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NUCLEAR DEVELOPMENT AND PROLIFERATION

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NEW ENVOY FOR DISARMAMENT DISCUSSES NUCLEAR CONTROLS

Plan for Pleas to U.S., USSR

Brisbane THE COURIER-MAIL in English 17 Aug 83 p 8

[Text]

AUSTRALIA will approach both the United States and Russia and urge them to stop their nuclear arms build-up.

The newly appointed ambassador for disarmament, Mr Richard Butler, will also ask both superpowers to seek ways to wind down their nuclear arsenals.

Mr Butler, who was in Brisbane yesterday, outlined these initiatives at a public meeting on disarmament which the Foreign Affairs Department called at the Australian Government Centre.

Mr Butler was questioned on Federal Government disarmament and foreign affairs policies by representatives of the People for Nuclear Disarmament, Australian Peace Committee, religious groups and trade unions.

He admitted that it would be difficult to apply the Government's philosophy and make it work in the present arms control and strategic situation.

"Because it is hard, that is no reason not to do it — to seek ways of stopping the nuclear arms race," he said.

He told the meeting that the Federal Government "fully admitted" it

needed help from people concerned about disarmament. He hoped for ideas which could be translated into action.

Mr Butler said he was having public meetings around Australia before taking up his appointment in Geneva.

He promised regular visits to Australia so the consultative process with concerned groups could continue.

"The build-up in nuclear arms has reached a stage of danger that everybody has a right to be heard. We will be heard," he said.

Mr Butler said Australia also would support the renewal of the nuclear non-proliferation treaty. He said that if it collapsed, four or five new nuclear weapons powers could emerge.

More Active Australian Role

Perth THE WEST AUSTRALIAN in English 19 Aug 83 p 18

[Text]

MELBOURNE: The dreadful spiral of nuclear weapons can be stopped, according to Australia's new ambassador for disarmament, Mr Richard Butler.

However, Mr Butler, who will be based in Geneva, said yesterday that the path to peace was difficult.

He was speaking at the Victorian branch of the Australian Institute of International Affairs.

He signalled that Australia was set to take "a much sharper, clearer and active role" to urge the two superpowers to end the weapons race and scale down their arsenals.

"We will be acting vigorously," Mr Butler said.

He said that Australia's voice was most respected in the international arena and the Government would put its position firmly to both the United States and the USSR.

The nuclear problem was on the mind of tens of thousands of Australians because of the threat the weapons posed to all people.

"We are clearly in the most dangerous situation that we have been in in human history," he said.

Australia would be taking a high profile in international forums to push for a more peaceful world, he said.

The Federal Government would apply pressure in the United Nations General Assembly for a nuclear test-ban treaty to operate for all time.

Many of the major Powers did not want to act yet and he admitted that the road ahead was difficult.

Mr Butler warned that Australia was worried that steps to control the spread of nuclear arms could stall.

This could cause the non-proliferation treaty, due for review in 18 months, to fall apart and five or seven current signatories might

get nuclear weapons.

Other matters Australia intended to pursue included seeking to restrict the nuclear space race and the growth of horrendous chemical weapons, and pressing for a nuclear-free zone in the south-west Pacific.

"One of our major objectives is to get the French to stop testing weapons in our backyard," Mr Butler said.

HAYDEN SEES ONLY 'PATCHY' SUPPORT FOR PACIFIC N-FREE ZONE

Assessment of Australian Position

Melborne THE AGE in English 24 Aug 83 p 3

[Article by Kate Le]

[Text]

CANBERRA. — Support for the Government's policy of a nuclear-free zone in the South Pacific was patchy and any agreement on the proposal was a long way off, the Minister for Foreign Affairs, Mr Hayden, said yesterday.

The proposal for such a zone will be discussed at the 14th South Pacific Forum, which meets in Canberra next week. Member countries have been considering the establishment of a nuclear free zone in the region for more than eight years.

In his address to the forum's executive yesterday, Mr Hayden concentrated on economic relations between South Pacific countries. Later, in an interview with Radio Australia, he warned that it would take time for the forum to reach agreement on the nuclear issue.

"I would be less than candid if I didn't acknowledge the support is a bit patchy in a few areas. I'm not prepared to identify countries, I think that's up to them, but there's not unanimous support for the proposal, so there is work ahead of us," he said.

The countries attending next week's meeting will be asked to endorse two resolutions. The first prohibits the testing, manufacturing, and storing of nuclear weapons, and the other calls for dumping of unclear waste in the Pacific to be banned.

The resolutions would have no effect unless the forum nations declared a nuclear-free zone in the South Pacific. ALP policy calls for the Labor Government to support a United Nations resolution aimed at banning all nuclear activities in the region.

