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RECORD OF THE TWO HUNDRED AND SEVENTY-FIRST PLENARY MEETING

Held at the Neue Hofburg, Vienna,
on Tuesday, 24 September 1985, at 10.20 a.m.

President: Mr. MANOUAN (Côte d'Ivoire)
later: Mr. WALKER (New Zealand)

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*/ A provisional version of this document was issued on 2 October 1985.

**/ GC(XXIX)/746 and Add.1.

The composition of delegations attending the session is given in document GC(XXIX)/INF/227/Rev.3.

ARRANGEMENTS FOR THE CONFERENCE

(a) ADOPTION OF THE AGENDA AND ALLOCATION OF ITEMS FOR INITIAL DISCUSSION
(GC(XXIX)/746 and Add.1)

1. The PRESIDENT informed the Conference that the General Committee, at its meeting the previous day, had authorized him to report on the outcome of its consideration of the agenda and the allocation of items for initial discussion. The General Committee recommended that the agenda consist of all the items on the provisional agenda set forth in document GC(XXIX)/746, together with the supplementary item contained in document GC(XXIX)/746/Add.1.
2. A member of the General Committee had expressed a reservation concerning the inclusion of the supplementary item.
3. The General Committee further recommended that those items be allocated for initial discussion as indicated in documents GC(XXIX)/746 and GC(XXIX)/746/Add.1.
4. Finally, the General Committee recommended that the supplementary item contained in document GC(XXIX)/746/Add.1 be included immediately after item 10, with the consequential renumbering of the subsequent items, and that the items be taken in the order in which they would then appear, subject to the understanding that changes might have to be made in the course of business so as to make the best use of the available time.
5. The General Committee's recommendations were accepted.

(b) CLOSING DATE OF THE SESSION AND OPENING DATE OF THE NEXT SESSION

6. The PRESIDENT informed the Conference that the General Committee had authorized him to report that it recommended fixing Friday, 27 September 1985, as the closing date of the twenty-ninth regular session and Monday, 29 September 1986, as the opening date of the thirtieth regular session of the General Conference, to be held in Vienna.
7. The General Committee's recommendations were accepted.

GENERAL DEBATE AND ANNUAL REPORT FOR 1984 (GC(XXIX)/748 and Corr.1) (resumed)

8. Mr. KWON (Republic of Korea) said that vitalizing the nuclear industry was a matter of great international concern, a fact which the Fifth Pacific Basin Nuclear Conference, held in May in Seoul with the theme of "Interdependency for a Vitalized Nuclear Industry", had fully recognized. That Conference had firmly concluded that the world's nuclear industry could and would be gradually vitalized despite stagnation caused by current constraints.

9. That being so, the Director General should consider a programme aimed at revitalizing Member States' nuclear industries, thus ensuring an extensive use of nuclear power to cope with the energy shortage which would probably occur in the near future.

10. The Republic of Korea was prepared to share with developing Member States its experience in initiating nuclear power projects, manpower training, domestic participation in nuclear power plant design and construction, and other fields of interest.

11. The Seoul Conference, representing the world nuclear community, had fully recognized the importance of interdependency between countries at various stages of development for vitalizing the nuclear industry, and it had stressed that regional and international co-operation in the field of peaceful nuclear technology was more imperative than ever. Some important issues raised at the Seoul Conference would be carried over to the succeeding sixth Pacific Basin Nuclear Conference to be held in Beijing in September 1987.

12. Nuclear programmes in his country were constantly progressing, both qualitatively and quantitatively. One additional 950 MW pressurized water unit had gone into commercial operation the previous weekend. The Republic of Korea now had four operating nuclear power plants, and the nuclear share of the nation's total electrical installed capacity had increased to slightly over 20%. Five more PWR units were currently under construction, and would come into commercial operation at a rate of one per year from 1986. With all nine units in operation by 1989, nuclear capacity would increase to over 35%. The bid invitations for Korean nuclear units 11 and 12 would be issued in the very near future.

13. His Government was deeply concerned with nuclear safety, assurance of supply, the development of an indigenous capability for fuel design and fabrication as well as NSSS design, and the manufacture of nuclear-grade components and equipment.

14. Nuclear power development strategy in Korea was being concentrated on standardizing future nuclear power plants and on maximum domestic participation, preferably throughout the nuclear sector, which would enable the country to keep abreast of the most important developments in the nuclear safety field.

15. To that end, and in an attempt to improve national design and construction capability, it was his country's firm intention to increase local participation schemes substantially, thus encouraging local companies to work as the prime contractors for subsequent units (the authorities hoped, for nuclear units 13 and 14).

16. In that regard, the Korea Electric Power Corporation planned to nominate local firms to supply nuclear equipment and components and to undertake installation services. The prime supplier would be totally responsible for overall project management as the prime contractor.

17. The NSSS design work was being undertaken by the Korea Advanced Energy Research Institute. That Institute was also responsible for providing nuclear fuel fabrication software, while the Korea Nuclear Fuel Company would supply the fuel assemblies to all operating PWR units from 1989. It was estimated that over 200 tons of fabricated fuel would be needed annually from the 1990s for reloading operations. The current plan called for the construction of a commercial fuel fabrication plant by 1988.

18. The achievement of national nuclear power development goals depended on timely deployment of qualified manpower in sufficient numbers. Most of the nuclear-related organizations in the country were pursuing intensive manpower training programmes either at their own in-house facilities or at professional training institutions.

19. The KAERI Nuclear Training Center had provided a wide range of courses for over fifteen years. In the current year, three IAEA-backed training courses had already been conducted at the Center, for which his Government was extremely grateful. It hoped that some of the Center's specific training courses could in future be offered to other Asian region participants.

20. With regard to safety endeavours, various measures had been taken to gain public acceptance for the country's nuclear power programme. Of particular significance was the recent establishment of a safety assessment office under the direct control of the Minister of Science and Technology.

21. His Government praised the Agency's work on nuclear safety, and would actively participate in its efforts to promote the exchange of information on safety issues. His country also took a keen interest in the Nuclear Safety Standards (NUSS) programme.

22. The risk of nuclear-weapons proliferation was of concern to all. The Republic of Korea valued the Agency's efforts to make safeguards yet more effective and noted the implementation records with satisfaction. His delegation attached great importance to national as well as international efforts to minimize the danger of nuclear-weapons proliferation without jeopardizing the peaceful uses of atomic energy.

23. At the conclusion of the Third NPT Review Conference, the record of the foregoing five years clearly indicated the effectiveness of the international non-proliferation regime. His Government was pleased to note that the Review Conference's final declaration was unanimously agreed.

24. The IAEA safeguards system was an extremely important vehicle for safeguarding a growing number of nuclear installations in Member States. However, there had been and still were occasional snags in the application of Agency safeguards; obviously they had to be applied on a non-discriminatory and equal basis, but in some cases that aim was not achieved. Ad hoc safeguards inspections at a certain nuclear facility took place frequently, it had to be said, and resulted in operational and economic difficulties.

25. On the matter of Agency staffing, he was pleased to note that the Director General had made progress towards implementing the resolution on staffing adopted at the twenty-fifth session of the General Conference. Recognizing the increasing role played by the developing countries, particularly those which had a tangible nuclear power programme, and the need to recruit staff on a balanced geographical basis, his delegation strongly desired that the Director General should continue his efforts to increase the number of staff drawn from developing countries with active nuclear programmes, especially for the senior policy-making levels. His country had a comprehensive nuclear power programme, and his Government expressed its wish to play an even more active role in Agency policy-making by holding a seat on the Board of Governors for the coming year; a floating seat was available for the Far East region. He believed that, through such active participation, his country's nuclear programme could maintain closer bonds with the Agency and thereby serve as a bridge between the advanced and developing Member States.

26. He was pleased to note that various projects under the RCA umbrella had been successfully carried out with the unsparing support of the Member States and the Agency. There was no doubt that the RCA had contributed greatly to promoting radiation and radioisotope techniques in his country.

27. The Korean delegation considered it an honour to have been a member of the RCA for more than ten years and stressed that it would continue to give positive support to the Agreement's progress. The Republic of Korea would be hosting the eighth RCA Working Group Meeting in Seoul in the spring of 1986.

