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RECORD OF THE THREE HUNDRED AND THIRTY-FOURTH PLENARY MEETING

Held at the Neue Hofburg, Vienna
on Monday, 16 September 1991, at 3.20 p.m.

President: Mr. SANTANA CARVALHO (Brazil)

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[*] GC(XXXV)/982.

The composition of delegations attending the session is given in document GC(XXXV)/INF/301/Rev.2.

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Abbreviations used in this record

ASSET	Analysis of Safety Significant Events Team
CANDU	Canada deuterium-uranium [reactor]
CERN	European Centre for Nuclear Research
IAEA	International Atomic Energy Agency
ICTP	International Centre for Theoretical Physics (in Trieste)
INES	International Nuclear Event Scale
INIS	International Nuclear Information System
IPERS	International Peer Review Service
LEU	Low-enriched uranium
MESA	Middle East and South Asia
NPT	Treaty on the Non-Proliferation of Nuclear Weapons (reproduced in document INFCIRC/140)
NUSSAG	Nuclear Safety Standards Advisory Group
OSART	Operational Safety Review Team
PHWR	Pressurized heavy water reactor
Pre-OSART	Pre-Operational Safety Review Team
PRIS	Power Reactor Information System
RADWASS	Radioactive Waste Safety Standards
RCA	Regional Co-operative Agreement for Research, Development and Training Related to Nuclear Science and Technology (for Asia and the Pacific)
SAGSI	Standing Advisory Group on Safeguards Implementation
TACF	Technical Assistance and Co-operation Fund
THORP	Thermal Oxide Reprocessing Plant (British Nuclear Fuels Ltd.)

GENERAL DEBATE AND ANNUAL REPORT FOR 1990 (GC(XXXV)/953) (continued)

1. Mr. WALKER (United Kingdom) welcomed Estonia, Latvia, Lithuania and Yemen as members of the Agency and endorsed the statement by the delegate of the Netherlands on behalf of the European Community. He commended the services and expertise of the Agency and its Action Team which had proved crucial in assisting the United Nations Special Commission to fulfil its duties in Iraq. In spite of such additional pressure, the Agency's sphere of activity had remained responsive to the growing needs of Member States in a period of difficulty and constraint for the world nuclear industry, when key political issues - safety, economics, and non-proliferation - were compelling the nuclear industry to satisfy proper public concerns.

2. In reality, the public depended on nuclear power for 17% of the world's electricity, and 10 of the 25 countries with operating reactors met more than a third of their electricity needs from nuclear power. Exports from major nuclear producers also helped to keep other countries' grids in balance.

3. Some research had suggested that if the worldwide production of elecricity from nuclear stations were replaced by that from coal-fired stations, an extra 1.7 million tonnes of CO_2 would be discharged annually into the atmosphere - an increase of 25% over current discharges from power plants.

4. While nuclear energy obviously had its problems, it was meeting a fair proportion of the world's energy needs. Recent projections indicated that the most likely scenario for the next two decades might be a continuation of modest levels of nuclear development on the whole, despite plans for considerable expansion in a handful of countries.

5. In the United Kingdom the construction of the first PWR at Sizewell was progressing and it was eight months ahead of schedule. The earlier generations of reactors were operating satisfactorily. Improved performance of the Magnox and advanced gas-cooled plants had led to a record output of 45 TW•h in 1990-91. The reprocessing industry was benefiting from significant overseas contracts for the new THORP facility, which on completion would be one of the largest in Europe.

6. Progress had been made in the search for a solution to long-term disposal of intermediate-level radioactive waste. In July, the waste management company, UK Nirex, had decided to concentrate its future efforts at Sellafield after intensive studies at both Dounreay and Sellafield for a proposed deep repository, which included deep boreholes and geological, environmental and safety studies. Nirex hoped to submit an application for permission to construct the repository in late 1992.

7. The Government had also initiated a fundamental review of nuclear research and development effort in the United Kingdom. The aim was to focus its efforts on the key needs for the future, which included decommissioning and waste management technologies and safety. A consultation document had been published in order to seek a wide range of interested views. A strategy for the Department of Energy's nuclear research and development programmes would be published by the end of the year.

8. The nuclear industry was international in all its aspects and no country's nuclear industry could flourish in isolation. The Agency, as one of several prominent international organizations in the nuclear field, had a key role in creating a framework of international confidence and co-operation.

9. In that context he wished to make a special mention of the Agency's work in promoting non-power applications of nuclear energy. It was a mistake to think that nuclear power technology requiring a specialized, high-quality infrastructure was necessarily the most important objective for all countries, particularly when worldwide forecasts of nuclear generating capacity were being scaled back, and public acceptance was not assured. Of greater priority for many countries was the development and application of advanced nuclear techniques in food, agriculture, medicine and industry. Those techniques not only contributed to economic development but also had a direct beneficial impact on many lives. Those benign uses must continue to be developed and supported.

10. In reviewing the Agency's activities during the preceding year, he noted a number of major events. First of all, the work of the Special Commission in the aftermath of the Gulf War and in view of the difficulties posed by the findings of inspections in Iraq had been of great concern to Member States and the Agency.

11. The second important event had been the submission to the Board of a draft medium-term plan. While much work remained to be done, the Board had welcomed the greater strategic element contained in the plan which would help its Members to reflect on the best way for the Agency to plan for the future. The Board would welcome contributions from other Member States at the Conference.

12. Thirdly, an important debate had begun on measures to make the safeguards regime stronger and more effective, which issue had acquired a new urgency in view of the discoveries in Iraq. His delegation fully supported the statement made by the Netherlands delegation on behalf of the member States of the European Community both on possible immediate measures to strengthen the safeguards system and on the need for fundamental thoughts about the future shape of the system and the most cost-effective ways in which it could achieve its objectives.

13. Fourthly, the substantial report of the international experts on the radiological consequences of the Chernobyl incident, published by the Agency in May, was a much-needed contribution to the understanding of the problem. It was an unprecedented effort, mobilizing the resources of the scientific community, to produce a balanced assessment.

14. Lastly, the discussion of objectives and approaches of safety programmes at the recent International Conference on the Safety of Nuclear Power, and the stronger international effort to deal with safety issues in Eastern Europe had enjoyed considerable support from Member States.

15. Referring to nuclear safety issues, he recalled that governments had drawn attention at the highest political levels in recent months to the importance of international co-operation in that area. The matter had also been emphasized at the summit meeting of the Group of Seven in June. In particular, the Governments of the United Kingdom, Belgium, France and Germany had issued earlier in the year a joint declaration on co-operation in nuclear energy, which included an undertaking to encourage regulators and industry to work towards mutual understanding of approaches to safety. His Government supported that process. A common objective was to facilitate international licensability of future reactor designs.

16. The Agency's natural role was to bring its technical expertise to bear on safety problems. In his opinion, such priority activities could and should be included in the Regular Budget. The recent safety problems in Bulgaria, in connection with which the authorities had sought international assistance, posed a new challenge to the international organizations concerned. In particular, when such assistance was urgently needed, it must be well co-ordinated and effectively implemented with the full co-operation of the host authorities and technical personnel at the site since they were uniquely placed to understand what was needed and had the ultimate responsibility for the safety of those plants. It was important that the lessons learned from the collaboration with Bulgaria should provide a feedback for other possible initiatives.

17. The International Conference on the Safety of Nuclear Power represented an important step towards international consensus on nuclear safety standards. In particular, his delegation welcomed the idea that Member States and the Agency should consider whether a framework convention on safety standards would indeed make a helpful contribution. A step-by-step approach, based on existing Agency guidance and documentation, seemed to be the right approach. While early agreement on binding standards would be difficult to achieve, it might be possible to agree on procedures for increasing the transparency of national decision-taking and for strengthening the present methods of disseminating best practice. He was also in favour of further international discussion with a view to identifying the safety objectives for the disposal of radioactive waste. That activity should also be built on existing Agency guidance but be separate from the work on plant safety standards.

