



International Atomic Energy Agency

# GENERAL CONFERENCE

GC(XXII)/OR.202

February 1979\*

GENERAL Distr.

ENGLISH

TWENTY-SECOND REGULAR SESSION: 18-22 SEPTEMBER 1978

RECORD OF THE TWO HUNDRED AND SECOND PLENARY MEETING

Held at the Neue Hofburg, Vienna,  
on Tuesday, 19 September 1978, at 10.50 a.m.

President: Mr. MALU wa KALENGA (Zaire)

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\* / A provisional version of this document was issued on 22 September 1978.

\*\* / GC(XXII)/595.

The composition of delegations attending the session is given in document  
GC(XXII)/INF/179/Rev.2.

## ARRANGEMENTS FOR THE CONFERENCE

## (a) ADOPTION OF THE AGENDA AND ALLOCATION OF ITEMS FOR INITIAL DISCUSSION (GC(XXII)/595)

1. The PRESIDENT informed the Conference that the General Committee, at its meeting the previous day, had authorized him to report on the result of its consideration of the above item. The General Committee recommended: (1) that the agenda should consist of the items contained in the provisional agenda, as set out in document GC(XXII)/595; and (2) that the items should be allocated for initial discussion as indicated in the same document.

2. The General Committee's recommendations were accepted.

## GENERAL DEBATE AND ANNUAL REPORT FOR 1977 (GC(XXII)/597) (continued)

3. Mr. SETHNA (India) congratulated the President on his election, and expressed his delegation's appreciation of the manner in which the Director General had conducted the Agency's affairs during the year.

4. The budget of the Agency for 1979 had shown an unprecedented increase of 27% over the budget for the preceding year. The Agency should exercise greater economy, especially in sectors not directly related to its actual operational needs. The Agency's budget continued to reflect an unfortunate imbalance between expenditure on safeguards activities and that on promotional activities. While budgetary provisions for safeguards activities increased substantially each year, those for promotional activities did not keep pace. Taking into consideration currency fluctuations and inflation, the technical assistance programme of the Agency had hardly grown at all in real terms.

5. The voluntary offers of some nuclear weapon States to place a few of their facilities under Agency safeguards might result in a further increase of the safeguards component of the budget. It was difficult to say to what extent such limited non-proliferation measures should be financed by the Agency. His country had always believed in the concept of comprehensive non-proliferation of nuclear weapons and had consistently held that international safeguards, in order to be truly effective, must be applied uniformly and universally to all nuclear activities in all States.

6. His delegation attached great importance to the technical assistance programme of the Agency, and was happy to be associated with the drafting of the revised Guiding Principles and General Operating Rules to Govern the Provision of Technical Assistance by the Agency. It was to be hoped that the revised Guiding Principles and General Operating Rules would be finalized soon and that individual Member States

would not insist on introducing principles contrary to the provisions of the Agency's Statute. His country was totally opposed to any form of discrimination in the provision of technical assistance by the Agency to its Member States, and urged the Agency not to accept the responsibility of administering voluntary technical assistance contributions if such offers were subject to restrictive and preferential conditions.

7. For 1979, the Board of Governors had recommended a target of US \$8.5 million for voluntary contributions to the General Fund. India would contribute the equivalent of US \$63 000, which was more than the amount corresponding to its base rate of assessment, and would continue to provide fellowships, scientific visits and expert services to other developing countries under the Agency's technical assistance programme.

8. The amendment of Article VI of the Statute had been under discussion for some time. His delegation supported the principle of more equitable geographical representation on the Board of Governors.

9. The five Codes of Practice relating to the Safety of Nuclear Power Plants had now been completed. Those Codes would be useful to Member States embarking on nuclear power programmes. India would continue to provide expertise for the preparation of the Safety Guides.

10. There had been three meetings of governmental representatives to consider the drafting of an international convention on the physical protection of nuclear material. His country attached great importance to the proposed convention, and hoped that a draft convention would emerge soon and find universal acceptance.

11. Since the preceding session of the General Conference there had been some notable developments affecting international co-operation in the field of atomic energy. There appeared to be a growing obsession with hypothetical proliferation involving quantities of nuclear material that were being used peacefully and were tiny compared to the vast amounts of nuclear material deployed in continuing weapons programmes. He hoped that a more balanced view would prevail so that the development of atomic energy for peaceful purposes was not unduly hampered.

12. His country was committed to the use of atomic energy for peaceful purposes for improving the living standards of its people. Electric power was being provided at competitive rates and applications of nuclear techniques in agriculture, industry and medicine were being developed. The Agency had an important role to play in international development, and India had made its contribution

towards the achievement of that goal. In the spirit of promoting international co-operation and understanding and recognizing the vital role that the Agency could play, he was happy to announce that his Government had offered to host the twenty-third regular session of the General Conference in New Delhi. India would provide all the necessary facilities and would defray such additional expenditure as the Agency might incur as a result of holding the session away from its headquarters.

13. Mr. SITZLACK (German Democratic Republic) said he would first like to extend a welcome to the delegation of the Republic of Viet Nam on the occasion of its first attendance at the General Conference.

14. Almost ten years ago to the day, the General Assembly of the United Nations had passed a resolution recommending the Treaty on the Non-Proliferation of Nuclear Weapons (NPT)<sup>1/</sup> and requesting the depository Governments to open it for signature. That event had marked the beginning of a phase of serious international endeavours designed to prevent an increased nuclear hazard to mankind. At the same time a start had been made towards a further shaping of the Agency's activities, which had led to continuous growth in its importance and responsibilities. But the Agency's endeavours would make sense only if the most urgent demand of the world today, namely the preservation of lasting peace, was met. In that connection, the real and urgent issue lay in successfully ending the nuclear arms race, stopping further production of nuclear weapons and reducing existing stockpiles.

15. There was no reasonable alternative to the policy of peaceful co-existence and disarmament. At the United Nations special session on disarmament, the majority of the Member States had declared themselves for disarmament, as an absolute necessity and a pressing task, thus strengthening the hope that effective disarmament measures would at last be taken, particularly in the nuclear field. His Government strongly supported the proposals made to that effect by the Soviet Union, calling, inter alia, for cessation of the production of all types of nuclear weapons and hence, also, stopping development of new weapon systems. In the same connection, his delegation strongly supported the demand to proceed immediately to the implementation of the proposal made by the eight socialist countries in the Committee of the Conference on Disarmament relating to a complete and unconditional renunciation of the production and deployment of neutron weapons.

16. It was essential in the interest of international security to prevent any further acquisition by racist regimes of arms, including nuclear weapons and related technology, since that was creating an increasingly dangerous situation for the world community. In that regard, all States should adhere strictly to the relevant decisions of the United Nations Security Council.

17. NPT was of the greatest importance within the framework of the efforts to bring about disarmament. Since its coming into force, considerable progress had been made but, unfortunately, not yet enough. In his delegation's opinion, all States should accede to NPT for its universal acceptance was in the interest of the whole world.

18. As a party to NPT, his country held that the Treaty in no way impeded the peaceful uses of nuclear energy. On the contrary, the conditions for international scientific and technical co-operation and for assistance to developing countries in the nuclear field would be much more favourable if misuse of nuclear energy could be excluded by further developing and strengthening the existing system of non-proliferation of nuclear weapons. Early in the year, in a note addressed to the Director General, his Government had clearly defined its policy concerning nuclear exports, relevant safeguards and other measures to strengthen that system, and his delegation would welcome similar policy statements on the part of other States. In the present situation, the Agency's responsibility for developing and consolidating the system in question was a growing one, as also its tasks in promoting the peaceful uses of nuclear energy by all States.