28. The Republic of Korea believed that the benefits of nuclear energy for power and other peaceful uses had to be fully and fairly available to any country that both needed them and was capable of using them, having demonstrated its understanding of the obligations involved.

29. In conclusion, his delegation wished to express its confidence that the Agency would continue to serve as a reliable instrument for the development of international co-operation in the peaceful uses of atomic energy, while consistently ensuring the effectiveness of the international non-proliferation regime and, for that purpose, of its own safeguards regime.

30. Mr. KHAN (Pakistan) said that it was not for him to comment on the outcome of the Third Review Conference of the NPT which had just concluded. His country supported all sincere and non-discriminatory initiatives to ensure both vertical and horizontal non-proliferation of nuclear weapons. However, the Agency was not a party to NPT and the terms and norms of that Treaty should not be imposed upon the general membership of the Agency and there should not be any discrimination between Member States based on their adherence to a particular regional or multinational treaty or arrangement, provided that they fully respected the Agency's Statute.

31. The ascendancy of the Super Powers in the development and deployment of nuclear weapons of mass destruction on the ground, under the sea and in space was unchallenged and their nuclear arsenals were increasing beyond any rational limits of self-defence. The earlier leadership of those countries in the peaceful uses of atomic energy was being gradually eroded as more countries made progress in acquiring indigenous capability in the nuclear fuel cycle and nuclear power technology. That evolution should be welcomed as a healthy development for the wider growth of nuclear power.

32. A deliberate policy of denying peaceful nuclear technology to the Third World countries would not succeed. An orderly and peaceful development of nuclear energy could be ensured only if there was a feeling of mutual trust and confidence between the supplier and recipient States. The norms of international trade and commerce in nuclear energy should be agreed upon through dialogue rather than imposed through coercion. His country had always supported the work of the Committee on Assurances of Supply (CAS) and believed that a voluntary and negotiated agreement reached by that Committee would be more effective than the unilateral restrictions announced from time to time by the supplier States. While the Agency was the best forum for discussing the technical issues related to nuclear energy, the political aspects of co-operation and the economic and security implications of nuclear technology could best be discussed in the wider forum of the United Nations. It was to be hoped that the long delayed United Nations Conference on the Peaceful Uses of Nuclear Energy would be convened as soon as possible.

33. His Government had consistently supported measures for strengthening the international nuclear non-proliferation regime including the establishment of nuclear-free zones in different regions. The Conference of Non-Nuclear-Weapon States held in Geneva in 1968 had been convened at Pakistan's initiative to complement the objective of the Non-Proliferation Treaty for obtaining security guarantees for the non-nuclear-weapon States against nuclear threat or blackmail. His country supported the Agency's safeguards system which it believed should be applied to all Member States on a non-discriminatory basis.

34. The growing stockpiles of nuclear weapons had not strengthened the security of the Super Powers, nor had they served the cause of world peace and the acquisition of nuclear weapons by the developing countries would also not contribute to their security but would constitute an unbearable burden on their limited economic and technical resources. For those reasons his country had taken important initiatives to reduce the risk of nuclear proliferation in its own region. It had advocated the establishment of a nuclear-weapon-free zone in South Asia and that proposal had received overwhelming support in the UN General Assembly. It had also expressed its willingness to subscribe to the NPT at the same time as India or to agree to reciprocal inspection of each other's nuclear facilities in order to assure the international community that nuclear weapons were not developed and introduced into the region. His country had also called for a formal joint declaration by the heads of the two Governments disavowing manufacture, acquisition or deployment of nuclear weapons. His country was prepared to enter into high-level consultations to consider those or any other positive and constructive proposals, which would ensure that the region would remain free from the scourge of nuclear weapons and that nuclear energy was used solely for the economic benefit of its peoples.

35. Thirty-four new nuclear power plants had been established in thirteen countries during the previous year. That figure marked the largest annual increase since the early 1970s and was very encouraging, but it was disturbing to note that none of those reactors had been commissioned in any of the

developing countries which were in urgent need of nuclear power to promote their development. Nuclear power was economically competitive, operationally safe and environmentally benign and nuclear power plants under Agency safeguards posed no threat of proliferation. The nuclear industry in most of the industrialized countries was in a precarious position with a large unutilized manufacturing capability. There was an over-supply of uranium which had reduced its price; the enrichment capacity far exceeded the foreseeable requirements; and new cheaper, more economic methods of enrichment were being developed. There was a lack of demand for heavy-water production plants and for nuclear power plants. International commerce in nuclear power was at a standstill.

36. That deplorable state of affairs was largely the result of the contradictory policies of supplier States, which were using nuclear power for political purposes and withholding it from the needy developing countries in order to gain certain objectives. Contrary to their declared objectives of promoting the peaceful applications of nuclear energy, they continued to deny peaceful nuclear technology to the energy-deficient developing countries. They used non-proliferation to justify that policy of denial but such a policy would be self-defeating since it was bound to generate strong political and economic motivation in the recipient States to seek greater self-reliance in nuclear power and as more countries were able to build their own nuclear power reactors and other facilities, they too would not be amenable to accepting safeguards on their indigenously produced facilities. The recipient States of the Third World were not willing to accept a permanent state of under-development in nuclear technology. It would be better to seek to strengthen the non-proliferation regime through co-operation rather than to persist in a policy of denial.

37. The unwarranted and unjustified Israeli attack on the Nuclear Reactor Centre in Iraq in June 1981, had done irreparable damage to the cause of the peaceful application of nuclear energy. It was imperative that Israel withdraw its threat to repeat such attacks on Iraq and other countries of the region, so that the nuclear facilities of those countries could be developed in an atmosphere of security.

38. The leading western countries, which enjoyed considerable influence with Israel should exert pressure on the Government of Israel to ensure that it complied with the provisions of resolution GC(XXVIII)/RES/425 so that the issue, which was of deep concern to the international community, could be resolved in an equitable manner, without any further delay.

39. There was also an urgent need for the international community to take strong and effective measures to prevent Israel or any other country from carrying out armed attacks with impunity against nuclear facilities devoted to peaceful purposes. His country fully endorsed the worldwide efforts for adopting an international convention, forbidding and preventing such attacks.

40. His country strongly deplored the racial policies of the apartheid régime of South Africa which were directly responsible for the serious unrest in the country and which had been universally condemned. His country fully shared the concerns expressed about the nuclear programme of South Africa and was opposed to the continuation of any nuclear, military or economic co-operation with the racist régime of South Africa.

41. There had been a welcome though modest increase in the resources made available for the technical co-operation programme of the Agency and his country was grateful to all those countries which had contributed to it. However, there were still a substantial number of technically sound projects, which could not be financed owing to lack of funds.

42. For that reason, the technical assistance programme should be financed through the Regular Budget of the Agency or through other equally predictable and assured resources. The Agency should preserve a balance between its promotional and regulatory activities and treat them equally in terms of resource allocation and method of financing.

43. His country, together with a number of other countries, had sponsored an amendment to Article VI.A.2 of the Statute, which was designed to rectify the gross under-representation of the regions of Africa and the Middle East and South Asia on the Board. Despite the fact that the majority of Member States had supported an increase in the representation of those two regions on the Board, those regions had been denied their rights for more than a decade due to a lack of political will.

44. Another proposal had come forward for the revision of Article VI as a whole which would entail major structural changes in the composition of the Board instead of making limited changes to help rectify the glaring imbalance in the representation of the two specific regions. Although his country sympathized with the sponsors of that proposal for reviewing Article VI as a whole, it was felt that it would take a long time before a consensus emerged. Therefore, the limited amendments proposed in Article VI.A.2 should be carried out as soon as possible while efforts were continued to find a solution to the wider issue of the revision of Article VI as a whole.

45. The efforts made by the Director General over the previous four years to increase the representation of developing countries at the policy-making level in the Secretariat were commendable. However, much still needed to be done before the goals set by resolution GC(XXV)/RES/386 relating to a substantial increase in the number of staff members from developing countries at all levels were met.

