dossier 55

DIRECTORAAT-GENERAAL
EUROPESE SAMENWERKING

Directie: DRW 1 I
Agendanummer: 270176

Kopie gezonden aan:

DCA
DIC/CV
DIC/KG
EZ (Hr Mann)

Verzonden 3 NOV. 1975

AFGESCHREVEN:

Na verzending ter visie aan:

POSTTELEGRAM

No. 3174/734

Islamabad, 28 oktober 1975.

Bezoek Bhutto aan Parijs;
levering kerncentrale.

Naar aanleiding van het bezoek van Eerste Minister Bhutto vorige week aan Parijs besteedde de Pakistaanse pers vooral aandacht aan de onderhandelingen over de levering van een kerncentrale. Het betreft een kerncentrale van 600 M.W. voor de provincie Punjab.

Uit goede bron werd hier vernomen dat van Franse zijde inderdaad interesse was getoond maar dat nog geen enkel definitief besluit was genomen. Behalve Frankrijk zijn namelijk ook West-Duitsland, Italië en de Verenigde Staten om zakelijke redenen in de levering van deze centrale geinteresseerd: in eerste aanleg betreft het een order van $ 50 miljoen op commerciële basis.

De Ambassadeur

G.J. Jongejans

De Minister van Buitenlandse Zaken
's-GRAVENHAGE.

9071-12-69-917135*

EMBASSY OF PAKISTAN
THE HAGUE

March 11, 1976.

PRESS RELEASE

PRIME MINISTER BHUTTO'S STATEMENT ON NUCLEAR ENERGY

Addressing a large welcoming crowd which accorded him an enthusiastic welcome on return from a highly successful 10-day tour of West Germany, Sweden, Canada and city of New York, the Prime Minister Zulfikar Ali Bhutto declared that Pakistan will not manufacture Atomic Bomb and will use its nuclear capability for peaceful purposes only.

2. Referring to the agreement with France for a Rs.1500 million nuclear reprocessing plant and its approval by the International Atomic Energy Agency, the Prime Minister said:"We are a peaceful nation ... We will not go for the bomb".

3. At an IAEA meeting in Vienna, which cleared the way for availability of French nuclear reprocessing plant to Pakistan, nineteen out of thirty four members cooperated with Pakistan while rest did not oppose it, Mr. Bhutto said.

4. This, he said, required intense efforts on part of Pakistan.

5. Mr. Bhutto said Pakistan had to convince the international community about its peaceful intentions. It was pointed out that Pakistan should not be punished for what India had done and she "should not be equated with India". Indian policy he said, was based on aggression and that country had a record of breaking international commitments.

6. The Prime Minister said there was no reactor, big or small in Pakistan when India acquired its first reactor in 1956 with cooperation of Canada.It was worth Rs. 200 million (US $ 20 million) while Pakistan was being offered a reactor worth Rs. 3 hundred thousand (US $ 30,000) aprox. "So you can imagine what sort of training Pakistani scientists would get from a reactor of such value".

DIRECTORAAT-GENERAAL
EUROPESE SAMENWERKING

Directie: DRW/AT
Agendanummer: 03121

Kopie gezonden aan:
zonder bijlage

DOA/ZA
DCO/OV
New Delhi
Ottawa

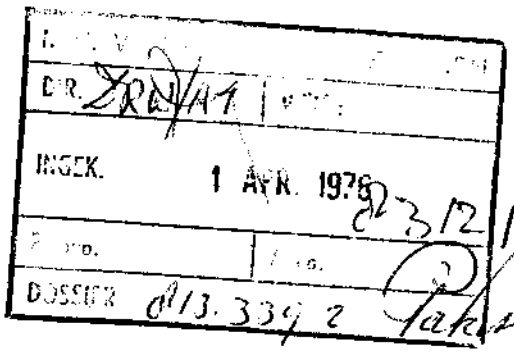
Verzonden 5 APR. 1976

AFGESCHREVEN

Na verzending ter visie aan:

AMBASSADE VAN HET KONINKRIJK DER NEDERLANDEN

ROYAL NETHERLANDS
EMBASSY



No. 889/214 Islamabad, 29 maart 1976.

Pakistan nucleair.

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Ik heb de eer U in vouwe dezes een krantenartikel aan te bieden van een Pakistaans nieuws-analyst en commentator, H.K. Burki, betreffende het in hoofde dezes genoemde onderwerp.

Aangezien de materie zelve zich bijna geheel aan mijn beoordeling onttrekt moge ik mij onthouden van evaluatie van dit korte artikel.

Het leek mij echter van waarde dat betrokken instanties te Uwen departemente ook kennis kunnen nemen van een Pakistaanse visie en Pakistaanse argumenten in breder (politiek) verband. Het bijgaande artikel lijkt mij daartoe van voldoende kwaliteit.

De Ambassadeur

G.J. Jongejans

De Minister van Buitenlandse Zaken
's-GRAVENHAGE.

