International Atomic Energy Agency

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GENERAL CONFERENCE

SIXTEENTH REGULAR SESSION: 26 SEPTEMBER–3 OCTOBER 1972

RECORD OF THE ONE HUNDRED AND FIFTY-FIRST PLENARY MEETING

Held in the conference centre of the Secretariat of External Relations, Mexico City, on Tuesday, 26 September 1972, at 4.35 p.m.

Temporary President: Mr. OTERO NAVASCUES (Spain)
President: Mr. FLORES DE LA PEÑA (Mexico)

* A provisional version of this document was issued on 29 September 1972.

** GC(XVI)/478.

The composition of delegations attending the session is given in document GC(XVI)/INF/139/Rev.3.

THE RECORD

OPENING OF THE SESSION

1. The TEMPORARY PRESIDENT declared the sixteenth regular session of the General Conference open.

2. In accordance with Rule 48 of the Rules of Procedure, he invited the delegates to observe a minute of silence dedicated to prayer or meditation.

● 3. All present rose and stood in silence for one minute.

4. The TEMPORARY PRESIDENT drew attention to the fact that the sixteenth regular session was special in the sense that the Conference, contrary to its usual custom, was meeting in Mexico City rather than in Vienna. That would enable delegations to acquaint themselves with a very ancient and outstanding civilization symbolized by the Plaza de las Tres Culturas, which was full of history.

5. At the outset of the session he wished to express the Conference's gratitude for the great efforts that had been made to provide such an admirable setting and for arrangements which would certainly contribute in no small measure to the session's success.

ELECTION OF THE PRESIDENT

6. The TEMPORARY PRESIDENT invited nominations for the office of President of the Conference.

7. Mr. QUIHILLALT (Argentina) nominated Mr. Horacio Flores de la Peña, the delegate of Mexico. He recalled the high offices held by Mr. Flores de la Peña in the Mexican administration, chiefly at the Ministry of Finance, and his university appointments as Director of the National School of Economics and professor of economics. He also mentioned Mr. Flores de la Peña's numerous activities abroad, more particularly as economic adviser to the United Nations and representative of his country at a large number of international conferences. Mr. Flores de la Peña was at the present time President of the Board of Mexico's National Institute of Nuclear Energy.

8. Mr. MANZ (Austria), Mr. DARUSMAN (Indonesia) and Mr. ORLANDO RODRIGUEZ (Cuba) supported the nomination.

● 9. Mr. Flores de la Peña (Mexico) was elected President of the General Conference for its sixteenth regular session by acclamation.

● 10. Mr. Flores de la Peña (Mexico) took the chair.

11. The PRESIDENT thanked the General Conference for the great honour it had accorded both his country and himself; he regarded his election as a tribute to Mexico and to its unabating efforts to ensure that nuclear energy would be used for purely peaceful purposes, so that the risk of war would be banished and world peace secured.

12. It was no easy task to preside over the deliberations of a body which, by virtue of its aim to promote the peaceful uses of nuclear energy, had to concern itself with many branches of scientific knowledge that were in process of continuous development. The task would be facilitated, however, by the spirit of co-operation which was sure to permeate the work of the session. Mexico had always championed the cause of the broadest freedom of opinion and the only limitation on freedom of expression was respect for the convictions of others.

13. All countries would have to work more and more closely together in order to solve the problems created by the effects of radiation and pollution of the environment, which were a threat to the very existence of civilized man. Extending far beyond the realm of science, those problems encompassed relationships between human beings; inasmuch as man, by applying his intelligence, had discovered ways of utilizing all the sources of energy in the universe, it was also up to him, through the exercise of moral principles, to bring all peoples together and thereby strengthen world peace and security.

14. Meetings such as the General Conference should help to narrow the gap between the experimental and social sciences so that human beings could learn to live in peace with what they had themselves created.

15. In conclusion, he paid tribute to his predecessor, Mr. Otero Navascues, the delegate of Spain, who had guided the deliberations of the fifteenth session with the authority natural to a man of such great erudition.