46. His country expressed its support for the programme and budget of the Agency in general and particularly appreciated its activities in the field of nuclear power, nuclear safety and health. The Agency should continue and intensify its efforts to promote the development of small and medium power reactors, which were of primary importance for the smaller grids of the developing countries.

47. In view of the increasing need for peaceful applications of nuclear energy in developing countries, it was unrealistic to insist on a zero-growth concept for such programmes in the budget of the Agency.

48. His country was continuing with the development of its peaceful nuclear energy programme in spite of the unilateral embargoes and restrictions. KANUPP had been operating successfully and was being regularly inspected by the Agency under its safeguards system. The planning of new nuclear power reactors was continuing. Nuclear power was the key to Pakistan's future economic development and represented the only viable alternative for overcoming the critical power shortages which it experienced. Use of nuclear techniques in agriculture had already made a significant impact on its

national economy. The recent increase in the output of cotton crop was based partly on the use of a new mutant developed using nuclear techniques. Work on the first gamma irradiation plant for sterilization of medical and agriculture products was proceeding and construction of the ninth nuclear medical centre would begin in the near future.

49. The co-operation and support received from the Agency in the planning and implementation of various projects and programmes was very much appreciated. His country had been pleased to host the Seventh Working Group Meeting of RCA in March 1985 and to welcome 20 countries to its Annual Summer College on Physics in June 1985.

50. Pakistan would continue to co-operate with the Director General in his endeavours to make the Agency an effective body for promoting both the regulatory and promotional programmes of the Agency.

51. Mr. RENON (France) said that because of its limited fossil fuel resources, France had long been making strenuous efforts to increase the nuclear share of its energy production, which now amounted to over 60%. For this purpose it had built up a nuclear industry covering all stages of the fuel cycle and power plant construction. Experience gained showed that greater international co-operation and exchange in the nuclear field, to which his country was particularly open, was vitally important.

52. But the sensitivity of certain technologies employed in industry required a set of regulations offering assurances of non-diversion and in that connection France actively supported the Agency's safeguards system, which in order to receive international support, had always to be implemented with full respect for the sovereignty of the contracting States. All States freely entering into such international commitments had the right to nuclear energy and France would willingly share its experience with States embarking upon the nuclear path.

53. France's experience had shown the feasibility of pursuing an independent energy policy under advantageous economic conditions. Its level of energy independence, which had fallen to 22.5% in 1973, today stood at 42.6%.

54. On the strength of the low cost price per kW/h obtained from fully standardized nuclear power plants constructed over a short space of time (five to six years), the nuclear share in national power consumption was increasing rapidly (23%), thereby giving impetus to modernization in numerous French industries.

55. The mentioned figure of 60% for the nuclear share in electricity production would reach some 75% by 1990, when plants now under construction came into service.

56. His country now had 61 units (of which 19 were under construction) with a total output of 60 000 MW and a fully established fuel cycle, and efforts were now focused on achieving high performance from those plants already in service by reducing outages for refuelling and maintenance and by increasing the operational flexibility of a set of reactors whose capacity already exceeded base load requirements.

57. Availability of the standard 900 MW(e) reactors, the chief reactor type in France, had stood at more than 80% in 1984, and operational flexibility had been appreciably increased to cater for demand fluctuations within the grid. The latest technology was now rendering French nuclear plants more flexible than fossil-fuel plants.

58. His country was also seeking greater energy independence through improvements within the fuel cycle. Despite a temporary world abundance of uranium, France was pursuing its policy of ore prospecting (accounting for 20% of world effort), and had contributed to the discovery of a 110 000 t uranium deposit with an unusually high ore grade (12%) at Cigar Lake in Canada.

59. With regard to enrichment, the multinational Eurodif plant, with an annual capacity of 10.8 million separative work units (SWU), provided fuel for one out of three reactors in the West and offered economically attractive enrichment services. It was expected that laser enrichment techniques would be introduced in the 1990s.

60. The 10 000th standard PWR fuel assembly had been fabricated at the end of 1984, while a new type of fuel called AFA had been developed. Moreover, the decision had been taken that year to produce a uranium-plutonium fuel mix

in order to utilize at an early stage plutonium stemming from reprocessing plants. A pilot facility was under construction at Cadarache for the fabrication of the first assemblies of that kind, while a project was being studied for a plant to produce 100 t per year, to respond to the demand expressed by Electricité de France (EDF) for the early 1990s.

61. By September 1985, the La Hague plant had reprocessed 1250 t of oxide fuel. The extension of this plant was going ahead according to plan and would raise its present nominal capacity from 400 to 1600 t/year by the early 1990s.

62. Work had been carried out on both high-level and low-level wastes. New surface storage sites had been sought, and the relevant proposals had been made to the French Government in 1985. So far, one site had been singled out as having the best features in conforming with the basic safety regulations governing radioactive waste disposal.

63. In regard to high-level wastes, France was pursuing work on an underground laboratory, together with research into further improving technical procedures for classifying wastes, reducing their volume and their long-lived alpha-emitter content, improving the quality of the encapsulating materials used, and improving quality control.

64. His country's faith in nuclear energy's contribution to world development was not confined to the implementation of present industrial production techniques - together with its European partners, France was preparing an almost inexhaustible source of energy for the future in the form of its fast breeder reactor.

65. Superphénix had just demonstrated its technical and industrial reality by going critical for the first time on 7 September, an event which had coincided, to within a month, with the 40th anniversary of the Commissariat à l'Energie Atomique (CEA). Fast breeder technology would undoubtedly make a major contribution to world energy supplies by the beginning of the 21st century. Production of fast breeder reactors on an industrial scale could henceforth be envisaged, and a 1500 MW(e) industrial prototype was being studied.

66. It might be wondered, however, why France was investing so much effort in a fast breeder programme, just at the time when the world nuclear equipment programmes had slowed down, and when there was an abundance of uranium on the market with a spot price lower than US \$16 per pound.

67. Experience had shown that the energy market was subject to unexpected and sharp changes: the "golden age" of cheap oil had been preceded and followed by periods of shortage. Prices were now falling steeply, scarcely five years after the second oil crisis. One thing, however, was certain: the risk of shortage was ever present and its consequences were far worse than a surfeit.

68. The French Government was convinced that the present situation with regard to uranium availability would change over the following years, and that it would be an unwise policy to slacken efforts aimed at increasing energy production efficiency. A new shortage would involve years of effort before equipment could be brought up to the level of meeting demands.

69. Regarding new investments in nuclear projects, the Agency's statistics had shown that forecasts of installed capacity by 1990 were still below 430 GW(e). In 1984, construction work had commenced on only 14 power plants totalling 11.3 GW(e).

70. There were, however, encouraging signs of the opposite trend - the public image of nuclear technology had changed somewhat for the better, and although pockets of unfounded fear persisted, the contribution made by nuclear energy to mankind's well-being both in terms of energy supply and scientific development, was being appreciated more and more.

71. Although there was little new construction work being undertaken at the present time, the commissioning of power plants built during the previous decade was going ahead at a great rate, giving rise to major developments in the fuel cycle industry and in power plant operation and maintenance services. The annual report for 1984 underlined that the world's installed nuclear power output in 1984 had totalled 220 GW(e), i.e. an annual increase of 17%, which was the biggest world increase since the early 1970s. Several countries which had previously considered themselves to be virtually

uninvolved in the nuclear industry were now drawing up plans and concluding contracts in preparation for a return to international co-operation in that field. That development was foreseeable, given that many countries, like France, possessed insufficient fossil fuel resources and would eventually be drawn back into the nuclear camp.

72. Of course, the matter of financing nuclear power projects could be problematical, and the developing countries in particular might opt for low- or medium-output plants in order to reduce costs. In such a case France was prepared to make specific offers in that regard.

73. France actively supported the Agency's efforts to promote nuclear technology with a view to world development. It also supported the Agency's activities involving bilateral co-operation, the forms of which included training in France for Agency fellows as well as missions by French experts to other countries. France also arranged training for professionals from abroad, for example, the annual courses held at the Institute National des Sciences et Techniques Nucléaires at Saclay. Training of that kind would be of great importance to future decision-makers and specialists when it came to defining and implementing their countries' energy policies.