18. The Agency's OSART and ASSET services had proved their value in promoting higher safety standards through peer review. It was necessary to consider how the scope of those programmes might be further developed. Another example of peer review - the regulators' exchange groups - had also shown its worth, and his country hoped to increase its participation in the continuing work of those groups.

19. Lastly, turning to Iraq's non-compliance with its safeguards obligations, which was dealt with in the Board's report to the General Conference[*], he considered that those violations had rightly been the subject of general condemnation and noted that their full implications were still being worked out. In that connection, his delegation wished to express its appreciation of the work of the inspection teams in Iraq, to whom the international community owed a debt of gratitude for uncovering evidence of Iraq's clandestine activities and breach of its obligations.

20. The United Kingdom had willingly provided help and information to the Agency and its inspectors, and would continue to do so, if requested. He stressed the importance of removing and rendering harmless the nuclear material present in Iraq as quickly and efficiently as possible. He regretted to note that at its preceding meeting the Board had found further evidence of Iraq's failure to comply with its obligations under the safeguards agreement.

21. Some of the findings of the inspection teams raised worrying questions about the effectiveness of safeguards in Iraq. His country had requested the Agency to submit its analysis to the Board at the earliest opportunity. He welcomed the Agency's proposed long-term plan on monitoring Iraq's future compliance with its obligations and hoped that the Agency and the United Nations Special Commission would reach early agreement on finalizing their respective reports. Ensuring future compliance might require unprecedented levels of co-operation between Member States and the Agency. However, the prime responsibility for demonstrating convincingly to the international community that Iraq was indeed complying fully with its non-proliferation obligations lay squarely on that country itself. Its record, including examples of lack of co-operation with the inspection team, did not inspire confidence.

22. That was especially regrettable at a time when other countries had realized the merits of accession to NPT: he recalled the decisions of South Africa, Tanzania, Mozambique, Zambia and Albania to become parties, together with statements of intent by France and China. He was pleased to

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[*] Document GC(XXXV)/978.

note that South Africa had signed a safeguards agreement with the Agency. Those developments were to be warmly welcomed in their own right and were not diminished by Iraq's total disregard of its obligations under the Treaty.

23. In conclusion, he observed that the advances made in extending and strengthening the non-proliferation regime should be consolidated and that the Treaty should have a positive future. The obligation to accept non-proliferation controls and international safeguards was a prerequisite for the benefits of nuclear development to be freely available and for acceptance of that development by the public.

24. Mr. EVANS (Australia) said that the present session of the General Conference was the most important in the history of the Agency. The events of the past year had underlined the challenges before the Agency and the importance for common security of its success. The joint decision of the Governments of Brazil and Argentina to conclude a full-scope safeguards agreement with the Agency would no doubt encourage the international community as a whole to deal seriously with the issues raised by security in the use of nuclear energy.

25. The momentous developments in the world over the past year had reaffirmed his country's conviction that efforts to prevent the proliferation of weapons of mass destruction could not be relaxed. In acting against the Iraqi invasion of Kuwait through the United Nations, the international community had successfully demonstrated both the primacy of the principles of justice and the efficacy of collective security. The United States and the Soviet Union had agreed on important reductions in their arsenals of strategic nuclear weapons. Solutions to the long-festering regional problems in Cambodia and southern Africa at last seemed imminent, and efforts to deal with the problems of the Middle East and the Korean peninsula were gathering pace.

26. However, international security could not be assured while the two nuclear superpowers still possessed nearly 50 000 nuclear warheads between them, three other countries were acknowledged nuclear powers and a small number of countries still wished to retain the option of joining them. The Gulf War had been a reminder that regional tensions could develop into armed

conflict, and that the States involved could still find reasons to justify - at least to themselves - the acquisition of a nuclear capability. The world needed, more than ever, to prevent the proliferation of nuclear weapons.

27. Australia supported the newly independent Baltic States membership of the United Nations and the Agency, and welcomed their accession to NPT as non-nuclear-weapon States. That would reassure the international community about any possible increase in the number of nuclear-weapon States and would make a tangible contribution to a stronger non-proliferation regime. Indications from the Soviet Union's highest legislative authority - the Congress of People's Deputies - that component Republics of the Union, as a condition of their sovereignty, would have to relinquish any right to possess nuclear weapons, were also most welcome, as was the approval of a resolution by that body on 6 September requiring the Republics to accede immediately to NPT as a condition for independence.

28. The Gulf War had underlined the dangers for international security that could arise from a combination of regional ambition, ruthlessness and the determination to acquire weapons of mass destruction. It had demonstrated the importance of efforts to discourage proliferation, and had shown that the only hope of eliminating such weapons lay in effective multilateral institutions like the Agency and instruments like NPT. The discovery of the extent of Iraq's violations of its obligations under NPT was a sobering message to the international community that it would have to make the non-proliferation regime even more effective; and the Conference could contribute to that aim.

29. The enormity of Iraq's unrepentant violation of its obligations had to be seen clearly in the context of the Treaty's importance. NPT and the Agency's safeguards system were vital for international security, and without them the world might well have been caught up in a vicious cycle of suspicion and nuclear armament. NPT had been an extraordinarily successful arms control treaty and confidence-building measure, and there was a continuing trend towards universal adherence. Australia warmly applauded the long-awaited decisions by France, China and South Africa, among others, to accede to the Treaty, and also the decisions of Zambia, Tanzania, the Baltic States and Yemen. The accession to the Treaty of all five permanent members of the United Nations Security Council would be of the utmost importance in view of their political influence and their role in nuclear trade.

30. The finding by the Agency's Board of Governors that Iraq had breached its NPT safeguards agreement was the first and only such case in the history of the Treaty. The main task before the Conference was to deter other States which might contemplate developing a clandestine nuclear programme like Iraq's. The Security Council's resolution 707 condemning Iraq reinforced that message.

31. The most effective deterrent was to take concrete, practical steps to strengthen the nuclear non-proliferation regime and the Agency's safeguards system on which it relied. If the international community tolerated or turned a blind eye to violations of international agreements, it would do so at its peril, for they constituted one of the foundations of the world order and of collective security. Many parties to NPT had still not concluded their obligatory safeguards agreements. That was a breach of the terms of the Treaty and should not be looked upon as a matter of little consequence: it would be comforting to see renewed efforts by the Depository States, other parties to NPT and the Director General of the Agency to ensure that those agreements were concluded promptly. The States in question must be firmly encouraged to live up to their obligations, as the issues involved affected the security of all. In that respect, he commended South Africa for the negotiation of its NPT safeguards agreement within weeks of its acceding to the Treaty and its commitment to bring that agreement into force upon signature - a stark contrast to the case of the Democratic People's Republic of Korea.

32. His country was very concerned about the time it was taking to have NPT safeguards applied in the Democratic People's Republic of Korea. That country had operated an unsafeguarded reactor for some time and had, reportedly, been building other nuclear facilities. As the only non-nuclear-weapon State in the history of NPT to have persisted in operating an unsafeguarded facility after accession to the Treaty, the Democratic People's Republic of Korea had left open the question whether it was pursuing a nuclear-weapons programme. Lack of confidence in the nuclear intentions of the Democratic People's Republic of Korea had generated suspicion in what remained one of the world's most dangerous security fault-lines. As an Asia-Pacific State, Australia was particularly concerned about the destabilizing consequences of the Democratic People's Republic of Korea's behaviour.

33. The Democratic People's Republic of Korea should not bring into operation any further unsafeguarded facilities, but should provide the Director General with information on facilities under construction so that safeguards could be applied promptly by the Secretariat.

