the target for voluntary contributions in 1981. It was well known that there was a draft resolution proposing that technical assistance should be financed under the Regular Budget. Although the many discussions that had been devoted to that question had not produced significant results, Indonesia still supported the resolution. In any event, it had been agreed that a means should be found for achieving assured funding. Indonesia, which approved the figures adopted for 1981, 1982 and 1983, wished to announce a pledge of US \$20 800 as its voluntary contribution for 1981.
- Mr. ROSSI GUERRERO (Venezuela) said that the twenty-fourth session of the General Conference was taking place at a moment when the international situation was particularly critical. The arms race, and especially the nuclear weapons race, had become the principal cause for concern. On the occasion of the present General Conference of the Agency, a body which had been set up mainly to promote the peaceful uses of nuclear energy, it was appropriate to present some thoughts on the subject of facts and attitudes which represented a growing danger for the international community.
- 15. The results of the Second NPT Review Conference, held recently at Geneva, had been discouraging. Once again, the nuclear-weapon States had sought to preserve a kind of nuclear oligopoly. Evidence thereof was the acceleration of the arms race. That behaviour was contrary to the principles and objectives of the Agency. As long as there was no change in the attitude of the nuclear-weapon States, no real progress could be made towards regulating the different aspects of the peaceful uses of nuclear energy.
- 16. Venezuela resolutely supported the efforts in favour of non-proliferation, but it asserted just as resolutely that non-proliferation could not and should not consist in the unilateral imposition of obligations on a large number of States while a privileged minority was seeking to avoid them. Non-proliferation must be a joint and equitable enterprise.
- 17. The use of nuclear energy for the economic and social progress of peoples should be recognized as an inalienable right of all countries, a right which had been confirmed in the final report of the International Nuclear Fuel Cycle Evaluation (INFCE).

- 18. For Venezuela, as a country which produced and exported energy, the peaceful use of nuclear energy was of particular importance. The energy shortage had demonstrated that it was urgently necessary to exploit new sources as rapidly as possible. That was true also for Venezuela, and that was why it had set up the National Council for the Development of the Nuclear Industry, which was responsible for promoting the use of nuclear energy for the economic and social progress of the country. Given the complexity, technological difficulties and cost of a nuclear programme, the Venezuela Government considered that international co-operation was indispensable, and in that context it needed the assistance and co-operation of the Agency. Venezuela strongly supported the work of the Agency, especially its efforts at promoting international co-operation in nuclear matters.
- 19. In that connection, the Venezuela delegation wished to mention the technical assistance programming mission sent by the Agency to Venezuela in May; the results of that mission were of great importance for the country's nuclear activities. It also wished to point out that Venezuela would be acting as host to a regional course on the use of radiation-induced mutations in plant genetics which was to take place at the Faculty of Agronomy of Zulia University in MaracaTbo from 3 November to 5 December 1981 under the auspices of the Agency and FAO and with the co-operation of the National Council for the Development of the Nuclear Industry.
- 20. It was obvious that the Agency was playing and would continue to play an important part in the peaceful applications of nuclear energy. It should carry out its mission with equal vigour in two directions: technical assistance and control of nuclear weapons proliferation.
- 21. Technical assistance should be the subject of increasingly intensive efforts. It should enable the developing countries to create the scientific and technological infrastructure necessary for eliminating their technological lag and to achieve a balanced interdependence. It was therefore necessary to establish an assured source of funding for technical assistance, to increase the resources allocated to it and to assist the developing countries in obtaining the necessary technical assistance for their projects.
- 22. Aware of the danger that a nuclear war represented for the survival of mankind, Venezuela firmly believed in the need for total non-proliferation based on the most absolute ethical principles and on international justice.

To achieve that goal, it was necessary, with the same vigour that was applied in the restrictive measures taken in connection with safeguards, to provide developing countries which undertook not to possess nuclear weapons with the indispensable assurances as to materials and equipment, the training of staff, the participation of national industry and co-operation in research and in the financing of projects.