19. His Government was firmly convinced that the Agency constituted the one and only world organization for discussion and settlement of all political, scientific and technical issues involved in the peaceful uses of nuclear energy. His country would support all efforts aimed at promoting the system of non-proliferation of nuclear weapons and further increasing the effectiveness of the Agency.

20. His delegation had scrutinized with great interest the annual report for 1977; the Director General and the Secretariat were to be commended on all the documentation prepared for the session. The programme, as drafted for the years 1979-84, took into account what was necessary and feasible in order for the Agency to carry out its tasks; and it appeared to be well-balanced. His delegation

<sup>1/</sup> Reproduced in document INFCIRC/140.

accordingly endorsed it as it stood. In particular, it agreed with the conclusions emanating from the International Conference on Nuclear Power and its Fuel Cycle (the Salzburg Conference), held in May 1977, and endorsed the idea of convening a similar world conference in 1981 or 1982 in recognition of the great importance of direct communication among all engaged in the development of nuclear energy applications in the world. His country's interest stemmed from its extensive nuclear energy programme, which already accounted for 8% of its total electric power generation and was to be further extended as an integral component of the energy substructure. That work was being done in close co-operation with the USSR and the other member countries of the Council for Mutual Economic Assistance (CMEA).

21. In regard to the programme on nuclear safety and environmental protection, noteworthy progress had been made, particularly in the work on nuclear safety standards. The importance of that work lay in the fact that the standards would form the basis for national regulations, thus facilitating international co-operation. His delegation had repeatedly stressed that safety and protection constituted fundamental conditions for obtaining the benefits to be derived from nuclear energy. In his country's own programme, priority had thus always been given to the matter of protection against potential deleterious effects. Measures to that end were planned and executed on a long-term basis, as, for example, the highly automated depository for low- and intermediate-level radioactive wastes which had been constructed over the past ten years and which provided for the final storage of wastes over long periods.

22. His country unreservedly supported the Agency's safeguards programme. Effective safeguards applied in non-nuclear-weapon States served international security and were an indispensable prerequisite for the responsible use of nuclear energy. It was therefore in favour of the application of effective, independent safeguards by the Agency, covering all nuclear activities and in accord with NPT principles. To date, however, the Agency had had virtually no opportunity to carry out the necessary independent controls in the non-nuclear-weapon States Members of the European Atomic Energy Community (EURATOM). It was to be hoped that those States would do everything in their power to fulfil their commitments under NPT. The safeguards agreement concluded between his country and the Agency had always been conscientiously fulfilled on the basis of an effective national system, the core of which was the computer-aided recording of and reporting on the nuclear material held.

23. His delegation had noted with interest the Director General's report to the Board of Governors on the implementation of safeguards in 1977<sup>2/</sup> and welcomed

in particular the Agency's conclusion that no safeguarded nuclear material had been diverted from the declared peaceful activities. It should be the general aim to ensure that such a conclusion could be drawn with ever-increasing reliability, and the Agency's endeavours clearly to define the objectives and procedures of the safeguards system, as also its efforts towards, inter alia, the rational use of resources and improvement of the quality of inspections and the qualifications of inspectors, should be further pursued. Clearly, the means to achieve those ends would have to be provided. His country would continue to give maximum support to all those efforts.

24. The physical protection of nuclear material and nuclear facilities constituted one of the measures aimed at consolidating the system of non-proliferation of nuclear weapons, since unsecured nuclear material could precipitate a threat far beyond national boundaries, and that international aspect had to be taken into account in national planning. The Agency's work on internationally agreed guidelines therefore enjoyed his country's full support, and it was looking forward to the early conclusion of the proposed convention on the physical protection of nuclear material.

25. Particular credit was due to the Agency for its work in disseminating scientific information on the uses of nuclear energy through well prepared scientific conferences and meetings and the International Nuclear Information System (INIS). The fact that the number of countries participating in INIS had recently considerably increased indicated that the service was finding growing appreciation. With the planned expansion of its scope in 1979, the system as a whole would become still more effective.

26. The trend discernible in the Agency's programme toward the provision of technical assistance in a broader perspective and on a longer-term basis was in full accord with his delegation's views. His country continued to attach great importance to the technical assistance programme and had the potential to give it effective support in many areas, in the interest of developing countries. It was ready to expand its assistance and to share its experience. In that connection, he was authorized to state that his Government would increase its contribution to the 1979 programme to the amount of 250 000 marks.

27. As for budget issues, his Government regarded the scheduled raising of the assessment on Member States for 1979 by about one-third as considerable, the more so as only half of the increase was accounted for by programme expansion. While fully appreciating the efforts already made to reduce expenditure, it hoped that everything possible would be done to keep administrative expenses as low as

possible in the future. Despite its concern, however, his delegation was prepared to endorse the draft budget as presented, in token of the great importance it attached to the Agency's activities.

28. The results presented in the annual report showed that the Agency had done excellent work over the past year, for which gratitude and appreciation were due to the Director General and the Secretariat.

29. Apart from its scientific, technological and economic importance, the Agency's programme was unique in serving the welfare of mankind, through promoting the peaceful uses of nuclear energy aimed at resolving the greatest problems afflicting the world. As noted in the Final Document of the tenth special session of the General Assembly of the United Nations on disarmament, however, it had also to be recognized that mankind was today confronted with the unprecedented threat of self-destruction, a threat due in part to the existence of nuclear energy. There could be no discussion on the Agency's programme, therefore, without laying emphasis on the need for securing peace. Highly sophisticated and costly technical measures alone would not suffice; the essential condition lay in the political will of all States to end the arms race and to achieve real disarmament. Misuse of nuclear energy had to be prevented. The importance of the Agency resided in its contribution to that endeavour and its activities for the benefit of mankind.

30. Sir John HILL (United Kingdom) said that he had listened with particular interest to the Director General's wide-ranging and thoughtful survey. For reasons which he would explain later in his remarks, he would single out for special mention what the Director General had said about the great need for a sustained programme of information and education regarding the impact of nuclear power on society.

31. During the past year a number of important decisions on the development of nuclear power in the United Kingdom had been taken, including the ordering of another four gas-cooled reactors and the expansion of the Windscale reprocessing plant.

32. Although the United Kingdom was relatively well endowed with fossil fuels, Government papers on energy policy had emphasized the importance of nuclear power. In January 1978 the Secretary of State for Energy had announced Government approval of the proposals by the Electricity Boards to order four further gas-cooled reactors and to envisage the subsequent ordering of a pressurized-water reactor.

33. Those decisions had been taken against a background of growing public awareness of their importance, and it was his Government's policy to encourage full public debate on all major projects, particularly in the nuclear field. The proposal by British Nuclear Fuels Limited to construct at Windscale a plant for reprocessing irradiated oxide fuel had been examined by public enquiry. The issues investigated had covered a wide range of questions. One of those was the role of nuclear power as contrasted with alternative sources of energy; another was the advantage of reprocessing as compared to long-term storage; a third was the question of the ultimate disposal of waste. There was no doubt that, as a result of the enquiry, criticisms of alleged secrecy over nuclear decisions could no longer be sustained, and it was abundantly clear that the safety and engineering record of the nuclear industry was outstandingly good. Also, the open discussions that had been held showed that many misconceptions and fears of the general public were without foundation. Finally, it had become more generally accepted that the contribution which the renewable and alternative forms of energy might be able to make was a long way off, and that meanwhile there was a demand for energy which only nuclear power could meet in the short term.