The Looking-Glass

False bomb scare

By H. K. Burki

ISLAMABAD: The agreement between Pakistan and France for setting up a plutonium separation plant had generated a great deal of heat, mostly, and this is not without its significance, in North America. All kinds of arguments had been advanced in the well-briefed press to somehow undermine this absolutely essential project. Even after the International Atomic Energy Agency had fully satisfied itself about the safeguards and given its approval, the campaign was kept up. At one stage, the false bomb scare had reached such heights that it seemed as though it was Pakistan and not India that had violated solemn commitments and exploded a nuclear weapon.

All kinds of mostly phoney arguments had been advanced against the project, but two were really noteworthy for their deliberate and well-considered perversion. The Director of the Arms Control and Disarmament Agency who could not have been unaware of Pakistan's already well-known nuclear reactor programme, declared there was no economic justification at all for establishing the separation plant. It was meant, he went on boldly, for making a bomb.

Perverted logic

Then there was the editorial comment by the distinguished 'New York Times". It argued: "Suspension of the Pakistan deal would improve chances to discourage India from going any further with the nuclear weapons development". It is such perverted logic by India's champions that has done grave damage in this region in the past, Pakistan being on the receiving end every time. Always placing holy India on a pedestal, they have wistfully expected it to observe norms of behaviour which are no part of her book. India's Western benefactors and apologists fail to realise that their governments command little leverage in Delhi, particularly on major policy matters such as the conduct of its now nearly self-reliant nuclear programme.

Although the basic reason for these critical judgements of Pakistan's policies and intentions was the agreement on the reprocessing plant, the controversy acquired another dimension with Canada wanting first to put its own set of safeguards on the French plant and then requiring new checks on the Karachi reactor. The discussions between Pakistan and Canada have centred round the question: under what terms and conditions should the irradiated fuel from KANUPP be allowed reprocessing in the plutonium separation plant to be built with French assistance?

Chashma complex

In order to put these discussions with Canada in their proper perspective, it is necessary to recall that the reprocessing plant will be built at Chashma as part of a whole complex. Judging by the programme announced by Atomic Energy Commission Chairman Munir Khan, the facility is being established essentially for the half a dozen nuclear reactors to be built as part of the Chashma complex. Work on the first 600 MW reactor is to begin by the end of this year. Thus, the Canadian-supplied KANUPP of only 137 MW capacity is just marginally relevant to the reprocessing plant. Two questions emerge from this wholly rational formulation.

First and foremost, all of Pakistan's nuclear facilities, old and planned, are or will be under the most stringent international safeguards. Secondly, by excluding KANUPP the only additional practical result to be achieved will be that the irradiated fuel from Karachi would not be reprocessed and remain useless in storage, as some of it has for the past three years.

Keeping these points in view, it becomes obvious that some of the nuclear States want to severely limit Pakistan's atomic energy programme because they had once allowed themselves to be deceived by India. After all, no State has tried to prevent Brazil from acquiring a reprocessing plant from West Germany.

Deadlier devices

Let us look at some of the larger issues involved in this whole nuclear business—peaceful and otherwise. The stockpiling of nuclear weapons may have been somewhat restricted by the SALT agreements. But efforts are constantly under way to develop even more effective and deadlier devices. Besides, after the Indian explosion of a nuclear weapon and Israel's possession of bombs, it is not going to be easy to prevent proliferation. Thus, if the Big Powers are really interested in putting the geni back in the bottle, there is only way it can be done: stop the manufacture of the weapons altogether, destroy all the stockpiles and their means of delivery. This proposal, it is worth recalling, has been supported in the past by an overwhelming majority of States and two nuclear Powers—France and the People's Republic of China.

The other larger issue which has virtually divided the community of international scientists concerns the safety standards and the disposal of nuclear waste. Sanity demands that nuclear reactors should be made as safe as desirable and that storage of nuclear wastes should provide maximum safety. If, let us assume for a moment, nuclear installations can never be made wholly safe and nuclear waste pose an unacceptable hazard then all new construction should be stopped everywhere. But the factual position today is that all the nuclear Powers, particularly the seven which have formed a virtual cartel, have major programmes, involving the construction of thousands of reactors.

Real point

The basic issue involved in Pakistan's atomic energy programme is not just its need for power which considering its conventional resources, is demonstrably compelling enough. The real point is: Has Pakistan to be permanently condemned to staying some half a century behind the industrialised world? That is the crucial question. For quite apart from generating power in quantities it is going to need—and availability of power is one of the decisive elements in a country's economic advance—a nuclear programme unlocks the door to a whole range of latest technologies. Without the acquisition of these technologies no country can hope to become a modern, industrialised State.

Pakistan has solemnly declared that it has no intention of making a bomb. It is providing, at the same time, an effective guarantee in the form of safeguards which are as rigid and thorough as to be almost humiliating for a sovereign State. So instead of trying to choke off Pakistan's peaceful nuclear programme the nuclear Powers should endeavour to reciprocate by furnishing to it some measure of genuine security against the threat of nuclear blackmail. Perhaps the best way the nuclear big guns can achieve their own over-all aim and allay the apprehensions of countries like Pakistan is to press for and create a nuclear free zone in South Asia and the Indian Ocean.