- 23. However, that was not sufficient; the nuclear-weapon States really had to put a stop to the arms race. A large part of the resources thus freed could be devoted to promoting economic and social welfare, especially in the developing countries. It was appropriate to mention in that connection that Latin America had taken concrete steps through the Treaty of Tlatelolco, which represented an umprecedented joint effort to free the countries of Latin America from the threat of nuclear destruction. Venezuela would continue to support the Agency for the Prohibition of Nuclear Weapons in Latin America.
- 24. Venezuela also supported without reservation the Inter-American Nuclear Energy Commission (IANEC) in promoting the peaceful uses of nuclear energy in the region. In that context, Venezuela would be host to a regional co-ordination meeting of the national officials responsible for training programmes in the field of nuclear power, which would be held under the auspices of IANEC in co-operation with the National Council for the Development of the Nuclear Industry at Caracas from 8 to 10 October 1980. Venezuela would also take part in the legal workshop on comparative legislation relating to exploration for and exploitation of radioactive ores, to be held at Quito from 7 to 10 October under the auspices of IANEC.
- 25. Lastly, he wished to reiterate his hope that the Agency's activities would respond to the legitimate aspirations of the developing countries, in conformity with the objectives which had inspired and justified its creation.
- 26. Mr. PRIBIČEVIĆ (Yugoslavia) noted that the General Conference was being held in international conditions that were difficult and complex from both the political and economic standpoint. The present energy crisis continued to affect adversely the economic and social development of all countries, especially the developing ones. The gap between the developed and developing countries was widening and the overall situation could easily lead to a major world economic crisis, with serious consequences for international relations as a whole.

- 27. His delegation had stressed on a number of occasions the importance of nuclear energy as a safe and clean energy source that could contribute to the solution of energy problems. Although it was true that the introduction of nuclear energy had come up against a number of difficulties that should not be underestimated, it was not to be forgotten that many countries, first and foremost the developing countries, lacked the conventional energy sources and could not therefore indefinitely postpone their decision to go nuclear. To wait for new energy sources that were not yet commercially available would seriously delay their economic development.
- 28. At the present time, however, there was no reliable system for assuring on a long-term basis, the supply of nuclear materials, equipment and technology. The exchange of information on scientific developments and the transfer of nuclear technology and materials continued to be hampered by a group of nuclear suppliers through unilaterally imposed limitations. Under the pretext of preventing the proliferation of nuclear weapons they were imposing additional restrictive requirements, as a result of which the development, research, production and use of nuclear energy in a number of countries had been considerably curtailed. All those measures had held up international co-operation in the use of nuclear energy for peaceful purposes and the transfer of nuclear technology, and in certain cases they had even adversely affected the economic planning of importing countries.
- 29. Under those circumstances Yugoslavia believed that there was need to adopt measures ensuring maximum security for importing countries when their respective nuclear programmes were put into effect. The problems concerned were essentially of a political nature. The first International Conference on Nuclear Energy and its Fuel Cycle, held by the Agency in Salzburg, had been able to produce very important scientific and technical data. Similarly, the International Nuclear Fuel Cycle Evaluation (INFCE) had provided highly useful technical data, accompanied by certain recommendations. In neither case, however, had there been concrete proposals for effectively solving the existing problems relating to international co-operation in the peaceful use of nuclear energy.
- 30. The Second Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons had not yielded any tangible results. It was hoped, however, that its failure would not adversely affect the processes under way at the Agency or elsewhere to arrive at a solution to the problems.

- 31. It was encouraging to note the Agency's decision to set up a Committee on Assurances of Supply (CAS) to consider ways in which the supply of nuclear materials, equipment and technology, together with fuel cycle services, could be assured on a long-term basis, thereby guaranteeing free access to nuclear materials and technologies.
- 32. With a similar aim in mind Yugoslavia had participated in the work of expert groups on International Plutonium Storage (IPS) and International Spent Fuel Management (ISFM). It would be guided, in future deliberations, by the conclusions of the First Regular Meeting of the Non-Aligned Co-ordinating Countries on the Peaceful Uses of Nuclear Energy, held recently at Buenos Aires. The representatives of the non-aligned countries had stressed that the results of those activities should not limit or affect in any way the free technological development of countries concerned or the availability of nuclear materials, including their own excess plutonium, nor impose requirements beyond those of the Agency's present safeguards.
- 33. Like many other countries, Yugoslavia felt that all the Agency activities referred to could also serve as a basis for the international conference on the promotion of international co-operation in the peaceful uses of nuclear energy. The non-aligned countries felt that the said conference would afford an opportunity to discuss all the political and economic aspects of the world development of nuclear energy: the promotion of international co-operation; transfer of materials, equipment, technology and know-how; long-term assurances of nuclear fuel cycle services; safety, regulatory and legal aspects; and the role of international organizations. There seemed to be a consensus in favour of the conference being held during the first half of 1983.
- 34. It was clear that the Agency would be expected to play a key role in all such activities, and its contribution would certainly be substantial. At the same time, it would have to continue efforts to adjust to the present state of affairs where international co-operation on nuclear energy was concerned. The present energy crisis made it essential for the Agency to take new action to meet the requirements of a number of countries, especially the developing ones, in introducing nuclear energy into their national programmes. To achieve that aim the Agency would have to be more democratized and manifest a higher degree of efficiency. All Member States, for example, should be able to take a full part in its activities and there would have to be equitable regional