74. His Government therefore welcomed increased efforts to promote the use of nuclear techniques in the areas of agriculture, food production, medicine and hydrology. The Agency's activities in those areas should be pursued and expanded.

75. The development of such technology could at the present stage have a major impact, even in those countries which would not subsequently be resorting to industrial nuclear power. It had to be borne in mind that the effectiveness of that kind of assistance lay in the quality of the experts, in choosing suitable equipment and in effective maintenance procedures.

76. There had also to be a parallel effort in regard to scientific and professional training in the countries concerned. The systematic introduction of training programmes as part of technical assistance projects covering technology transfer responded to that need, and all those who had contributed to it were to be commended.

77. With regard to the funds allocated to technical assistance and co-operation, financed for the most part on a voluntary basis, his Government pledged its share of the target of US \$33 million fixed by the Secretariat, insofar as it could be expected that those funds would be used effectively and subject to approval by the French Parliament.

78. The programme on the planning and implementation of nuclear choices in developing countries was also fully in line with the long-term view by which the Agency's policy should be guided. His Government would welcome the inclusion in that programme of a few thoughts on the subject of suitable sources of funding.

79. Activities relating to the fuel cycle, more especially radioactive waste management and storage, to which the Agency's budget accorded particular importance, matched developments in the operation of power reactors, of which the number in service was steadily growing.

80. He noted with satisfaction that 15% of the Agency's total programme had been devoted to problems of nuclear safety as well as to initiatives recently taken by the Agency to meet requests for assistance or expertise in the matter of safety and radiation protection by countries implementing nuclear programmes.

81. The work of the International Nuclear Safety Advisory Group (INSAG) should help to improve consistency in the Agency's activities in that field.

82. Referring back to the question of international safeguards, his delegation noted with satisfaction that, as in preceding years, the Secretariat had been able to state that nuclear material under Agency safeguards in 1984 had remained in peaceful nuclear activities. The Agency's surveillance activities were a key factor in world nuclear development and France made systematic use of its safeguards system to keep check on its nuclear exports.

83. The Agency's safeguards system was both reliable and credible, but it would have constantly to be improved to take account of the multiplicity and growing diversity of the facilities to be inspected. That would be necessary

in order for it to maintain its credibility and effectiveness at a reasonable cost. His country would also prefer to see a safeguards system financed with equal sharing between all Member States.

84. Discussions within the Standing Advisory Group on Safeguards Implementation (SAGSI) had already made it possible to outline the different approaches within the present procedures applied. That work, however, was only in its infancy and there was need to pursue it in greater depth before its implementation could be envisaged.

85. France was also continuing to participate in the safeguards support programme, the aim of which was to improve monitoring and inspection equipment and techniques employed by the Agency, as well as training of Agency inspectors.

86. The Agency's budget for 1986 displayed a satisfying balance between promotional and safeguards activities. That fact was to be welcomed as the two activities were equally essential, and would now receive equal weighting in terms of the allocations made.

87. It was also gratifying to note the considerable effort made by the Agency to streamline its budget which now met the requirement of zero growth of the Regular Budget. In that context, the constant endeavour to keep down costs while improving efficiency was an essential corollary to further development of the Agency's activities.

88. The new system of holding intensive consultations with Member States when drafting the budget had shown the prime importance of identifying the priorities for programme implementation. It was hoped that the practice of budgetary constraints would continue.

89. In conclusion, his delegation expressed its full support for the Agency's work, both as a whole and in the discharge of its individual responsibilities. That view was based on an in-depth analysis of the outlook for nuclear development throughout the world in harmony with France's permanent commitments in favour of that development, of which he hoped France set an example.

90. Mr. TETENYI (Hungary) said that he first wished to congratulate the President of the General Conference on his election and also to express his best wishes to the Director General on the occasion of his reappointment for a new term of office.

91. In the complex world situation of the present time it was appropriate to commemorate the great victory which 40 years before had ended the most terrible war in the history of mankind. That victory had made it possible to set up an international organization, the main objective of which was to maintain international peace and security. At the same time, however, it was a reminder that the first priority of international relations should be to end the nuclear arms race and prevent the proliferation of nuclear weapons.

92. An important event of the previous two weeks had been the Third Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons. The link between that Treaty and the Agency's activities was well known and it was gratifying to note that the main objectives of the Treaty had been attained, with no increase in the number of nuclear-weapon countries. The number of States acceding to NPT was now 130, making it the most widespread Treaty of its kind.

93. His country attached particular importance to implementation of Article VI of NPT, under which all signatory States undertook to pursue negotiations aimed at the earliest possible cessation of the armaments race and at nuclear disarmament. It was regrettable that a number of politically and economically important countries had not yet adhered to the Treaty.

94. More than ten years before a draft treaty had been submitted to the General Assembly of the United Nations for a total and overall ban on nuclear tests. The Soviet Union had recently announced a moratorium on its own tests and had called upon the other nuclear powers to do the same. It would be highly significant if, in the wake of the Soviet Union and China, other nuclear powers would commit themselves to not being the first to use nuclear weapons. All means available to the Agency should be set in motion to make NPT universal.

95. IAEA safeguards, which directly or indirectly promoted the non-proliferation regime, were highly important and Hungary had already made considerable efforts to foster such activity. As previously reported by his delegation, Hungary had developed a visual system for examining and identifying spent fuel assemblies and fuel elements. The system, which ensured optimum reproductivity of data, had already proved of great practical value in a number of countries. Hungary was prepared to offer the Agency its expertise in that field and to assist Agency inspectors in the practical application of the system.

96. Hungary had also supported the Agency's safeguards activity in other ways. For example, to facilitate non-destructive measurements by Agency inspectors a permanent protection tube had been mounted, on a cost-free basis, in the wet storage basin used for spent fuel from the Central Physics Research Institute, and special collimators had been built into the wall of the storage basin at the Paks nuclear power station.

97. At the same time, in addition to the positive achievements in Agency safeguards, his delegation felt there was need to mention some of the more problematic issues. It was noted, for example, that at certain facilities of primary importance from the safeguards standpoint, the safeguards goals had not been attained for many years. Although there might be technical reasons for that fact, more effort should be made by the Agency to achieve those goals and to increase the credibility of its safeguards system.

98. Furthermore, there were other areas of the Secretariat where improvements and developments were feasible. For instance, it would be desirable - at least in the case of countries with minor nuclear activities - to restore the duties of country officer, since it appeared that the recent abolition of that post had caused difficulties on both sides. But the Agency's achievements in introducing computerized processing of inspection data were highly appreciated and would make the conclusions with regard to safeguards activity not only more efficient, but also more objective.

99. During the past year, Hungary's peaceful nuclear activities had made further headway. In the course of the previous winter, which had been

particularly cold, the Hungarian nuclear power plant had proved a reliable source of energy, operating between 1 November 1984, and 31 March 1985, at 94% efficiency.

100. The two WWER-440 units at present in operation at that power plant had produced a total of 9415 GWh of electricity by 30 June 1985. The high grade of work done during the design, construction and startup of the plant was shown by the fact that in 1984 availability of the first unit had been 75.3%, although the first refuelling and maintenance had taken up 74 days of the operation time for the year.

101. The outages had been due mainly to refuelling and maintenance requirements, and only 1.5% was accounted for by incidents, the latter resulting to the extent of 66% from failure of mechanical components in the secondary circuit, and 25% from breakdown of the electrical equipment.

102. Significant research and development work in the field of nuclear energy was envisaged under the five-year plan for 1986-1990. It was intended to concentrate on achieving optimum operation, better utilization and increased safety. It was also planned to establish the theoretical and experimental foundations for nation-wide application of probabilistic safety analysis, in which field the assistance of the Agency would be counted on.

103. In addition to nuclear power, there had been steady development in other applications of nuclear energy for peaceful purposes. After Budapest, the country town of Debrecen was becoming an important centre for nuclear research. A demonstration irradiation facility and a high-power neutron generator had been installed there with the assistance of the Agency. The cyclotron and associated laboratories at the Institute of Nuclear Research were also now nearing completion. That facility would be used for medical purposes as well as special isotope production. Clinical diagnostics and radiation therapy were also considered important activities and were being developed.