My Hayden said: "If the forum nations decide they want to have applied a nuclear-free zone in areas where they have sovereign authority they can ensure that applies, that is preventing stockpiles and the production of nuclear weapons, the testing of them, the storage and disposal of waste product, and so on. That can be done very effectively."

Asked about the prospect of an international agreement, Mr Hayden was less optimistic. He warned that the negotiations leading to an agreement would take some time. "That's the nature of international negotiations. You've only got to see how many years it takes to get a signature on an international convention and then to get ratification after it, so I don't think we should hold our breath," he said.

Mr Hayden said he hoped Australia could make worthwhile progress at the forum meeting. The need for some form of international agreement was illustrated by recent reports of French testing in French Polynesia, an area not covered by the forum.

In his formal address to officials yesterday, Mr Hayden said Australia would have to move to a more open economy and would be aiming for active marketing arrangements particularly with Pacific countries.

He said the Government was committed to regional co-operation and closer relations. Mr Hayden also reminded delegates that Australia would not be responding to the French invitation to send witnesses to testing at Mururoa Atoll until forum leaders had been consulted.

The forum, which was established in 1972, comprises representatives of Australia, the Cook Islands, the Federated States of Micronesia, Fiji, Nauru, New Zealand, Papua New Guinea, the Solomon Islands, Tonga, Tuvalu, Vanuatu and Western Samoa.

Papua New Guinea Backing

Melbourne THE AGE in English 24 Aug 83 p 7

[Text]

PORT MORESBY, 23 Aug. — Papua New Guinea would back Australia's stand against French nuclear tests in the Pacific at next week's South Pacific Forum meeting in Canberra, a Government spokesman said today.

The spokesman said the Foreign Minister, Mr Namaliu, recently had called for a more militant approach to nuclear protest.

PNG is expected to urge Forum members to adopt a united approach to nuclear waste disposal. It also would voice its strong support for decolonisation of New Caledonia and for a definite timetable for that country's political independence from France, the spokesman said.

PNG believes that reorganisation of New Caledonia's legislative, administrative and land ownership systems and of its minerals and tourism industries would be fairer to the indigenous Kanaks by supporting and protecting their interests and culture.

PNG is expected to recognise that some improvements have been made in New Caledonia.

Meanwhile, the Prime Minister, Mr Somare, said he had decided to accept a French offer and send a scientist to the nuclear testing site at Mururoa Atoll.

—AAP

CSO: 5100/7501

AUSTRALIA

BRIEFS

OPPOSITION TO NUCLEAR PLANT--The Australian Democrats will oppose any attempt to establish a nuclear power plant in Tasmania. The party's leader, Senator Chipp, said: "Recent reports indicate that Mr Gray (the Tasmanian Premier) has been in the United States investigating the possibility of getting a nuclear power plant to replace the Franklin dam, Mr Gray will have the biggest fight on his hands if he pursues this absurd option." [Text] [Sydney THE AUSTRALIAN in English 18 Aug 83 p 3]

CSO: 5100/7501

STARTUP OF EXPERIMENTAL REACTOR DISCUSSED

Prague RUDE PRAVO in Czech 24 Jun 83 p 5

[Article by Jaroslav Simek: "A Support for Nuclear Power Production"]

[Text] At the end of June, the LR-0 zero-power experimental light-water reactor will go into permanent operation in the largest institute of our scientific research base for nuclear power, the Institute of Nuclear Research in Rez near Prague. This is a device which can be used to simulate various situations and obtain detailed, precise information on processes in the core of VVER-type power reactors, which are the basic reactors for the construction of future electric power stations here and in other socialist countries.

The main technical problems of the construction of nuclear power stations have already been solved. Those which have been completed are operating reliably and performing their main mission. Nonetheless, because of the short time during which nuclear power stations have been in use, there is not yet sufficient knowledge and statistical information on various irregularities in their operation. And this is the area in which the new experimental reactor will have its effect. As Eng Miloslav Hron, CSc, deputy director for research at the Institute of Nuclear Research, explained to us, "Among other things, it will allow us to obtain important information on ways of further increasing the safety and reliability of nuclear power stations and of making their operations more economical. But our research will also give answers to many questions of the Czechoslovak machine building industry, which is successfully expanding production for nuclear power. In addition, it is obvious that we will be enriching the international cooperation of the socialist countries in this area."

Multifaceted Use

The technology is a multipurpose design. It makes it possible to carry out experiments not only with VVER-1000 cores, but also, after installation of a core insert, of VVER-440 cores as well. This insert will be prepared and started up this year. It is being readied by Skoda Plzen's Power Generation Machinery and the Institute of Nuclear Fuels in Prague-Zbraslav. The design makes use of four Czechoslovak inventions.