ADDRESS BY THE PRESIDENT OF THE UNITED MEXICAN STATES

16. The PRESIDENT OF THE UNITED MEXICAN STATES welcomed the delegates of all Members represented at the session and recalled that it was of universal interest that the Agency should attain the lofty aims with which it had been invested at the time of its creation.

17. Mexico had always supported the cause of countries seeking to banish the threat of an atomic conflict. The fruits of contemporary technology should serve to further the progress of humanity and not to destroy it. Mexico desired a peace based on justice rather than on mutual fear and suspicion.

18. The risk of nuclear war would not be eliminated by vague suggestions, but by definite and clear-cut action; he therefore urged those States that had not yet done so to become parties

to the Treaty on the Non-Proliferation of Nuclear Weapons [1] and the Treaty for the Prohibition of Nuclear Weapons in Latin America (the Tlatelolco Treaty) [2]. It was gratifying to see, in that connection, that the United States and the United Kingdom had ratified Additional Protocol II to the Tlatelolco Treaty and that the Netherlands, like the United Kingdom, had ratified Additional Protocol I. Equally heartening was the statement made by the People's Republic of China in support of the creation, by Mexico and other States, of a denuclearized zone in Latin America.

19. But stopping the spread of nuclear weapons was not enough - there was also a need to destroy those already in existence; so that, while disarmament was mainly the responsibility of the Great Powers, all countries without exception should assist in the realization of that aim.

20. The population explosion and industrial growth were depleting natural resources and disrupting the ecological balance. Rational use of nuclear energy was essential to preserve life and the basic structures of human civilization.

21. Environmental pollution arising from the use of conventional energy sources created the need for substitute technologies; hence the contribution that nuclear energy could make in that respect was inestimable.

22. There was an urgent need to channel the enormous resources currently being wasted towards the solution of social problems. If the existing mechanisms of solidarity and fair distribution were to break down, human coexistence would be seriously threatened.

23. Nuclear energy might well become the most productive source of power which had ever been available to man, but the exclusive enjoyment of the fruits of scientific progress by those countries which had attained the highest level of industrial development would be at variance with the universality of human culture. Current hegemonic tendencies amounted in fact to technological colonization and it was therefore essential to fight against all selfish appropriation of knowledge and to encourage resolutely a democratization of the yield of human effort.

24. The international community should recognize the right of all peoples to develop and should bear in mind that tensions could be reduced only when the great nations renounced their excessive concentration of political and economic power and when they realized that the best guarantee of their own security and progress lay in recognizing the rights of the weaker nations. Mexico had spoken, before other forums, in favour of a charter relating to the economic duties and rights of States which would justly regulate international economic life and respect the desire of all peoples to enjoy on an equitable basis the benefits of scientific and technological progress.

25. Mexico acknowledged the considerable part played by the Agency in striving for a better distribution of the benefits of the nuclear age and hoped that it would be able to count on its technical assistance in the implementation of the country's projects in the nuclear field. Among such projects was the construction, starting in 1976, of Mexico's first high-power reactor.

26. Despite inevitable ideological differences, all nations were united by the common wish to end for all time the age of armed conflict. That goal would be reached only after long and arduous efforts, and it would be necessary to act decisively in order to overcome the many opponents of change. However, both within and beyond Mexico's borders there were numerous forces at work in an effort to restore the dignity of man.

27. The lessons of their past had made Mexicans firm believers in the use of peaceful means as the only way of resolving disputes, for war could be avoided if the differences dividing the international community were made the subject of dialogue and negotiation. Mexico, which was by tradition a peace-loving nation, had always respected the rights of others. It desired a form of peace which was rooted in liberty, which would not limit the possibilities of progress, which would not entail the victory of force over the spirit, and which would enable man to attain cultural enrichment and to regain mastery over his destiny.

28. The present gulf between scientific progress and ineffective social systems was making it impossible to derive the fullest benefit from man's cultural heritage. Each nation should, in its own way, overhaul its ancient structures and try to achieve true development based on a better organization of labour and an optimum distribution of income.

29. Faced with the rapid advance of science and technology, man should pause and reflect for a moment. The technological capacity of man to transform nature would turn to his detriment unless he revised his fundamental values and clearly defined his historic aims.

