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RECORD OF THE THREE HUNDRED AND FORTIETH PLENARY MEETING

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President: Mr. SANTANA CARVALHO (Brazil)

later: Mr. AMMAR (Tunisia)

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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

AFRA African Regional Co-operative Agreement for Research,

Development and Training Related to Nuclear Science and

Technology

ASSET Analysis of Safety Significant Events Team
CEC Commission of the European Communities
INSAG International Nuclear Safety Advisory Group

IPEN Peruvian Nuclear Energy Institute

IPF Indicative Planning Figures

LWR Light-water reactor

MESA Middle East and South Asia

NPT Treaty on the Non-Proliferation of Nuclear Weapons

NUSS Nuclear Safety Standards

OPANAL Agency for the Prohibition of Nuclear Weapons in Latin

America and the Caribbean

OSART Operational Safety Review Team
RAPAT Radiation Protection Advisory Team

RBMK High-power channel-type reactor (Soviet Union)
TACF Technical Assistance and Co-operation Fund

WAMAP Waste Management Advisory Programme
WANO World Association of Nuclear Operators

WWER Water-cooled and -moderated reactor (Soviet Union)

ELECTION OF MEMBERS TO THE BOARD OF GOVERNORS (GC(XXXV)/956) (continued)

- 1. The $\underline{\mathtt{PRESIDENT}}$ informed the General Conference of the results of the voting.
- 2. The result of the election of two members from the area of Africa was as follows:

Abstentions: 8

Valid votes: 156

Required majority: 40

Votes obtained:
Algeria 69

Libyan Arab Jamahiriya 28

Zaire 59

- 3. Having obtained the required majority, Algeria and Zaire were elected to the Board.
- 4. The result of the election of one member from the area of the Middle
 East and South Asia or of South East Asia and the Pacific or of the Far East
 (the so-called "floating seat") was as follows:

Abstentions: 1
Valid votes: 81
Required majority: 41
Votes obtained:
Philippines 37
Viet Nam 44

5. <u>Having obtained the required majority, Viet Nam was elected to the Board</u>.

GENERAL DEBATE AND ANNUAL REPORT FOR 1990 (GC(XXXV)/953) (resumed from meeting 339)

6. Mr. SALLOUKH (Lebanon), welcoming Estonia, Latvia, Lithuania and Yemen as new Members of the Agency, observed that the increase in the Agency's membership demonstrated the value attached by the international community to its activities.

- 7. The growth in world population raised the demand for food, consumer goods and medical care and hence the need for energy. Nuclear energy had been found to be the best and most competitive source of energy, thanks in particular to the work of the Agency in the areas of implementation of safety procedures, control of production and use of nuclear material and management of nuclear waste. Everyone agreed that it was the duty of every State to apply internationally accepted safety standards to all stages of use of nuclear energy, as that guaranteed the safety of its population and territory. Moreover, an advanced stage had been reached in studies on the formulation of common principles through a review of the conventions on nuclear damage with a view to defining concepts, geographic scope of liability and areas of application. That trend was reflected in the recommendations of various Agency meetings on nuclear safety standards calling for embodiment of those standards in national legislation and for steps towards conclusion of appropriate international agreements in the light of the Agency's expertise and experience.
- 8. He suggested that the Agency should have the authority to carry out safety inspections of nuclear facilities, just as it was authorized to perform inspections to verify the use of nuclear energy for peaceful purposes. That objective was supported by all States since nuclear damage knew no boundaries and many States had been affected by nuclear waste.
- 9. The Agency could play an important role in formulating principles of transfer of nuclear technology, which contributed vitally to human activities like agriculture, industry, medicine, animal production, etc. and which was therefore urgently needed in the developing countries.
- 10. Acute shortage of water, including drinking water, was hindering growth and progress in many countries, especially those in the Middle East and in the southern Mediterranean area. The Agency should urgently help in finding more advanced and less costly methods of water exploration than the conventional ones used at present and thus perhaps contribute to maintaining peace, which was often broken because of the need for drinking or irrigation water.
- 11. The Middle East was one of the world's most troubled and threatened regions, where people were living in the hope of justice and durable peace. Stability was an essential element of the promised international order, the

outlines of which was emerging. In that context, establishment of peace required that Israel's nuclear facilities be placed under Agency safeguards, and the IAEA was highly qualified to fulfil its role in that area.

- 12. Many countries in the Middle East, including Lebanon, were convinced of the need to declare the region free from weapons of mass destruction and especially nuclear weapons. He emphasized therefore that the Director General should continue his consultations with a view to implementing the General Conference resolutions relating to the nuclear capacity of all countries in the region and to tightening and widening the scope of application of safeguards. The latter's proposals on the subject formed an appropriate basis, and Lebanon and other States were willing to co-operate in the application of safeguards in the Middle East in order to pave the way for establishing a just and comprehensive peace and for the prosperity and development of States in the region, to which endeavour the Agency could make an effective contribution. It might not be so difficult to make the Middle East weapon-free if the parties concerned and the influential World Powers sincerely desired peace.
- 13. Referring to the matter of amendment of Article VI of the Statute, he pointed out that, although the current consultations had yielded no tangible results, they indicated that the political changes in the world, and developments in the nuclear field in every region and within every State were urging in that direction. Lebanon was concerned at the slow progress of those consultations because it was in the Agency's interest to ensure a balance in the Board's composition and to correct imbalance whenever it occurred. That objective might be attained if technical aspects were given more weight than political considerations.
- 14. At the same time, the problem of financing of safeguards and technical assistance continued to be equally difficult to solve. Mutual understanding of the developing countries' need for technical assistance, with their increasing populations, and the need on the part of countries with nuclear installations to develop the safeguards system was essential for reconciling the different points of view. While there was no consensus on linking those

two subjects, he considered that if the same criteria were applied to both, an agreement could be reached and the Agency's statutory objectives would be fulfilled.

- 15. He expressed satisfaction at the rate of fulfilment of pledges for voluntary contributions for the technical co-operation programme and hoped to see the figure rise to 100%, as had been the case early in the decade. He also commended the successful conclusion of the first two-year technical co-operation programme, and was looking forward to the specific evaluation to be made in December.
- 16. His Government agreed with the Agency's view that the important limiting factor in the expansion of the latter's activities was the amount of financial resources made available for technical co-operation and research contracts and not the inability of developing countries to assimilate the assistance, as was evident from the large number of recommended projects. The 17.6% fall in the implementation of technical co-operation activities in the Middle East, especially if Europe was included, was a matter of concern. Perhaps the reason lay in the conditions that had prevailed in the region during the year under review. He hoped that the region would be accorded priority in the near future since the causes of that decrease had disappeared.
- 17. The contained application of the principle of zero-growth budget was hanging like a sword of Damocles over the Agency's activities. While the target for voluntary contributions had been reached, effective and real growth in the Regular Budget would ensure continuation of the Agency's activities and provide assurance to States needing assistance.
- 18. Lebanon had lived through painful events for 15 years, during which period its various development projects had come to naught. Its infrastructure for power generation, water supply, hospitals and other amenities had been destroyed so that it urgently needed to reconstruct those basic facilities now that reconciliation had taken place, peace and security established and the authority of its Government extended over much of its territory. His country was greatly counting on the assistance which the Agency could provide in implementing development projects in its area of competence.

- 19. While establishment of peace and security had been the immediate aim of Lebanon, preservation and strengthening of that situation was the long-term objective, in which regard the Agency could play an important part.
- 20. Mr. KOCH (Denmark), after welcoming the new Members of the Agency, recalled that in March 1985 the Danish Parliament had decided to exclude the use of nuclear power in its energy programme. That decision was taken because problems of nuclear safety and nuclear waste storage remained unsolved. That decision had, of course, been reinforced by the Chernobyl accident in 1986 and had also been confirmed in a recent public debate in Denmark.
- 21. Denmark had however launched a comprehensive set of measures which make a significant contribution to the reduction of carbon dioxide and other harmful emissions resulting from energy production and consumption. In May 1990, in response to the report of the World Commission on Environment and Development, the Danish Parliament had formally approved a plan of action for sustainable development. In accordance with the Toronto targets, the agreed overall target for the energy sector, including the transport sector, was a reduction of CO₂ emissions by 20% in 2005 compared with the 1988 level and a further reduction in SO₂ and NO_x emissions.
- 22. It was estimated that the measures to be taken under the energy action plan would result in a reduction of almost 15% in gross energy consumption, a reduction of more than 20% in ${\rm CO}_2$ emissions, a reduction of 60% in ${\rm SO}_2$ emissions and a reduction of 50% in ${\rm NO}_{\rm x}$ emissions by the year 2005. The Danish Government and Parliament were convinced that ambitious energy and environment policies could be implemented at no extra economic cost, without resorting to nuclear power.
- 23. Like other countries, Denmark was seriously concerned about the reports that Iraq had failed to comply with its obligations under its safeguards agreement with the Agency and the United Nations Security Council resolution 687 which called upon Iraq to declare all its nuclear activities to the Agency. There was an obvious need to strengthen the effectiveness of the Agency's safeguards system and to improve its efficiency and credibility. As a first step, there should be an obligation for States to declare any new

facilities to the Agency, at least 180 days before construction work began; an obligation to declare all civil nuclear materials to the Agency; and effective use by the Agency of special inspections of undeclared nuclear facilities. Those initial steps would soon have to be followed by more radical measures. There was also a need to tighten export and supply control and full-scope safeguards should be made a condition for new nuclear supply. All States which had not yet done so should place their nuclear facilities under full-scope Agency safeguards.