For the long term, experiments planned for the LR-0 reactor involve the preparation of promising VVER-type cores not only for new power stations, but also for heat stations. For realistic plans are being made for nuclear power stations to provide not only sufficient electric energy, but also heat for homes and various branches of industry.

Half a Year Ahead of Time

The basis for the construction of the LR-0 reactor was created in 1975 as part of the assignment on Research and Experimental Reactors in the state plan for development of science and technology. In 1976-1979, Chemoprojekt Prague and Skoda Plzen's Energeticke strojirenstvi plant, in close cooperation with Soviet experts from the I. V. Kurchatov Institute of Nuclear Energy in Moscow, developed comprehensive technical and design documentation for the reactor. Simultaneously, the Gidropres design office of the USSR State Committee for Atomic Energy designed a VVER-1000 experimental fuel cell. A similar task, but for a VVER-440, was assigned to the Institute of Nuclear Fuels in Zbraslav. A contract between the Skodaexport PZO [foreign trade organization] and the Soviet Union's Atomenergoeksport for the importation of fuel inserts for the LR-0 reactor was concluded by the two partners at the International General Engineering Fair in Brno in September 1979.

The installation of the process equipment was completed last August, and the reactor first went critical on 19 December 1982. An important role in the last phase of construction of the reactor was played by joint socialist pledges to accelerate the entire project and present it for permanent operation half a year ahead of time, by July 1983. Under the sponsorship of the Central Bohemian and West Bohemian Kraj CPCZ committees, this pledge was undertaken in honor of the 10th Trade Union Congress by the working collective of the Institute of Nuclear Research in Rez and the equipment suppliers of Skoda Plzen's Energeticke strojirenstvi plant. The participating organizations succeeded in creating conditions which in particular made it possible to avoid slippages and assured high-quality work.

Several measures considerably strengthened the installation capacities on site. All work was managed in accordance with a precise schedule.

But the Work Has Not Ended

The plans for comprehensive testing, physical startup, test operation, and the first stage of research work on the reactor, too, were ready on time and were of the required quality. The same can be said of the working up and discussion of the complete safety and operating documentation.

Josef Bardos, CSc, head of the department of experimental reactor physics, confirmed that "We now can state that the reactor is ready in all respects for the beginning of permanent operation and is one

of the most important installations for research in the physics of VVER-type power reactors. But efforts to improve it will continue. In addition to the insertable 440-type core, this year we will also put a mockup for studying radiation stress on reactor pressure vessels into operation."

Another stage in the long-term cooperation between Czechoslovak and the Soviet researchers, technicians and workmen is reaching its culmination. Even though the production of electrical energy in nuclear power stations in this republic is in its infancy, we already have a tradition in using the energy of the atom. This was another reason why the decision was made to build the LR-0 experimental light-water reactor in Czechoslovakia, where it is already beginning to carry out all planned assignments.

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CSO: 5100/3033

BRIEFS

BRAZILIAN-VENEZUELAN NUCLEAR ENERGY COOPERATION--Venezuela and Brazil will soon sign a cooperation agreement in the area of nuclear energy for peaceful uses as was announced in Caracas by Rex Nazare, that country's CNEN (National Nuclear Energy Commission) chairman. Under the agreement, the Brazilian and Venezuelan governments will promote cooperation in the research on and application of nuclear energy for peaceful uses and will facilitate the accomplishment of joint projects. Nazare announced that the agreement will be carried out and coordinated by the appropriate Brazilian institutions in the area of the peaceful uses of atomic energy and by the Venezuelan agency, the CONADIN (National Council for the Development of the Nuclear Industry). "The agreement in particular will spell out the areas of scientific-technical cooperation and efforts will basically be aimed at an exchange of information in the field of radiological protection, especially individual dosimetry and calibration of equipment used in therapy," he pointed out. The Rio de Janeiro official indicated that Venezuela will be able to use the selective information dissemination services provided by the CIN (Nuclear Information Center) of Brazil as a part of the final implementation, in Venezuela, of the automated system of nuclear information. CONADIN Executive Secretary Julio Cesar Pineda in turn announced that Venezuela signed a basic technical cooperation agreement with Brazil through which both countries established cooperation relations, specifically in the area of personnel training. He added that two CONADIN officials are currently in Brazil, talking to the CIN about radiological safety. [Text] [Caracas EL NACIONAL in Spanish 31 Aug 83 p C-2] 5058

CSO: 5100/2093

NUCLEAR COOPERATION WITH CHILE WELCOMED

Buenos Aires LA NACION in Spanish 7 Sep 83 p 8

[Editorial: "Nuclear Cooperation with Chile"]

[Text] Ratification of the nuclear cooperation agreement with Chile takes on special significance in the context of current relations with that country. The agreement, in itself, approaches the matter in terms of the "peaceful uses" of atomic energy. But it is also obvious that such a delicate strategic issue requires a deep conviction, of the highest political order, regarding the procedures and possibilities for cooperation, motivated and governed by the desire for peace among nations.