DIRECTORAAT-GENERAAL

EUROPESE SAMENWERKING

Directie: DRW/AT

Agendanummer: 11693

Kopie gezonden aan:

- ~~VoMil (Drs. Kakebeeke~~)
- EZ (Drs. v.d. Lande)
- ~~Fin. (Drs. Alma)~~
- ~~O&W (Hr. Huysmans)~~
- Wetenschapsbeleid (Drs. Stefels)
- ~~L&V (Hr. Mol)~~
- SoZa (Ir. v. Daatselaar + Jhr.Mr. Elias)

Na verzending ter visie aan:

Galen Lust

76/20

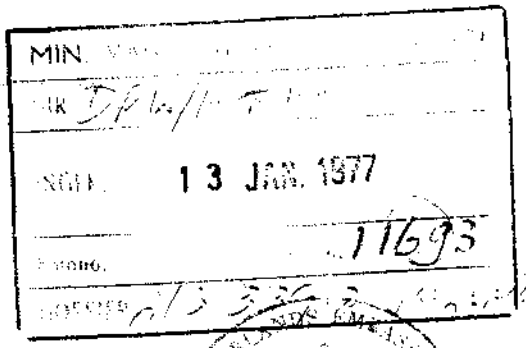
Tekst gepubliceerde verklaring Minister of State for Defence and Foreign Affairs, Aziz Ahmed, m.b.t. verbreking nucleaire samenwerkingsovereenkomst met Canada.

De Minister van Buitenlandse Zaken

's-GRAVENHAGE.

x

x zeer recent bericht
l.a.w.



xxxxxx

Islamabad, 10 januari 1977

GESCHREVEN

PRESS
NFORMATION DEPARTMENT
GOVERNMENT OF PAKISTAN

HANDOUT E.No. 12-R

MR. AZIZ AHMED ON CANADIAN DECISION TO DISCONTINUE NUCLEAR COOPERATION WITH PAKISTAN

ADDRESSES PRESS CONFERENCE

Islamabad, January 3.

Following is the text of the statement by the Minister of State for Defence and Foreign Affairs, Mr. Aziz Ahmed, in reply to the Canadian decision to discontinue nuclear cooperation with Pakistan.

The statement was made at a Press Conference which the Minister addressed at the Television Station, Chaklala here this morning.

"On December 23 Mr. Jamieson, the Canadian External Affairs Minister, announced in the Canadian House of Commons that

> "for all practical purposes nuclear cooperation between Canada and Pakistan is effectively at an end".

This implies, he explained, that Canada will no longer supply uranium fuel, spare parts or technical assistance required for the maintenance and operation of the Karachi Nuclear Power Plant(KANUPP).

The Canadian decision is arbitrary. It constitutes violation of its three bilateral agreements for cooperation with Pakistan in peaceful uses of atomic energy. These are: the Agreement of 1959

for .....

What is more, feeling perhaps that Pakistan might not accept such unreasonable demands, it began to using pressure. It took the following actions in quick succession:

One. Since December 1974 Canada has refused to enter into any contract for the supply of fuel for KANUPP.

Two. In 1973 Pakistan concluded, with Canada's consent, an agreement with Canadian manufacturers for the supply of a fuel fabrication plant. When the plant was ready for delivery in December 1974, the Canadian Government stopped its shipment. The export permit for this plant has been lately cancelled.

Three. Since December 1974 again, except in the case of two plant breakdowns, the supply of spare parts for KANUPP has been limited and irregular, with Canada withholding certain key components which had been ordered by us with its prior consent.

It would thus be seen that the recent decision of the Canadian Government to formally discontinue nuclear cooperation with Pakistan in fact implies no material change from the policy it has followed since December 1974.

It should be noted that there was no justification for the Canadian demand that its existing agreements with Pakistan be re-written, nor was there any justification for the actions that Canada took to enforce that demand.

Nevertheless, in the interest of continued cooperation with Canada in this field, Pakistan agreed to discuss the question of additional safeguards for KANUPP. Since Pakistan has not used, nor does it intend to use, Canadian nuclear assistance for non- peaceful uses, it approached this issue with an open mind, ready to meet any legitimate concerns

that Canada .....

for nuclear cooperation, the agreement of 1965 relating to the Karachi Nuclear Power Station and the Agreement of 1972 for the provision of technical assistance and services to Pakistan by Canada.

These instruments envisaged termination of cooperation by Canada only if Pakistan were to violate its undertaking not to use Canadian supplies and assistance to further a military purpose.

Over the years, Pakistan has scrupulously honoured this and all other undertakings. Up to date, there has been no complaint from Canada, not even a hint of one, to the contrary.

Why, then, has Canada taken this wholly unwarranted action? Let us examine the Canadian position.

In May 1974, India carried out a nuclear explosion. This was done with the help of a reactor that Canada had gifted in the 1950s, without prescribing any safeguards to ensure that it would be used by India for peaceful purposes only.