34. After thorough debate, the recommendation contained in the report of the enquiry that the project should proceed without delay had been approved by a large majority in Parliament. That outcome had demonstrated that, if all the facts were presented and analysed in a clear and rational manner, the public was unlikely to reject the benefits nuclear power could offer. Accordingly, he wished to urge that vigorous information programmes aimed at all levels of public opinion should be implemented with a view not only to defending the nuclear industry from its critics but also to bringing to public attention its positive achievements and its future potential.

35. The second example of the United Kingdom Government's positive approach to the need for public acceptability was its undertaking that a proposal to proceed with a commercial demonstration fast reactor would be the subject of a similar wide-ranging public enquiry, though the timing and form of such an enquiry had not yet been settled.

36. Modifications to the Dounreay reprocessing plant to permit the reprocessing of the plutonium oxide from prototype fast reactor (PFR) fuel were approaching completion, and commissioning of some sections had started. Commissioning of

the solvent extraction plant was expected to be completed in early 1979. Work on the pilot plant at Windscale for the manufacture of mixed plutonium/uranium oxide fuel by the gel precipitation route was proceeding favourably and it was expected that that plant would also be in operation by early 1979.

37. In any discussion of the environmental impact of nuclear energy, an important question was whether nuclear facilities could be safely and successfully decommissioned. The United Kingdom welcomed the Agency's continuing sponsorship of work in that field, including the exchange of information and the preparation of decommissioning codes. The United Kingdom was currently gaining first-hand experience in decommissioning following the closing down of the experimental Dounreay Fast Reactor after 17 years of successful operation. Some of the internal components removed from the reactor had been subjected to the highest irradiation of any material in the world.

38. The introduction to the Agency's annual report for 1977 referred to developments in the nuclear fuel cycle during that year. In that connection he wished to mention the progress made in Anglo-Dutch-German collaboration on the centrifuge project (URENCO). The first cascade halls of the plants at Capenhurst and Almelo had been formally opened in 1977, and when fully operational in 1979 those facilities would be the world's first major commercial plants to use the centrifuge process. URENCO would increase its capacity to meet developing market requirements.

39. The United Kingdom greatly welcomed the decision of the European Council of Ministers to site the large fusion experiment, the Joint European Torus (JET), at Culham. With its European partners the United Kingdom had taken a full part in the discussions leading to the establishment of the JET Joint Undertaking in June and would, of course, continue to work for the success of the project.

40. The risks associated with the proliferation of nuclear weapons were a matter of concern to all nations. It was therefore worth recording that 1978 had seen important international discussions on the problems of disarmament. There had for example been progress in the United Kingdom's tripartite negotiations with the United States and the Soviet Union on a Comprehensive Test Ban Treaty, and in his speech at another significant international meeting devoted to the question of disarmament - the United Nations special session on

disarmament which had recently been held in New York - the Prime Minister, Mr. Callaghan, had reaffirmed the willingness of the United Kingdom to play a central role in moves towards disarmament.

41. The second Review Conference of the Parties to NPT was due to be held in 1980. On that occasion the United Kingdom Government would continue its efforts towards the attainment of the vital objective of non-proliferation of nuclear weapons. However, recognizing that some countries had reservations about acceding to NPT, his Government recommended as an alternative for those countries the text of the Agency's Full Fuel Cycle Safeguards Model Agreement, itself based on the Agency's safeguards system.

42. The further development of nuclear energy was indispensable. But in order to promote its peaceful use and to avoid proliferation of nuclear weapons it was also essential to strengthen the existing non-proliferation regime. That should be done in a way which recognized that all countries had a legitimate claim to a guarantee that their energy needs would be met. The United Kingdom Government therefore welcomed INFCE, which had attracted broad support and participation and had already yielded worthwhile technical and scientific progress.

43. The United Kingdom was of course playing an active part in INFCE, and was contributing technical papers based on its experience of commercial reprocessing.

44. Another important development during the past year had been the circulation to Member States of the Agency's study on the international management and storage of plutonium and spent fuel. The United Kingdom Government warmly welcomed the opportunity provided by the study for discussing various schemes aimed at increasing the proliferation resistance of the nuclear fuel cycle.

45. If any scheme for international plutonium storage was to achieve general acceptability, it would have to be non-discriminatory and the need of States to have properly safeguarded access to plutonium supplies would have to be recognized. The establishment of such a scheme would make a significant contribution to reducing proliferation risks. It was accordingly something to which his Government attached high priority.

46. If NPT could be described as the cornerstone of non-proliferation, safeguards themselves and the operation of the Agency's safeguards inspectorate were the bricks and mortar. He was very pleased indeed that in the Safeguards Implementation Report for 1977 the Agency had again been able to confirm that there was no evidence of any diversion of a significant quantity of nuclear material.

47. The United Kingdom was always considering the best ways and means of giving practical support to the Agency's safeguards activities, which it regarded as being of fundamental importance. A two-week training course for Agency safeguards inspectors was to be held in the United Kingdom at Springfields and Windscale in October 1978. The question of future courses would be reviewed with the Agency in the light of the experience gained.

48. Ever since the conclusion of NPT in 1968, the United Kingdom had publicly undertaken, in spite of its exemption as a nuclear-weapon State, to open all peaceful nuclear activities in the United Kingdom to Agency safeguards. He was pleased to be able to confirm that, after long negotiations, an agreement on that subject between the United Kingdom, EURATOM and the Agency had entered into force on 14 August 1978. His Government felt that implementation of the agreement would afford the Agency valuable technical experience, since the Agency inspections would cover plants of advanced design incorporating the newest technology.

49. The United Kingdom was convinced that NPT was the single most important international instrument for containing the dangers of nuclear proliferation. As the Prime Minister had said with reference to NPT at the United Nations tenth special session on disarmament: "We need to make acceptable agreements that will strengthen the technical barriers to the spread of nuclear arms, while making it possible for all countries who so desire to have access to nuclear energy for peaceful purposes." To achieve that end, there had to be secure access to supplies of nuclear fuel. The United Kingdom therefore attached particular importance to the statement made at the conclusion of the 1978 economic summit meeting held in Bonn, when the United States and Canada had expressed their intention to continue as reliable suppliers of nuclear fuel within the framework of effective safeguards.

50. The United Kingdom firmly believed that the link between assured fuel supplies and safeguards was vital to universal participation in the peaceful benefits of nuclear technology. The Guidelines for nuclear suppliers, to

which the United Kingdom was a party and which had been published by the Agency as document INFCIRC/254, should assist in making clear to customer countries the conditions which nuclear suppliers considered it necessary to impose.

51. The United Kingdom recognized the importance of furthering the contribution of atomic energy to peace, health and prosperity throughout the world. His Government had, therefore, as in previous years, pledged its full contribution to the Agency's General Fund. In addition, the United Kingdom would be increasing the sums which it had been making available to the Agency for the provision of fellowships in the United Kingdom for training scientists. He was pleased to say that the funds available for that purpose would in 1979 be more than double those allocated in 1978, and it was hoped that they could be further increased in the future.