34. He recalled that, when addressing the Fourth NPT Review Conference in his capacity as Australian Foreign Minister, he had called directly on the Democratic People's Republic of Korea to conclude and apply a safeguards agreement. He now welcomed the approval by the Board of Governors of the safeguards agreement with the Democratic People's Republic of Korea, pointing out that the resolution adopted by the Board called on it very clearly to sign the agreement and implement it fully.

35. Non-nuclear-weapon States operating unsafeguarded facilities inevitably generated suspicions about their nuclear intentions. The way was open to them to end that suspicion by accepting international legal obligations not to develop nuclear weapons, just as Brazil, Argentina and South Africa were proceeding to do, following recent important decisions. Australia hoped earnestly that Israel, Pakistan and India would follow that lead.

36. The international non-proliferation regime could be further consolidated by a strengthening of the Agency's safeguards system, the need for which had been made very plain by the Gulf War and the subsequent discovery of the extent of Iraq's manipulation of that system. As a major supplier of uranium to the nuclear energy programmes of many Agency Member States, Australia had a particular interest in the effective application of safeguards.

37. The extent of Iraq's violation of its obligations was now becoming evident, for which thanks must be given for the unprecedented authority accorded the inspection teams, the intelligence made available to them by Agency Member States and the resolute international response to Iraq's aggression. The use of force to ensure compliance with international obligations could not be ruled out in exceptional circumstances, but it should not be necessary to rely on force to ensure compliance with obligations under the non-proliferation regime. Iraq's violations had cast doubt on the adequacy and effectiveness of IAEA safeguards: that could not be ignored, nor was it in the international community's interests to do so. Immediate action was needed to strengthen safeguards and to provide the Agency with a better

flow of information so that it could take quick action when inconsistencies were found. His delegation wished to see the Conference adopt a clear statement on prompt and effective action to strengthen the safeguards system, and would be introducing a draft resolution to that effect.

38. As the Director General had pointed out, the case of Iraq showed that Agency inspectors could uncover clandestine nuclear activities, provided three major conditions were fulfilled, namely that Member States provided intelligence information, that the Agency had an unequivocal right to inspect sites at short notice, and that the UN Security Council supported such inspections.

39. Australia agreed with that analysis. Member States should provide the Secretariat with design information on new nuclear facilities as early as possible, and the Board should take an early decision on that question. Universal reporting of nuclear material and equipment transfers, which would require an extension of the current reporting practices, would improve the Agency's ability to detect clandestine facilities outside the safeguarded fuel cycle. Member States should also provide the Secretariat with national information on activities or trade affecting the application of safeguards, including court proceedings on violations of nuclear export controls.

40. The Agency deserved commendation for its execution of the tasks entrusted to it by the Security Council under resolution 687, and the Director General and his staff were to be congratulated for the professionalism they had shown. The activities in respect of Iraq had been more demanding that any previous inspection tasks, and his country had been pleased to contribute by providing expert personnel for the Agency's inspection teams.

41. Unequivocal right of access to suspect sites was a key element in strengthening the safeguards system. The Fourth NPT Review Conference had called on the Agency to consider the scope of special inspections, the circumstances in which they should be applied and the procedures for carrying them out. Quick action was needed, and his country wished to see consideration of the issue completed by the time of the Board's session in February 1992.

42. The Iraq exercise would provide useful information on the details of inspection practices and assumptions, which the Secretariat should study carefully as a matter of priority, with the help of the SAGSI.

43. Yet another measure needed for strengthening the nuclear non-proliferation regime was a tightening of supply and export controls. Nuclear suppliers, in line with NPT, had already begun to establish export control understandings on nuclear dual-use items where there was a clear gap in current arrangements. Australia urged all countries to review the adequacy of their export controls, using the control lists of the Zangger Committee and the Nuclear Suppliers Group as a standard.

44. All current and potential nuclear suppliers should adopt the principle that new nuclear supply could take place only when accompanied by a legally binding commitment to non-proliferation and the application of full-scope safeguards, as called for by the Fourth NPT Conference. Despite the events that had taken place in the year since then, an extraordinary number of major suppliers had still not endorsed that principle. Indeed, four of the five permanent members of the Security Council were involved. Despite what they had said in previous months, the permanent five had not set an example for other States in the area of arms control. He therefore called on France, the United Kingdom, the Soviet Union and China to take the necessary action as soon as possible.

45. A stronger safeguards system had to be backed up with the necessary human and financial resources, which was a challenging task in a climate of international financial stringency. Although the Director General had said that the Agency would be able to carry out its responsibilities for another year with a budget showing no real growth, the importance of strengthening safeguards, the growing safeguards obligations resulting from further accessions to NPT and developments in the nuclear industry all had implications for the resources needed by the Agency. He therefore found it difficult to see how the safeguards programme could be held to zero growth for much longer. The preparation of a Medium-Term Plan for the period 1993 to 1998 should improve the management of the Agency's limited resources in a decade of financial restraint, but all Member States would need to review their attitude to the Agency's budget and to look critically at the programmes funded by the Agency; Australia, for its part, had already begun to do so.

46. His country remained firmly committed to the Agency's technical co-operation programme, thus fulfilling its obligation under NPT to assist

developing countries to benefit from the peaceful applications of nuclear science and technology. Australia had also hosted and funded two Agency training courses during the past year, and had provided training for 30 IAEA fellows in fields such as radiation protection and nuclear medicine. Its scientists had undertaken about 30 expert missions on behalf of the Agency's technical assistance projects and supplied a range of equipment.

47. Australia would again pledge its full contribution, an amount corresponding to its share of the assessed budget, to the TACF for 1992. In addition, it would continue to contribute considerable extra funding for technical co-operation, particularly in support of the RCA. It was examining a programme for the next RCA triennium involving an expenditure of over US $1 million on projects in radiation protection, nuclear medicine and industrial applications of radiation technology.

48. Much of that assistance was provided through the Australian Nuclear Science and Technology Organization (ANSTO), whose development during the previous year underlined the country's determination to build on its expertise in nuclear science and technology. Three major facilities had recently been commissioned: a large tandem accelerator, a national medical cyclotron, and a supercomputer centre. ANSTO had also arranged major new projects under its collaboration with Japan's Institute for High Energy Physics and with the European Centre for Nuclear Research (CERN) at Geneva. He noted also the continuing development of the high-level waste form Synroc, invented in Australia, the Soviet Union having joined the growing list of international Synroc collaborators. A group of industrial companies in Australia had decided to proceed to the next stage in their study of Synroc's commercial viability.

49. In conclusion, he said that the dangers of nuclear proliferation were not related exclusively to the military threat. Security was multi-dimensional, and environmental developments could also pose a threat. There would be more nuclear plants in the years to come, and the Agency, through its technical work in nuclear safety, would have a vital role to play in securing adherence to even more stringent standards. The matter could not be left to individual States alone; the international community as a whole had a common interest in the highest safety standards for nuclear plants. The results of

the International Conference on the Safety of Nuclear Power held in Vienna in early September, were before the General Conference and warranted careful study. Australia supported the idea of an international framework convention on nuclear safety and wished to see the matter examined further.

50. In the past year, those who had forgotten or become complacent about the dangers of nuclear weapons proliferation had had an opportunity to look over the precipice and had realized, once again, the crucial need for the nuclear non-proliferation regime to work well.

51. The institutions on which international security was based needed to adapt to changing circumstances, especially after the enormity of the changes over the past few years. That was true even of institutions such as NPT and the Agency, which had served the international community well. Action was needed to ensure that the non-proliferation regime responded to the rapid pace of change. But what was also needed was universal acceptance of the basic fact that any international agreement, even one so manifestly in the common interest as NPT, would work only when everyone fulfilled their obligations under it.

52. Mr. JIANG (China) extended a warm welcome to the Republics of Yemen, Estonia, Lithuania and Latvia, which had just been approved for membership of the Agency.