30. For the peoples of the "third world", the end of the arms race would not on its own ensure security and stability. It would have to be accompanied by a renunciation of the politics of hegemony by the Great Powers and by a fair international distribution of the world's wealth.

APPOINTMENT OF THE CREDENTIALS COMMITTEE

31. The PRESIDENT proposed, in accordance with Rule 28 of the Rules of Procedure, that a Credentials Committee should be appointed consisting of the following nine Members:

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[1] Reproduced in document INFCIRC/140.

[2] Reproduced in the United Nations Treaty Series, Vol. 634, No. 9068.

Colombia, India, Indonesia, Italy, Japan, Romania, the Union of Soviet Socialist Republics, the United States of America and the Republic of Zaire.

● 32. The proposal was accepted.

ELECTION OF THE VICE-PRESIDENTS

33. The PRESIDENT recalled that, under Rule 34 of the Rules of Procedure, the Conference was required to elect its Vice-Presidents after the election of the Chairmen of the two Main Committees. He therefore proposed to suspend the plenary meeting for a short time to enable the two Committees to elect their Chairmen.

● 34. The meeting was suspended at 5.25 p.m. and resumed at 5.35 p.m.

35. The PRESIDENT invited nominations for the eight posts of Vice-President of the Conference.

36. Mr. HAUNSCHILD (Federal Republic of Germany) nominated the delegates of Australia, Canada, France, Ghana, India, Japan, Poland and the Union of Soviet Socialist Republics.

37. Mr. MALU wa KALENGA (Zaire) seconded those nominations.

● 38. The delegates of the Members nominated were elected to the eight Vice-Presidencies.

APPOINTMENT OF THE GENERAL COMMITTEE

39. The PRESIDENT recalled that, under Rule 40 of the Rules of Procedure, the Conference was required to elect four additional members to the General Committee. He invited nominations.

40. Mr. FODOR (Hungary) nominated the delegates of Czechoslovakia, Lebanon, the United Kingdom of Great Britain and Northern Ireland and the United States of America.

41. Mr. RAZAFINDRATANDRA (Madagascar) seconded those nominations.

● 42. The delegates of the Members nominated were elected to the General Committee, which was thus duly appointed in compliance with the provisions of Rule 40 of the Rules of Procedure.

APPLICATIONS FOR MEMBERSHIP OF THE AGENCY (GC(XVI)/479)

43. Mr. SETHNA (India) said that he wished to sponsor the application of the People's Republic of Bangladesh for membership of the Agency which was the subject of document GC(XVI)/479. He recalled that the Board of Governors had considered the application on 21 June and had recommended that the Conference approve Bangladesh for membership; such approval would be in conformity with the provisions of Article IV.B of the Statute, and Bangladesh, which was already a Member of specialized agencies such as the International Labour Organisation and the World Health Organization, had diplomatic relations with 91 States. Bangladesh was performing very valuable work in fundamental research on nuclear physics at the Dacca Centre and there were countless instances of peaceful applications of nuclear energy within its borders.

44. Sir John HILL (United Kingdom) recalled the bonds which had long existed between the peoples of Bangladesh and the United Kingdom, both of which countries were members of the Commonwealth. The United Kingdom had officially recognized Bangladesh as soon as it had gained independence and had established close and cordial relations with it; the United Kingdom had also helped Bangladesh in the difficult task of reconstruction after the ravages of war. Bangladesh was a young nation and had a right to belong to the international community and to be admitted to membership of the United Nations and the specialized agencies. His delegation therefore supported the application of Bangladesh for membership of the Agency and felt sure that the representatives of that country would play an active part in the life of the Agency.

45. Mr. KHAN (Pakistan) said he had no intention of reverting to the tragic events of 1971 and that he did not want to oppose the application for membership contained in the draft resolution in document GC(XVI)/479.

46. Nevertheless, he thought it would be premature for the General Conference to take a decision before the United Nations itself had taken a stand in the matter; he considered that the conditions laid down in Article IV.B of the Statute were not as yet fulfilled and that General Assembly Resolution 2793 (XXVI) of 7 December 1971 and Security Council Resolution 307 had not yet been implemented. The problem should be solved only with the utmost good will and at the appropriate moment; if the Conference decided to vote, the delegation of Pakistan would abstain.