52. Mr. KOSTADINOV (Bulgaria) said that the twenty-second regular session of the Agency's General Conference was being held in an atmosphere marked by worldwide efforts to strengthen the process of détente, supplemented by specific action in the field of disarmament, and that an important contribution in that respect had been the tenth special session of the General Assembly of the United Nations on disarmament, the results of which were of great significance for the Agency. The session had stressed the responsible part to be played by the Agency in ensuring peaceful co-operation in the utilization of nuclear energy. The Director General's contribution to the work of the special session on disarmament, which had been constructive and encouraging, had been to put forward positive proposals for making the non-proliferation of nuclear weapons more universal and for further strengthening the application of safeguards.

53. The Bulgarian Government welcomed the initiative shown at the special session on disarmament, which had been aimed at creating the conditions essential for genuine disarmament. An important part in that respect was played by the proposals put forward by the Soviet Union on practical ways of ending the arms race, together with the statement that the Soviet Union would never use nuclear weapons against States which undertook not to produce or acquire such weapons, or to have them on their territory. The Soviet Union had recently submitted for consideration by the General Assembly of the United Nations a draft international convention on strengthening the security of non-nuclear-weapon States. The Bulgarian Government welcomed that step, considering that the immediate conclusion

of the convention, together with the accession to it of both nuclear-weapon and non-nuclear-weapon States, was an important way of strengthening international peace and would have a beneficial effect on the Agency's work of promoting non-proliferation. Progress along those lines would also be of great importance for the success of the Second NPT Review Conference to be held in 1980.

54. His delegation supported the appeal made to all Governments during the special session on disarmament for the further strengthening of current international treaties aimed at limiting the arms race. A particular case was the Treaty on the Non-Proliferation of Nuclear Weapons, which more than ever before needed to be applied more universally. The time had come for all non-nuclear-weapon States with a high nuclear potential to consider acceding to NPT or accepting effective Agency safeguards with respect to all their peaceful nuclear activities. That applied particularly to countries located in regions fraught with conflict and tension. A nuclear conflict breaking out in any of those regions could trigger a worldwide nuclear clash. If the Governments of such countries, including South Africa and Israel, really wanted to show the world that they were anxious to prevent an escalation of the instability and tension in their respective areas, they should accede to NPT.

55. A matter of concern in the overall non-proliferation effort was the continued delay in the practical implementation of Agency safeguards in the non-nuclear-weapon States Members of EURATOM. His delegation considered it impermissible to postpone any longer the full application of the Agency's standard safeguards procedures to non-nuclear-weapon countries with considerable nuclear activities, including the non-nuclear-weapon States Members of EURATOM.

56. In a world in which nuclear power was being developed at an ever faster pace and the international exchange of nuclear materials and equipment was expanding, further improvement of the Agency's safeguards activities was a priority consideration in strengthening the regime of nuclear non-proliferation. Effective and independent control by the Agency was one of the basic premises for broad international co-operation in the peaceful use of nuclear energy. It was heartening to see, along those lines, that the Agency had begun, both from the organizational and procedural standpoint, to improve the work of the Department of Safeguards and that the Safeguards Evaluation Section was operating successfully. The Secretariat was also working on a clearer-cut definition of the technical aims of safeguards. Bulgaria would welcome the continuation of

the new trend on the basis of a thorough analysis of the work of the inspectorate and systematic introduction of all necessary improvements.

57. The Agency's work in the field of technical assistance was especially commendable in view of the understandable efforts of Member States to use nuclear energy to speed up their economic development. Technical assistance should continue to be based on voluntary contributions in national currency, with priority being given to those countries developing their nuclear power capacities that had already acceded to NPT. That stipulation was a perfectly just one, for it was those States which had in practice made the most effective contribution to ensuring the peaceful nature of international nuclear co-operation. His country continued to oppose the provision of technical assistance by the Agency to the régimes of South Korea and Chile and to Israel.

58. His Government wished to express its satisfaction with Bulgaria's own fruitful collaboration with the Agency, which was of great benefit to the country. Bulgaria regarded the utilization of nuclear energy as an important means of solving energy problems of decisive importance for its economic and social development.

59. The Bulgarian Government was, for its own part, rendering assistance to the Agency, and in the current year had provided advisory services for a project relating to the introduction of numerical data identification techniques into INIS. His country was continuing to work on the development of methods and equipment that could be used in the Agency's safeguards work. A series of programmes for automated and absolute determination of plutonium isotope composition was also being prepared, and completion of that work would provide a solution to one of the most topically relevant problems in the Agency's inspection work. His country fully supported the Agency in its efforts to combine the function of technical assistance with the activities essential for safeguarding the non-proliferation of nuclear weapons, and in that connection he was authorized to announce that Bulgaria would increase its voluntary contribution to the General Fund in 1978 by 28% in national currency, in accordance with the figure recommended by the Board of Governors.

60. In conclusion, the Bulgarian delegation welcomed the work done by the Secretariat in preparing the Annual Report for 1977. The Report gave evidence of the fact that the Agency was an important international organization that made a major contribution to the cause of peace and international co-operation,

and described, clearly and concisely, the highlights of the Agency's activities; the Bulgarian delegation therefore endorsed its adoption by the General Conference.

61. Mr. MOROZOV (Union of Soviet Socialist Republics) noted that for the first time the Socialist Republic of Viet-Nam, which had now assumed the rights and duties of full membership in the Agency, was taking part in a session of the General Conference. His delegation welcomed the representatives of the heroic Vietnamese people, who had defended their freedom and the unity of their country in a struggle lasting many years and who were now stoutly defending the inviolability of their territory, their independence and their right to build socialism in their own country without interference, threats and pressure from outside. It believed that Viet Nam's participation in the work of the Agency would further enhance the latter's role in the development of international co-operation in the peaceful uses of nuclear energy.

62. The Conference's twenty-second regular session was taking place in a year marked by intense international activity aimed at solving one of the cardinal problems of modern times: that of diminishing the danger of war, limiting the growth of armaments and ultimately achieving disarmament. On the occasion of the sixtieth anniversary of the Great October Revolution, Mr. Leonid Brezhnev, the General Secretary of the Central Committee of the Communist Party of the Soviet Union, had said "The most important, the most pressing problem now is to stop the arms race which is overwhelming the world."

63. Holding unswervingly to its principles in the matter of disarmament, the Soviet Union was doing everything in its power to achieve progress in current negotiations on a limitation of the arms race and on disarmament; it was coming forward with specific proposals aimed at curbing the arms race, especially where nuclear weapons were concerned, as a transition to true disarmament measures. The proposals which his country had made at the recent special session of the General Assembly of the United Nations on disarmament were designed to secure those goals. In particular, the Soviet Union had proposed that negotiations should be launched with a view to stopping the production of nuclear weapons in all forms and bringing about a gradual reduction of stock-piles until all such weapons were eliminated.

64. A particularly important matter, for all who wished to limit the arms race, was the prevention of any further proliferation of nuclear weapons. NPT had been opened for signature ten years before. One could confidently say that its conclusion had erected a barrier to the spread of nuclear weapons over the whole planet. But further efforts were needed, especially if one considered what fateful consequences might ensue for the world should States located in zones of tension and conflict obtain nuclear weapons. For that reason, plans to produce such weapons in South Africa and Israel could not but cause profound alarm.