- 24. Denmark was pleased that more States had acceded to the NPT, thereby increasing its universality. The obligation for Parties to the NPT to conclude a safeguards agreement under Article III of the NPT was unequivocal and without qualification. He was therefore concerned to note that some 50 of the non-nuclear-weapon States Party to the NPT had not yet concluded safeguards agreements in accordance with the Treaty obligations. Although none of those States had significant nuclear activities, it was a matter of importance for the credibility of the NPT and the safeguards system that States should comply with their obligations under Article III.
- A number of steps had been taken to expand co-operation in some areas of nuclear safety. There was a particularly urgent need to do so, since many reactors were of old design and did not meet reasonable safety standards. An increasing number of States had acceded to the Convention on Early Notification of a Nuclear Accident and the Convention on Assistance in the Case of a Nuclear Accident or a Radiological Emergency. The five NUSS safety codes and a number of safety guides had been strengthened to serve as guidance to Member States in developing their national legislation and regulations. Basic safety principles for nuclear power plants reflecting the most advanced policies and practices had been developed by INSAG. Furthermore, the establishment of stronger and more restrictive safety principles and criteria had been supplemented by more frequent use of OSART, RAPAT, WAMAP and ASSET missions. However, there was still a long way to go before a comprehensive international safety regime could be established. The Conference on Nuclear Safety at the beginning of September was a step in the right direction. During that Conference, major issues had been evaluated and recommendations formulated. Denmark attached particular importance to the proposal to

establish a system of legally binding common safety objectives and to incorporate them in principles and standards within the context of an international safety convention.

- 26. His Government felt that it was very important to set up a network of bilateral agreements as a supplement to the multilateral agreement concluded within the framework of the Agency or in other forums. Those bilateral agreements should include a clear and unequivocal commitment to inform neighbouring countries about the planning of new installations or about major changes in existing nuclear installations in order to provide the neighbouring country concerned with an opportunity to express its views before a decision was taken. With regard to civil liability for nuclear damage, Denmark strongly supported the work of the Standing Committee on Liability for Nuclear Damage and hoped that its work would be successfully concluded at an early date resulting in wide international acceptance of a new regime.
- 27. Finally, in view of the importance which it attached to the Agency's technical assistance activities, Denmark could accept the target of US \$52.5 million for 1992 to the TACF and had already pledged its full share of that target.
- 28. Mr. GOMEZ MENDEZ (Colombia) congratulated the President and Vice-Presidents on their election and thanked the Director General for his opening statement. As the annual report showed, the Agency was operating well under his fine direction and by virtue of the effective collaboration of its staff members.
- 29. Article II of the Statute stated that the Agency's aim was to "accelerate and enlarge the contribution of atomic energy to peace, health and prosperity throughout the world", and to ensure that any assistance it provided was not "used in such a way as to further any military purpose". Recent events, and the role which the Agency had played in those events, had underlined the Agency's raison d'être. His delegation was of the view that a balance should exist between the peaceful applications of nuclear technology and safeguards. Whilst recognizing the importance of the safeguards system (the financing of which should be in direct proportion to the economic

resources available and the number of nuclear facilities), he felt that the other main objectives of the Agency such as technical assistance and nuclear applications in industry, agriculture and medicine, should receive equal attention. The latter activities were of especial importance to the developing countries. Colombia, as a Party to the Tlatelolco Treaty and the NPT, attached particular importance to the Agency's safeguards system and the nuclear safety activities. Regulatory activities of that kind were an essential way of ensuring that atomic energy was used for peaceful purposes and for the benefit of humanity.

- 30. It was vitally important that all Member States co-operate with the Agency to promote operational safety, and the effective application of the Convention on Early Notification of a Nuclear Accident and the Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency. His delegation was analysing the study of the Chernobyl accident and supported any initiative aimed at determining liability for damage caused by nuclear accidents. In addition, he urged States to sign and ratify the Convention on the Physical Protection of Nuclear Material, and voiced his support for the prohibition of all armed attacks against nuclear installations devoted to peaceful purposes.
- 31. Colombia had received help from the Agency with training, equipment and peaceful applications of nuclear technology from the Agency. In 1965 the Government of the United States had donated the IAN-R1 research reactor to Colombia which was still operating satisfactorily and had undergone various modernization work. Currently, measurements were being taken in preparation for a changeover to a different type of fuel and a power increase; the work was being done via a technical assistance project with the Agency and with the active collaboration of the United States. The latter had donated uranium for the fuel changeover.
- 32. With the Agency's support and the backing of the Government of Colombia, nuclear technology had been incorporated in various fields, including medicine, agricultural applications, hydrology, environmental applications, nuclear reactors, irradiation of food and other produce, and radiation protection. Colombia currently had 25 nuclear medicine centres

which, taken together, were performing some 50 000 investigations per year and were benefiting the needier sectors of the population in particular. The Institute of Nuclear Affairs supplied the centres with cold reagents which it manufactured itself, and any imported radioactive material required. When the power of the reactor was increased it should be possible to produce the latter locally. Nuclear technology had played an important part in the development of radioimmunoassay techniques for identifying hormones, the detection and control of which was of vital importance in livestock production. The Colombian Agricultural Institute had helped with the development of strains of rice and sorghum with greater resistance and higher yield. Tracer techniques had been employed to improve the use which was being made of fertilizers in many areas of Colombia. A series of projects was being implemented, with the technical assistance of the Agency, in health, industry, radiation protection, the environment, analytical techniques, agriculture and high-level radiation comprising thirteen activities in all.

- 33. As an active member of ARCAL, Colombia was involved in ten regional projects two in agriculture, two in human and animal health, and one each in hydrology, radiation protection, use of research reactors, nuclear analytical techniques, nuclear instrumentation and nuclear information and had a strong interest in taking part in three other projects related to industrial applications, health and hydrology.
- 34. As counterpart for the various technical assistance projects which were being implemented, the Government of Colombia met its annual commitments including voluntary contributions and contributions in kind, and provided all the required facilities for the construction and equipping of laboratories and training of staff, as well as amenities for experts. The Institute of Nuclear Affairs had almost finished building 4250 square metres of facilities intended for work in agriculture, hydrology, radiation protection, electronics, chemistry and radiopharmacy, and for a documentation and data centre.
- 35. Over the preceding two years, two events within the country had helped promote the activities of the Institute of Nuclear Affairs. The first of those was the passing of Law No. 29 on science and technology which had been promulgated on 27 February 1990. Regulatory decrees had been issued under

that law as of the beginning of 1991 to promote missions abroad and high-level professional training, and to improve contractual systems and procedures in the areas of science and technology, and arrangements for research workers. The other important move had been the setting up of the National Council for Science and Technology.

36. Humanity had taken great steps forward in all areas of technology during the twentieth century, many of which were a great danger to its own continued existence. Paradoxically, those technical advances had not been adequately mirrored by social and economic progress. The great challenge for humanity in the future was to ensure that technological and scientific development continued while minimizing its destruction potential and improving the living conditions of the public, especially in countries where conditions were poor.

Mr. Ammar (Tunisia) took the Chair.