When the Indian nuclear explosion took place, Canada was surprised. We were not. During the intervening period, we had warned Canada time and again that this unsafeguarded reactor would be used by India for that purpose. Our warnings were unheeded.

However, in order to prevent a repetition of such an occurrence, Canada proceeded to concentrate its attention on Pakistan, rather than on India. It demanded that we accept some totally unreasonable conditions as price for Canada's continuing cooperation with us, while pleading helplessness to get India to accept similar conditions.

It proceeded to ask for wholesale revision of the agreements already in force between Canada and Pakistan on this subject.

What is .....

upgrading the existing safeguards applicable to Canadian equipment, nuclear materials, heavy water and fuel. We further agreed that all used fuel from this reactor, when reprocessed, will also be similarly safeguarded.

Pakistan was under no obligation whatsoever to accept any of these commitments. Nevertheless, it accepted them in order to meet all legitimate Canadian concerns about the operation of KANUPP, while, on its part, Canada agreed to provide the fuel and other supporting assistance to KANUPP for only two years.

This was not all. The Canadian Government went even further. It made two extraordinary demands. First, that we must accept that the Canadian safeguards will cover Pakistan's entire nuclear programme, not merely the nuclear facilities provided by Canada. Second and this is particularly significant that even if Canada should terminate all nuclear cooperation with Pakistan under the bilateral agreements, Pakistan shall nonetheless remain bound by its commitments under those agreements for the rest of the operating life of KANUPP.

These two demands were so unreasonable and one-sided that Pakistan could not but reject them.

The fact is that Canada had no right to make any of these demands in the first place. In a statement, the Canadian External Affairs Minister himself recognized the legal and other difficulties in making retroactive changes in existing contracts and the inadvisability of such a course of action.

Nevertheless, he said that an exception will be made in the case of Pakistan and the new Canadian policy will be applied

retroactively .....

that Canada might have on this subject.

Accordingly, over the last two years, three rounds of formal comprehensive talks have been held between Pakistan and Canada on the question of additional safeguards for KANUPP. As a result, Pakistan agreed to accept a number of new safeguard commitments. The negotiations got protracted, because, at each round of talks, Canada put forward additional demands, going back on understandings previously reached.

Finally, on December 4, the Canadian Government presented to us with an Aide Memoire which offered to resume supplies of fuel, spare parts, etc., for KANUPP for a period of only <u>two</u> years, provided Pakistan accepted <u>all</u> the "safeguards" demanded by Canada. We were given until December 13 to signify our assent, otherwise, we were informed, all support to KANUPP would be terminated.

Overlooking the unreasonableness of the Canadian demand, the Pakistan Government decided to make a further effort to reach an amicable settlement of this issue. Replying on December 13, as required by Canada, we accepted a number of additional Canadian demands in order further to assure Canada that KANUPP will be used for peaceful purposes only.

This was done in spite of the fact that this objective was already fully ensured under the safeguards agreement between Pakistan, Canada and the International Atomic Energy Agency.

The new conditions accepted by us included, among other things, an explicit assurance that Pakistan will not carry out any nuclear explosion, peaceful or otherwise, in violation of its commitments to Canada. They also included additional commitments by Pakistan for

upgrading .....

retroactively to the agreements already entered into long ago. This attitude is clearly discriminatory and untenable.

Canada is entitled to apply whatever policy it chooses to supplies under <u>future</u> contracts. But this policy cannot be applied retroactively to supplies under agreements already signed. It is entirely inappropriate to demand changes in those agreements and it is neither fair nor permissible to violate them unilaterally.

A noteworthy observation made by the Canadian External Affairs Minister, indeed, renders further discussion of the entire KANUPP issue irrelevant.

After stating that all supplies or assistance to KANUPP shall stop, he went on to add:

> "We have made it perfectly obvious that under no circumstances will we continue cooperation with Pakistan if that country acquires a reprocessing plant as presently suggested".

The door to further negotiations has thus been barred.

The Agreement concerning the reprocessing plant is a transaction entirely between two sovereign states — Pakistan and France. No third country has any right to demand that Pakistan should abandon the reprocessing plant.

I should like to make it clear that Pakistan will not give up the reprocessing plant under any circumstances.

AHQ&AM/st.

"430 - 3.1.77"
Regd. No. P.35 19.30 Hrs.

PER LUCHTPOST

AMBASSADE VAN HET KONINKRIJK DER NEDERLANDEN

ROYAL NETHERLANDS
EMBASSY

MIN. VAN ...
DIR. DZW/AZ
INGEK. 4 FEB. 1977
Fotono.
DOSSIER 913.339.2 Pakistan 34/93/

Ce. DZO/OV
geschied

No. 340/103 Islamabad, 31 januari 1977.

Onderwerp: Nucleaire politiek in Pakistan.