- distribution of seats on the Board of Governors and of staff posts in the Secretariat, including the safeguards inspectorate. That could not be attained without a balance between technical assistance and other promotional activities, on the one hand, and the safeguards inspection activities, on the other. It was encouraging to see that the Board had decided, in June 1980, to establish indicative figures for technical assistance contributions in the coming years, thereby introducing an element of predictability into a vital area.
- 35. The Yugoslav long-term development plan up to the year 2000 paid due regard to nuclear energy, more especially the construction of nuclear power plants. Analyses of energy generation requirements showed that despite the still dominant part played by coal and hydropower, the introduction of nuclear energy would be indispensable. Several nuclear power plants were to be constructed in the course of the next 20 years, and the country's first nuclear power plant would in fact undergo trial operation in mid-1981.
- 36. At the present time, Yugoslavia was preparing a programme based on a single type of nuclear fuel cycle. Since the participation of foreign technology suppliers would be indispensable for the implementation of the programme which would probably be worked out in the course of 1981 intensive negotiations on terms for participation by the partners in the construction of Yugoslav nuclear power plants were now under way. Preliminary site studies had already been carried out, and in all industrial sectors efforts were now geared to improving technologies already acquired and strengthening production capacity so as to achieve the greatest possible degree of self-sufficiency.
- 37. The imminent completion of the first nuclear power plant and preparation of the nuclear development programme up to the year 2000 made it imperative for Yugoslavia to speed up the drafting of the different regulatory documents that would be required.
- 38. He expressed his country's appreciation to the Agency for the expert services and valuable technical assistance provided during the final stage of the construction of the first nuclear power plant. It was hoped that the assistance would be continued in 1981.
- 39. In conclusion, he stressed his country's desire to increase co-operation with the Agency; as both a non-aligned country and a Member State, Yugoslavia

would take part in all Agency activities promoting the peaceful use of nuclear energy. There was clearly a need to find a new consensus among exporters and importers of nuclear materials and technology, in a spirit of understanding, equality and non-discrimination.

- 40. Mr. SKALLI (Morocco) pointed out that the General Conference was being held within a rather special context only a short while after the Second Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, the deliberations of which had been characterized by failure entailing unforeseeable consequences.
- 41. The international climate was seriously deteriorating and it was to be noted that the race to acquire ever more sophisticated and ever more destructive weapons had in no way abated, while the gap between the affluent and developing countries was steadily widening. To that had to be added the waning reserves of natural energy sources, which could easily create a serious threat to a number of vital balances and add further tension to that already existing.
- 42. It was on those grounds that nuclear energy was bound to acquire an ever more important role and to arouse interest on an ever increasing scale in the international community, provided that the doubts and distrust regarding the safety of nuclear power plants and the risk of the proliferation of nuclear weapons were dispelled. His delegation had had frequent occasion to stress the importance of the Agency's mission and responsibilities both in promoting the peaceful use of nuclear energy and in strengthening the non-proliferation regime.
- 43. It should be recalled that the Second NPT Review Conference had ended a short while before without any consensus being reached on a final document. If the credibility of NPT was not to be further damaged, it was imperative for vertical and horizontal non-proliferation to be achieved. The nuclear powers would therefore have to respect the provisions of NPT and apply in full the commitments contained in it, especially in Article VI. Everyone was aware of the importance of banning nuclear tests and the urgency of concluding a treaty along those lines.
- 44. The problem of the security of non-nuclear-weapon States was an extremely important one for Morocco. It was essential that the nuclear Powers provide guarantees of safety for those States and it was encouraging to see