53. In the past year, the Agency had achieved commendable results in many important areas, including the introduction of INES on a trial basis, the international project to assess the health and environmental effects of the Chernobyl accident, the wide-ranging and in-depth discussions by the Standing Committee on Liability for Nuclear Damage, which had provided a sound basis for a review conference on the Vienna Convention, the elaboration of safeguards criteria, and assisting with the implementation of Security Council resolutions 687 and 707.

54. With regard to nuclear power generation, the tremendous shock of the Chernobyl accident had led, in some countries, to a slowing down or even a complete halt in the pace of nuclear power plant construction. Most countries, however, still viewed nuclear power as a viable energy source, and had persevered with its development. According to the Agency's statistics,

32 out of 83 nuclear power reactors currently under construction were in developing countries. The Agency should therefore make greater efforts to assist developing countries with nuclear power, for example in formulating in development strategies, enhancing infrastructure, promoting human resources development and disseminating successful experience in the design, construction and operation of nuclear power plants.

55. The Agency's research and development work on the new generation of power reactors with passive safety features had been very useful. In addition to structural simplicity, a short construction cycle and lower investment requirements, they had an extremely low probability of serious accidents. Breakthroughs in such advanced technology would have a significant impact on nuclear power development over the next century throughout the world, and particularly in the developing countries. The Agency should not only provide a forum for information exchange regarding new generations of reactors, but should also make greater efforts to explore new forms of international co-operation in the development and construction of those reactors. His country would continue to participate in such international exchanges and co-operation.

56. In recent years, the Agency had done a lot of useful work in helping Member States to formulate waste management plans. The waste disposal safety standards currently being elaborated by the Agency were appropriate to the needs of Member States and should therefore be finalized as soon as possible. When considering integrated development strategies for radioactive waste management, the Agency should give greater attention to the risks to human health and the environment posed by highly radioactive liquids.

57. Nuclear applications in industry, agriculture and medical science should be given due attention. In view of differences in national development levels and the wide spectrum of nuclear applications, the Agency's activities in that area should focus on projects for the development and transfer of techniques with significant socio-economic benefits for developing countries, and regional co-operation should be further developed. Careful identification of priorities was important in view of the policy of zero real growth in the Regular Budget.

58. There was growing awareness among States that the greenhouse effect and other environmental problems such as acid rain, air pollution, spent radiation sources and radioactive wastes were posing an increasingly serious threat to the environment. Both emergency measures and long-term action were urgently needed to protect the environment and human health. China appreciated the Agency's energetic efforts in recent years in such areas as promoting public awareness of the superiority of nuclear power in terms of environmental protection and safety, carrying out a comparative assessment of nuclear and other sources of energy, guiding the safe use and management of radiation sources, and assisting Member States to plan and build radioactive waste repositories. The Agency should play a more active role in environmental protection. Industrialized countries, with their abundant financial and technical resources, should not only protect their own nuclear environment, but should assist developing Member States to do the same.

59. In the development of its nuclear industry over the past three decades, China had consistently given first priority to safety and protection. Safety had consistently been maintained at a relatively high level by means of comprehensive regulations, the establishment of safety and environmental protection facilities, and the application of substantial research efforts. The Chinese nuclear industry had in 1981 begun an assessment of the radiation environment of over 40 nuclear facilities, including uranium mines, uranium processing and enrichment plants, fuel fabrication and reprocessing plants, reactors and plutonium metallurgy and processing plants. The results showed that the radiation impact on the environment of China's nuclear industry over the past three decades had been very slight, and that the negative impact had been negligible compared to those existing naturally or arising from other human activities. China's nuclear industry would continue to make a positive contribution to economic development, environmental protection and enhanced public health.

60. The Chinese Government had always attached importance to developing co-operative relations with the Agency. Over the past year, China had actively supported and participated in the technical committee meetings on the design requirements of advanced water reactors and on uranium provinces in Asia and the Pacific. China had hosted or financed six regional training

courses and technical committee meetings, and provided training for scientists and technicians from developing countries, particularly Asian-Pacific countries. China had also provided technical expert services in various fields for developing countries. In carrying out technical assistance and co-operation projects, China had been actively exploring ways and means to raise the implementation rate, and had enhanced project evaluation and management. As a result of joint efforts, the Agency's technical assistance projects in China were playing a positive role in numerous sectors of the national economy and had produced substantial socio-economic results. Nuclear safety and radiation protection were an important aspect of that co-operation. In the previous year, China had invited the Agency to carry out Pre-OSART evaluation of the Daya Bay nuclear power plant in Guangdong Province and a Pre-OSART follow-up review of the Qinshan nuclear power plant. In March, China had formally joined the International Nuclear Event Scale and had participated in the Event Reporting System as an observer. China's voluntary submission of some civilian nuclear facilities to Agency safeguards was an indication of its commitment to supporting the safeguards regime.

61. In the past year, there had been further progress in China's nuclear power development. The Chinese-designed and -built 300 MW(e) pressurized water reactor in Qinshan had reached the stage of commissioning and startup. Units 1 and 2 of the Daya Bay power plant, which was jointly funded by China and Hong Kong, were currently at the stage of equipment installation, and preparations for production were continuing according to schedule. Active preparation was also under way for the 2 x 600 MW nuclear power plant for Phase II of the Qinshan project, and other nuclear power projects were also under consideration or being planned.

62. In developing its nuclear industry, China had given priority to research and development for nuclear science and technology. Over the past year, significant research results had been obtained using newly-built facilities such as an HI-13 tandem accelerator, a high-current pulse electron beam accelerator and the China Tokamak HL-1. A series of experiments in, inter alia, thermal physics, power escalation and pulse mode operation had been carried out on the Chinese-designed and -developed uranium-hydrogen-zirconium pulsed research reactor. The conceptual design of a fast reactor

was virtually complete and major progress had been made in the development of mixed oxide fuel pellets and materials for fuel assemblies. Following the successful commissioning of the Chinese-designed and -built 5 MW low-temperature heating reactor, 200 MW low-temperature heating reactors were currently being designed.

63. According to the Statute, two of the Agency's major objectives were to promote the peaceful applications of nuclear energy and to encourage their use for the benefit of mankind. All States had the right to make use of nuclear energy techniques, and since the 1980s, numerous developing countries had begun activities in that area. Their call for international co-operation in the development and use of nuclear power was entirely just and reasonable, but the current state of affairs was far from satisfactory. The industrialized countries continued to monopolize the technology relating to nuclear science and nuclear energy, while developing countries continued to encounter financial problems and technical constraints. Some developed countries were unfavourable to international co-operation with developing countries on peaceful nuclear energy applications, an attitude which could only cause serious concern. Although appropriate measures were necessary to prevent the proliferation of nuclear weapons, and their acceptance was a precondition for co-operation, they should by no means hamper or restrict international co-operation on peaceful nuclear energy applications. Such restrictions compromised the legitimate right of countries, and particularly developing countries, to benefit from those applications.

64. The Chinese Government had always adopted positive, prudent and responsible policies regarding nuclear exports, with strict adherence to three main principles, namely, exclusive use for peaceful purposes, acceptance of Agency safeguards and no transfer to third countries without China's prior consent. China was fully conscious of the sensitive nature of facilities, equipment and technologies for uranium enrichment, reprocessing and heavy water production, and had therefore placed strict controls on their export. No transfers of such equipment or technology had taken place, and none were planned.

65. In order to support safeguards activities, China would continue to notify the Agency of her nuclear material exports to and imports from

non-nuclear-weapon States, whenever the quantities involved exceeded one effective kilogram.