Ik heb de eer U een kranteknipsel aan te bieden betreffende een bezoek van een Chinese missie - die deze dagen in Pakistan verblijft, vide d.z.z. no: 337/99 dd. heden - aan de Karachi Nuclear Power Plant (KANUPP), een project dat jarenlang - tot zeer kort geleden - in volledige samenwerking met Canada werd opgebouwd en gedreven.
Gezien de mate van overheidsinvloed op de pers ligt het vermoeden voor de hand dat de publicatie van dit bezoek in deze vorm past in het kader van dit regeringsbeleid op nucleair gebied. Een interpretatie hiervan zou kunnen zijn dat Islamabad het nuttig oordeelt op deze wijze aan Ottawa te kennen te geven dat eventueel nog andere bronnen van nucleaire bijstand aangeboord kunnen worden.

De Ambassadeur,

G.J. Jongejans.

De Minister van Buitenlandse Zaken,
's-G R A V E N H A G E.

Veli.

9040-1-74

Chinese team visits KANUPP

KARACHI, Jan. 28: Mr. Shih Lin, leader of the visiting Chinese Government's scientific and technological co-operation delegation, today visited the Karachi Nuclear Power Plant and said they were impressed to see Pakistani engineers and technicians running the plant so efficiently.

After going round various departments of the plant, Mr. Shih Lin said that this power plant was an impressive project and paid tributes to Pakistani technicians for playing an important role in the building up of their motherland.

In the visitors book he wrote "We wish you will make still more and greater contributions."

The delegation was received on arrival at the power plant by Dr. Ishfaq Ahmed, Member, Technical of Pakistan Atomic Energy Commission. The Plant Manager, Mr. S.M.N. Said, took the delegation round the project and explained in detail its working.

Earlier, the delegation spent two-and-a-half hours at the Pakistan Council of Scientific and Industrial Research (PCSIR), and appreciated the efforts being made to utilise natural resources of the country. The delegation visited PCSIR laboratories and Pak-Swiss Training Centre.

Dr. Yusuf Ahmed, Director PCSIR Laboratory, Karachi, explained to the delegation the research work being done in various fields.

The delegation was given presents by Dr. A. Ghani, Chairman PCSIR, before its departure.—APP.

1261

2659/738.

Rede Militair Gezaghebber over nucleaire opwerkingsinstallatie.

De Minister van Buitenlandse Zaken,
's-GRAVENHAGE

x

AFGESCHREVEN. XXX

Islamabad, 20 juni 1978.

N-plant for peaceful purposes: CMLA reaffirms resolve

NATHIAGALI, June 17: The Chief Martial Law Administrator, Gen. Mohammad Zia-ul-Haq, today reaffirmed Pakistan's resolve to use the French nuclear reprocessing plant for peaceful purposes.

"I wish to affirm that our nuclear power programme is for peaceful purposes and is directed towards the overall development of the country," he said while inaugurating the Third International Summer College on Physics and Contemporary Needs at a hotel here this morning.

Gen. Zia-ul-Haq added: "The acquisition of the nuclear reprocessing plant is a step in that direction and we are determined to pursue our laid down policy in this field and it will be peaceful".

About 30 scientists from 20 developed and developing countries are attending the three weeks college which has been organised by the Pakistan Atomic Energy Commission with the sponsorship of International Centre for Theoretical Physics, Trieste, Italy.

One hundred Pakistani scientists are attending the college. Prominent among those present on the occasion was Mr. Justice Abdul Hakim, Acting Governor of the NWFP.

The CMLA said that the Government had made substantial allocations in the next Five-Year Plan for the development of nuclear energy in the country.

He said the nuclear energy programme was intended to improve the quality of life in Pakistan and was welfare-oriented. Gen. Zia-ul-Haq commended the role of Pakistan Atomic Energy Commission in carrying out programme. But, surely, he added, Pakistan had to do much more in promoting science and technology.

In this connection, he stressed the need for setting up proper infra-structure, especially more centres for technologists, besides reforming universities from the point of view of technology. Gen. Zia-ul-Haq said Pakistan also wanted to meet the need of friendly countries, particularly in the Middle East and Africa.

Expressing his delight at the presence of sizeable number of eminent scientific scholars from abroad for the three-week deliberations, the CMLA expressed the hope that they could suggest practical methods of increasing production in Pakistan so that its 73 million people would overcome the numerous problems. In this connection, he particularly mentioned the problem of salinity. He said it was becoming so acute that if positive and big steps were not taken vast areas of the Punjab and Sind would turn into white lakes in five years' time. And these lakes would be suitable for only duck shooting and not for agriculture production.

Gen. Zia-ul-Haq asked the participants: "You give us meaningful recommendations and we will get them implemented". He also suggested that the papers read by the participants should be compiled and distributed to all the universities and colleges in Pakistan for their benefit. He also asked the participants to suggest how to improve the quality of education in Pakistan.

The CMLA was of the view that the scientific knowledge would be shared by all nations for the benefit of mankind. Withholding of this knowledge would lead to a lopsided development of the contemporary society which would be against the spirit of international co-operation.

Talking of the problems of scientists in Pakistan, the CMLA said that the Government was anxious of their problems and would make all possible efforts to solve them.

The Government, he said, would give the scientists well deserved place in the country but in return would expect from them that they apply their knowledge within the country.