- the establishment of a special working group by the Conference of the Committee on Disarmament to study effective international arrangements to safeguard non-nuclear-weapon States against the use, or threatened use, of nuclear weapons.
- 45. His delegation also believed that the creation of denuclearized zones was an important step towards disarmament and reiterated its support for the position adopted by the Group of 77 at the Second NPT Review Conference.
- 46. Furthermore, it was vital that non-nuclear-weapon States should benefit from the peaceful use of nuclear energy. International co-operation in that field would make it possible, especially for developing countries, to meet the many challenges facing them in promoting their economic and social development.
- 47. With regard to safeguards, the system should be rigorously applied so as to prevent the diversion of nuclear energy from peaceful applications. Non-nuclear-weapon States were committed to respecting the system by signing safeguards agreements with the Agency, and it was heartening to see that a large number of countries had already done so.
- 48. Morocco possessed an important energy potential and was at present deploying considerable efforts to develop its resources. To meet its needs the primary energy sources used were hydropower, coal and hydrocarbons. In 1979, 82.1% of the primary energy consumption had been met by hydrocarbons, 8.8% by hydropower, 7.8% by coal and 1.3% by local natural gas.
- 49. Morocco therefore regarded oil prospecting as a matter of high priority and a number of sedimentary basins were at present being thoroughly explored from both land and sea. It was also planned to develop its bituminous schists, of which there were abundant reserves in the country. Two major deposits had already been the subject of intensive geological studies. Hydroelectric power currently accounted for about % of national energy consumption and could be further developed. Coal accounted for 7.4% in the country's energy balance and was being mined at Jerada at the rate of 75 000 tonnes per year.
- 50. As far as uranium was concerned, geological and radiometric surveys had continued in the Upper Moulouya River region and in the Western High Atlas mountains, where the drilling carried out had shown high uranium concentrations. With regard to the uranium contained in phosphates, Morocco was closely following the development of the extraction technology based on phosphoric acid, in particular the results obtained by some of the industrial units already in operation.

- 51. In view of the national grid situation, the commissioning of a nuclear power unit would not be possible before 1993 or 1994. However, siting studies and the training of staff had already been started in co-operation with Agency experts and would be intensified in the years ahead. A Triga research reactor had been purchased, but the scientific and technical research programme to be drawn up could not be implemented without the constant aid of Agency experts.
- 52. In conclusion, he wished to draw attention to the under-representation of the African continent in the Agency. By virtue of its human and energy potential, by virtue of the varied and immense riches in its possession, and by virtue of the number of States that it incorporated, Africa could rightly claim better representation at all levels.
- Mr. BARABAS (Czechoslovakia) said that the Agency's activities were especially important in matters connected with peace, the relaxation of international tension and disarmament. Among other things, it bore full responsibility for implementing the safeguards agreements concluded in connection with the Treaty on the Non-Proliferation of Nuclear Weapons (NPT). The Second NPT Review Conference had shown that it was essential first of all to strengthen the NPT regime. That objective was not unrelated to the implementation of the decisions contained in the Final Act of the Helsinki Conference on Security and Co-operation in Europe and hence was of importance also for the conference shortly to be held in Madrid.
- 54. His delegation firmly advocated the strengthening of the non-proliferation regime and of the Agency's safeguards function. It appreciated the Agency's activities and achievements in the area of safeguards and called upon States party to NPT which had not yet signed an agreement with the Agency to do so as soon as possible. It welcomed the conclusion of the Convention on the Physical Protection of Nuclear Material and also the Agency's activities in continuation of the International Nuclear Fuel Cycle Evaluation. It considered that the supply procedures in use among the socialist countries demonstrated that it was possible, within the framework of NPT, to establish an export system without discrimination.
- 55. Since the preceding session of the General Conference, Czechoslovakia had commissioned a second WMER-440 reactor at the W1 power station. The construction of a second power station comprising two WMER-440 reactors had