- 37. Mr. SILANGWA (Zambia) congratulated Estonia, Latvia, Lithuania and Yemen on becoming Members of the Agency.
- 38. His country was grateful for the technical assistance provided by the Agency in the form of equipment, training courses, fellowships and expert services. The Agency's technical assistance had enabled Zambia to establish research facilities such as the Nuclear Analytical Laboratory, the multipurpose cobalt-60 irradiator and the Induced Mutation Plant Breeding Laboratory. Zambia hoped that the facilities of the Nuclear Analytical Laboratory would be used on a regional and subregional basis within the framework of the AFRA agreement. The Southern Africa Development Coordination Conference had already indicated that it was interested in collaborating with the Induced Mutation Plant Breeding Laboratory and the laboratory was already receiving requests for assistance from agricultural firms. Results of the Agency-supported project on radioisotopes in agriculture were being disseminated and it was hoped that those results would promote the use of Zambia's rock phosphate for increased agricultural production.
- 39. Zambia was developing its radiation protection service with the Agency's technical assistance through the training of personnel, provision of expert services and supply of equipment. The Agency was helping Zambia to

draft regulations, codes of practice and licensing procedures for radiation material, equipment and facilities, as well as regulations on radioactive waste management.

- 40. Zambia was encouraged by the progress made with regard to resolution GC(XXXIV)/RES/545 on South Africa's nuclear capability and threat to the southern African subregion. It welcomed the South African Government's decision to join the NPT and the signing of the safeguards agreement with the It also shared the concern expressed that the South African Government might not be able to provide a complete inventory of its nuclear facilities, materials and past nuclear programmes. It therefore urged South Africa to co-operate fully with the Agency to make sure that thorough and competent inspections and verifications were carried out to ensure that there would be peace in the region and that the region would become a nuclearweapon-free zone. Although Zambia had only recently acceded to the NPT, the Zambian Government was committed to peace and to the establishment of a genuine mechanism limiting both the vertical and horizontal proliferation of nuclear weapons. For its part, Zambia still had no significant nuclear programme.
- 41. Zambia also supported the initiative being proposed to make the Middle East a nuclear-weapon-free zone and believed the Agency should take all the necessary steps to ensure that no undeclared nuclear installations and nuclear material existed in the Middle East.
- 42. His delegation was very concerned that the discussions in the Board of Governors on the question of the amendment of Article VI.A of the Statute had not resulted in significant progress. The current imbalance in the geographical representation on the Board of Governors should be corrected by ensuring that the statutory principle of equitable geographical representation was applied to Africa and the Middle East and South Asia. That issue was a separate one from the revision of Article VI of the Statute as a whole.
- 43. With regard to the Conventions on Early Notification and on Emergency Assistance, Zambia welcomed the Agency's plans to focus its future activities on ensuring that all Member States were able to receive notifications and transmit them to the Agency in a timely manner and were able to receive

critical radiological information from the Agency and elsewhere and to inform their citizens quickly and in an appropriate manner to protect their health and safety.

- 44. With regard to the financing of technical assistance, Zambia continued to support proposals which would result in a mechanism guaranteeing reliable and predictable resources for the TACF. Zambia would continue to pay its assessed voluntary contributions and he was pleased to pledge Zambia's full share of its assessed contribution towards the 1992 target for the TACF.
- 45. Zambia noted the steps taken by the Agency and progress made in implementing the resolution on the staffing of the Agency's Secretariat. The Director General should continue his efforts to recruit personnel from developing countries, particularly at the professional and policy-making levels. In that context, he welcomed the Agency's junior traineeship programme under which some candidates from developing countries could receive on-the-job training to upgrade them to the level at which they were able to compete on an equal basis with their peers in developed countries.
- 46. His delegation appreciated the measures that the Agency had taken in connection with various resolutions on measures aimed at strengthening international co-operation in matters relating to nuclear safety and radiological protection. He welcomed the publication of the International Chernobyl Report and the findings of the International Conference on the Safety of Nuclear Power. He also welcomed the programme for nuclear safety and radiation protection regulators arranged for the current session of the General Conference.
- 47. Mr. MAHIGA (United Republic of Tanzania) welcomed Yemen, Lithuania, Estonia and Latvia as new Members of the Agency.
- 48. Tanzania was very grateful to the Agency for the technical assistance it had provided in the areas of agriculture, veterinary science, pest control and medicine. Plans were also under way for the application of irradiation technology to food processing and storage. The Agency's technical assistance would continue to play an important role in the country's development and Tanzania would also make co-operative arrangements with other countries, wherever possible, in order to share their expertise and experience in the peaceful uses of nuclear science and technology.

- 49. Tanzania had no plans for the development and application of nuclear power in the forseeable future. Although it had vast potential sources of renewable energy, such as hydropower, that had not been fully exploited, it was still heavily dependent on oil, which consumed two-thirds of its foreign exchange earnings. Its energy policy would for a long time be aimed at exploiting energy from sources where the country had comparative advantages. However, in the long run, the country's development would necessitate the diversification and use of other sources of energy, including nuclear energy.
- 50. Some developing countries had already made significant strides in the development and application of nuclear science and technology and had shown a willingness to share that knowledge and experience with other developing countries in their regions. Co-operation in the nuclear field offered good opportunities for south-south co-operation and the Agency was to be commended for its initiatives to assist regional schemes among developing countries. Regional schemes not only made economic sense, but also enhanced transparency and promoted mutual trust in the use of nuclear technology. As the Agency endeavoured to work with a zero-growth budget, it should at all times keep in mind the plight of developing and the least developed countries.
- 51. With the growing need for energy and concerns about sustainable development, a comprehensive approach to the issues of energy supply, demand and conservation would have to be adopted by the whole international community in order to exploit the full range of energy sources in such a way as to ensure sustainable development. Whatever approach or arrangements the international community might consider in the field of energy, the Agency would continue to play a crucial, if not leading role.
- 52. The United Republic of Tanzania acceded to the NPT on 26 May 1991 and his Government had authorized its Permanent Representative and Ambassador to the United Nations and its Agencies in Geneva and Vienna to sign a safeguards agreement with the Agency at any time when mutually convenient. His country had never had any nuclear ambitions and had delayed its accession to the NPT for so long to protest against the nuclear arms race, which had taken place despite the NPT. Its accession to the NPT should be regarded as a sincere gesture to confirm its commitment to horizontal and vertical non-proliferation

of nuclear weapons and its recognition of recent positive developments. In particular, it welcomed the agreement on strategic arms signed in July 1991 between the United States and the Soviet Union. The significance of that agreement was in the opportunities it offered for negotiating further reductions in existing stockpiles of nuclear weapons. In that context, Tanzania was relieved by assurances from the Soviet Union that the command and control system of its nuclear arsenals would continue to be under one centralized authority. He also welcomed the fact that two nuclear powers, China and France, had announced their intention to accede to the NPT and he hoped that the opportunity thereby provided of accelerating the disarmament process and preventing the proliferation of nuclear weapons would not be lost.

- 53. Tanzania supported the current initiatives taken by the United Nations and the Organization of African Unity to ensure that Africa would remain a nuclear-weapon-free zone. While welcoming South Africa's accession to the NPT, Tanzania hoped that South Africa would permit the Agency to carry out full-scope inspection and verification of all its nuclear materials, including the production records of its enrichment plants.
- 54. With regard to the situation in the Middle East, the basis for a lasting solution to the conflicts did not lie in the acquisition of nuclear weapons or weapons of mass destruction, but in a negotiated peaceful settlement to the long-standing political problems. His country supported the efforts of all the States in the region to establish a nuclear-weapon-free zone. An effective credible safeguards system was an essential element in building confidence and enabling mankind to benefit from nuclear technology in peace and prosperity.

REPORT ON THE SPECIAL SCIENTIFIC PROGRAMME

55. Mr. HOEGBERG, reporting on the Special Scientific Programme on behalf of Mr. Palmgren (Chairman of Session 1b), said that the Agency's activities under the WWER-440/230 project and the recent International Conference on the Safety of Nuclear Power had formed the basis for the Special Scientific Programme session dealing with the prospects for nuclear power and

the safety aspects of WWER plants in Eastern and Central Europe. Invited speakers from Bulgaria, Czechoslovakia, Hungary, Poland, Romania and the Soviet Union had all stressed the importance of continuing their nuclear power programmes.