66. Turning to the issue of the Treaty on the Non-Proliferation of Nuclear Weapons, China had always advocated the complete prohibition and destruction of nuclear weapons. China was not in favour of, and did not encourage or engage in, nuclear proliferation, or help other countries develop nuclear weapons. NPT was the most universal international treaty in the field of disarmament and arms control, and despite its drawbacks and deficiencies, had played an important role in preventing nuclear proliferation, thus having a positive impact on the maintenance of world peace and stability. China supported the three main objectives of the Treaty, i.e. preventing nuclear proliferation, promoting nuclear disarmament and facilitating international co-operation on the peaceful uses of nuclear energy. In the previous year, China had sent an observer delegation to the Fourth NPT Review Conference. In order to contribute to achieving the objectives of NPT, Premier Li Peng had recently announced in Beijing that China had decided in principle to accede to the Treaty.

67. Looking to the future, great opportunities lay ahead, as well as difficulties and challenges. The Agency would surely, with the active participation of all Member States, succeed in carrying out the onerous tasks entrusted to it and achieve its statutory objectives. Strict compliance with the Statute and adherence to the principle of mutual respect of sovereignty and equal consultations were necessary. China would continue, with other Member States, to contribute to the thriving worldwide development of the peaceful uses of nuclear energy.

68. Mr. AHMAD (Pakistan) welcomed Yemen, Estonia, Latvia and Lithuania as new Members of the Agency.

69. The General Conference was taking place at a time of crucial changes in world affairs. There was greater convergence on the non-proliferation issue, highlighted by France's and China's decisions to accede to the NPT, and encouraging developments in the area of disarmament, offering opportunities for diverting resources from military to peaceful purposes. Although many distinguished delegates had called for further strengthening of the Agency's

safeguards, the Agency should not lose sight of its equally important role of promoting the peaceful uses of atomic energy for sustainable development.

70. Pakistan was firmly convinced that regional commitments to non-proliferation could contribute towards achieving a world completely free of nuclear weapons. Pakistan had advocated the establishment of a nuclear-weapon-free zone in South Asia since 1972 and earlier in the year had proposed that the United States of America, the Soviet Union and China consult with India and Pakistan to discuss and resolve the issue of non-proliferation in South Asia with the aim of reaching an equitable agreement to keep the region free of nuclear weapons.

71. Only stability and economic prosperity could lead to lasting peace and energy was a prerequisite for sustained economic growth. The use of fossil fuels posed serious environmental problems, which would become even more serious with further industrialization, unless appropriate alternative measures were adopted. Nuclear power offered a way out of the dilemma, as a benign, practically inexhaustible resource, which was cost competitive in most countries.

72. To deny developing countries peaceful nuclear technology through the fear of the proliferation of nuclear weapons could seriously jeopardize the development aspirations of such countries, particularly those which were deficient in conventional energy resources. The emphasis should be on understanding the energy needs of developing countries and the Agency should focus greater attention on the energy requirements of those countries, in accordance with Article III.A.2 of the Statute. The Agency could, for example, play a catalytic role in developing economically viable, advanced small and medium-sized power reactors for use in developing countries as an alternative to coal and oil-fired plants and it should actively promote the standardization of the design of such reactors. South-South co-operation should also be encouraged, since a number of developing countries were in a position to share their experience in the design, construction and operation of nuclear power plants.

73. The proposal to amend Article VI.A.2 of the Statute had been under consideration for some fifteen years, but no steps had yet been taken to redress the gross under-representation of Africa and MESA in the Board of

Governors. It was therefore high time to take the necessary measures to ensure equitable representation.

74. Pakistan supported the adoption of the Agency's programme and budget as presented in document GC(XXXV)/955. However, as it had repeatedly pointed out, the concept of "zero-growth" had outlived its usefulness, although it had enabled the Agency's Secretariat to gain valuable experience and expertise in the optimum allocation of limited financial and manpower resources. Allocations for technical assistance should be substantially increased and freed from the uncertainties of voluntary contributions. It was regrettable that so far the ratio of payments to the target for the Technical Assistance and Co-operation Fund was less than 40%. For its part, Pakistan had paid its assessed Regular Budget contributions and voluntary contributions to the TACF for 1991 very early in the year and had also pledged its share to the TACF for 1992. With regard to the Medium-Term Plan, Pakistan fully shared the views of the Group of 77 that a proper and equitable balance had to be maintained in all the Agency's activities.

75. The recently concluded International Conference on the Safety of Nuclear Power had provided a forum for a valuable exchange of views. It had suggested many tasks which the Agency should undertake, especially in ensuring the safety of older reactors. Although Pakistan itself had an active interest in nuclear power, it should be remembered that two thirds of the Agency's members did not have any nuclear power reactors, and for them the Agency's programmes in the areas of radiation protection, regulatory infrastructures, guides for the safe transport of radioactive material and so on were of greater relevance. The Agency should therefore maintain a proper balance in its nuclear safety activities.

76. His delegation appreciated the various services (such as OSART, ASSET, RADWASS, IPERS) which the Agency offered to its Member States and the work done by NUSSAG and SAGSI. Pakistan was also a participant in the Agency's INES programme. Equally commendable were the databases such as INIS and PRIS, which provided a forum for the exchange of safety-related data and operating experience among different countries.

77. The Director General had made commendable efforts to reduce the serious imbalance in the representation of developing countries on the Agency's

Professional staff. However, much still needed to be done to give adequate representation in the Secretariat at the higher and policy-making levels.

78. With regard to developments in Pakistan, the country would need large inputs of energy in order to maintain a reasonable level of economic growth and to meet the growing aspirations of its people. Pakistan's limited fuel resource potential called for a carefully planned gradual and smooth transition to non-fossil energy options, of which nuclear electricity was the major alternative. Consistent with its longstanding policy, any nuclear power plant acquired from abroad would be placed under Agency safeguards.

79. Pakistan appreciated the help it had received from the Agency in ensuring the safe operation of its Karachi nuclear power plant. His delegation hoped that the Agency would further strengthen its efforts in the area of safety by speeding up the implementation of General Conference resolution GC(XXXI)/RES/474 calling upon supplier States to share all relevant safety information with recipient States.

80. Pakistan was also grateful for the technical assistance provided by the Agency in the form of expert missions and scientific visits to assist it in the conversion of its 5 MW research reactor from high enrichment fuel to low enrichment fuel and its upgrading to 10 MW. The first core of LEU fuel had been received from China and was being installed. The upgraded reactor would of course continue to be under Agency safeguards.

81. Pakistan was also actively engaged in promoting the use of radioisotopes and radiation sources in agriculture, medicine and industry. Pioneering work had been undertaken in biotechnology and genetic engineering and in the area of the diagnosis and treatment of malignant diseases. There were at present nine centres in Pakistan treating more than 170 000 patients from all over the country every year.

82. For the past fifteen years Pakistan had organized the International Summer College on "Physics and Contemporary Needs" co-sponsored by the Agency's International Centre for Theoretical Physics in Trieste. Pakistan had also hosted several workshops and training courses under the RCA and his country greatly appreciated the role played by the RCA in fostering South-South co-operation.

83. Mr. IYENGAR (India), welcoming the Republics of Yemen, Lithuania, Latvia and Estonia as new Members of the Agency, said that the Conference assumed special significance against the background of a number of important recent events. It was unfortunate that unforeseen and unprecedented circumstances had led the Agency to carry out intrusive inspection activities exceeding its statutory role and the provisions of the safeguards agreements. Though that task had been mandated by the UN, it was essential to avoid the natural tendency to globalize such actions. A single international experience should not be allowed to fundamentally alter the character of the Agency, as spelt out in its Statute.

84. It should be remembered that the Agency's fundamental role, as envisaged by the Statute, was promotional. Article II, setting forth the objectives of the Agency, laid down that it should seek to accelerate and enlarge the contribution of atomic energy to peace, health and prosperity, subject, of course, to safeguards against abuses for military purposes. The aim of the provisions in the Statute for safeguarding nuclear materials and facilities was to prevent the abuse of atomic energy originally intended for peaceful purposes. However, that should not result in a major proportion of the overall budget being consumed by the safeguards function alone; a balance must be maintained between the Agency's promotional and regulatory activities.