Generally speaking, he added, scientists community in Pakistan comprised dedicated and God fearing human beings. But there was a section which tended to be greedy. They leave their country for monetary gains only.

This phenomenon, he noted, had hit Pakistan adversely. No country, he said, could afford such a drain. He said he expected Pakistani scientists to keep the interest of their country uppermost. The CMLA said that a section of scientists also left the country out of professional jealousy or envy. This tendency should also be discarded for the sake of national interest.

Earlier, in his welcome address, Dr. Munir Ahmed, Chairman of the Pakistan Atomic Energy Commission, said that the objective of three-week college was to share the knowledge with scientists of the Third World and the developed world and to pool it for their common good.

He spoke at length about the achievements of the Atomic Energy Commission in various fields, particularly agriculture, industry and medicine.

He also spoke of the Commission's plan to build a 600-megawatt plant at Chashma to meet the increasing power needs of the country.

Dr. Munir Ahmed told the gathering that the Pakistan Atomic Energy Commission had in the agriculture sector developed a new variety of high-yielding rice which would shortly be released to the public.

About Karachi nuclear power station he said after the Canadians withdrew their assistance to the station, the Pakistanis were running and manning it all by themselves.

He said a new nuclear medical centre would be set up in Islamabad next year. The Commission would also set up an industrial services group for the industrial sector.

Earlier, Dr. Riazuddin, Chief Organiser of the College, introduced the college and the course of its study. He said the courses would lay emphasis on "energy". The objective behind the college, according to him was "to remove the barriers of isolation" between Pakistani and foreign scientists.

A message of good wishes and goodwill received from renowned Pakistani nuclear scientist, Dr. Abdus Salam, Director of International Centre for Theoretical Physics, Trieste Italy, was read out to the participants.

Scientists from Algeria, Bangladesh, Brazil, Colombia, Egypt, India, Italy, Jordan, Libya, Malaysia, Nepal, New Guinea, Niger, Nigeia, Senegal, Spain, Sri Lanka, Sudan and Turkey are attending the college.—APP.

2333/675.

persbericht betr. nieuw procédé voor exploratie van uranium.

De Minister van Buitenlandse Zaken,
's-GRAVENHAGE

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Ambassade van het Koninkrijk der Nederlanden, Islamabad
1601

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Islamabad, 2 juni 1978.

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Pakistan

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27.5.78

New uranium detection method evolved

Pakistani scientists have developed a new nuclear technique for geological application which could revolutionise the detection and exploration of uranium and thorium reserves in the country, it was officially learnt in Karachi yesterday.

They have developed an instrument called "plastic detector" based on the new technique using sensitive plastic films to detect radioactive gases like radon and thoran which are produced in the decay process of uranium and thorium.

The instrument has been successfully designed and developed after one and a half years of research by the solid state nuclear track detection laboratory. The research was aimed at understanding the potential of alpha plastic films in exploring uranium ores.

Presently the direct drilling method is employed for uranium and thorium exploration. This method, however, is very expensive and requires importation of costly and sophisticated equipment. One drill hole for uranium exploration costs about Rs 75,000.

Apart from the high cost involved, there has been difficulty in importing necessary equipment because of the trend among the developed nations to discourage export of nuclear technology to the less developed nations.

Scientists and engineers throughout the world have been trying to devise new techniques of uranium exploration so as to reduce costs and improve effectiveness and dependability.

The new technique developed by the Pakistani scientists, it is learnt, will be most inexpensive as compared to the existing method. It would not cost more than Rs 5 per point of investigation, and would require an initial investment of Rs 30,000 to 40,000 on the purchase of non-consumable equipment.—APP

DIRECTORAAT-GENERAAL
EUROPESE SAMENWERKING

Directie: DRW/AT
Agendanummer: 141463

Kopie gezonden aan:

Bonn
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Dublin
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Parijs
Rome

PV EG Brussel
~~PV OESO Parijs~~

EZ
~~Soza~~
~~Vomil~~

~~Chef DIO~~
~~DIO/PI~~
DIO/OV
~~DGES~~

DOA

Verzonden 29 MEI 1978

Na verzending ter visie aan:

Chef DRW
DRW/AT (v Galen Last)
Mr. Brands

AMBASSADE VAN HET KONINKRIJK DER NEDERLANDEN

ROYAL NETHERLANDS
EMBASSY

No. 2191/642. Islamabad, 23 mei 1978.

Onderwerp: nucleaire aktiviteit in Pakistan.

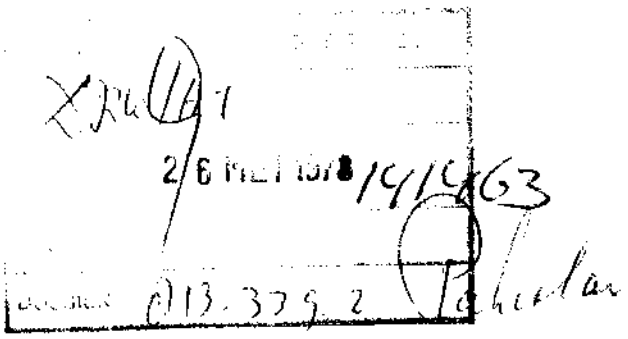
De omwenteling in Afghanistan is in Pakistan kennelijk gezien als een goede gelegenheid om de campagne tot verkrijging van een opwerkingsfaciliteit met hernieuwde kracht door te zetten.