Thus this consideration also includes the value of the good auspices which can influence, now and with a view to the future, the focus of Argentine-Chilean relations.

A few days ago in these columns, we praised the initiative of both countries' political sectors to promote the formulation of a general peace agreement.

This needs to be mentioned in order to precisely define certain features.

The idea of a peace agreement should not be attributed exclusively to the contingencies of the ongoing southern dispute. Moreover, it would be superfluous to believe that, under the terms of an arbitrated settlement, the two countries have formally agreed not to resort to the use of force. But it is also clear that civilian concern for maintaining peace is a response to the anxiety caused by events capable of disrupting peace.

In this sense, ratification of the nuclear agreement in the present circumstances, because of the considerations which we mentioned initially, should be interpreted as an appropriate expression of governmental judgment.

In any case, beyond occasional considerations, there is the obviousness of the presumable benefits of a firm policy of peace between Argentina and Chile, based on a clear awareness which will eliminate shocks and gloomy apprehension.

The starting point for this will lie in an absolute clarification of the confrontational issues which we wish to place under the mantle of peace, mainly territorial

issues. This means settling existing disputes and precisely defining, for the same purpose, as many as could be presumed, of whatever nature.

It is therefore imperative, as the Chilean representative noted in signing the recent agreement, to deal with joint issues candidly and sincerely.

11915

CSO: 5100/2092

CASTRO MADERO DISCUSSES NUCLEAR POLICY

Comments on Weapons Capability

Buenos Aires LA PRENSA in Spanish 21 Aug 83 p 3

[Text] The chairman of the National Atomic Energy Commission, Vice Admiral Carlos Castro Madero, has acknowledged that Argentina has the capability to produce nuclear weapons, but explained that as a result of the system of "international safeguards," to which the Atucha plant is subject, that possibility does not exist.

Castro Madero explained that Argentina has a "pilot plant for reprocessing" uranium, from which plutonium can be obtained, the basic component for the construction of nuclear weapons. He noted that more plutonium can be obtained from a process using heavy water.

When asked whether it is possible that Argentina would build nuclear weapons with plutonium obtained by the enriched uranium process, Castro Madero answered that "it depends, because the plutonium which could be extracted would only come from the Atucha reactors, which are subject to safeguards."

In statements to Radio Continental, Castro Madero added that "the reprocessed fuel elements and the plutonium produced are also subject to safeguards."

He emphasized that "the Atucha plant is not subject to safeguards, but the reactors are, for although we use material produced abroad, all of it is subject to safeguards."

Difference

Castro Madero added that "it is agreed that everything received from abroad is subject to international safeguards, although it is agreed that whatever is produced with our own technology is not subject to such safeguards."

"Therefore," he explained, "the matter of safeguards has nothing to do with the Argentine position of not signing the Tlatelolco Nuclear Nonproliferation Treaty."

He added that when a country submits to safeguard agreements through the International Atomic Energy Agency (IAEA), "it has to be ready, when the time for inspection arrives, to prove that even the last gram of heavy water is being used for peaceful purposes."

Submarine

Asked about the feasibility of building a nuclear-powered submarine, Castro Madero said that such a vessel "does not require heavy water, only a compact reactor using enriched uranium."

"I believe that in the event the project should be implemented, it would have to be based on a process using enriched uranium," the official said, and added that "a theoretical study is being made and it will be left up to the future government to decide whether or not it will be possible to go ahead with it."

Positive Change

Finally, Castro Madero said that he considered U.S. authorization for Germany to sell 143 tons of heavy water to Argentina "a very positive change."

The U.S. Government has authorized the sale of heavy water, which is the property of the Germans, but the operation requires the approval of the United States, since it was originally produced in that country.

The decision of the Department of Energy indicates a complete change in the nuclear supply policy regarding Argentina as a result of the latter's failure to sign the Tlatelolco Treaty.

Cost

Castro Madero corrected the cost of the heavy water for Argentina, explaining that the first 38 tons purchased will mean an expenditure of approximately \$8 million.

He added that should the decision be made to purchase the remaining 105 tons, Argentina will have to spend \$22 million more.