85. In that context, the enormous energy requirements of the developing countries was an obvious area where the Agency could play a leading role. The recently held symposium on electricity and the environment in Helsinki had also highlighted the need to contain carbon dioxide emissions by substantially reducing the burning of fossil fuels for electricity generation, in which context nuclear energy was an obvious alternative. There was an immediate need to develop new reactor designs to generate low-cost electricity, increase safety and enhance fuel resource utilization for the energy-hungry developing world in particular. It was welcome, therefore, that, in its draft Medium-Term Plan, the Secretariat had proposed that attention be devoted to the development of small and medium-sized reactors and specialized reactors for the desalination of water, which should be given the highest priority. Making small and medium-sized reactors competitive would be of considerable relevance to the developing countries, and the use of thorium, as important a resource as uranium, also merited active consideration.

86. It followed that any policy formulated in the Agency should not cloud the atmosphere and hamper the efficient functioning of the Agency in discharging its promotional functions and responsibility. Further, it must be ensured that there was no interference in the internal policies of Member States and no infringement of their fundamental right to carry out research and development and thereby to benefit from its spin-offs. An emphasis on "special inspections" or, as sometimes referred to, "challenge inspections", beyond the provisions of existing documents was bound to cloud the atmosphere, for the simple reason that "challenge inspections" essentially presupposed the acquisition by the Agency of information through questionable means.

87. Another important issue would be the way "sensitive technology" was defined. The dividing line between sensitive and non-sensitive technology was rather thin, one of the essential characteristics of modern science and technology moreover. To achieve its objective of promoting the peaceful uses of nuclear energy, the Agency should therefore ensure that no artificial barriers were raised to impede the development of high technologies.

88. Scientific discoveries could not remain perpetual secrets. History had taught that science could never be the preserve of only some nations, a lesson that was equally applicable to technology. Further, unethical practices by some countries infringing on committed international norms had undeniably resulted in sensitive scientific and technological know-how being passed on indiscriminately. Hence, signing an agreement or treaty was patently not by itself the recipe for preventing proliferation. More important was self-restraint, a policy which, despite having developed nuclear technology several years ago, his country continued to practise. Deeply committed to the cause of disarmament, it had submitted a comprehensive Action Plan to the Third Special Session of the UN General Assembly devoted to disarmament, calling upon the international community to negotiate a binding commitment to eliminate nuclear weapons within a specific time-scale, appropriate commitments being assumed by non-nuclear-weapon States. Important developments in the area of disarmament were heartening, and it was hoped that the dismantling of psychological and political barriers would lead to further progress towards the widely cherished objective of the complete elimination of nuclear weapons.

89. India continued to regard the Regional Co-operative Agreement (RCA) as a valuable instrument for promoting co-operation among developing countries, particularly in human resource development. During the past year, it had hosted regional training courses in research reactor safety principles and isotope techniques in hydrology. Three more training programmes and workshops had been planned for 1991-92. Activities under RCA should be expanded to create a base for nuclear power generation and should therefore include areas such as surveying and prospecting of atomic minerals, reactor operations and waste management. To contribute further to the human resource development of RCA member States, he had recommended that the Agency consider establishing a regional institute to provide training facilities in various nuclear science and technology disciplines and his country would be happy to provide a site for such a useful institution. It was also vital to restore the enthusiasm and dedication with which the Agency's technical co-operation programmes were initially conceived. He pledged India's assessed share of voluntary contribution to the Agency's Technical Assistance and Co-operation Fund for 1992.

90. During the past year, India had made significant progress in her various programmes for the peaceful application of nuclear energy. All the seven operating nuclear power reactors were functioning satisfactorily. The coming months were expected to see the commissioning of two more pressurized heavy water reactor (PHWR) units of 220 MW(e) each at Narora and Kakrapar. The setting up of two 500 MW(e) PHWR units at Tarapur had been approved and it was hoped that the Indian nuclear power programme would be stepped up. The lessons learnt in building and operating the indigenous PHWRs had contributed to the development of new reactor designs and also to the resolution of critical operational and maintenance problems. The infrastructure for the production of uranium fuel and zirconium tubes had also considerably expanded and two new heavy water plants had commenced production, all of which augured well for the future development of the indigenous nuclear power generation programme.

91. The 60s and 70s had seen a number of Agency-sponsored international meetings, at which scientists from different areas of fundamental science interacted constructively in developing new areas of research related to the

emerging technologies. It was regrettable that those activities had recently been diluted in favour of those dealing mainly with rules, regulations, accounting and safeguards, which, though by no means trivial, seemed to dominate the stage. The Agency was a unique UN organization devoted to promoting international co-operation in advanced areas of science and high technology. However, an examination of the Agency's resource allocations to various areas of activity clearly demonstrated the need for a reorientation of priorities. The absence of an active scientific advisory committee was a major lacuna needing to be filled, and he therefore urged the Agency to seek the advice of eminent international experts so that its activities were not reduced merely to performing mundane tasks. The inaugural address had referred to the cycle of growth in nuclear power, possibly occasioned by new scientific and technological breakthroughs, a very important aspect where the need for advice from senior scientists to the Agency needed to be stressed.

92. With reference to the recently held international conference on the safety of nuclear power, it should be noted that, universal as the principles of nuclear safety might be, the details varied from one type of reactor to another, as reflected in the various IAEA safety codes and guides, which Member States should be encouraged to use in the design, construction and operation phases. Effective compliance with the principles involved in safety must be verified by the national regulatory bodies. The IAEA should play a greater role in assisting countries needing to develop and manage the safety of nuclear power plants independently. However, any attempts to establish an international convention or binding regulation for nuclear power safety would only be counter-productive, especially where developing countries were concerned. In conclusion, he said that the increased representation of developing countries on the staff of the Agency's Secretariat was welcome.

93. Mr. AMROLLAHI (Islamic Republic of Iran), speaking first of all on behalf of the President of the Islamic Republic of Iran, welcomed the gathering of the thirty-fifth regular session of the General Conference of the International Atomic Energy Agency and expressed the hope that the Agency's endeavours to promote the peaceful uses of nuclear energy would continue unabated. Although the peaceful use of nuclear science and technology was currently beset with problems, he believed that the utilization of that energy form was essential to the evolution of human civilization.

94. The Government of the Islamic Republic of Iran would uphold all the international instruments of control and verification relating to the peaceful uses of nuclear energy. Equally, considering military applications of nuclear energy to be inadmissible under any pretext, it supported the concept of a nuclear-weapon-free world and, in particular, a nuclear-weapon-free zone in the Middle East and the Indian Ocean and would do its utmost to achieve that goal. Attempts to use nuclear science and technology for non-peaceful purposes not only seriously endangered global safety and security, they inhibited the peaceful uses of that energy form in Third World countries for the purposes of development and progress. If the manufacture of nuclear weapons was not stopped and nuclear weapon arsenals were not destroyed, future generations would always be threatened by nuclear conflicts. It was the responsibility of world leaders to discharge their duties in that respect. He hoped that the International Atomic Energy Agency would ensure, as far as it was able, that nuclear technology supplier countries did not prevent Third World countries from gaining access to nuclear technology and would not set up obstacles to the spread of peaceful nuclear applications. He commended the outstanding work of the Director General who, despite various difficulties, had achieved success in meeting the prescribed objectives.

95. Speaking next on his own behalf, he congratulated the President of the Conference on his election.

96. The thirty-fifth regular session of the General Conference was being held at a time when positive trends were becoming apparent in the field of the peaceful uses of nuclear energy. Greater interest was being shown by various States in the NPT and IAEA safeguards. The acceptance of safeguards by South Africa and the revision by the Democratic People's Republic of Korea of its policies concerning the NPT and safeguards, which he hoped would eventually lead to full acceptance, were all significant developments that would further isolate the usurper Israeli régime as a nuclear threat blatantly ignoring all international means of control and verification. He urged all States which had not yet joined the NPT or had not accepted safeguards, and particularly developing countries, to reconsider their past policies in that respect.