47. Mr. ARKADIEV (Union of Soviet Socialist Republics) said he was in favour of the admission of Bangladesh, which had taken its place in the community of nations as a result of a national liberation movement; by admitting it to membership of the Agency, the Conference would in fact be strengthening the principle of universality, and the participation of Bangladesh in the Agency's activities would help to improve international co-operation in the utilization of atomic energy for peaceful purposes.

48. Mr. SUDARSONO (Indonesia) recalled the religious and historic ties which united Indonesia and Bangladesh and said he supported the admission of that country to membership.

49. Mr. KABBANI (Saudi Arabia), like the delegate of Pakistan, believed that the Conference should not discuss the question until the General Assembly of the United Nations had taken a decision; if the matter were put to the vote, his delegation would abstain.

50. Mr. ELMEHRIK (Libyan Arab Republic) also considered it preferable to postpone discussion of the question, and said that if a vote were taken he would abstain.

51. The PRESIDENT took it that the Conference wished to adopt the draft resolution contained in document GC(XVI)/479.

● 52. It was so decided.

STATEMENT BY THE REPRESENTATIVE OF THE SECRETARY-GENERAL OF THE UNITED NATIONS

53. Mr. KUTAKOV (Representative of the Secretary-General of the United Nations) said that he had been instructed to read the following message from the Secretary-General of the United Nations, Mr. Kurt Waldheim, to the Conference on the occasion of its first session in Latin America, cradle of one of the great civilizations:

(1) "As the General Conference of the International Atomic Energy Agency convenes in Mexico City for its sixteenth session, to review the Agency's activities and to lay the ground for further advances in the peaceful uses of nuclear energy, it gives me great pleasure to convey sincere wishes of success to all its participants.

(2) "I find it both significant and auspicious that the General Conference has chosen to meet in Mexico City, where, on 14 February 1967, the Treaty for the Prohibition of Nuclear Weapons in Latin America was signed - a treaty establishing the first nuclear-weapon-free zone for an inhabited portion of the world, as well as an effective system of control in which the International Atomic Energy Agency is to play a central role.

(3) "For many years, I have been personally associated with the Agency's efforts to develop the positive and peaceful potentialities of the atom and, to this end, to provide an effective system of safeguards against diversion of fissile material from peaceful to military uses. I view with great satisfaction the continuing progress that the Agency is making in these fields, thereby implementing its statutory goals and responding to the vital needs of a rapidly changing world. In this connexion, I wish to pay a special tribute to the Director General, Dr. Eklund, for his able guidance of the Agency's activities.

(4) "The International Atomic Energy Agency has now negotiated safeguards agreements with many States in accordance with the provisions of the Treaty on the Non-Proliferation of Nuclear Weapons. The most recent achievement in this respect is the Agreement between the five non-nuclear-weapon States concerned, the European Atomic Energy Community and the Agency, which your Board of Governors has just approved. In my view, this represents a very significant advance and it is my hope that such progress will be further accelerated in the months ahead, in a way that will contribute to the consolidation of the non-proliferation regime.

(5) "The International Atomic Energy Agency continues to be engaged in activities designed to fulfil a number of recommendations concerning the peaceful uses of atomic energy made by the Conference of Non-Nuclear-Weapon States, which was held in 1968 under United Nations auspices. The annual reports of the Agency clearly show the close co-operation between the United Nations and the Agency in this field, as indeed in any other field of common interest, including the human environment.

(6) "It is gratifying to note that the total resources of the Agency for technical co-operation activities have grown in recent years. This should help to promote the further development of the applications of nuclear energy for peaceful purposes, especially in the developing countries, and thus contribute to fulfilling the basic goal of the Agency which, in the words of its Statute, is to accelerate and enlarge the contribution of atomic energy to peace, health and prosperity throughout the world. No doubt, still further efforts will be needed in the years to come in order to realize this goal in the most effective manner.