Dat men hier oog heeft (of wenste te hebben) voor de contra-indicaties die liggen in de ongewisse politieke situatie in het land en de nog grotere onzekerheden in de toekomst, valt natuurlijk niet te verwachten op dit emotioneel geladen terrein.

De Pakistaanse chef der nucleaire aktiviteiten heeft deelgenomen aan het recente overleg in Londen
./. (vide bijlage).

De Ambassadeur,

G.J. Jongejans



De Minister van Buitenlandse Zaken,
's-GRAVENHAGE

PAKISTAN TIMES 18.5.78

PAEC engineer's efforts

Way to control heavy water leaks evolved

An entirely new technique for detecting and controlling heavy water leaks—a chronic problem with nuclear power plants throughout the world—has been sucessfully developed and tested by a PAEC engineer Sultan Bashiruddin Mehmood. The new invention will save the country millions of rupees in foreign exchange annually on the import of heavy water and reduce make up losses. This has also helped improve the availability of the plant which does not have to be shut down for locating leaks, thus enabling it to produce more power for Karachi.

Mr. Mahmood started working on the problem at KANUPP in early 1973.

The PAEC has honoured the inventor for this valuable discovery and awarded him honorarium as a token of appreciation. The discovery has been granted patent by Pakistan and is also being patented in Canada. The SBM probes have been widely heralded by nuclear power specialists abroad.

Mr. Mahmood joined PAEC over 15 years ago. He obtained second position in B.Sc. (Elect. Engg.) examination at Lahore in 1962. Later, while in PAEC he did his M.Sc. (Control System) from the Manchester University, U.K., in 1966.

Author of over 20 research papers, Mr. Bashiruddin Mahmood has eight different inventions to his credit. Five of these inventions have been patented in U.K. and Pakistan.—PPI.

DAWN 16.5.78

Munir for London to discuss nuclear energy problems

Mr Munir Ahmed Khan, Chairman, Pakistan Atomic Energy Commission (PAEC), has flown to London to attend a meeting of selected group of distinguished international experts to review the future of nuclear energy and interrelated problems of proliferation and security, it was officially learnt in Karachi yesterday.

The three-day meeting starting in London today will facilitate the first serious dialogue between some of the suppliers and recipients of nuclear technology.

The high-level consultative panel of experts has been set up by the Royal Institute of International Affairs and the Rockefeller Foundation. Besides, Mr Munir Ahmed Khan, the panel includes the atomic energy chiefs of Argentina, Brazil and India, some members of the Board of Governors of the International Atomic Energy Agency, and leading specialists from the United Kingdom, United States, France and West Germany.

MORNING NEWS FRIDAY MAY 19, 1978.

HEAVY WATER LEAKAGES

PAEC engineer invents device

ISLAMABAD May 18: An entirely new technique for detecting and controlling heavy water leaks—a chronic problem with nuclear power plants throughout the world—has been successfully developed and tested by a PAEC Engineer; Mr. Sultan Bashiruddin Mahmood.

The new invention will save the country millions of rupees in foreign exchange annually on the import of heavy water and reduce make up losses. This has also helped improve the availability of the plant which does not have to be shut down for locating leaks; thus enabling it to produce more power for Karachi.

The discovery has special significance for Pakistan as heavy water has become a rare commodity for the country after Canada cancelled its nuclear cooperation with Pakistan in 1976; and put an embargo on the supply of spare parts, heavy water and fuel.

Heavy water is a chemical substance similar to water, but with different nuclear properties used in KANUPP type reactors both as coolant and moderdtor. As it is at very high temperature and pressure it leaks from the end fittings of the reactor into the containment area and escapes through the stack of the building. Prior to this invention KANUPP's annual loss of heavy water was as high as 5000 kilograms costing about rupees 10 million in foreign exchange. This loss has now been cut down.

CANADA ALSO ADOPTS

The Pakistani invention has also been adopted by the Canadian nuclear industry and at other heavy water nuclear reactors in the world. The tools developed by the inventor have been internationally recognised after his name as SBM (Sultan Bashiruddin Mahmood) Probes.

Mr. Bashiruddin Mahmood started working on the problem at KANUPP in early 1973. After painstaking research he ultimately succeeded in developing an extremely reliable and sensitive equipment to quickly detect and locate the exact nature of heavy water leaks from various points in the reactor system. Once the leaks were detected Mr. Bashiruddin Mahmood was able to device means of effectively controlling them.