97. Currently, global transformations were taking place which all pointed to the imminent formation of economic power blocks. Eventually the North would be reorganized into three or four blocks of States; the States within each block would be united via economic as well as political charters, and the blocks thus formed would be linked by agreements on trade, technology transfer and resource allocation. That would be a truly commendable development, but only as far as the East and West were concerned. The polarization it would cause meant that the States of the South would have to form closer ties with one another and, eventually, economic blocks in the South to counterbalance those of the North. Disunity and divergence of interest would render the States of the South impotent against the dominance of the North. For that reason, it was imperative that the developing countries reassess seriously their current and often outdated policies, bearing in mind the broad implications of contemporary developments.

98. It was possible that the economic blocks of the North had already identified their domains of influence and interest in the South, a strategy which could be termed "new colonialism". If such arrangements were allowed to take root, the developing States would never be able to define freely their future course of progress and would remain in a perpetual state of "development", ideologically and politically alienated from one another and the rest of the world. The advent of the "new colonialism" was clearly manifesting itself in the form of increasingly restrictive policies imposed by the North to regulate the transfer of technology to the South. In that regard, the so-called "trigger list" of "off-limit" technologies to which developing countries were given only strictly controlled access was constantly expanding and was already in force. Nuclear energy and associated technologies, even when used for peaceful purposes, were high on the list.

99. Thus, the following issue merited serious contemplation by all Member States, particularly those belonging to the South. - Considering the fact that the developing countries could not at present readily benefit from nuclear energy for power production purposes, and considering also the fact that advanced applications of nuclear science and technology in the developing countries for peaceful purposes were practically impossible, what role could the peaceful applications of nuclear energy play in the future of the

developing countries and, by extension, what was the Agency's role in that respect in the light of its statutory objectives?

100. On the other hand, the unfortunate misapplication of nuclear science and technology by certain misguided régimes had played into the hands of the technology-holders. Iran had always given its full support to sanctions against States misusing that technology and would continue to do so. However, isolated instances should be treated individually and should not be used as grounds for a general penalization of the developing countries. If recent events pointed towards intended proliferation by some countries then, rather than depriving all developing States of the benefits of nuclear technology, the causes of the adoption of such policies should be identified. The main cause was clearly the potential nuclear threat of the usurper régime of Israel which, encouraged by the complacency of the international communities, had manufactured and stockpiled nuclear weapons, blatantly ignoring international treaties of control and verification regimes. The establishment of peace and security in the Middle East was not feasible without the complete nuclear disarmament of Israel. The potential nuclear threat of Israel had been and would continue to be the source of the tension and insecurity in the Middle East.

101. The Agency's safeguards system involved great effort and considerable expense. Colossal international efforts were being channelled into implementing the NPT and keeping it alive after 1995 through the organization of costly and time-consuming review conferences. However, the growing restrictions on access to nuclear science and technology for peaceful purposes were a clear indication that supplier countries realized that the current instruments of control and verification were inadequate. If that were not the case, why were independent restrictive measures being imposed by the technology holders such as those in the "Nuclear Suppliers Group" and the "Zangger Committee", and why did some supplier countries, in clear violation of the terms of NPT, unilaterally enact legislation restricting, often retroactively, the transfer of nuclear science and technology even to those countries which were NPT signatories and had accepted full-scope IAEA safeguards? It was also disturbing to note that the Agency reflected such restrictions in its own documents, such as INFCIRC/209/Rev.1 and INFCIRC/254,

without adopting an official position. The so-called "new world order" could only be meaningful if mankind were able to benefit from the progress of technology without prejudice. All men should have an equal share in the benefits of modern technologies and, needless to say, in their potential risks. Currently, however, 96% of the benefits of nuclear power accrued to the peoples of the developed countries only, whereas the potential risks were faced by all.

102. Iran's nuclear power programme had been a technically sound but capital-intensive undertaking supported by qualified indigenous manpower. The current chronic power shortages in the country and the amount of capital which had been sunk in unfinished nuclear power plants were strong incentives not to abandon such projects, notwithstanding the refusal of the Government of Germany to fulfil its obligations under bilateral agreements totally disregarding the fact that Iran had been among the first countries to accept international systems of control and verification. Such refusals clearly had political motivations. In any event, the developing countries should be aware that, if the discriminatory policies of the Government of Germany prevailed, the future of the nuclear industry in all developing countries might become highly questionable since the credibility of bilateral agreements had been completely destroyed. Iran was, nevertheless, deeply committed to completing the project, even if that meant having to buy or order again the parts which had been blocked, and expected the Agency's co-operation at all stages including construction and even operation. Under the circumstances, Iran was left with no alternative but to pursue its claims through the competent arbitration tribunals.

103. Despite the promotional endeavours of the Agency, the impressive performance of nuclear power plants worldwide, and the extremely effective peaceful applications of nuclear science, the politics of the issue had attained such disproportionate importance that the peaceful benefits of nuclear energy had been totally overshadowed by its strategic implications. The restrictive policies of supplier countries were irreconcilable with the mandate of the Agency. The Agency could not possibly fulfil its mandate of "accelerating" and "enlarging" the contributions of atomic energy to peace, health and prosperity throughout the world while it was constrained by the

formidable political, technical and financial restrictions imposed by supplier Member States. The peaceful use of nuclear energy was the inalienable right of all sovereign nations and, having once accepted effective means of control and verification, no country should be deprived of the benefits thereof, unless of course it was found to be in violation of its non-proliferation obligations.

104. It was often asked why a country rich in indigenous fossil fuel resources, especially oil and gas, needed nuclear power. The more salient reasons were as follows. - Firstly, it was imperative that such countries reduce their total dependency on a single depletable commodity and shift their oil-based economy to other industries. Secondly, nuclear technology in general and nuclear power in particular had a tremendous potential for upgrading the technical and industrial infrastructure in a country and enhancing its qualified manpower resources. Thirdly, the environmental arguments against the use of fossil fuels for power production which had been put forward in the industrialized States should, by logical extension, also apply to developing countries irrespective of their indigenous fossil fuel resources. A document recently published by Siemens, commenting on a German Parliamentary report entitled "Preventive Measures to Protect the Earth's Atmosphere", argued in favour of expanding nuclear power for environmental reasons. Siemens was the contractor for the unfinished Iranian nuclear power plants and was currently refusing to fulfil its obligations. Siemens and the Government of Germany were clearly applying double standards. Fourthly, relying solely on depletable resources was hardly commensurate with sound policy and the prosperity of future generations. Indeed, the USA and the USSR which possessed considerable petroleum and gas resources, did not rely solely on fossil fuels. Developing countries, irrespective of their indigenous energy resources, were faced with increasing population growth, expanding towns and cities, and the implementation of increasingly demanding development programmes, all of which resulted in an ever-increasing demand for electrical energy. In view of the well-established drawbacks of fossil fuels, the only primary energy resources suitable for electrical power generation for the foreseeable future were hydroelectric power and nuclear power. Hydroelectric power had limited potential, particularly in the developing countries; thus, nuclear power appeared to be the only option.

105. Positive steps needed to be taken by the developing countries and supplier countries which, with the assistance of the International Atomic Energy Agency, might help resolve the current impasse. The following steps could be taken by the developing countries. - Firstly, there should be full acceptance of all internationally approved control and verification mechanisms particularly by those States which already operated nuclear power plants. Those States might otherwise find the maintenance and future expansion of their nuclear power programmes increasingly difficult. Secondly, close and formal regional ties should be established with a view to achieving nuclear-weapon-free zone status. Iran had been the first country to propose such a measure for the Middle East and would continue to support the issue. Thirdly, States should give their full support to the NPT and its extension beyond 1995. On the other hand, supplier countries should continue their joint efforts to develop new generations of small- and medium-size nuclear power reactors featuring enhanced passive safety features with particular emphasis on standardization, reduced lead time and, consequently, reduced capital requirements. Advances in fuel efficiency combined with lower capital costs should make nuclear power plants increasingly competitive by comparison with plants running on fossil fuels.