65. The task of giving a universal character to NPT remained vitally important. The Soviet Union accordingly urged all who had not yet acceded to the Treaty to do so. That in itself would make a significant contribution towards strengthening the non-proliferation regime.

66. Understanding as it did the desire of the non-nuclear-weapon States to obtain guarantees binding in international law from the nuclear-weapon States that nuclear weapons would not be used against them, the Soviet Union had declared at the special session of the General Assembly of the United Nations that it would never use such weapons against States which had themselves renounced the production and procurement of them and did not possess them on their territory.

67. The Soviet Union had in fact just come forward with a new initiative in the interests of peace. It had proposed including in the agenda of the General Assembly for its 33rd session, as an important and urgent question, an item entitled "Conclusion of an international convention to strengthen guarantees for the safety of non-nuclear-weapon States", in the preparation of which would participate, on one hand, those nuclear-weapon States which were prepared to offer appropriate guarantees to the non-nuclear-weapon States and, on the other hand, interested non-nuclear-weapon States which were prepared to renounce the production and procurement of nuclear arms and which did not have such weapons on their territory.

68. The creation of non-nuclear zones in various regions of the world would do much to strengthen the nuclear non-proliferation regime.

69. Supporting as it did the efforts of all countries which did not want to allow nuclear weapons in their regions, the Soviet Union had signed Additional Protocol II of the Treaty for the Prohibition of Nuclear Weapons in Latin America (the Tlatelolco Treaty)<sup>3/</sup>. In doing so, it had undertaken not to assist any Latin American country in obtaining nuclear weapons and also not to use nuclear weapons against States party to the Tlatelolco Treaty. It went without saying that the Soviet Union would scrupulously observe that obligation on the condition that other nuclear powers respected the status of the region and that States party to the Treaty ensured an authentic non-nuclear regime.

70. An important role in matters of non-proliferation and in preventing the risk of nuclear war was played by the International Atomic Energy Agency - an international organization enjoying great authority and the support of all who were interested in ensuring that atomic energy was used exclusively for peaceful purposes. The Soviet Union for its part had always given the Agency every possible support in carrying out that important and noble task, so vital to the interests of all countries and peoples, and would continue to do so.

71. Recently, in many countries and in various international forums, there had been a fresh upsurge of debate on the role and place of nuclear power in the world's fast-growing power economy. The "reassessment of values" that was being witnessed and the quest for alternative sources of energy were connected with a number of factors, and in the first place with the problem of non-proliferation. However, it was becoming increasingly obvious that for many countries with large power requirements nuclear power would, even in the next few decades, become the favoured source of energy and in some cases undoubtedly the main source of electric power. That being so, the task was to determine how nuclear power could be introduced in such a way as to protect the environment and prevent any danger of weapons proliferation. Those questions had in fact been given thorough treatment by the Agency's Director General in his address to the Conference. The Soviet Union shared Dr. Eklund's concern and also his assessment of the present situation. National programmes for the development of nuclear power and international efforts to evaluate the nuclear fuel cycle had an important role to play in the solution of those problems, as did also meetings such as the Salzburg Conference, which the Agency had conducted so successfully in 1977.

<sup>3/</sup> United Nations Treaty Series, Vol. 634, No. 9068.

72. There had been no basic changes in the Soviet Union's programme of nuclear power development or in its approach to the main problems thereof. The main features of the programme were familiar: a combination of power stations using thermal and fast reactors, and radiochemical reprocessing of the fuel with extraction of plutonium and unspent uranium for reuse. In the coming 10 to 15 years the intention was to accelerate the growth of capacity based on thermal reactors (by enlarging existing power stations and building new ones), using proven designs which had demonstrated good technical, economic and operational characteristics.

73. The accelerated development of nuclear power in the Soviet Union was not a consequence of any depletion of natural sources of energy but was governed, rather, by economic and ecological considerations. The Soviet Union was in fact among the more fortunate countries where fuel and energy were concerned. It was the only large, highly developed industrial State in the world which could base its economic development exclusively on domestic fuel and energy resources.

74. However, those resources were not by any means evenly distributed over the territory of the Soviet Union. The European part of the country, where a large part of the population lived, was increasingly feeling an insufficiency of organic fuels. For that reason, the development of nuclear power was being given priority in the European part of the country, pursuant to decisions taken at the XXVth Congress of the Communist Party of the Soviet Union.

75. Those decisions were being successfully implemented. In the economic plan for 1976-1980 the rate of introduction of nuclear power stations in fact outstripped the development of electrical energy as a whole in the country. By 1980 nuclear capacity would be of the order of 21 million kW; by 1985 it would double, and thereafter the introduction of nuclear power stations would move even faster. Installed nuclear capacity was expected to reach 90-100 million kW by 1990.

76. A large industrial base was needed to construct the machinery needed for such a power programme. The "Izhorskij Zavod" combine was being reconstructed

for the purpose, and very soon the first unit of the giant "Atomash" nuclear machinery plant would go into operation. In countries belonging to CMEA, existing plant was being expanded and new large machine factories installed; also multilateral co-operation in the production of machinery, instruments and equipment for nuclear power stations was being put in hand.

77. At the thirty-second session of CMEA, which had taken place in June, a specific long-term programme of co-operation among CMEA Member States had been adopted in the energy, fuel and raw materials spheres, to extend up to 1990. One of the most important aspects of that programme was the accelerated development of nuclear power in the organization's Member States. With the technical collaboration of the Soviet Union, nuclear power plants with an aggregate capacity of about 37 million kilowatts were to be built in the European Member States of CMEA and in the Republic of Cuba, and it was anticipated that two large power plants producing four million kilowatts each would be built on the territory of the USSR with the collaboration of interested CMEA Members to supply electrical energy for all participating in the project.

78. The long-term programme also foresaw scientific and technological co-operation aimed at series production of the VVER-1000 reactor and its introduction in CMEA Member States after 1980; also foreseen was the development of a large fast reactor and of reactor plants for the combined production of heat and electric power.

79. Parallel with the expansion of the industrial base for machine construction, plants serving all other stages of the nuclear fuel cycle were being developed. An industry had been created for the extraction and processing of uranium ores, for uranium enrichment and for the production of fuel elements and special materials required for nuclear power plants.

80. Serious attention was being given to the development of methods, equipment and technological processes for radiochemical reprocessing of irradiated fuel, and also to methods of managing large quantities of radioactive waste. To ensure careful and comprehensive checking and verification of technology and equipment for the radiochemical sector and a controlled introduction of reprocessing capacity, it had been decided that irradiated fuel should be stored for at least five years before reprocessing. The successful development

of thermal reactor fuel reprocessing methods made it possible to extend the basic technology to processes and installations for the reprocessing of breeder reactor fuels, thereby allowing broad utilization of power plants with reactors of that kind in the overall energy scheme.

81. A great deal of attention was being given in the Soviet Union to the development of new and more effective energy sources, above all fast reactors. The country's fast breeder programme was based on the construction of reactors with large conversion coefficients and short fuel doubling times - reactors which would make it possible to develop nuclear power at the required rate of growth without appreciable external inputs of uranium. By the beginning of the twenty-first century the Soviet Union expected to have established what it felt to be an optimum nuclear power structure, a combination of fast breeder reactors serving for base power production and thermal reactors used both to generate electric power and to supply process heat for industry as well as heat for homes.