- made appreciable progress. Two other stations, each with four 440-MW reactors, were being built and preparatory work had begun at the site of a future station with WMER-1000 reactors.
- 56. Czechoslovakia had exported the first pressure vessel of a WWER-440 reactor to Hungary. It planned to build a total of 17 reactors of that type, including seven for export. For the purpose of city heating, it was also considering the use of nuclear power plants, to which very stringent safety criteria would be applied so that they could be installed in the vicinity of large cities.
- 57. Such an extensive nuclear power programme would not have been possible without close co-operation with the Soviet Union and other countries members of the Council for Mutual Economic Assistance (CMEA). While every effort was being made to use all available sources of energy, the Czechoslovak planners considered that in the decades ahead nuclear power plants would supply the largest part of the country's energy requirements.
- 58. The Czechoslovak delegation fully endorsed the Agency's programme for 1981-1986 and the draft budget for 1981. It set a high value on the Agency's activities and would continue to support them in the future.
- 59. Mr. de CARVALHO (Brazil) said his Government considered that every country had the inalienable right to use nuclear energy for peaceful purposes on the basis of non-discriminatory international co-operation. It firmly believed that any effective non-proliferation policy must involve universally applied measures. The existing safeguards system had produced excellent results insofar as the non-nuclear-weapon States were concerned. However, since the establishment of the Agency in 1957 there had been at the same time uncontrolled vertical proliferation of both nuclear weapons and international safeguards, the former in nuclear-weapon States and the latter in the rest of the world. It was time to consider the establishment of a more effective safeguards system which would be universally applicable and non-discriminatory.
- 60. Public acceptance of nuclear energy was still a major problem which was not likely to be resolved for a long time and might seriously affect the development of national nuclear programmes. It was therefore necessary to promote public education and to present the undistorted facts about nuclear energy. The Agency could play a highly important part in that connection by fostering co-operation and through dissemination of information to its

Member States. That function of the Agency called for an effort comparable to its non-proliferation role.

- 61. As a developing country, Brazil considered that the increasing use of nuclear energy for peaceful purposes was essential for accelerated and self-sustained economic development. In Brazil, 90% of the electric power used was hydroelectric; on the other hand, only 20% of the oil it consumed was produced in the country. The anticipated increase in the demand for electric power indicated that Brazil's hydroelectric potential, which was over 200 000 MW, would be fully utilized in less than 30 years. In order to ensure economic development, it was making tremendous efforts to tap new sources of energy. An example of those efforts was the programme for production of ethanol from sugar-cane and other biomasses, which was perhaps the most significant project of its kind in the world. By the end of 1981, more than half a million vehicles would be using ethanol as fuel.
- 62. As for electricity generation, given the limits of its hydroelectric potential and the relative shortage of fossils fuels, his country had no alternative but to use nuclear energy. It was generally recognized that scientific and technological development was a sine gua non for economic development, and could only take place from a certain level of economic development. Developing countries should therefore concentrate their meagre resources in a few chosen fields considered to be strategic sectors. Such sectors were those which, once developed, would have a series of positive impacts on other sectors, thus triggering socio—economic development. The nuclear sector was perhaps one where scientific and technological progress could have the greatest effect. For that reason, apart from playing a role in the generation of energy and in supplying electricity grids, nuclear programmes had a very positive effect on a country's educational system, on basic and applied research in several sectors, and on standardization and quality control in industry.
- 63. Besides its direct impact in increasing the scientific knowledge in a country, a nuclear programme had considerable positive effects in all areas of knowledge and industry. As regards agriculture, it was widely recognized that food production was one of the crucial problems of the present time. The world's population was growing, while the availability of arable

land was tending to decrease. It had therefore become imperative to make better use of available land and to improve productivity in agriculture. Nuclear techniques offered considerable advantages in that regard.