(7) "I believe that the International Atomic Energy Agency can look back with satisfaction to the work it has accomplished since the first session of the General Conference, held fifteen years ago. During this brief period, the Agency has grown from an inspiration to an effectively working international organization. It is my conviction that the Agency's activities and programmes will continue to grow and that its share in the progress of mankind will become ever more significant."

COMMUNICATION BY THE DELEGATE OF FRANCE

54. Mr. GIRAUD (France) congratulated the President on his election and thanked him for having allowed him, at the suggestion of the Director General, to make a statement which was not envisaged in the provisional agenda for the session.

55. He had asked to speak in order to inform the Conference of a scientific discovery that had been announced several hours previously at the Academie des Sciences in Paris under the patronage of Mr. Albert Bernard Bongo, President of the Gabon Republic. As the discovery concerned the territory of that country, he wished to associate the Gabon delegation with his statement.

56. In June 1972 the control laboratories of the Commissariat à l'energie atomique (French Atomic Energy Commission) had found, in a sample of uranium hexafluoride produced from ore concentrates, uranium-235 contents that were abnormal in relation to the accepted concentration for natural uranium, which was always of the order of 0.720%, with variations involving only the fourth decimal place.

57. Subsequent analyses had discounted the possibility of accidental contamination by uranium originating from a reprocessing plant where the isotopic content would have been changed, and had proved that the anomalies could be attributed to a particular area of the Oklo deposit, in the Haut-Ogoué region of Gabon, which had been worked for the past two years.

58. There was thus no doubt that "non-natural" uranium had been found in nature. Analyses carried out on a large number of batches, each comprising several tons of uranium hexafluoride and all produced from ore originating in Gabon, had shown uranium-235 concentrations ranging from 0.621 to 0.640%. Other ore samples had exhibited a slight enrichment - of up to 0.730% - in uranium-235. Analyses carried out on random samples of ore, each representing several hundred grammes of uranium, had yielded surprising results: the uranium-235 concentration dropped as low as 0.440%. The uranium-235 concentrations appeared to be low in proportion as the overall uranium contents of the ore were high; the latter exceeded 10% locally.

59. Only two hypotheses seemed adequate to explain the cause of the anomalies: either an isotopic separation process occurring in the course of the ages, or a chain reaction taking place very long ago. The chemists and physicists of the Commissariat à l'énergie atomique had adopted the latter hypothesis: in the case of ore samples having the lowest uranium-235 contents, analysis of the isotopic composition of some of their elements in the middle of the periodic table gave quite abnormal percentages that could only be explained by the presence of stable isotopes produced at the end of fission chains. That had been true of cerium, samarium, europium, neodymium and dysprosium, for which considerable discrepancies had been found in relation to the isotopic composition of the natural elements.

60. The age of the deposit, which was contained in Pre-Cambrian sediments, had been calculated to be approximately 1700 million years, and it should be noted that at that remote epoch the fissile isotope content - thanks to the more rapid natural radioactive decay of uranium-235 by comparison with uranium-238 - had been about 3%, i.e. the same as that of present-day light-water reactors. It therefore appeared that critical conditions could have been produced naturally as a result of a suitable combination of parameters, which did not seem to be incompatible with the characteristics of the part of the Oklo mine concerned. The following favourable factors had been encountered there simultaneously: an old deposit, high uranium content and large dimensions, low concentrations of neutron-absorbing elements and the very likely presence of water at the time in question.

61. In addition, the presence in the ore of uranium slightly enriched in uranium-235 might be explained by the migration of plutonium-239 formed during the chain reaction; the plutonium had disappeared in the course of time, leaving its decay product uranium-235.

62. In view of the scientific importance of the discovery, the company responsible for operating the mine, after consulting the President of the Gabon Republic, had been good enough to interrupt the working of the section in question, which contained several hundred tons of uranium, until scientists could collect samples and make all the measurements necessary to understand the essential features of the phenomenon. If the phenomenon were observed in places other than Gabon, it would cast doubt on the concept of "natural uranium". The practical consequences would be that isotopic control of ore concentrates would be required in the uranium industry.

● The meeting rose at 6.30 p.m.