82. While working on the "contemporary problems" of power production, the Soviet Union was also continuing with its large programme in plasma physics and controlled nuclear fusion research, thus laying the scientific and technological foundations for power generation in the next century.

83. The Soviet Union approved of the Agency's draft programme for the period 1979-1984, which was adequately balanced and took account of the interests of both developing and developed Member States. It would continue to co-operate actively with the Agency for the solution of scientific and technological problems and would offer broad support for work connected with nuclear power and its fuel cycle, nuclear safety and environmental protection, plasma physics and controlled nuclear fusion research, INIS and so on.

84. In view of the importance of nuclear fusion for all mankind, the Soviet Union had responded to the Director General's appeal for closer international co-operation in fusion research and had made a specific proposal, at a meeting of the International Fusion Research Council (IFRC) in 1978, for the development and construction of a demonstration fusion reactor by the combined efforts of Member

States. His delegation was convinced that work on such a vast project under the aegis of the Agency would be in the interests of all countries and would contribute enormously to the development of energy production technology for the future.

85. It was a familiar fact that long-term programmes for the development of nuclear power were confronted in many countries by the problem of reliable fuel supply. The Soviet Union provided uranium enrichment services to a number of countries on mutually advantageous terms, on the understanding that the uranium would be used only for peaceful purposes. It was prepared to continue offering such services, to other countries as well, enriching their uranium up to 5% in  $^{235}\text{U}$ , with appropriate international safeguards and in strict accordance with existing agreements on the control of nuclear exports, in the spirit of NPT.

86. The provision of technical assistance to developing Member States occupied a special place in the Agency's programme. The Soviet Union attributed particular importance to that type of activity; it responded to requests received through the Agency's Secretariat by supplying equipment, instruments and materials to those countries, and assisted in the training of specialists by organizing training courses and study trips to the Soviet Union. Acting in the spirit of Article IV of NPT, the Soviet Union had increased its voluntary contribution to the General Fund from 100 000 roubles in 1968 to 650 000 roubles in 1978.

87. The Soviet delegation was authorized to announce, on behalf of the Soviet Government, that its voluntary contribution in 1979 would be increased to 750 000 roubles (in national currency), for the provision of technical assistance primarily to developing countries party to NPT.

88. In the opinion of his delegation, the Secretariat should, through technical assistance, more actively foster the development of the peaceful uses of atomic energy in States party to NPT. That would be more fully in accordance with the provisions of the Statute, which required an equitable approach to the provision of technical assistance, and would accord also with a principle which had received broad support at the NPT Review Conference in

1975, namely that non-nuclear-weapon States party to NPT should receive preferential treatment in the provision of technical assistance both on a bilateral basis and through the Agency.

89. The Soviet delegation was also authorized to announce that the Soviet Union was prepared to contribute 50 kilograms of  $^{235}\text{U}$  free of charge to the Agency's fund for the five-year period ahead, as a contribution to the Agency's activities connected with the peaceful utilization of atomic energy. The material in question would be supplied in concentrations up to 20% enriched in the isotope  $^{235}\text{U}$  for use as fuel in research reactors, critical and sub-critical assemblies and the like, to meet the needs of non-nuclear-weapon States party to NPT.

90. The Soviet Union attributed great importance to the Agency's control functions arising out of the Statute and out of NPT. It took a positive view of the Director General's efforts to improve the structure of the Department of Safeguards and equip it to meet the requirements of current and future tasks. The steps that had been taken to secure a further improvement of verification procedures and methods also merited approval, as did the development of an automated safeguards data processing system and the preparation of recommendations concerning national systems of accounting and control of nuclear materials, which were such an important element in the efforts States were making to strengthen the non-proliferation regime. Another positive feature of the Secretariat's work was that it was concentrating its verification effort on those sensitive stages of the fuel cycle where nuclear materials that could be used in explosive devices might be obtained.

91. At the same time, the Soviet delegation had to express understandable concern at the fact that many States party to NPT had not yet fulfilled the requirements of Article III.4, which established a time limit for the entry into force of the safeguards agreements concluded with the Agency. It would greatly serve the interests of the effectiveness of both NPT and the Agency's safeguards system if those States would, very soon, act to fulfil their obligations under Article III.4.

92. Another question which should not be deferred was the application of full-scope safeguards to the nuclear activities of the non-nuclear-weapon States Members of EURATOM in strict accordance with the Agency's safeguards system. The Agency should make full use of its right of independent verification and not delegate that right simply because there existed a national system of accounting and control in particular States or groups of States. The Soviet Union called upon the non-nuclear-weapon States Members of EURATOM to act in a constructive spirit and display their goodwill by completing the process required for the practical application of Agency safeguards in the shortest possible time; that process had already been prolonged well beyond all deadlines laid down in NPT.

93. The Soviet Union was actively co-operating with other countries in the peaceful uses of atomic energy and was prepared to develop that co-operation further, under the auspices of the Agency as elsewhere. Using the energy of the atom itself very extensively, the Soviet Union was ready to share its rich experience and technical abilities with others for the further progress of mankind. In pursuance of that principle the Soviet Union would continue to do everything in its power to strengthen the Agency and enhance the activities so important for peace which emerged from the Statute and from NPT.

94. In closing, he wished to express confidence that the present session of the General Conference would make an important contribution to the further development of international co-operation in the peaceful uses of atomic energy and to the strengthening of international security and the non-proliferation regime.

95. Mr. SMOLDEREN (Belgium) congratulated the President on his election, especially in view of his and his country's special links with Belgium. He also thanked the Director General for his work in a particularly difficult period for the Agency.

96. Turning to the work of the Agency itself, he wished to emphasize, firstly, that one of its main statutory functions was to ensure that the applications of nuclear energy with which it was associated were exclusively for peaceful purposes. The Agency was therefore obliged to apply effective safeguards and it was normal that the Director General and the Department of Safeguards should make continuous efforts to ensure their quality and effectiveness. In that connection, however, certain fundamental principles had to be borne in mind.

97. First, it was necessary to base the implementation of Agency safeguards mainly on provisions decided on by the Board. If technical committees were asked by the Secretariat to make suggestions, those suggestions could not be taken as equivalent to or replace decisions of the Board. If Agency officials believed that regulations laid down by the Board needed to be reviewed, it was for the Board to set up a committee to propose amendments; the committee must be open to all Member States wishing to participate. Moreover, Member States not represented on the Board would have to be able to make their views known about subjects of particular concern to them.

98. Secondly, Agency safeguards objectives were inseparable from the objective of developing peaceful applications of nuclear energy throughout the world. Safeguards must not work against that objective nor cause technical or economic discrimination between nuclear-weapon States and those which had voluntarily renounced nuclear weapons. Although the effectiveness of Agency safeguards should not be impaired, it was unacceptable that they should put such a burden on industrial installations as to prevent them from being internationally competitive. In order to prevent economic discrimination, Belgium had frequently proposed that nuclear-weapon States should accept identical safeguards in their non-military nuclear installations. Such safeguards would not entail unnecessary expenditure and would be the best way of ensuring similar opportunities for competition between nuclear-weapon and non-nuclear-weapon States. The principle that safeguards should not hamper development was in fact appropriately stated in paragraph 4 of document INF/CIRC/153 (Corrected).