Previous reports cited a cost of \$100 million, which "is not correct," Castro Madero stated.

He reiterated that in 1985, Argentina will be capable of producing about 200 tons of heavy water.

Expresses Concern Over Program

Buenos Aires LA NACION in Spanish 11 Sep 83 p 12

[Text] Bahía Blanca--"Such a decision could greatly harm the Argentine nuclear plan." The chairman of the National Atomic Energy Commission [CNEA], Vice Admiral (retired) Carlos Castro Madero, used these words to express his deep concern over the possibility of nuclear power plants being withdrawn from the CNEA's jurisdiction during the country's next constitutional stage.

Vice Admiral Castro Madero made this statement after expressing his views on aspects of the nuclear plan to navy officers at the Puerto Belgrano Naval Base.

Radical Plan

The plan to remove nuclear power plants from the CNEA's sphere of influence appears in documents concerning the energy policy which the Radical Civic Union would implement if it were victorious in the elections of 30 October.

Continuity

The CNEA's chairman also rejected claims that the Argentine nuclear plan is too large and expressed his conviction that "although restricted by economic problems, it will continue to go forward beyond January 1984."

Heavy Water

Castro Madero acknowledged that because of the budget cuts ordered in recent years, the heavy water plant being built at Arroyito, Neuquen, will go into operation in late 1985 instead of next year. Regarding the U.S. Government's decision authorizing the sale of heavy water of German origin to Argentina, he affirmed that it is a gesture which "to some extent confirms the rationality and clarity of our nuclear policy." He added that that purchase will not have further implications but will enable the country to have a reserve of heavy water, providing it with security against possible losses due to breakdowns of nuclear power plants.

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CSO: 5100/2092

ARGENTINA

CASTRO MADERO ON STATE OF NUCLEAR SUBMARINE PROJECT

Sao Paulo O ESTADO DE SAO PAULO in Portuguese 11 Sep 83 p 16

[Text] Buenos Aires--"We are conducting studies on an atomic engine to be put into the submarines we are building. Within a year we will be in a position to conduct the first tests but it will take us another between 6 and 8 years to get an operational submarine," O ESTADO was told by Adm Carlos Castro Madero, chairman of the CNEA (National Atomic Energy Commission).

Madero admitted that "the decision to go ahead with the project was made after the Malvinas War. We asked the International Atomic Agency to 'condemn' the use of nuclear submarines in the Malvinas Islands but the leading countries--the United States, Great Britain, and France--and the moderate nations of Europe, such as Sweden, Holland, Italy, etc., decided that nuclear power for submarines is not to be condemned. For this reason, Argentina, which was attacked by a nuclear submarine--the 'Conqueror,' which sank the cruiser 'Belgrano'--decided to plan a nuclear engine for itself."

The admiral wanted to stress that there is no legal limit, nor are there any international commitments to prevent Argentina from pushing the project: "The plan at any rate will have to be approved before its execution is decided."

Questioned as to the recent purchase of heavy water from West Germany, Castro Madero replied: "A German firm offered us 143 tons of heavy water already used in reactors which is irradiated. We decided to purchase 38 tons at a price of \$8.1 million and we signed a purchasing option for the remaining 105 tons. This material is to be used in forming a security stockpile and it is to replace that which is lost each year in the two power plants which are now operating, that is, Atucha I and Embalse."

The two power plants require 7.2 tons of heavy water to be replaced annually so that the purchase that was transacted will perfectly cover the normal heavy water supply needs until production is started at the Argentine manufacturing plant at the end of 1985.

Problems

There are some political problems connected with the purchase. The heavy water sold by West Germany is of United States origin. It was necessary to get United

States approval for delivery to Argentina. Argentina's nuclear policy conflicts with that of the United States. "United States authorization can be interpreted as a gesture by that country to our administration since Washington could have refrained from giving authorization for this transfer," the admiral said. "I do not know whether there was any interference by Great Britain--that would not have any relevance for us in this case. At any rate, there is a legal limitation in the purchasing contract--the heavy water cannot be used for the production of atomic weapons. The purchasing contract therefore prevents its use in so-called peaceful explosions as well as in military explosions."

Castro Madero believes that the seller country was also influenced by the purchase of 5 tons of heavy water from the Soviet Union last year. With that purchase, Argentina demonstrated its determination to supply itself with the nuclear material it needs even if it has to go to the socialist bloc--an initiative which displeased the Western leaders. The Argentine nuclear plan involves a very significant development framework which also constituted a factor in favor of United States authorization. One of the heavy-water plants is already under construction.

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CSO: 5100/2094