- 56. In Bulgaria, it was believed that nuclear power from the Kozloduy power plant was bound to remain an essential part of the country's power supply programme for the future. Nevertheless, it was recognized that the establishing of acceptable safety standards must have priority over the provision of full-load service to the country.
- 57. In Czechoslovakia, the environmental burden of burning fossil fuels and the economic burden of large energy imports were reasons why further nuclear construction was felt to be indispensable for the development of the economy. So far the share of electric power in total energy and the role of electricity in households were very low and would inevitably increase. Burning high-sulphur coal would not be possible for much longer.
- 58. In Hungary, the Paks plant accounted for 50% of domestic electric power production. Since all four WWER-440 units were of the more advanced 213 type, there was no pressure to introduce improvement programmes. The Paks plant had a good reputation for technical performance and safety. The possibility of building additional nuclear power plants remained open pending studies of alternatives and needs.
- 59. In Poland, the WWER programme had been abandoned and it was expected that by the year 2005, and certainly by 2010, a number of advanced nuclear power plants would be available. The degree of electrification measured in per capita consumption, or in terms of utilization by industry for refined products, was still very low in Poland.
- 60. In Romania, the Cernovoda Candu project had been thoroughly restructured after the political changes. Startup of the five-unit plant was scheduled for 1995. Institutional matters and know-how did not constitute serious constraints on the progress of the project, but, even though dependence on imported fossil fuel energy and environmental degradation supported the case for nuclear power in Romania, as elsewhere, economic limitations were a serious threat to the programme and international

assistance would probably be needed. An impressive fuel manufacturing capability had already been established.

- 61. In the Soviet Union, where nuclear power accounted for a modest 12% of electric power production, the use of nuclear energy was as attractive as ever. Fossil fuels, which supplied 70% of the country's electric power needs, had to be transported over long distances which made little economic sense (coal 4000 km, gas 2000 km). A programme to enhance the safety of operating plants was to be followed by the construction of several new units. At many sites, new units with advanced safety features were to replace old units which were coming to the end of their useful lifetime. The new units would use WWER-1000 reactors for the most part, but there might be some smaller WWER units as well. The prospects for uranium supply were good. An underground leaching technique had been reported which made it possible to exploit lowgrade ores. There was capacity for sustaining a large LWR programme (100 000 MW), and the USSR's successful prototype fast reactor programme could also be expanded. Local political decisions had been made in favour of the construction of new nuclear power plants, and in some cases swift action was required. An RBMK improvement programme was also under way.
- The specialists' meeting had dealt with the safety aspects of WWER reactors as a special topic in a sub-session. Agency staff had described the organization of the Agency's WWER-440/230 project and its main findings. What had emerged was that the WWER-440/230 concept had both strengths and limitations. The large water inventory in both primary and secondary circuits, low nuclear fuel heat rates and good core operational performance were positive design features. On the other hand, it had been found that the degree of redundancy, diversity and segregation was low in some reactor systems, which were therefore susceptible to common mode failures. It had also been found that there were basic weaknesses due to the fact that certain nuclear standards for instrumentation and control and electric power supply had not been applied at the design stage. By comparison with current practices applied to most other nuclear power plant types, analyses had been performed for only a narrow range of potential accidents. Operational and maintenance practices gave cause for concern, as did the protection provided against external hazards and fires, and embrittlement of pressure vessels was

also a problem at some plants. The development of a proper safety and quality culture might prove to be more difficult, although not as expensive, as extensive technical measures.

- 63. One logical conclusion was that management-related problems might also be acute at other operating WWER plants. That possibility had been discussed at the special session, but it had not been possible to assess the extent of the problem. The Agency should take the initiative and apply the results of the WWER-230 studies in further work on other plants. A report on WWER-1000 units indicated that the safety technology of those plants was quite well in line with current world standards.
- 64. As a special topic, the specialists' meeting had heard a report on the measures taken at the Krsko plant under the threat of military action.

 Actions taken by the Agency had been recognized as helpful.
- European nuclear plants were being backed up by a great deal of assistance and co-operative action. A panel presentation of Agency, WANO and CEC activities, complemented by opinions from Western European national regulatory bodies and from the receivers of support and assistance, had indicated that there was a risk of some confusion and duplication. On the whole it had been felt that national bodies in countries receiving assistance would have to play a central role in deciding what advice to take and what assistance to request. It had been suggested that the Agency might act as a clearing-house or information centre on behalf of the activities being carried out, providing advice and keeping a registry of information.
- 66. The resources allocated to nuclear programmes by the CEC had been noted with satisfaction, but many of the problems of ensuring efficiency in safety improvement projects were still unsolved. More than a thousand specific problems, or weaknesses, had been reported under the Agency project. That meant, among other things, that the individual countries affected would have to find effective mechanisms for ordering the work and assigning priorities; otherwise serious difficulties could be expected to arise.
- 67. In conclusion, the specialists' session on the safety of WWER plants had recognized that there was a major common problem but also a willingness

to resolve it - and that resources were being made available for the study of possible solutions.

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

- Mr. ELYAGIUBI (Libyan Arab Jamahiriya) commended the Agency for its activities on extending the peaceful uses of nuclear energy throughout the world for the benefit of mankind, especially in the areas of health, agriculture and industry, and for its efforts to strengthen international co-operation in nuclear safety and radiological protection. Its success in responding to new conditions must be recognized by all Member States.
- 69. For many years the General Conference had adopted resolutions calling upon the Zionist entity to comply without delay with Security Council resolution 487(1981) by submitting all its nuclear installations to Agency safeguards. Resolution GC(XXXIV)/RES/526 adopted in 1990 had requested the Director General to continue consultations with the States concerned with a view to applying Agency safeguards to all nuclear installations in the Middle East region. But Israel refused to place its nuclear installations under Agency control. The region continued to suffer from the effects of wars and was exposed to the danger of production and stockpiling of weapons of mass destruction. A radical solution must be found urgently so that the region could be free from those lethal weapons. In that connection, he reaffirmed his country's support for banning weapons of mass destruction throughout the world and for divesting what was called Israel of such weapons without delay.
- 70. While all Member States agreed on the importance of safeguards, a great many States felt that the current method of financing that activity imposed a heavier burden on some countries than on others. In his opinion, States with substantial nuclear activities ought to bear a greater share of the safeguards costs.
- 71. Referring to the Agency's Medium-Term Plan for 1994-98, he expressed his appreciation of the Secretariat's efforts in that regard. He hoped that in preparing the plan it would bear in mind the aspirations and needs of the developing countries embarking on the peaceful uses of nuclear energy in the context of increasing demands for food, medical care and industrial goods, in satisfying which nuclear techniques could play a role.

- 72. Recalling resolution GC(XXXIV)/RES/540 requesting the Agency to assess the costs of potable water production with a comparison of the costs of desalination by nuclear and other means, and the general scarcity of water in the world, he pointed out that many developing countries hoped that nuclear technology would provide an economical method for desalting sea water to overcome that scarcity. While he appreciated the Agency's efforts to study the economic and technical feasibility of nuclear desalination, he called upon all Member States, especially the industrially developed ones, to participate more actively in implementing resolutions which aimed at promoting human progress, prosperity and well-being. The Jamahiriya, for its part, was earnestly pursuing the objective of supplying drinking water, as was demonstrated by the completion of the first stage of the Great Man-Made River Project, under which water was being piped over the longest distance in human history. He looked forward to the time when sea water processed by nuclear technology would make up for water shortage. He emphasized that supply of potable water should be a high-priority programme for the international organizations concerned and the IAEA should include nuclear desalination among its major activities.
- 73. The Agency had been involved in the establishment of AFRA, and his country attached great importance to co-operation under that regional arrangement. He urged all Member States which could do so to provide assistance for the numerous AFRA programmes. In his opinion, the Arab Nuclear Energy Agency could also provide substantial support to the Agency, and he hoped that it would be enabled to play its part in solving energy problems in a large part of the world.
- 74. The topic of nuclear waste disposal had been on the agenda of the previous sessions of the Conference. Although the exact number of radioactive sources used in the world were not known, most of those existing in the developing countries had been imported from the industrially advanced States so that the Agency should continue to assist its developing Member States in dealing with the problem.
- 75. In conclusion, he stressed the importance of the United Nations agencies, which should endeavour to serve all Member States in a balanced and

equitable manner so as to establish a fair international balance and thereby to ensure a life of security and freedom for everyone in the world.

- 76. Mr. CASTRO-DIAZ BALART (Cuba) welcomed the Republics of Estonia, Latvia, Lithuania and Yemen, which had been approved for membership of the Agency.
- 77. Nuclear energy was the only available option for electricity production in many developing countries, as they had no other energy resources. However, although 17% of the world total energy production in 1990 had been nuclear in origin, the only developing countries likely to make progress in nuclear power development before the end of the century were the few who already had nuclear programmes. Under those circumstances, the Agency's technical assistance and co-operation programmes were of even greater importance. In the case of Cuba, such activities had contributed to programmes in the areas of, inter alia, public health, agricultural development, food, water resources, and the sugar industry. Cuba had always paid its voluntary contributions in full, and believed that technical assistance should continue to be financed on a voluntary basis, and to use the IPF system.
- 78. In view of the close link between acquisition of nuclear technology and the need for international safeguards to ensure non-proliferation, an equitable balance should be maintained between safeguards development and the promotion of the peaceful uses of nuclear energy. The danger of nuclear proliferation would decrease if progress were made on nuclear and conventional disarmament and if the non-use of force were established as a universal principle in international relations. The problem of financing safeguards could best be resolved by means of technical analysis to ensure optimization of the resources available, in accordance with established objectives and priorities.
- 79. Cuba's attitude to the events which had led to the adoption of United Nations Security Council resolution 687 was based on respect for international law and the expectation that Iraq would comply with the obligations arising from agreements it had entered into. However, Cuba would like to see the Agency show the same willingness to take action to implement the numerous resolutions of the General Conference and the Security Council on the nuclear

capabilities of South Africa and Israel, which had also caused much concern and been justly condemned.