99. Thirdly, it was necessary to develop and to use equipment designed to simplify as far as possible the inspection effort required of the Agency and to ease the constraints imposed by safeguards on managers of nuclear installations. The present trend marked by considerable increases in the number of Agency staff for purposes of applying safeguards was out of all proportion to the effort it was making to develop equipment designed to reduce the number of inspectors. Appropriately installed equipment could operate round the clock, whereas human inspection effort always required the physical presence of inspectors. Modern data processing techniques were sufficiently workable and versatile to be able to provide solutions for safeguards problems.

100. Fourthly, the Agency had a duty to take every precaution to protect commercial and industrial secrets or other confidential information coming from installations to which it applied safeguards. To that end, it should limit its inspection requirements to what was really necessary in order to implement safeguards. It should not request access to all parts of nuclear installations or permission to make tests which were not of direct relevance to safeguards. The problems in that connection were particularly difficult because the Agency recruited inspectors on fixed-term contracts. In many cases, those inspectors had worked for the nuclear industries of Member States and, after their contracts with the Agency expired, would go back to work for firms in their country of origin which were in competition with those which they had been sent to inspect. Inspectors should therefore not have the opportunity to acquire technical information that was in any respect confidential about fabrication techniques used in the factories they inspected. It might well be desirable for the Agency not to recruit inspectors on a fixed-term basis but rather on a career basis so that they would not put to commercial use information acquired while working for the Agency.

101. Fifthly, the Agency should make full use of national and, even more so, of supranational systems of accounting and control of nuclear materials in order to avoid unnecessary duplication. Wherever possible, it should carry out its tasks by verifying results obtained by the national or supranational system. It was a fundamental principle laid down in paragraph 7 of document INFCIRC/153 (Corrected) that, when carrying out such verification, the Agency should take due account of the technical effectiveness of such systems.

102. Sixthly, it was necessary to bear in mind the principle laid down in Article IV of NPT that nothing in that instrument should affect the inalienable right of all parties to the Treaty to develop research, production and use of nuclear energy for peaceful purposes without discrimination. That right could be impaired if controls were imposed which made peaceful nuclear installations unusable. It would also be against NPT to reserve certain spheres of non-military industry to nuclear-weapon States. Belgium was supporting international efforts to reduce the dangers of proliferation of nuclear weapons by participating actively in INFCE and by adhering to the guidelines of countries exporting nuclear technology. However, the objective of non-proliferation should never result in limitations being imposed on Belgian technology designed to meet the country's economic, industrial and energy requirements. The sensitive technology needed for Belgium's development objectives could be used without serious risk of proliferation.

103. It was in the light of the six principles mentioned above that Belgium would endeavour to ensure that the safeguards agreements concluded between seven EURATOM countries and the Agency would be put into effect as soon as possible.

104. The need to achieve an effective safeguards system should not overshadow another important task of the Agency, that of assisting the developing countries with peaceful applications of nuclear energy. The needs of those countries were enormous and a selection had to be made among projects. That should be done after extensive exchanges of views had taken place between the requesting countries and the Agency, in some cases with the participation of experts from countries able to provide the assistance requested. His delegation welcomed the steps taken by the Director General to speed up the examination and the implementation of projects.

105. He also noted with satisfaction that the total amount of unobligated balances had stopped increasing and that it might be reduced in the near future. Efforts in that direction should be continued.

106. Belgium proposed to continue making voluntary contributions to the General Fund and to offer six Type II fellowships. It would also continue with the special technical assistance agreements with Nigeria for the eradication of the tsetse fly, providing a contribution of B.Fr. 10 million over a period of five years (1977-1981), and with Zaire for the development of the Kinshasa nuclear centre.

107. With regard to general problems of the administration of the Agency, the tendency for the number of staff members to increase and the permanent effect that trend was having on its budget were cause for great concern.

108. The draft budget proposals for 1979 had been totally unacceptable and the Director General, to his credit, had tried to reduce them. However, the increase finally agreed on was still too large and it was most important to prevent such increases from becoming habitual.

109. With the Agency's move to more functional buildings in the Donaupark, its staff should be able to work more efficiently and thus it might be possible to reduce its numbers. The fact that the Board had agreed that the Agency should occupy two office towers in the Donaupark complex did not mean that it could progressively take on another 500 staff members to fill the space available. It appeared, however, that there was a danger of that happening, judging by document GC(XXII)/600, which showed a proposed increase of 200 staff members in two years. His delegation reserved the right to speak further on that point in the Committee of the Whole.

110. Although the move to the Donaupark would involve an increase in operating costs, they should be kept to a minimum and there should be no expenditure that was not fully justified. In view of current difficulties, furnishings and equipment should not be renewed unless renewal was really necessary. He was sure that the Director General would see that the move was carried out with the maximum efficiency and economy.

111. In conclusion, he stressed the need for the Agency to preserve its character as a highly specialized technical institution. The responsibilities with which it was entrusted by the Member States and the United Nations were such that technical considerations should take priority over the political considerations with which certain Member States were becoming increasingly concerned. If the technical aspects of the utilization of nuclear energy were not given due attention, the Agency would not be able to safeguard the peaceful use of nuclear installations effectively nor make a wide distribution of worthwhile technical assistance.

112. Mr. KHAN (Pakistan) said that on behalf of the Pakistan delegation he wished to join in offering congratulations to the President on his unanimous election. With his vast experience in the nuclear field and thorough understanding of the Agency, there was no doubt that he would guide the Conference successfully and enable the delegates to deal effectively and constructively with the delicate issues before them. His election symbolized the expanding role and importance of Africa in international affairs and the growing recognition that Africa had a key role to play in shaping the Agency's future policies. The Pakistan delegation also wished to congratulate the Director General on his thought-provoking remarks about the problems of nuclear energy and heartily endorsed many of the ideas he had presented.

113. The activities of the Agency were expanding rapidly in both scope and depth. The programme and budget for 1978 had shown the largest increase in any single year. During the discussion in the Board, the Pakistan delegation had commented on the desirability of controlling the Agency's budget without seriously curtailing the effectiveness of its programme. There had been a disproportionately large increase in the safeguards budget at the expense of other important programmes, particularly technical assistance. The Agency could fulfil its statutory requirements and retain its effectiveness only if equal emphasis were placed on the promotional and regulatory activities. Disproportionate emphasis on safeguards would affect the Agency's credibility as the promotor of peaceful applications of nuclear energy and would seriously undermine its ability to play a constructive role in implementing safeguards. The major powers had to realize that they could not use the Agency as an effective instrument of non-proliferation without making it an equally effective vehicle for the promotion of nuclear energy. It was absolutely essential to maintain a proper balance between safeguards and technical assistance. It was regrettable that the net resources available for technical assistance were declining in purchasing power year after year and that the Agency was losing its influence over the nuclear energy programmes in a large number of developing countries whose requests for assistance had to be rejected for lack of funds. Such indifference towards the needs of the developing countries would breed apathy which would seriously undermine the universal acceptance of the Agency's safeguards system and the strengthening of non-proliferation.

114. Pakistan believed that nuclear power was more than ever needed to overcome the growing energy shortage which was beginning to undermine economic and political stability in various parts of the world. It was following with deep interest the outcome of research and development into solar and fusion energy. Even the most optimistic projections indicated that the full development and commercialization of those new technologies was still three decades away and that during that period world energy needs would more than double. There was therefore no other viable option but to put to use the available proved technology of nuclear fission reactors in order to conserve irreplaceable resources.