104. The Hungarian Government greatly appreciated the Agency's efforts to attain its aims as set forth in the Statute. In addition to the safeguards activities already referred to, his delegation attributed great importance to

the Agency's nuclear power and safety programmes. Also of special importance were the activities in waste management and the preservation of food by irradiation, as well as its programmes for promoting agricultural production and the food industry.

105. After safeguards, the Agency's second most important area of activity was technical assistance and co-operation. It was gratifying to see that the funds available to the Agency for that purpose had been increasing. Hungary was contributing to the Technical Assistance and Co-operation Fund to an ever-increasing extent both in terms of money and services. In that connection his delegation wished to pledge a voluntary contribution of 3.6 million forints in national currency to the Fund for the year 1986.

106. In consideration of the above and on the basis of the documents submitted for consideration by the General Conference, his delegation could, in conclusion, approve the Agency's Report for 1984.

107. Mr. MORPHET (United Kingdom) said that the successes achieved by the Agency over the past year in support of the international development of peaceful nuclear power were impressive and should be a source of satisfaction to all.

108. The Agency's unique safeguards system was vital to confidence that trade in nuclear materials, equipment and technology could be carried out without leading to proliferation of nuclear-weapons capability, and it was the responsibility of Member States to ensure that safeguards inspectors were equipped to meet the challenges of safeguarding plants using new technologies. Two ways of doing that were to give the Agency full co-operation in developing techniques for safeguarding the more advanced facilities already existing in some countries, and to ensure that safeguards considerations were given full weight at the design stage, when new facilities were still under consideration. On the first point, a great deal of effort had been put into identifying ways of safeguarding centrifuge enrichment plants. Over the period November 1980-March 1983 the Hexapartite Safeguards Project, chaired by the United Kingdom, had developed an internationally acceptable safeguards approach for such plants. The first specific agreement

based on that approach, in respect of Almelo in the Netherlands, had recently been reported. Similar negotiations in relation to the Urenco-UK facility at Capenhurst in the United Kingdom had been conducted during the past sixteen months and his country was now ready to accept Agency safeguards at that facility under its voluntary offer.

109. The United Kingdom had always adopted a responsible attitude to the safeguarding of advanced nuclear facilities and had co-operated closely in the application of Agency safeguards to the prototype fast reactor and its associated reprocessing plant at Dounreay in Scotland. It would also continue to play a full part in the development of safeguards technology, for instance by offering the use of major facilities and their staff for the purpose of training Agency inspectors.

110. A specific example of taking safeguards considerations into account at the design stage of new installations was constituted by the development of laser technology for enrichment. In the past, the application of safeguards had tended to lag behind the introduction of new technologies, but that need not be the case in future, and his Government was encouraging the nuclear industry to take careful account of safeguards considerations in its design work.

111. The management of spent fuel and waste was a key area of the Agency's work of considerable interest to its Members because the issues involved were of fundamental importance to the development of nuclear power. The nuclear industry in the United Kingdom was committed to the reprocessing of spent fuel from the present generation of reactors and would continue to offer reprocessing services to overseas customers under very high levels of security. Magnox fuel was normally stored in ponds on discharge from the reactor and had to be reprocessed quickly because it suffered a corrosion reaction. Advanced gas-cooled reactor (AGR) fuel had a longer storage life under water but also had to be reprocessed within a reasonable time. Apart from the industry's commitments to overseas customers, therefore, important technical reasons gave rise to a real need for the new thermal oxide reprocessing plant (THORP) currently under construction at Sellafield.

112. Looking further ahead, neither the industry nor his Government had taken a firm view on whether early reprocessing or a prolonged period of storage followed by either reprocessing or direct disposal would be preferable for the management of fuel from future reactors. The issue was by no means straightforward, and the points to be considered included economic, radiological and social/environmental aspects. Recent studies, including work by international organizations, had suggested that economics of the various options were finely balanced according to the particular circumstances in each country. Much depended on the assumptions made, for instance, about fast reactor development and future uranium prices. There were many uncertainties in such analyses. Some countries might see strategic as well as economic advantages in recovering uranium and plutonium from spent fuel. Certainly his country, which had no indigenous uranium resources, had made use of recycled uranium. About 80% of the fissile material for the initial charges for the AGR programme had come from Magnox operations. For radiological reasons, at least a few years' storage was needed before spent fuel could be treated to allow the intense radioactivity to decay. Reprocessing involved a radiation dose to the work force which could, however, be held at a small fraction of the limits recommended in the basic safety standards of the Agency and of WHO, ILO and NEA. After reprocessing it was possible to incorporate the waste products in a stable matrix to give high levels of protection. Direct disposal had the disadvantage that almost all of the original uranium was treated as a waste product, which had implications for the conservation of resources and for radiological control in uranium mining and the long-term management of mining wastes.

113. Concerns had of course been expressed about the environmental impact of reprocessing plants, but it would be wrong to ignore the considerable improvements in control, including reduction of discharges to the environment, which were achieved under modern standards and the considerable investment which was being made to achieve such improvements.

114. While plutonium represented a valuable potential energy source for the world, its storage and handling called for the closest attention to safety, and where it was traded its end use must also be watched carefully.

Quantities of spent fuel could be expected to increase significantly as nuclear power programmes expanded. Management of those quantities constituted a long-term commitment of the nuclear industry and its regulators requiring the development of appropriate strategies, one component in which would be a balanced programme of reprocessing and recycling.

115. The Board of Governors had already directed some attention to the establishment of storage schemes in implementation of Article XII.A.5 of the Statute. His country believed that the Agency should have an effective mechanism for that purpose and that there was a strong case for minimizing the number of storage locations. A recent decision by the members of the European Community on trading conditions illustrated both the sensitivity of the topic and the possibility of making progress: all those States had a strong commitment to non-proliferation and had set up a common market in civil nuclear materials. Nevertheless, they had recognized the great sensitivity of trade in plutonium and had specifically agreed on the peaceful purposes for which trade in plutonium would be allowed and on the need for each consignment to be covered by assurances regarding end use. Perhaps elements of such a system could have wider application.

116. The Agency's work on technical assistance was also of key importance. The resources available for the technical assistance and co-operation programme had nearly doubled over the last five years. Further amounts had been made available from the Agency's Regular Budget, and the work of the technical Divisions of the Agency itself contributed significantly to the transfer of technology. Extrabudgetary funds also played an important role in funding the Agency's technical assistance. His country had been glad to give assistance in that area and had announced at the Third NPT Review Conference that it would continue to provide extrabudgetary funds for footnote a/ projects and would double the amount of its contribution over the period up to 1990.

117. It was important that assistance should be put to effective use. Hence it was gratifying to note that implementation rates had continued to improve and had reached 65% in 1984. In terms of disbursements, which might be taken as a measure of work accomplished, there had been a 90% increase in 1984 over 1983. Nevertheless, further efficiency gains were possible, and his country,

along with a number of others at the Review Conference, had co-sponsored a working paper which recognized the importance of the IAEA's technical assistance programme as the main element in the dissemination of nuclear technology for peaceful uses and put forward a series of proposals for improving technology transfer mechanisms, including reinforcement of the Agency's aid to countries seeking finance from organizations such as the International Bank for Reconstruction and Development.

118. Over the last two years, the Agency had contributed to a comprehensive scientific review of the environmental effects of the sea disposal of radioactive waste which was currently being discussed at the Consultative Meeting of the Contracting Parties to the London Dumping Convention. The Agency had also been engaged in revising, at the request of the Contracting Parties, the definition of radioactive wastes not to be dumped at sea and the Board of Governors, at its meetings immediately preceding the present session of the General Conference, had agreed to transmit the revised definition to the Contracting Parties. His Government had considered the results of those reviews carefully and remained satisfied that there was no reason further to restrict sea disposal of radioactive waste, provided it was carried out in accordance with existing international recommendations, and that it was both prudent and reasonable to continue to retain sea disposal as one of the available options.

119. His Government was very glad to note that the Committee on Assurances of Supply (CAS) had made significant progress during the last year in formulating a consensus on the conditions which should apply to nuclear trade. His Government also approved of the Agency's continuing its work on small and medium power reactors because it was important to ascertain whether the circle of countries benefiting from nuclear power could be widened by means of smaller reactors.