- 80. With regard to the amendment of Article VI.A.2 of the Statute, efforts would be better directed to finding a solution to the problem of Article VI as a whole. The recent International Conference on the Safety of Nuclear Power had demonstrated the broad range of current opinion on the vital role of safety in the future of nuclear power. However, nuclear safety should not be understood as operational safety alone, and should not be dealt with by means of binding legal instruments which went beyond the terms of reference of the Agency.
- 81. Despite economic and other difficulties, Cuban nuclear activities were continuing with optimism. The main focus of attention remained the construction of the first nuclear plant, which was one of the most important economic initiatives ever undertaken in the country. Ninety per cent of the construction work for the first unit had been carried out with completion expected in the first six months of 1992, the installation work to be completed in the same year. High priority had been given to supervision and monitoring, in order to achieve the highest levels of quality and safety at the plant, in accordance with existing international requirements. In recent times, the various media propaganda campaigns questioning the safety of the Juraguá nuclear power plant had intensified. Their alarmist tone and lack of objective data revealed the true aim behind their claimed concern for the inhabitants and the environment in the Caribbean area - to prevent Cuba from making use of nuclear power, despite its legitimate right and urgent need to do so.
- 82. Since the establishment of the nuclear power programme, the Cuban Government had followed a well-defined strategy of establishing and strengthening the national bodies concerned with nuclear and radiological safety. The Radiation Protection and Hygiene Centre and the National Centre for Nuclear Safety had been set up as technical, directing and co-ordinating institutions to monitor safety at nuclear facilities. A body of state inspectors ensured strict and systematic monitoring of installations under construction, and substantial efforts had also been made in training

specialists for the nuclear programme. Over 2000 professional staff, middle-level technicians and qualified workers had been rigorously trained abroad and in Cuba in the building, operation and maintenance of the type of plant to be used. The Juraguá plant had model V-318 WWER reactors, with a more advanced design in terms of containment, safety and earthquake resistance characteristics than other similar units in successful operation in Finland and Hungary. Cuban reactors also incorporated equipment and many modern safety features used in the West.

- 83. Cuba was open to any joint effort aimed at increasing nuclear safety in the Caribbean, and various experts, including North Americans, who had visited the country in recent years had commended the technical level and rigour of the construction work. In 1991 there had been an exchange of visits of Mexican and Cuban specialists and directors between Juraguá and Laguna Verde as part of the exchange of experiences organized by WANO, with very useful results. The Cuban Government would also be prepared to receive an assessment team from the Agency, whose recommendations could help raise safety levels even further.
- 84. Any attempt by the United States or other countries to single out the Cuban power plant and to demand additional measures beyond those accepted internationally would be rejected, as they had no objective basis and were of a political nature. Cuba, conscious of its responsibilities and commitments, was prepared to exchange information and experience on a basis of absolute reciprocity and respect of sovereignty, and to co-operate in strengthening public confidence in the technology.
- 85. Satisfactory results had been achieved with other peaceful uses of nuclear energy, including the extended use of nuclear techniques in vital areas such as public health, agriculture, food, and the sugar industry. One of Cuba's 22 high-priority science and technology programmes was devoted to that field and had already achieved significant economic results.
- 86. The construction of a Centre for the Production of Isotopes and Radiopharmaceuticals, in co-operation with Argentina, had reached an advanced stage. The pilot plant for the processing of low-level radioactive wastes would soon be in operation and the new site for the Centre for Radiation

Protection and Hygiene which would include, inter alia, secondary calibration and whole-body count laboratories donated by the Agency would be completed early in the following year.

- 87. Construction work was continuing and supplies had been agreed with the Soviet Union for the first stage of the Nuclear Research Centre.
- 88. Various regional and national courses had been held in co-operation with the Agency in 1990.
- 89. Cuba also attached great importance to the assistance provided for those affected by the Chernobyl accident, and the studies deriving from it.

 Medical assistance had been provided for over 5000 children to date, and specialized dosimetric-radiobiological studies had been carried out, providing valuable information which would be made available to all interested parties.
- 90. Approving the report contained in document GC(XXXV)/953, which showed that impressive progress had been made in all sectors of activity in 1990, he stressed that the medium-term plan should take into account the requirements and characteristics of the developing countries as well as maintain the essential balance between the complementary and related areas of promotional and regulatory activities. Some internal issues should also be dealt with in the Agency to facilitate a more effective work of the governing bodies, including the Board. Revision of procedures, greater flexibility, and financial adjustments for technical assistance were some of the issues requiring attention.
- 91. Cuba's participation as an observer at the OPANAL Conference was a further indication of its co-operative spirit. At the First Latin American Summit of Guadalajara, the Cuban President had stated that although the circumstances preventing Cuba from signing the Tlatelolco Treaty had not changed, when all the countries of Latin America had assumed their responsibilities under the Treaty, Cuba would be prepared to sign it in the interests of regional unity.
- 92. He commended the results achieved in the application of nuclear energy in the year of the Agency's 35th anniversary, and was sure that the Agency would continue its work successfully, while observing the principle of respect

of national sovereignty and the right of all nations to benefit from peaceful nuclear activities.

- 93. Mr. GLEISSNER (Austria), welcoming the new Member States of the Agency, noted that their membership was an important step towards the Agency's universality.
- 94. The nuclear safeguards regime was recognized increasingly widely as an essential feature of a stable and peaceful world order. He welcomed the fact that France and China had announced their intention to join the NPT and noted that the accession of those two countries would lead to a strengthening of the non-proliferation regime. He also welcomed the decisions of Argentina and Brazil to establish an international safeguards system on the basis of a bilateral treaty and to sign an agreement with the Agency for its implementation. A further important development was the accession of South Africa to the NPT followed by its signing of a safeguards agreement with the Agency. Those parties to the NPT which had not yet done so were urged to conclude safeguards agreements as soon as possible and in that context he hoped that the Democratic People's Republic of Korea would sign and implement its agreement with the Agency in the near future as a follow-up of the steps it had already taken.
- 95. Iraq's failure to comply with its obligations under its safeguards agreement with the Agency was a serious violation of international law and had given rise to criticism about the efficiency of the existing safeguards system. The events of the past year had demonstrated that the international community needed improved systems to ensure that international obligations were fulfilled.
- 96. As was well known, the results of a referendum had led Austria to decide, not to use nuclear fission for the purposes of electricity generation and the Austrian Government hoped that Austria's example would be followed by other States, particularly its neighbours. In view of its concern about safety, Austria welcomed the results of the International Conference on the Safety of Nuclear Power, which had laid a good foundation for future developments, and hoped that it would lead to the establishment of an international nuclear safety convention.

- 97. Austria was very interested in the work of the Standing Committee on Liability for Nuclear Damage and welcomed the progress achieved. Although the Standing Committee had given priority to the preparation of a thorough revision of the Vienna Convention on Civil Liability for Nuclear Damage, it had also embarked on an extensive discussion of an enlarged concept of nuclear damage inflicted on the environment. The Committee should be encouraged to devise a contractual system of international nuclear liability corresponding to that enlarged concept of nuclear damage. Austria welcomed the support expressed for the inclusion of elements of international State liability in a revised system of international nuclear liability. The existing procedural provisions of the Vienna and Paris Conventions for claims settlements were, in its view, unsatisfactory. The Standing Committee should therefore also consider the establishment of an international claims tribunal or a court of Austria hoped that a new and comprehensive nuclear liability arbitration. regime could be established which would be acceptable not only to the contracting parties of the Vienna and Paris Conventions, but also to countries not participating in those two systems.
- 98. Lastly, Austria also attached great importance to the Agency's technical assistance and co-operation programme and had pledged its share of the proposed target for the TACF for 1992. It had also declared its readiness to provide extrabudgetary support amounting to approximately US \$260 000 for a specific pest eradication project.
- 99. Mr. AMOO-GOTTFRIED (Ghana) welcomed the four new Members which had recently joined the Agency and expressed the hope that they would participate fully in the Agency's work and enjoy the many benefits it offered.
- 100. Recent events had underlined the need to strengthen the Agency's safeguards system. However, care should be taken not to place undue emphasis on safeguards at the expense of the Agency's equally important promotional activities. In view of the Agency's very limited resources, more effective techniques should be developed to make the safeguards system more efficient.
- 101. Ghana welcomed the recent bilateral agreement between Argentina and Brazil on a common nuclear policy and their readiness to negotiate a full-scope safeguards agreement with the Agency. The announcement that the

Democratic People's Republic of Korea had finalized the negotiation of a standard NPT-type safeguards agreement with the Agency was a significant step forward and it was to be hoped that the agreement would be signed and ratified as soon as possible. His delegation also welcomed the accession of the United Republic of Tanzania, Mozambique, Zambia, South Africa and Albania to the NPT regime and hoped that many more States would accede to it in order to make the NPT universal.