- 64. Those facts demonstrated the importance of the utilization of nuclear energy in developing countries, especially when it was realized that the rate of development must be such as to enable them to reduce and eventually eliminate the gap separating them from the developed countries. A nuclear programme in a developing country could serve as a catalyst of general economic development.
- 65. It was in that context that the Brazilian nuclear programme was being carried out. In a few months the first Brazilian power reactor, Angra-I, would reach criticality; it would generate up to 626 MW(e). Two additional power plants, of 1300 MW(e) each, were already under construction at the same site, and siting studies for subsequent nuclear power stations were under way. Determined to achieve self-sufficiency in the nuclear field, his country had undertaken to master all aspects of the nuclear fuel cycle, from ore prospecting to waste disposal. Its proven reserves of uranium were well over 200 000 tonnes equivalent of U₃0₈ concentrate. The techniques of ore dressing and yellow cake production had been mastered and the first yellow cake plant, with a capacity of 500 tonnes per annum, would soon start production. In 1979 Brazil had started the conversion of uranium hexafluoride in a pilot plant, using techniques developed domestically. A plant was under construction at the same site, near São Paulo, and during the present decade the country's demand for uranium hexafluoride would be met fully from national production.
- 66. Within the framework of its co-operation with the Federal Republic of Germany, Brazili was developing the jet nozzle enrichment process. A fuel fabrication plant was already under construction near Rio de Janeiro. Moreover, a plant to produce heavy components for the nuclear industry had gone into operation in early 1980.
- 67. The importance of the Agency's technical assistance programme should be emphasized, since nuclear safety depended on qualified manpower, whose training was a basic need in developing countries. Nuclear safety should be considered a factor which would facilitate the maximum use of nuclear technology rather than one which would limit its future development. The Brazilian National Nuclear Energy Commission was acquiring the necessary technical competence to carry out the safety evaluation of the nuclear facilities under construction.

Under the Agency's technical assistance programme, a large number of experts had gone to Brazil to assist the Commission in the various aspects of safety assessment, inspection and operator licensing. In addition, Brazilian experts had participated in many Agency-sponsored courses, conferences, working group meetings and training programmes.

- 68. The Agency's activities in the area of safety research were very important. Research programmes in co-operation with the Agency would enable developing countries to be involved in analytical and experimental work which they could not have undertaken for budgetary reasons or for lack of qualified personnel. Proper management of radioactive waste was a necessary condition for the public acceptance of nuclear power. The Agency should promote international co-operation with a view to finding a rational and feasible solution to that controversial problem.
- 69. Brazil attached great importance to co-operation among developing countries as a means of increasing their self-reliance. That concept also applied to co-operation in the peaceful uses of nuclear energy. In that respect, it was worth mentioning the recent agreement concluded between Brazil and Argentina on the peaceful uses of nuclear energy. It covered a wide range of activities and the co-operation between the two countries in both scientific and industrial areas was developing rapidly; it could be said that the agreement had already increased the self-reliance of both countries in the nuclear field.
- 70. Mr. COLOMBO (Italy) said that the twenty-fourth regular session of the General Conference of the Agency was being held at a time when the world community was facing an especially critical situation. It was necessary more than ever for the members of the international community to co-operate in reducing tensions and strengthening security and mutual trust. Co-operation was also needed in the peaceful uses of nuclear energy, which was becoming increasingly essential for economic growth in the years to come. Without underestimating the role which other sources of energy and, in particular. the more rational use of oil might play, it could be stated that the main socioeconomic problems facing the world could be resolved satisfactorily in the next few decades only by the increasing use of nuclear energy. In that connection mention should be made of two developments since the twenty-third session of the General Conference: the conclusion of the International Nuclear Fuel Cycle Evaluation (INFCE) and the Second Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons (NPT).

- 71. INFCE had rendered a great service by removing certain misunderstandings and by shedding light on certain realities. It had been pointed out, for example, that nuclear energy could and should be used increasingly in order to meet the energy requirements of mankind and that effective measures could and should be taken to respond to the specific needs of developing countries in the matter of the peaceful uses of nuclear energy. INFCE had shown that it would not be realistic to expect to develop new fuel cycles which could eliminate any risk of military uses of nuclear energy and it had confirmed the validity of the existing cycles. Effective measures capable of reducing the risk of horizontal nuclear proliferation could and should be taken but not in such a way as to reduce the supply of nuclear material. Lastly, the desired objectives could only be achieved through continuing international co-operation in a climate of mutual understanding.
- 72. It was disappointing to note that at the Second NPT Review Conference, which had been held ten years after the entry into force of the Treaty, the parties had not been able to arrive at a consensus on a final document.