115. The greatest threat to nuclear energy lay not so much in the opposition from environmentalists or in cost increases, but in the uncertainty and confusion created by the questionable and vacillating policies of the major suppliers. Pakistan shared their concern about the dangers of proliferation and the unregulated spread of nuclear technology, but those problems could not be overcome by deliberately destroying confidence in the continuity of supplies of materials, equipment and technology required for peaceful purposes. The world was anxiously awaiting early agreement among the super powers to reduce stocks of destructive weapons and to ban further nuclear weapons tests and the deployment of new weapon systems.

116. There was a growing tendency among the supplier States to modify existing treaties, agreements and contracts unilaterally under the pretext of strengthening non-proliferation. That had created a sense of insecurity among the recipient States which subscribed wholeheartedly to the various safeguards treaties and agreements. The importance of international undertakings should not be undermined or destroyed on the pretext of controlling proliferation, and law-abiding countries should not be forced to renegotiate existing arrangements and contracts. Non-proliferation could only be built on the solid foundation of mutual trust and confidence. Each contract which was dishonoured added to the growing mistrust among nations. A partnership should be developed between the recipient and supplier States, between the rich and the poor - a partnership for progress and peace. There should be greater independence in the nuclear fuel cycle and a sharing of nuclear materials and technology. In the long run that would be a better guarantee of world peace than a policy of

denial which left the recipient States with no alternative but to seek fuel cycle independence for their economic survival.

117. Pakistan fully supported INFCE as a potentially valuable exercise to help establish technical options for facilitating peaceful applications of nuclear power. The communiqué issued at the start of the study stated that "The evaluation will be carried out in a spirit of objectivity, with mutual respect for each country's choices and decisions in this field, without jeopardizing their respective fuel cycle policies or international co-operation, agreements and contracts for the peaceful use of nuclear energy, provided that agreed safeguards measures are applied". If those assurances were not respected, the usefulness and credibility of any conclusions and recommendations resulting from INFCE would be seriously impaired.

118. Pakistan had complete faith and confidence in the adequacy of the Agency's safeguards system and in the Agency's ability to implement that system. There was a regrettable tendency to undermine the Agency's role in safeguards through the setting up of parallel regimes and norms by different supplier States and the introduction of new concepts into Agency safeguards systems which were completely incompatible with the Statute. Pakistan could not accept a difference between NPT and non-NPT States as far as technical assistance was concerned. It appreciated the Agency's efforts to undertake research into improved safeguards techniques in order to increase the effectiveness and efficiency of its system and reduce the number of inspectors without sacrificing reliability. The Pakistan delegation urged the Director General to ensure an adequate geographical distribution in the Agency's safeguards inspectorate.

119. The developing countries of the world, representing two thirds of mankind, were facing a critical dilemma. There had been an inevitable increase in the price of oil and, as the available resources became exhausted and the cost of discovering and developing new resources climbed, a further escalation in prices was becoming unavoidable. The industrialized countries, instead of enforcing a firm policy of energy conservation, were increasing their consumption and pre-empting the available limited reserves. It was ironic that for domestic political considerations they were also slowing down their nuclear power programmes. Moreover, some were deliberately delaying or deferring the development of more efficient reactors, thus creating the fear of a further rise in uranium prices and constraints on its availability. When the energy-

deficient developing countries turned towards nuclear power, they faced the insurmountable hurdles created by a calculated policy of denial of the nuclear technology which was desperately needed for development. That double squeeze was creating a dilemma for the poorer nations, which were being forced to develop independent nuclear programmes because of the insecurity produced by the withholding of supplies. Pakistan believed that the policy of denying nuclear technology and using it as a political weapon against the Third World was self-defeating and counter-productive and that it would certainly destroy confidence between the countries of the North and South. A serious dialogue should be initiated between the supplier States and the recipient States of the Third World so as to reach an understanding on the norms and rules which should govern the supply and use of nuclear technology. The alternative was misunderstanding and possible confrontation, which everyone wanted to avoid. Pakistan was convinced that proliferation was essentially a political problem. The real tasks were to develop a global policy for optimal utilization of world energy resources and available technologies, to meet the needs of the industrialized countries and the projected requirements of the developing countries, to transfer technology to the Third World and to satisfy the legitimate security concerns of non-nuclear countries.

120. In order to deal with such broad issues, the General Assembly of the United Nations had adopted resolution 32/50, in which all States were invited to consider convening an international conference on the economic, political, social and technical problems of promoting international co-operation in the peaceful uses of atomic energy. Such a conference could be held after the completion of the INFCE study and the NPT Review Conference.

121. In 1977, together with 25 other co-sponsors, Pakistan had tabled an amendment for the expansion of the Board in order to ensure more equitable representation for the areas of Africa and of the Middle East and South Asia. During the ensuing debate, 39 countries had supported the principle underlying that amendment. The General Conference had decided through Resolution GC(XXI)/RES/353 to refer the matter to the Board and to ask it to report the results at the twenty-second regular session of the General Conference. The General Assembly in its 32nd session had also adopted a resolution in which it was stated that due consideration should be given to the request of developing countries for an increase in their representation on the Board of Governors of the Agency.

122. During 1978, very intensive discussions had taken place within the Board and outside in order to find a way to correct the imbalance in the representation and arrive at a solution which would command the widest possible support in the General Conference. While Pakistan believed that the original proposal calling for three additional seats for Africa and two for the Middle East and South Asia offered a most equitable, just and fair solution, it had, in a spirit of compromise, co-sponsored a resolution calling for the addition in the immediate future of only one seat each for the two areas. It was to be hoped that the new proposal, which had been endorsed by a large number of Member States, would command the overwhelming support of the General Conference and that the spirit of compromise shown by the co-sponsors would be fully reciprocated by other areas. The moderate increase of two seats would still keep the representations of Africa and of the Middle East and South Asia at 25% and 29% respectively as compared to the revised average of 33% for the Board as a whole. Pakistan believed that the painful discussions on the issue should not be prolonged, because that would only add to the sense of frustration felt by the countries of the areas concerned, which had long suffered from the denial of their legitimate rights of adequate representation on the Board.

123. The national nuclear programme in Pakistan had placed continued emphasis on the development of the peaceful applications of nuclear energy in the fields of power generation, agriculture, medicine and industry. The nuclear power reactor at Karachi had been operating satisfactorily for six years, and it had been found necessary to develop local means for the production of spare parts and other supplies. There had been an accelerated search for uranium, and significant deposits of zirconium and other nuclear materials had been located. Plans for the construction of a fuel reprocessing plant were being implemented and work was expected to start soon on a 600-MW nuclear power plant. The construction of a centre for nuclear studies for training up to 100 scientists a year in nuclear technology had been completed and another centre for nuclear power reactor engineers, operators and technicians had been started. A sixth nuclear medicine centre had been finished and the construction of a seventh was about to begin. In agriculture, a number of new varieties had been evolved through radiation-induced mutations and one had already been released for cultivation. In June 1977, the Third Summer College on Physics and Contemporary Needs had been organized with the technical co-operation of the International

Centre for Theoretical Physics at Trieste. The next college, to be held in June 1979, would be devoted to the problems of meeting global energy needs, with particular reference to the developing countries.

The meeting rose at 1.20 p.m.