- 102. The South African nuclear facilities and activities had caused great concern in the African continent. He hoped that, with the signing by South Africa of a safeguards agreement with the Agency, it would be possible to establish a nuclear-weapon-free zone in Africa. All States with significant nuclear programmes which had not yet acceded to the NPT should do so as soon as possible and submit their nuclear facilities to full-scope Agency safeguards.
- 103. The International Chernobyl Project, which had assessed the radio-logical consequences of the accident and evaluated the protective measures, was a highly commendable example of international co-operation. In view of the worldwide fear and condemnation of nuclear power following the Chernobyl accident, the recent three-week review of the design and operation of the four nuclear reactors at Kozloduy in Bulgaria was very timely. The review had identified a number of safety-related deficiencies. Other countries with similar installations should also submit them regularly to independent safety reviews.
- 104. While his delegation was pleased that after a delay of 16 years, the African region now had an operative regional co-operative agreement, AFRA, it was very disappointed at the lack of necessary financial support available and therefore appealed for generous donations to support AFRA. In that connection, it was particularly grateful to France for funding the project on radioimmunoassay and hoped that other States would follow that laudable example.
- 105. Ghana was making steady progress in its peaceful uses of atomic energy. A multipurpose gamma irradiation facility designed for food preservation and radiation sterilization of medical products would be commissioned

early in 1992. Significant advances had been made in nuclear medicine using radioimmunoassay, gamma scanning and radiopharmaceuticals. Users of ionizing radiation were being monitored and a project for monitoring radon concentrations in selected homes nationwide was under way. Satisfactory progress was also being made in the implementation of projects concerning the sterile insect technique, food preservation by gamma irradiation, radiation processing and radiation—induced genetic mutation breeding. Ghana's facilities were also made available to the region through the hosting of regional training courses. Ghana had not neglected the legal aspects of radiation protection in all these areas and it had finalized a radiation protection law which would be soon promulgated.

- 106. The Agency was playing an invaluable role in helping small developing countries such as Ghana with the acquisition and installation of the necessary infrastructure for the development and peaceful utilization of nuclear power. It was hoped that developed Member States would continue to make more resources available to support the Agency's technical assistance and co-operation programmes.
- 107. There was at present unprecedented worldwide concern for the environment. The need for a drastic reduction of the greenhouse gases resulting from the burning of fossil fuels was now greater than ever before. Currently the most viable alternative to fossil fuel as a source of energy was nuclear power and the Agency therefore had a pivotal role in leading the efforts to promote the development and use of nuclear power and the Agency needed the support of all Member States in its activities to promote public acceptance of nuclear energy.
- 108. Finally, he noted that the revision of Article VI.A.2 of the Statute was long overdue and that specific steps had to be taken promptly to correct the glaring under-representation of the regions of Africa and MESA regions on the Board of Governors.
- 109. Mr. GHOSHEH (Jordan) congratulated the Republic of Yemen, Estonia, Lithuania and Latvia on their becoming Members of the Agency, which would certainly benefit from their active and positive contribution to its work.

- 110. The present session of the General Conference was taking place at a critical time when radical changes had occurred in the socialist countries and when the aftermath of the Gulf crisis continued to affect the region and the world as a whole.
- 111. The Agency's work had seen both success and failure. On the one hand, it had succeeded in raising the efficiency and in extending the safeguards system, demonstrating thereby that the nations of the world sincerely desired the use of nuclear energy for peaceful purposes to promote development and prosperity and not as a means of terror, threat or destruction.
- 112. But, on the other hand, for more than ten years the Conference had been unable to achieve any result on the crucial subject of the Israeli nuclear threat, which was detrimental not only to the security of the neighbouring countries, especially Jordan, but to world peace and security. Israel seemed to be a unique case, to which what applied to other countries did not apply, and it was not interested in trying to create the conditions for peace and security in the world.
- 113. He recalled that his country had been subject to Israeli threat since 1948, from which date Israel had successively occupied the whole of Palestine and parts of the neighbouring States, including the West Bank, the Gaza Strip, the Sinai and the Golan, and continued to use every means of persecution, repression and suppression against the unarmed populations of the occupied lands, who strongly rejected Israeli occupation. It persisted in denying their right to freedom, in seizing their lands and settling thereon immigrants foreign to the area, further endangering security and peace in the region. International measures must be taken to curb that threat, and the debate that had lasted for more than ten years should be ended so that attention could be devoted to other, no less important issues. Therefore, Jordan considered it necessary to apply safeguards to the Israeli nuclear installations and to establish a special international commission to inspect those installations and to verify that they and their programmes served peaceful purposes.
- 114. Stressing the urgent need for establishing a nuclear-free zone in the Middle East, as Jordan had advocated repeatedly at the preceding sessions of the Conference, he pointed out that the region would be practically

nuclear-free if it were free from Israeli nuclear weapons because Israel alone had real military nuclear capabilities and stockpiles of atomic weapons. Therefore, as soon as Israel complied with the world community's demand by placing its nuclear installations under international control, by ceasing the production and development of military nuclear material and devices and by signing the NPT, the establishment of a nuclear-free zone in the Middle East would be realized.

- 115. Noting that the Director General, perhaps preoccupied with the Gulf crisis, had not devoted to the issue of the Israeli nuclear threat the attention it had deserved, his delegation called upon the latter to give the matter the consideration that he had been requested to do over the preceding decade by the General Conference, and to submit a comprehensive report thereon at its thirty-sixth session.
- 116. Another matter of concern to Jordan and the international community in recent years was nuclear waste, which posed a serious threat to human life and the environment. In 1988, his country's delegation had submitted a proposal to the General Conference on the subject of radioactive and toxic chemical waste. He was pleased to note that those suggestions had largely been reflected in the Code of Practice on International Transboundary Movement of Radioactive Waste adopted by the Conference in 1990, which Jordan's Radiation Protection Board had recommended the Government to put into effect. That Code of Practice showed what the Agency could do to promote security and well-being; it should be binding on all, and regional and international machinery be developed with a view to its scrupulous application.
- 117. An important factor preventing strifes and conflicts, which were responsible for the arms race, was creation of economic prosperity and social well-being. There were many ways in which international co-operation could be strengthened to achieve that end, the Agency's technical co-operation programme certainly being one such means. In that connection, it was imperative to correct the existing imbalance between the resources allocated to safeguards and those to technical co-operation and assistance. In his delegation's opinion, more resources should be available for the latter activities and they must be financed on an assured basis and not by voluntary

contributions alone, which had been affected year after year by various economic and political conditions.

- 118. It was necessary to develop regional mechanisms, in co-operation with the Agency, in order to implement certain projects. One such mechanism was the Arab Nuclear Energy Agency under the Arab League, and he hoped that the IAEA would assist that organization, so that the two could complement each other in promoting the peaceful uses of nuclear energy and in protecting human health and the environment from the hazards of radiation.
- 119. For two decades until the early 1980s Jordan had undergone rapid economic, socio-economic and social development and, despite scarcity of resources and reliance on imported energy sources, it had attained high growth rates. It was among the first ten countries in the world in terms of the level of public health services; it had sharply reduced infant mortality in the preceding twenty years and had made great strides in the vaccination of children. It had expanded educational facilities and had produced tens of thousands of university graduates, who were serving the nation and many of whom were helping other Arab countries to develop their infrastructures.
- 120. Those positive achievements should be viewed against the background of scarcity of energy sources, successive immigrations since 1948, the large school-going population of 500 000, shortage of water sources, paucity of arable land, the Gulf crisis with its economic consequences and, in particular, the constant Israeli threat for more than 40 years, all of which were placing additional burdens on his country's economy.
- 121. His Government therefore attached especial importance to the Agency's technical co-operation and assistance programme, and hoped that it would assist Jordan's nuclear activities in the areas of agriculture, water management, medicine, information, industry, environmental and radiological protection, etc. under a multi-year national plan to preserve the high social standard attained over the preceding decades.
- 122. Jordan's most valuable resource was its people, as King Hussein had aptly pointed out, and the Agency was in the best position to assist in maintaining the high social standard of that people, who had rendered outstanding service to the country and to the world as a whole.