120. His Government, being satisfied with the Agency's work, also welcomed the Final Document of the Third NPT Review Conference because of the strong support expressed there for the Agency's safeguards and technical assistance work. The view had been put forward that the Agency's technical assistance worked well in general but could benefit from fine tuning; it had also been

suggested that the funding of nuclear power programmes in developing countries should be strengthened. His delegation looked forward to hearing the Director General's views on all the references to the IAEA in the Final Document.

121. In conclusion, he said that the United Kingdom had for nearly 30 years been using nuclear energy for civil power generation and had developed a range of organizations spanning the entire fuel cycle for power production as well as all other aspects of the use of nuclear energy. His country had assigned an important role to the nuclear component in its energy strategy, and had always sought to develop civil nuclear power as efficiently as possible under the highest standards of safety and security. Those continued to be his country's aims in its future plans, which included bringing into operation a most modern fuel cycle plant. The United Kingdom retained its commitment to backing all its efforts with adequate research so as to be confident in the technology it deployed. Not least, it intended to stand by its commitment to supporting the IAEA fully in its objectives.

122. Mr. HAUNSCHILD (Federal Republic of Germany) said that the past year had been witness to a considerable increase in the installed capacity of nuclear power. The future would be marked by a tendency towards steady growth, a fact that had been confirmed by the increased share of nuclear power in the world's overall electricity production, which now accounted for 13%. At the same time there had been a slow-down in the construction of new nuclear power plants.

123. The Agency's important mission would continue as the application of nuclear techniques progressed. Its activities had been of great benefit to many countries and at the same time its safeguards system had helped to make the world feel safer.

124. The Third Review Conference of the Parties to NPT had shown the broad international support for that Treaty and it was encouraging to note that the Conference had also reconfirmed the importance of the Agency's work in safeguards and nuclear co-operation.

125. In the Federal Republic of Germany there had been headway in all areas of nuclear power and its fuel cycle. There were now 19 nuclear power plants in operation with a total capacity of some 17 000 MW(e), representing an

increase of 41% over 1983. The country's total nuclear capacity would reach 20 000 MW(e) by 1987, and 24 300 MW(e) by 1990. In 1984 nuclear power plants had accounted for 27.6% of the public electric power generation. With a total production of 10.15 billion kWh in 1984, the Grafenrheinfeld power station (1240 MW(e)) had produced more electricity than any other nuclear power unit in the world for any one year. International statistics showed that the second and third places were taken by the stations at Krümmel and Unterweser, both of which produced more than 10 billion kWh in 1984.

126. Advanced reactor projects in the Federal Republic were progressing according to schedule: full commissioning of the 300 MW(e) high-temperature reactor at Schmehausen was scheduled for the end of 1985; the 300 MW(e) fast breeder reactor was nearing completion and due to start up in 1986; the first URENCO centrifuge enrichment in the Federal Republic started up in August 1985; a storage facility for spent fuel (1500 t) at Gorleben was ready for operation and construction of a second one at Ahaus had begun - in both cases, however, the licences were being contested in court proceedings; the PAMELA demonstration plant for vitrifying high-level waste at Mol (Belgium) had begun its test programme; the construction of two shafts for exploring the Gorleben salt dome for final storage of high-level waste was proceeding to schedule, and the KONRAD iron ore mine, now being converted into a repository for low-level waste and waste from the decommissioning of nuclear facilities, would be operational by 1989.

127. The most important event of the past year had been the decision to build the first commercial reprocessing plant, to be operated by the DWK company. The new industrial complex, to be built at Wackersdorf in Bavaria, would also include a fuel reception and storage facility, a fuel fabrication plant, a radioactive waste conditioning plant and a waste storage facility. Cold operation of the plant was scheduled to start in 1993. The total cost would be DM 5 billion, which was to be provided solely from private funds. The decision to build the plant was based on a comprehensive study of the possible advantages from the safety standpoint of direct disposal versus reprocessing. From the study it was concluded that direct disposal did not offer decisive safety advantages and fell far short of the level of technical

feasibility already attained in reprocessing. Hence for the time being direct disposal could not be considered an alternative to conditioning and disposal of nuclear waste after reprocessing, although that situation might well change in certain cases as research and development proceeded.

128. Generally speaking, it could be said that in the Federal Republic of Germany nuclear energy continued to move towards a normal fully established and accepted energy source. Furthermore, industry was taking over full responsibility for the LWR fuel cycle and becoming more and more involved with the development and application of advanced nuclear technologies. With regard to the international activities of his country, he wished to mention in particular a memorandum of co-operation between German industry and China under an agreement signed in 1984.

129. With regard to the Agency's activities, his delegation considered the Agency's safeguards system to be an essential element of non-proliferation policy. However, proliferation was first and foremost a political problem that could not be solved by purely technical means, although the confidence-building nature of safeguards was generally accepted as an indispensable component in an overall non-proliferation approach. The Agency's safeguards system was now generally recognized as a standard for world-wide nuclear co-operation and technology transfer. But his country fully accepted the notion that the credibility of safeguards also needed the readiness of supplier States to help other countries to acquire nuclear know-how.

130. The Agency's safeguards system was now entering the stage of consolidation and optimization of the procedures and instrumentation. The Board of Governors and relevant advisory groups should improve the effectiveness and efficiency and also the consistency of the transparency of the system. All such endeavours were both useful and necessary.

131. Germany welcomed the recent entry into force of the safeguards agreement between the Agency and the Soviet Union.

132. Germany was continuing its safeguards support programme, especially in connection with large bulk-handling facilities and advanced reactors. For example, safeguards instrumentation had been developed in the Federal Republic for commercial-size fast breeder and high-temperature reactors.

133. The progress made by the Committee on Assurances of Supply (CAS) was heartening. It had managed to prepare a draft synthesis on the principles underlying its mandate. While acknowledging that the task of CAS was a complex one, he hoped that in due course final agreement would be reached.

134. The Director General's report described the broad scope of the Agency's activities in technical assistance and co-operation. Resources available for it had increased remarkably over the past few years, accounting for 36 million dollars in 1984. Hence the Agency's efforts to improve its programme, more especially the project implementation rate, source utilization and more systematic evaluation of results were to be welcomed.

135. The German Government had responded favourably to the Director General's request to support the initiative for intensifying regional co-operation in Latin America under the ARCAL programme and one of the project proposals under that new scheme would receive its support. His delegation was convinced that the regional effort would contribute to improved pooling of knowledge and utilization of resources as well as to greater co-operation between the countries taking part.

136. His country was happy to be able to contribute significantly to the Agency's technical co-operation programme despite severe budgetary restrictions, and it pledged its full share for voluntary contributions to the Technical Assistance and Co-operation Fund in 1986 and intended to make available additional, extrabudgetary resources.

137. The results of the initial phase of the small and medium power reactor study completed in 1985 had been encouraging. It was a useful survey of the economic potential of such reactors and the maturity of available designs. Germany was interested in the development of small reactors based on both light-water and high-temperature technology geared to the needs of developing countries. In Germany, there was a renewal of efforts aimed at the conduct of detailed studies of that kind with a view to facilitating the elaboration of specific demonstration projects. The Agency could play a valuable role in promoting such efforts.

138. The assigning of high priority to nuclear safety was to be welcomed since the Agency had already played a constructive role in consultations and exchanges in that field. The fourth Nuclear Safety Review was a useful survey of the relevant international developments. Also to be welcomed was the Agency's work on the Nuclear Safety Standards (NUSS) programme in 1985, and its willingness to assist with their implementation. The continued discussion of reactor safety research was particularly important and the recent Technical Committee meeting on that subject had shown that there was a very good basis for an in-depth exchange on a global scale.

139. The International Nuclear Safety Advisory Group (INSAG), which had started work in March 1985, would doubtless prove a good forum for discussion of safety issues, without interference in national regulatory responsibilities.

140. In conclusion, his delegation wished to commend the Director General for his work over the past year and fully supported his renomination for a further term of office.