106. On the basis of the above, the Islamic Republic of Iran was seeking to initiate a programme designed to resolve the current deadlock with regard to nuclear power projects. That programme would aim broadly at the following: firstly, a review of the deficiencies of the current systems of control and verification with a view to strengthening those systems so as to mitigate all proliferation concerns expressed by supplier countries; secondly, the promotion of new-generation nuclear power plants with enhanced safety, design and operational features which would remove proliferation concerns; thirdly, the promotion of control strategies and of support for the extension of the NPT beyond 1995, perhaps with some revisions; fourthly, the promotion of closer and more direct dialogue between supplier and recipient countries with a view to fostering greater understanding. The Agency should play a central role in the successful implementation of that programme. The resolution of the deadlock was important not only to the future progress of the developing countries, but also to the preservation of the integrity of the Agency.

107. In conclusion, he outlined the activities which the Atomic Energy Organization of Iran (AEOI) had undertaken during the previous year. - Iranian nuclear research centres were engaged in various projects in the fields of nuclear physics, radiation chemistry, plasma physics, laser techniques, production, the application of radioisotopes and radiopharmaceuticals, and various other radiation applications. The Gamma Irradiation Centre, which had a capacity of 200 000 Curies, had been very active and, during the previous year, 40 000 packages of various items had been sterilized. The laboratories for the application of nuclear techniques in agriculture had succeeded in producing strains of wheat, barley and other cereals with improved characteristics. The AEOI was also responsible for the protection of all personnel working with ionizing radiation. Therefore, all imports and exports, and all activities connected with radiation were routinely controlled and supervised by the AEOI. Furthermore, the AEOI was responsible for the inspection of radiation application centres and provided radiation protection services to 9000 personnel employed at 1400 laboratories and other institutions which used radiation throughout the country. The Conference on High Levels of Natural Radiation had been held in Ramsar with the co-operation of the Agency. He thanked the scientists who had taken part in the Conference and made it a success, and the Agency and other supporting organizations which had provided assistance.

108. Ms. MACHADA QUINTELLA (Brazil) welcomed Estonia, Latvia, Lituania and the Republic of Yemen as new Members of the Agency and expressed appreciation for the wide range of highly qualified services the Agency had rendered to Member States and the international community in 1990. Her Government placed special emphasis on nuclear safety and radiological protection. A number of significant initiatives had been carried out in those areas, and others were proposed as a follow-up to the International Conference on the Safety of Nuclear Power: Strategy for the Future.

109. The Agency's services in radioactive waste management were of special relevance to Brazil, which had received an Agency mission in 1990 that had furnished valuable assistance in achieving the disposal of wastes resulting from the radiological emergency at Goiânia in 1987. The Angra I nuclear power plant had attained a high level of operational safety and a good performance record, thanks largely to two OSART missions sent by the Agency.

110. Ever since the Chernobyl accident, the idea that the effects of nuclear accidents could not be confined geographically had been reinforced among the general public. Nuclear accidents thus became the concern of all. International nuclear co-operation was the key word in the promotion of safe, peaceful uses of nuclear energy. Considerations of global security had necessarily to take into account the fact that nuclear safety should be attainable by developing countries, and to that end, there should be an open exchange of experiences and technology. Whenever the exchange involved sensitive technologies that might be used for proscribed activities, they could take place under international supervision. Yet the risks of misuse of such technologies should by no means hinder international co-operation.

111. At the April 1991 session of the United Nations Disarmament Commission, Brazil and Argentina had presented a joint initiative that related, inter alia, to the benefits that both supplier and recipient countries could derive from the establishment of broadly based, transparent and equitable multilateral regulations for international transfers of goods, services and know-how in relation to sensitive technology. The lack of effectiveness of current regulations, and the restrictions they caused on legitimate commerce and on access to advanced technology, impaired their credibility.

112. Turning to the Agency's role in promoting and providing international co-operation in the peaceful uses of nuclear energy, she said her delegation had always been a strong supporter of the Agency's technical co-operation programme. Its importance for developing countries could not be overemphasized, yet it also significantly benefited industrialized nations.

113. Environmental protection had become a priority in Brazil. Without losing sight of its development requirements, Brazil was doing its part to preserve its ecosystems and expected other countries to do the same, especially those that were primarily responsible for environmental deterioration. Her country was looking forward to the United Nations Conference on Environment and Development, to be held in Rio de Janeiro in 1992.

114. In the past, Brazil had been one of the main beneficiaries of the Agency's technical co-operation. More recently, it had started contributing

to the programme - sharing its experiences with other developing countries, especially in Latin America, through ARCAL. In 1990, ARCAL had continued to promote nuclear development in participating countries without binding them to financial counterparts they could not afford, and while taking fully into account the orientation and capabilities of their nuclear programmes. ARCAL's present organizational structure had proven to be adequate for accomplishing the programme's objectives. Some reorientation of project areas might be beneficial, however, as might the thorough revision of the programme's guidelines recommended by the Planning and Co-ordination Committee.

115. She reaffirmed her Government's support for the Agency's safeguards system operating on the basis of non-discrimination and of negotiations with sovereign States. In providing safeguards services to Member States, the Agency was expected to give due consideration to their right to preserve the technological advances they had already achieved, for those advances had involved significant efforts to overcome constraints.

116. The current Brazilian Government had demonstrated its strict adherence to the principle of peaceful uses of nuclear energy. Brazil's nuclear policy was governed by the Constitution, promulgated in 1988, which stated that all nuclear energy had to be used for peaceful purposes, and by the Treaty of Tlatelolco. Although that Treaty was not in force in Brazil, the country's policy had been to abide fully by it. Since assuming office, President Collor had established a policy of making the nuclear programme more transparent, in compliance with the wishes of Brazilian citizens.

117. In its statement to the General Conference in 1990, the Brazilian delegation had referred to the dynamic process of political consultation, economic integration and technical collaboration between Brazil and Argentina. That process had born fruit. In November 1990, the Presidents of Brazil and Argentina had signed a declaration on common nuclear policy that constituted a landmark for both countries. Besides reaffirming the commitment of the two countries to the use of nuclear energy solely for peaceful purposes, the declaration had approved three steps: the establishment of a common system for accounting and control of nuclear materials, the negotiation of a joint safeguards agreement with the Agency, and the adoption of measures conducive to the full entry into force of the Treaty of Tlatelolco.

118. Brazil and Argentina had signed a bilateral agreement that was now under consideration by both national parliaments. The agreement would create a Brazilian-Argentine agency for accounting and control of nuclear materials. The two countries had already begun negotiation with the Agency of a joint safeguards agreement, and they looked forward to its early signature.

119. Brazil's commitment to safeguards on its nuclear activities was not an isolated gesture. In a declaration signed with Argentina and Chile on 5 September 1991, the Brazilian Government had committed itself to prohibiting chemical and bacteriological weapons even before the conclusion of negotiations on the convention concerning chemical weapons.

120. In recent months there had been additional signings of safeguards agreements with the Agency. That process reflected the voluntary decisions of each country, which was as it should be. Safeguarding nuclear activities was one of the Agency's most important roles, and was also one of the most delicate. Its effectiveness depended upon the technical soundness of the system and on the expertise of its professionals, as well as on its political acceptance. Save in exceptional cases, safeguards should be applied by working side by side with the country involved. Confidence in the Agency's technical expertise and trust in its unbiased motivations were essential to effectiveness.

The meeting rose at 5.40 p.m.