- 123. Referring to the need for increased representation of developing countries on the Board of Governors and of nationals of those countries in the Agency's Secretariat, he urged that the repeated appeals made in that regard should be responded to. A crucial factor in the development of the Agency's activities was that the majority of Member States should feel that they were fairly represented; that would raise the degree of their involvement in the running, and in sharing the responsibilities, of the Agency. His delegation was therefore in favour of amending Article VI of the Statute, and called upon the Conference to settle the issue, which had been on its agenda for a decade and a half without any conclusive result.
- 124. Jordan wished to express its commitment to pay its assessed contribution to the Regular Budget. It regretted that for a few years it had been unable to bear its share of voluntary contributions to support the technical co-operation and assistance programme but hoped to do so in the future.
- 125. He endorsed the Agency's programme and budget for 1990, emphasizing, however, the need for growth in the budget, especially in the promotional areas, with a view to responding to the increasing developmental needs of States.
- 126. The continuing imbalance between the appropriations for safeguards and those for promotional activities hindered the developing countries from making use of the Agency's programmes in the manner referred to above and reduced the effective utilization of its potential. His delegation urged once again that an appropriate formula be found so that the promotional budget would respond to Member States' demands and accord with the Agency's responsibilities with regard to the promotion of prosperity and security in the world.
- 127. Mr. OGADA (Kenya), having welcomed Estonia, Lithuania, Latvia and Yemen to the Agency, said that with the end of the Cold War, Member States were in a position to discuss serious issues freely without being diverted by ideological differences. The delicate balance that had had to be kept on the Board in the past was therefore no longer necessary and Article VI.A.2 of the Agency's Statute should be revised in favour of a wider geographical representation for Africa and MESA.

- 128. His Government would soon accede to the Conventions on Early Notification, Emergency Assistance and the Physical Protection of Nuclear Material. It would also sign a safeguards agreement with the Agency in accordance with Article III of the NPT to which it was party.
- 129. The political changes unfolding in South Africa were of great interest to Kenya. It supported the changes being introduced, but abhorred the interethnic violence and killings which had resulted in the unnecessary loss of many lives. His delegation welcomed South Africa's accession to the NPT and its decision to place some of its nuclear facilities under Agency safeguards. Mozambique, Zambia and the United Repubic of Tanzania had also signed the NPT, thus paving the way for a nuclear-weapon-free zone in Africa.
- 130. His delegation attached particular importance to Agency technical assistance in the agricultural sector, in particular in areas such as tissue culture, mutation breeding, nitrogen fixation, fertilizer research and pest control. Kenya was already applying nuclear medicine techniques in diagnosis and treatment, non-destructive testing techniques and other industrial techniques in the area of food technology and welding. Furthermore, the Centre for Nuclear Sciences, which was a pilot project funded by the Agency, had been fully integrated into the University of Nairobi Faculty of Engineering as a teaching institute.
- 131. While welcoming the establishment of AFRA, he noted that its success was dependent on external financial support. He therefore appealed to donor agencies and governments to provide financial assistance to AFRA. In that context, he was particularly grateful to the United States and France for the support they had given to AFRA.
- 132. Kenya was also very grateful to the United States for having funded a large extrabudgetary project on the production of radioimmunoassay kits for Kenyan hospitals. His delegation hoped that support could also be provided for two other important Agency-approved extrabudgetary projects, one on the supply of gamma cameras and related nuclear medical equipment and the other on nitrogen fixation.
- 133. Owing to the serious economic difficulties experienced by Kenya and other commodity producers in the late 1980s, Kenya had not been able to pay

its full contributions to many international organizations, including the Agency. However, he was pleased to announce that the first instalment of its accumulated assessment would be paid to the Agency very shortly.

- Mr. HESS (Namibia) noted that Namibia's experience in the field of 134. energy was limited and that the Agency's General Conference provided a welcome opportunity to enable it to learn more about the peaceful uses of nuclear energy. Namibia was a significant uranium producer and in that field was, like other developing countries, heavily dependent on the sale of primary products. At present, Namibia generated its electricity from hydropower and from diesel oil. When there was a shortage of rain the production of electricity was reduced and Namibia was forced to buy electricity from its neighbours at great cost. In view of Namibia's uranium reserves, nuclear energy seemed a possible alternative. However, there were public fears about the safety of nuclear power plants and also an urgent need for the transfer of nuclear technology to young Namibian scientists. Namibia looked forward to participating in Agency training programmes in that area and in the area of radiation protection. It was also grateful for the assistance already provided by the Agency to its national health, agriculture and veterinary programmes.
- Mr. SALAS BARAHONA (Peru) noted that recent political developments had given special significance to the Agency's activities. In the area of safeguards, the Agency had a very important role to play in the universalization of the safeguards system and it was essential to ensure that effective non-discriminatory measures were applied to control the proliferation of nuclear weapons. His delegation was pleased that several Member States had signed safeguards agreements with the Agency, but was concerned at the large number of States which had not yet done so.
- 136. As far as Latin America was concerned, the Peruvian President had proposed a policy of regional disarmament based on the limitation of weapons and the use of the resources which would thereby be released to promote the economic and social development of the region. That policy involved a new concept of defence aimed at maintaining democratic stability. Peru had invited the Ministers of Foreign Affairs of the Member States of the Rio Group

to participate in a special meeting in Lima in order to agree on a joint renunciation of the acquisition of all types of weapons of mass destruction.

- 137. While Peru fully appreciated the importance of the safeguards system to prevent nuclear proliferation, the Agency's technical co-operation activities should not be neglected, since they also made a valuable contribution to the promotion of peace. Like other developing countries, Peru had always insisted that there be a just balance between the Agency's safeguards and technical co-operation activities. In that connection, it believed that mechanisms should be found to provide the TACF with reliable assured resources.
- 138. His delegation noted the progress achieved in the preparation of the Medium-Term Plan for 1993-98. In outlining the Agency's future activities, the Plan should preserve a certain flexibility and be consistent with national development programmes. Continuous co-ordination with national authorities was therefore essential.
- 139. Peru was very satisfied with the activities carried out under the ARCAL programme, which promoted training and research in important areas such as health, food and agriculture. The ARCAL programme also stimulated better integration of countries in the region and encouraged co-operation between them. For its part, Peru was ready to make available the services of the Oscar Miro Quesada Nuclear Centre to other countries in the region. Plans were also under way to convert the Peruvian Nuclear Centre into a regional nuclear technology centre.
- 140. In the light of the serious economic situation facing the country, the Peruvian Nuclear Energy Institute (IPEN) had decided to implement an emergency plan to make full use of the country's nuclear facilities and to optimize the IPEN's participation in measures to restimulate national development. The IPEN had a double role as regulatory authority and as institution promoting the uses of nuclear technology. With assistance from the Agency, the IPEN had made important progress in standardizing national legislation in the area of radiation protection and nuclear safety and had trained a team of specialists to inspect the country's nuclear facilities. Reorganizational changes taking place in the IPEN would help to increase efficiency and improve co-operation with the country's production sectors interested in the use of nuclear

technology to improve production and quality control processes. The IPEN had established a number of specific institutions to promote the peaceful use of nuclear energy, such as the Institute for Non-Destructive Testing and Quality Control, the Foundation for Nuclear Techniques and Materials Research, the Foundation for the Development of Food Irradiation Technology, Sterilization of Medical Products and Treatment of Waste, and the Association for Environmental Studies.