141. Mr. ZHOU (China) said that the present session of the General Conference was the second one that China had attended since its admission to the Agency. Reviewing the Agency's work over the past year, one could say that it had done a great deal of useful work in helping Member States to develop nuclear power, carry out nuclear research and apply nuclear technology. The Agency's activities in promoting the development of small and medium sized power reactors, formulating nuclear safety standards, accelerating research in radiation protection, developing probabilistic risk assessment techniques and in various other related fields of nuclear energy were greatly appreciated. The steps taken by the Agency to improve the project implementation rate and enhance the efficiency of technical co-operation were praiseworthy. It had also played a positive role in promoting co-operation between Member States in the peaceful uses of nuclear energy.

142. Nevertheless, while recognizing the Agency's achievements one had to consider also the difficulties that it faced. The technical assistance provided was not yet sufficient to meet the needs of the developing countries and the proportion of safeguards expenditure in the Agency's budget had been increasing too rapidly. A greater effort would be required in order to overcome those problems.

143. China was a developing country with a vast amount of territory and a very large population. To attain the ambitious goals it had set for itself for socialist modernization by the end of the present century, China would have to exploit more fully its present nuclear industry and nuclear research facilities as well as deploy greater efforts in promoting the peaceful use of nuclear energy in every branch of the national economy. His country was now formulating a nuclear energy development programme of its own, with priority accorded to the construction of nuclear power stations in Guangdong and the eastern part of China, where the industry was concentrated and energy was in short supply.

144. China already possessed research reactors, including high-flux and mini-neutron-source reactors as well as laboratory facilities, such as accelerators and an experimental nuclear fusion facility. China also possessed a fairly complete nuclear fuel cycle, ranging from uranium prospecting, mining, milling and enrichment to the disposal of nuclear wastes. It was planned to improve that industrial system in the future so as to cater for the increasing needs of China's nuclear power industry.

145. In view of the importance of nuclear safety and radiation protection, there had been set up a Chinese national nuclear safety administration, which would seek to improve the existing nuclear safety regulations and draw up codes of practice and safety guides.

146. There had already been marked socio-economic benefits for the national economy and public health from the application of isotopes, irradiation and nuclear technology. Use was also being made of radiometric technology and related instrumentation for the iron and steel, coal, metallurgical, chemical and other industries. In agriculture, radiation had been used to develop new varieties of crops, the cultivation of which already covered more than 6.5 million hectares of land. Progress had been achieved as well in the preservation of food by irradiation and in 1986 the Agency planned to hold a seminar on that subject in China, at which the Chinese experience would be shared with other countries.

147. China was a peace-loving country and stood in favour of nuclear disarmament. It needed peaceful conditions in order to be able to implement its modernization programme. The Chinese Government's decision to cut down

the armed forces by one million men was a contribution to world peace. As far as nuclear policy was concerned, China supported the peaceful application of nuclear energy throughout the world for the benefit of mankind. Present and future co-operation with other countries in the nuclear field would be limited solely to peaceful purposes. As Premier Zhao Ziyang had declared in 1984, China was not in favour of nuclear proliferation and would not engage in it; nor would it help other countries to develop nuclear weapons.

148. In line with its peaceful nuclear policy, China had carefully studied the safeguarding of civilian nuclear facilities. As a result, the Chinese Government had decided to voluntarily place some of its civilian facilities under Agency safeguards in due course, and would be discussing that matter with the Agency. It was to be stressed in that connection that the decision was based on China's independent foreign policy and not the result of any bilateral negotiations.

149. China's modernization programme necessitated active international co-operation in the peaceful use of nuclear energy and it therefore advocated wide-ranging collaboration between countries, organizations and experts based on principles of respect for national sovereignty, non-interference in the internal affairs of other countries, equality and mutual benefit. Following those principles, his country had since 1984 signed intergovernmental agreements with Argentina, Belgium, the United Kingdom, the United States of America and Japan, in addition to those already concluded with Yugoslavia, Italy, France and other countries.

150. As a new Member of the Agency, China was already co-operating with the Agency and with other Member States. During the past year, Chinese representatives had attended over 50 specialized meetings and training courses as well as taking part in the fellowship activities sponsored or co-sponsored by the Agency. Nineteen research institutes in China had signed contracts and taken part in the co-ordinated research programme; China had also sent experts and delegations to visit the Agency, while the Agency had, in return, sent officials to China on a number of occasions.

151. Since its admission to the Agency, China had made every effort to contribute to the Agency's technical co-operation activities. It was willing to share experience acquired in the nuclear industry and in nuclear research

with other Member States on the principle that countries can learn from each other and in that way make up their deficiencies. In 1984 China had hosted training courses and international meetings. For example, a consultants' meeting on low-power research reactors and a training course on elementary analysis had recently been held in Beijing with success.

152. His country had already joined INIS and had begun to supply it with information on Chinese nuclear science and technology. An application had been made for membership of the International Nuclear Data Committee as well. China had officially joined the Regional Co-operative Agreement for Asia and the Pacific, which showed that co-operation with the Agency in the nuclear field would be further extended to cover a broader range of applications in industry, agriculture and medicine.

153. During the short time it had been a Member of the Agency, China had developed good relations of co-operation both with the Agency and other Member States. His country would continue to render the Agency active support in its aim of promoting international co-operation in nuclear energy for the benefit of mankind.

154. Mr. AMROLLAHI (Islamic Republic of Iran) said that his country aspired to the pure fundamentals of Islam and therefore endeavoured, in spite of all external pressures, to familiarize the world with the true teachings of that religion. The echoes of Islam could be heard in the hearts of the people of Africa, amongst the oppressed people of southern Lebanon and in the voices of all the repressed people of the world. The more pressure was exerted by the Super Powers upon Third World countries, the sooner the people of those countries would find their true paths and reach their desired goals.

155. The nations of the Third World had long been under the control and at the mercy of the world Powers, and their natural resources had been transferred to a few countries whose industries were totally dependent upon such resources. According to the published statistics of the Agency (e.g. document GOV/2206), the share of the capitalistic countries in the peaceful applications of nuclear energy had been increasing constantly, whereas the share of the Third World countries had followed a declining

trend. The only reason for that state of affairs was the reluctance of the Super Powers to transfer technology to Third World countries, on the pretext of certain unfounded allegations. The oppressive countries introduced preventive tactics such as "export licences" for the transfer of their technology and know-how, but they were not prepared to accept any conditions when it came to pilfering the oil of the Middle East, which was the lifeline of its people, or to plundering the natural resources of Africa and South America. However, for the export of their products and know-how they created multitudes of terms and conditions. If such trends were not condemned by the non-aligned nations, then from the beginning of the twenty-first century the same Powers which had pilfered the natural resources of those nations would also retain their technological monopoly, and the longer the developing nations were kept away from such technology the harder it would be for them to gain any progress in those fields.

156. In view, therefore, of the tendency of such countries to impose obstacles so as to restrict the transfer of technology and introduce self-styled and ill-intended political filters, the Islamic Republic of Iran wished to propose that the Third World countries recommend that international gatherings on nuclear science and technology should not be convened in imperialistic countries, particularly the United States of America because they did not refrain, even in technical and scientific matters, from interfering with the participation of the progressive countries of the Third World on various unfounded pretexts.

157. The abhorrent policy of apartheid practised in South Africa had only recently led to atrocities and injustices inflicted upon the repressed black majority population of South Africa by a despotic minority white ruling group which was not only plundering the wealth of that mineral-rich country to build up its oppressive conventional forces, but was also actively involved in the non-peaceful applications of atomic energy in an attempt to gain access to the devastating potentials of a nuclear weapons arsenal. That represented a threat to the world in general and to the African people in particular. Moreover, it should not be forgotten that a close relationship and collaboration existed between the racist régime of South Africa and the occupying Zionist forces in Palestine, who were playing a similar role in the Middle East and posed the same actual and potential threats to the region as

well as to other parts of the world. His Government sincerely hoped that as the solidarity and resistance of the people of Lebanon had helped defeat and repel the onslaught of the Zionist forces and their supporters, so the gleam of hope would soon appear in the sullen faces of the oppressed people of South Africa, a gleam which would no doubt lead to the inevitable radiance of victory.