 Nevertheless, it had been possible at the Conference to carry out an extensive and highly useful review of the application of the Treaty. The Italian Government wished to stress the importance of NPT, which was an essential and irreplaceable factor in strengthening peace and security in the world and in promoting co-operation and socio-economic development. The Treaty should be applied effectively in the various sectors of international activity with which it was supposed to deal, for that would lead to a reduction of the risks of nuclear proliferation and to ensuring universal accession to the Treaty. It was essential, among other things, to apply the provisions of Article IV relating to the peaceful applications of atomic energy and those of Article VI dealing with measures for limiting and controlling nuclear weapons.
- 73. The discussions which had recently been held at Geneva showed that there was considerable convergence of views concerning a number of evident disparities observed in connection with the application of Articles III and IV of the Treaty. While safeguards against risks of diversion of nuclear energy had proved to be effective and adequate, the application of the provisions designed to facilitate exchanges in the area of the peaceful uses of nuclear energy seemed to be only partial and unsatisfactory. For that reason, the Italian Government, too, was of the opinion that the application of Article IV should

be watched more closely. In that connection, it agreed with the Director General's view that ideas such as that of "prior consent" were inappropriate, since they could give rise to effects which were the opposite of what was intended. In its bilateral relations in the field of nuclear energy, his Government complied strictly with the international agreements in force and had agreed in principle on the need to specify full-scope safeguards as the final and universal goal in that area.

74. As regards safeguards against the risks of military uses of nuclear energy, the Italian Government was highly satisfied with the assurance contained in the annual report for 1979 that verifications had shown that there had been no diversion. That assurance strengthened the firm belief of the Italian Government that the concern felt by the world community over the risks of diversion should not result in the imposition of new forms of unilateral control which might impede the peaceful uses of nuclear energy essential for the survival and the social and economic progress of mankind. His Government considered it sufficient to apply the Agency's safeguards system correctly. Recalling in that connection the decision taken by nuclear-weapon States such as the United Kingdom, the United States and France to accept Agency safeguards on a voluntary basis for some of their nuclear facilities, it hoped that other nuclear-weapon States would follow that example.

75. Since the situations in different countries required different strategies of exploitation of nuclear energy, the Italian Government would continue, within the framework of the Agency and consequently with the indispensable contribution of all countries concerned, to support the preparation of international standards which could specifically and adequately meet the parallel requirements of non-proliferation and the development of the peaceful uses of nuclear energy. For that reason it was pleased to note that the Convention on the Physical Protection of Nuclear Material had been submitted for ratification and confirmed that it would contribute to the preparation of appropriate international standards for international management of spent fuel and international plutonium storage. On the subject of the supply of nuclear material, his Government was confident that the Committee on Assurances of Supply would carry out its vitally important task.

76. Realizing the need to reduce its dependence on oil, Italy had undertaken a national energy programme extending over ten years and calling for balanced use of other sources and for conservation of energy. As for nuclear energy,

Italy was planning to construct nuclear power stations, each comprising two 1000-MW units. at the rate of one a year. That would enable it to increase its total installed capacity from 1350 MW at present to about 7400 MW in 1990 and to more than 25 000 MW by the end of the century. In spite of the difficulties still being encountered by the Italian nuclear power programme, especially in the matter of final site licensing procedures, there were conditions favourable for the development of that programme. For example, a national conference on nuclear safety, which had been held in Venice in January 1980, after the Three Mile Island accident, had discussed the problem of safety of nuclear power plants in Italy. The discussions confirmed in particular the validity of the safety standards and procedures in force in Italy. In April 1980 the Italian Government had approved the five-year plan of the National Nuclear Energy Committee for 1980-84, which provided for the establishment of an autonomous body to oversee all activities, and not only nuclear activities, involving hazards for the population and for the environment. Furthermore, under the plan the Committee would intensify its industrial promotion activities both in the nuclear sector and in the sector of new and renewable energy sources.

77. The effort being made by Italy at the national level in the area of nuclear energy had necessarily to be placed in an international context, and Italy would continue, and seek to extend further, the co-operation activities which it had already undertaken.

78. In the fifties efforts had been made to efface the memory of how the era of nuclear energy had started by launching the "Atoms for Peace" slogan. Since then a number of developments had taken place and the world was facing an energy crisis. It might therefore be appropriate for the years ahead to adopt a new slogan: "Atoms for Survival".

The meeting rose at 5.15 p.m.