- 141. He noted with pleasure that the Agency's technical assistance programme with Peru had increased continuously since 1977. Currently, some 17 projects were being implemented in various nuclear fields, and Peru was very grateful to the Governments of the United States and the United Kingdom for the provision of extrabudgetary resources to finance some of those projects. In particular, the United States Government had given valuable support for the implementation of a project to update studies on energy and electricity demand to determine what priority should be given to the nuclear option.
- 142. Mr. HOFFMANN (Luxembourg) expressed his support for the statement made by the representative of the Netherlands on behalf of the Member States of the European Community and that made by the representative of the Commission of the European Communities.
- 143. With regard to the safety of nuclear power plants, Luxembourg was convinced that the proposed nuclear safety convention would improve nuclear safety in general. However, such an international convention, while imposing on States very strict safety criteria, should not diminish their responsibility for guaranteeing the safety of their own nuclear power plants. He hoped that the Director General would be able to submit specific proposals on that subject for the meeting of the Board of Governors in February 1992. It was also very important that the safety of old nuclear power plants which did not comply with current safety criteria should be improved and that those where the level of safety was inadequate should be shut down.
- 144. Recent events in the Gulf had demonstrated the urgent need to strengthen the international safeguards system. Luxembourg supported the idea of special inspections, which it believed should also be carried out at undeclared nuclear facilities. His country also believed that there should be

- a more effective distribution of inspections, since it did not seem appropriate that three large industrialized countries accounted alone for about 70% of the total number of Agency inspections.
- 145. A third area of particular concern to his delegation was that of the establishment of an international liability regime for nuclear damage. Such a regime would not only be desirable to improve public attitudes to nuclear power, but was also a moral obligation for States with nuclear facilities. Although resolutions GC(XXXIII)/RES/508 and GC(XXXIV)/RES/529 attached priority to the question of liability for nuclear damage, the meetings which had been held in the Agency since 1989 to make preparations for a conference to review the Vienna Convention had not yet led to specific results. That was regrettable, since it was widely recognized that the existing liability regime for nuclear damage was far from satisfactory. He therefore hoped that the General Conference would continue to attach particular importance to solving that problem.
- 146. Before concluding, he wished to reject the statement made to the General Conference the previous day by the delegate of Iraq alleging that Luxembourg had exported enriched uranium in 1985. That statement was incorrect, as verifications carried out by the Agency's Department of Safeguards had demonstrated. Furthermore, the Agency's Director General had himself rejected the allegations made by Iraq in his reply to the Governor from Iraq during the special session of the Board of Governors on 18 July 1991.
- 147. Mr. ATANGANA-ZANG (Cameroon) commended the Director General and the Secretariat on the work they had done since the previous session of the General Conference.
- 148. He welcomed the move towards democratization which was taking place in the Soviet Union and which, in the course of a little over two years, had transformed the political situation not only in Eastern and Central Europe but in the African continent as well. In the context of east-west relations it had brought about the end of the Cold War, and in the Third World it had led to the extinction of regional conflicts. The Third World of the sixties was

poised to become the south of the nineties, faced with a north which was united but which would not, it was to be hoped, abandon the south.

- 149. Cameroon had been progressing towards democratization under the leadership of its President, Mr. Paul Biya, since 1982 and recent events had only added the final impetus to that process. Currently, Cameroon had approximately 35 political parties and was preparing to hold elections by the end of the year.
- 150. He therefore welcomed enthusiastically the States of Yemen, and particularly Lithuania, Estonia and Latvia, which had just become Members of the Agency. After approximately 50 years, Moscow had not only permitted the emancipation of its former satellite States but was supporting their reintegration into the concert of nations, and into the United Nations system of which the Agency formed part.
- 151. As a Member of the Agency since 1964, Cameroon had always done its best to promote the ideals of the Agency and the peaceful uses of nuclear energy. It was pleasing that an ever increasing number of countries were joining the Agency and subscribing to the NPT and safeguards system. He welcomed the signing by South Africa of the NPT on 10 July 1991, followed shortly thereafter by the signing of a safeguards agreement. It was to be hoped that the developments which were taking place in that country would swiftly lead to a systematic and total removal of the apartheid system. Similarly, he commended the moves which the Democratic People's Republic of Korea had made towards concluding a safeguards agreement pursuant to the NPT which it had signed five years previously. Equally pleasing was the declaration by France, in June 1991, that it wished to adhere to the NPT, as was the interest which had been expressed by China in that regard. With the five main nuclear-weapon States behind it, the Treaty would have an even more universal validity.
- 152. Cameroon was a Member of the Board of Governors and was party to virtually all the legal instruments with which the Agency was associated. Thus it was one of the comparatively few (ten) parties to the Vienna Convention on Civil Liability for Nuclear Damage and party to the Joint Protocol linking the Vienna Convention with the Paris Convention on Third Party Liability in the Field of Nuclear Energy.

- 153. That being so, his country followed the work of the Standing Committee on Liability for Nuclear Damage with the closest attention work which was expected to terminate, during the course of the coming year, in a diplomatic conference whose task it would be to revise the Vienna Convention.
- 154. He urged those countries which were taking part in the work of the standing committee to push on their work to a successful conclusion. Cameroon had adhered both to the Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency and to the Convention on Early Notification of a Nuclear Accident, as well as the NPT and safeguards. Cameroon had also been a member of AFRA since the previous year. He urged all 11 African Member States to adhere to that regional agreement.
- 155. Despite the economic crisis it was facing, a situation in which it was not alone, Cameroon continued to honour all its financial commitments to international organizations and particularly those in the United Nations system. Thus, only three days previously he had signed a pledge for a voluntary contribution of \$5259 to the TACF for 1992.
- 156. Cameroon was making every effort to promote the peaceful uses of nuclear energy within its boundaries. As well as the half dozen projects which were already being implemented with the help of the Agency, the Ministry of Higher Education, Information Science and Technical and Scientific Research in Cameroon was currently preparing a draft law on radiation protection and a development plan for nuclear techniques, with the help of all interested national bodies. In due course, they would be requesting assistance from Agency experts for those activities.

REPLY BY THE DELEGATE OF IRAQ TO THE STATEMENTS MADE BY THE DELEGATES OF KUWAIT, ISRAEL AND LUXEMBOURG

157. Mr. MAJID (Iraq), exercising his right of reply, pointed out that the delegation of Kuwait had raised subjects in the morning's meeting which were of no relevance to the Conference's work. The delegation of Kuwait was going against the movement in the Arab world towards reunification and was joining the evil-intentioned campaign, led by the United States, against Iraq. His delegation had hoped that the representative of Kuwait would have condemned the crime committed and proclaimed by the United States forces of

burying 8000 Iraqi soldiers alive. With regard to the Kuwaitis in Iraq, Iraq had transmitted a list of the names of more than 3000 Kuwaitis to the International Red Cross in July 1991. Kuwait had repatriated only 190 persons and was still reluctant to repatriate the others under the pretext that it needed more time to check their identity papers. Kuwait alone was responsible for the delay. It appeared that Kuwait was making a distinction in terms of nationality among its citizens, as though there were a group of first-class and a group of second-class citizens in Kuwait.

- 158. With regard to the statement of the delegate of Israel, the statement made by the delegation of Iraq in 1990 was still true, in spite of all the false allegations that had been made: the Iraqi nuclear programme was a peaceful one. Attempts to introduce uranium enrichment technology did not signify that the programme was for military purposes, since such technology was a complementary part of the fuel cycle. According to the Agency itself, Iraq had more than a year before it was obliged to provide the Agency with information on the design of its installations. Israel would always represent the most serious nuclear threat in the Middle East and Israel was entirely responsible for the introduction of nuclear armaments and the escalation of the arms race in the Middle East.
- 159. The delegate of Luxembourg had attempted to deceive the General Conference about a fact which was confirmed in the records of the meetings of the Board of Governors for 1985 and even more clearly in the Safeguards Implementation Report. The fact in question reflected a clear violation of the safeguards system.

REPLY BY THE DELEGATE OF KUWAIT TO THE STATEMENT MADE BY THE DELEGATE OF IRAQ

- 160. Mr. EL-SAEID (Kuwait), exercising his right of reply, said that in order to save time and to avoid getting involved in the lies spread by the Iraqi régime, he would avoid discussing any topic which lay outside the scope of the Agency. Some points, however, needed to be clarified.
- 161. With regard to the Kuwaiti prisoners of war in Iraq, Kuwait had submitted a list of 2000 names. It was true that Iraq had provided a list of 3000 names, but none of those names tallied with those on the Kuwaiti list.

The Iraqi régime, after having been compelled to leave Kuwait, was in fact trying to enter Kuwait again through the creation of a fifth column. It was well known that the Iraqi régime was multiplying its violations of Kuwait's borders. While press reports indicated that Iraq had agreed to allow United Nations planes to fly over its territory, it was in fact creating obstacles which belied that authorization. All those facts clearly demonstrated that Iraq was not serious about its declared intention of implementing Security Council resolutions and was still resorting to familiar devious tactics to avoid implementation of those resolutions.

The meeting rose at 7 p.m.