158. At a time when the Super Powers persisted in expanding their arsenals of nuclear weapons, the developing countries were increasingly being accused of promoting the proliferation of nuclear weapons, but of course such accusations were merely intended to divert attention from reality. Tensions were currently being built up between India and Pakistan by the Super Powers in an attempt to engage the two countries in a regional conflict on the pretext that one country was surpassing the nuclear capabilities of the other. That was why the news media of the Super Powers alternately decried the role of one country or the other in the proliferation of nuclear weapons.

159. His delegation had already proposed in previous sessions of the General Conference that the developing countries should seriously consider the establishment of a special international nuclear safeguards system for the non-discriminatory implementation of nuclear safeguards with a view to exerting effective control over the threat of nuclear weapons proliferation and thus ensuring world peace and security.

160. Recent events in the conflict between his country and Iraq seemed to show that an august international body such as the IAEA was either unable to observe and implement its own adopted resolutions or else, more disturbingly, was strongly biased in its dealings with the affairs of its Member States. Iraq had attacked the Bushehr nuclear power plant three times so far. On each occasion the Agency had been notified in accordance with the appropriate procedures, and the case had been presented both to the Board of Governors and to the twenty-eighth regular session of the General Conference. During a meeting of the Board of Governors following the first attack, his delegation had pointed out that if no strong and appropriate measures were adopted against the Iraqi aggressions such attacks would be repeated. Unfortunately,

no effective measures had been adopted by the Agency, so the Iraqi régime had attacked the Bushehr plant on two further occasions, with loss of life and more material damage. Full information on those attacks could be found in documents GOV/INF/471, GOV/INF/471/Add.1, GOV/INF/472 and GOV/INF/473.

161. The response of the IAEA, or rather the lack thereof, suggested that such aggressions created an inconvenient conflict between the atrocities of aggressive régimes supported by Eastern or Western Powers on the one hand, and internationally adopted resolutions or codes of conduct on the other. It was not surprising, therefore, that the Powers supporting the aggressive régimes, not being able to reconcile the actions of their surrogates with the internationally adopted resolutions, preferred to remain silent. A prominent instance of such a conflict of interests was provided by General Conference resolution GC(XXVII)/RES/407 as applied to the Iraqi military attacks on the Bushehr plant.

162. It had often been argued that the Agency's lack of response to the military attacks was due to the fact that the Bushehr plant was not covered by Agency safeguards. However, as a signatory to NPT, his country had accepted safeguards procedures, and if the Bushehr plant had been completed as originally planned, it would definitely have come under an appropriate safeguards arrangement. Unit No. 1 was to have been provisionally accepted for safeguards implementation on 1 December 1980, and so the safeguards arrangements should have come into force by 1 December 1978, but they had not owing to delays caused by the Agency. Thus, since nuclear installations were evidently considered peaceful only if they were already subject to Agency safeguards, and since that condition had been fulfilled as far as the Islamic Republic of Iran was concerned, the military attacks on the Bushehr plant were clearly in contradiction with the resolutions in question.

163. In that context the Iraqi régime, in a new spate of warmongery, had recently subjected Iranian cities and non-military installations to repeated bombing raids, and a number of bombs had struck locations around Iran's Nuclear Research Centre, which was devoted to peaceful purposes. Since the research reactor was operational and subject to safeguards inspections, the Agency's arguments for not taking any action against the attacks on the

Bushehr plant did not apply in the present case. Moreover, contrary to the statement by the Iraqi Resident Representative in his letter of 12 March 1985 to the Director General, the Iraqi régime had no intention whatsoever of abiding by the Agency resolutions, particularly resolution GC(XXVII)/RES/407. The Iranian Government felt compelled to report such incidents to the IAEA, but since earlier complaints to the Board of Governors and to the Director General had generally been ignored, the General Conference was now requested to urge the Director General to adopt stronger measures. All Member States, individually or collectively, were further urged to condemn the aggressor, to make every possible effort to prevent the recurrence of any further armed attacks against Iran's peaceful nuclear installations, to take the appropriate measures for full implementation of General Conference resolution GC(XXVII)/RES/407, and to support the spirit of the draft resolution GC(XXVIII)/RES/742 submitted by the Islamic Republic of Iran at the twenty-eighth regular session of the General Conference.

164. Turning to other matters, he said that the achievements of the Committee on Assurances of Supply (CAS) had not so far been overly significant. As a result, no internationally binding regulations had emerged, and thus no predictable, reliable and generally assured sources of supply were at the disposal of developing Member States, which might encounter serious difficulties in consequence. For example, his country, before the victory of the Islamic Revolution, had signed a contract for the supply of nuclear fuel for its - safeguarded - research reactor with a United States company, and had complied with its obligations and effected payments of more than US \$2 million for the delivery of the fuel. However, the company concerned had not fulfilled its obligations under pressure from the United States Government. Following that breach of agreement, as a result of which Iran had sustained direct and indirect damage amounting to well over \$10 million, his country had applied to the Agency for assistance in obtaining the appropriate nuclear fuel; however, the Agency had not responded adequately. The Iranian delegation had in various CAS meetings stated its view that States accepting agreed and appropriate international safeguards applied through the Agency on a non-discriminatory basis should receive guaranteed assurances of supply, and

would therefore continue to pursue that case of breach of agreement in the competent courts of law until such time as his country received what legally and rightfully belonged to it.

165. The recent Third NPT Review Conference, intended to ascertain whether the objectives of NPT were being achieved, had unfortunately revealed that the Treaty was not being implemented effectively. In the first place, certain developing States had, gradually and over the years, managed to acquire a capability for manufacturing nuclear weapons, on a crude basis, simply on the pretext of not being NPT signatories. Secondly, the signatory States were at a double disadvantage in that, on the one hand, they fell behind in developing their nuclear capabilities on moral grounds as signatories of the Treaty, and on the other, they were discriminated against on political and ideological grounds by the nuclear-weapon States and nuclear material suppliers; thus, their pursuit of the peaceful application of atomic energy was also hampered.

166. The United States Government's action in the case of nuclear fuel supply mentioned earlier constituted a clear violation of Article IV, Sections 1 and 2 of the Treaty, and an instance of discrimination by a nuclear-weapon State against a developing country. In view of such discriminatory acts, and of the progress made by other States, particularly those not party to the Treaty, in the field of nuclear weapons and the associated technologies, it seemed inevitable that the ratification of a new treaty would be reconsidered on the expiry of the present one, unless some assurances were provided that non-proliferation measures would not jeopardize the full exercise of the inalienable right of all States to apply and develop their peaceful nuclear energy programmes for economic and social development in conformity with their priorities, interests and needs, that all States would have access to and be free to acquire technology, equipment and materials for the peaceful uses of nuclear energy, taking into account the particular needs of the developing countries, and that international co-operation in the nuclear field would be under agreed and appropriate international safeguards applied through the IAEA on a non-discriminatory basis in order to prevent effectively the proliferation of nuclear weapons.

167. In that connection, his Government considered that the implementation of safeguards at a very few specific nuclear installations in certain nuclear-weapon States was totally inadequate and superfluous in view of the continuing proliferation of the nuclear arsenals of those States. His country strongly disapproved of any form of proliferation of nuclear weapons, and insisted that it should be prevented by the implementation of non-discriminatory safeguards.

168. As to the problem of financing technical assistance, that had already been recognized, but no serious measures had been taken in that respect and the uncertainty due to the voluntary nature of the Technical Assistance and Co-operation Fund still remained. The promotional activities of the Agency were so important for the developing countries that the financing of technical assistance must be placed on a predictable and assured basis.

169. In conclusion, he wished to summarize briefly his country's most recent activities in the nuclear field. The Atomic Energy Organization of Iran, in addition to its other current activities, was planning to establish a centre for the application of nuclear energy in food and agriculture. A gamma irradiation centre was being commissioned which was primarily intended to provide gamma irradiation and support services for radiosterilization of disposable medical products, but was also expected to conduct additional research on an experimental basis for the radurization of foodstuffs, the radioprocessing of various polymeric materials and high-dose dosimetry. The Atomic Energy Organization of Iran also had several research projects in the field of plasma physics and nuclear fusion, including a small tokamak.

The meeting rose at 1.15 p.m.