The detector mounted on a machine scans the reactor face having 400 end fittings which are potential leak points remotely from the control room in less than half an hour. Portable devices have also been developed for leak search on the pumps values and other equipments through a remote control device without exposing the operator to radiation. With these devices which contain a sensitive recorder the operator sitting in the control room can regularly monitor even minor leaks. The end fittings which show leak are then tightened remotely from the control room. Similar tools have also been developed for detecting leaks in other areas of the power plant. The operators move around the system with these tools and locate the leak points which are then plugged.

INVENTOR HONOURED

The PAEC has honoured the inventor for this valuable discovery and awarded him honorarium out of appreciation. The discovery has been granted patent by Pakistan and is also being patented in Canada. The SMB Probes have been widely heralded by nuclear power specialists abroad.

Mr. Bashiruddin Mahmood joined PAEC over 15 years ago. He obtained second position in B.Sc. (Elect. Engg) examination at Lahore in 1962. Later while in PAEC he did his M.Sc. (control system from the Manchester University UK in 1966.

Currently working as Director Industrial Liaison at the PAEC Head Office in Islamabad Mr. Bashiruddin Mahmood is responsible for the development and fabrication of equipment and parts for nuclear plants through local resources. He is also responsible for promoting industrial application of nuclear techniques and radio isotopes and development of technical manpower for the Commission's projects.

Author of over 20 research papers Mr. Bashiruddin Mahmood has eight different invention to his credit five of these inventions have been patented in UK and Pakistan.—APP.

US holds up licence for plutonium export to Pakistan

WASHINGTON, May 20: The US Administration has withheld approval of licences to export uranium to South Africa and plutonium to Pakistan, the "Washington Post" reported today.

It said both licences were held up because of South Africa's and Pakistan's intention to develop, produce and test nuclear weapons.

South Africa is building a plant to enrich uranium which it says will be used for peaceful purposes only, while Pakistan has announced that it intends to build a reprocessing plant to extract plutonium from spent uranium fuel.

The export licences to South Africa and Pakistan were two of 12 nuclear licences held up by the State Department.

Export licences were also held up for Bolivia, Yugoslavia, Iran, Malaysia, Bangladesh, India, Mexico, the Philippines, Taiwan and China.

The licences for shipment to South Africa and Pakistan were the only two held up for purely political reasons.—DPA.

KANUPP instrumentation explained

MN 21.5.78

Pakistan was among the 37 states, which attended an International five-day symposium on nuclear power plant control and instrumentation held recently at Cannes (France) under the auspices of the International Atomic Energy Agency (IAEA).

Dr. Nauman Jafri, Principal Scientific Officer, KANUPP represented Pakistan at the conference. He explained to about 300 participants the operation of the KANUPP.

The purpose of the symposium was to assess the latest experience gained in the design, installation, commissioning, operation and maintenance of nuclear power plants.

The topics of discussion were core power distribution and control, protection and alarm systems, instrument techniques, systems for surveillance of reactor components, new system architecture and reliability problems of reactor electronic systems.—PPI

PAKISTAN TIMES

New device to detect uranium

BY OUR CITY STAFF

An inexpensive device which would revolutionise detection and exploration of uranium has been developed by the scientists at PINSTECH.

Named "Plastic Detector", the instrument has been designed after an 18-month research by the Solid State Nuclear Track Detection Group.

It is based on new technique, using sensitive plastic films to detect radio-active gases like radon and thoran which are produced in the decay process of uranium and thorium.

At present direct drilling method is in vogue, which requires importation of costly sophisticated equipment. It is estimated that one drill hole would cost Rs. 750. Moreover with the curbs on export of nuclear technology, the import of sophisticated equipment is becoming difficult.

According to PINSTECH sources, the new technique is extremely inexpensive as the cost per point of investigation will be Rs 5 only.

The technique requires an investment of Rs 30,000 to 40,000 on purchase of equipment.

DAWN

New technique to detect uranium, thorium reserves

RAWALPINDI, May 19: A new nuclear technique has been evolved at the Pakistan Institute of Nuclear Technology for the detection and exploitation of uranium and thorium reserves in the country.

According to Pakistan Atomic Energy Commission, the instrument called "plastic detector" is based on a new technique using sensitive plastic films to detect radio active gases like radium and thoran which are produced in the decay process of uranium and thorium.

The present direct drilling method employed for uranium and thorium is very expensive and requires sophisticated equipment, imported at a cost of about Rs 75,000 per drill hole.

The Pakistani technique is extremely inexpensive as it will not cost more than Rs 5 per point of investigation and will require an initial investment of between Rs 30,000 and Rs 40,000 on the purchase of non-consumable equipment.—PPI

Urdu Press round-up

PT
20.5.78

Stand on nuclear plan hailed

The prominent Urdu dailies have felt happy over Gen. Zia-ul-Haq's announcement that Pakistan would acquire a nuclear reprocessing plant at any cost, as spelled out in a recent interview with 'The Washington Post'.

These papers have editorially deplored the attitude and prejudices of the USA and its allies in the West. How can a single extra plant cause proliferation when such plants are gradually increasing across our borders and elsewhere, they have asked, and at the same time advised the Government to take up the issue with the Muslim countries so that combined efforts could be made in this matter. The forthcoming Asian Islamic conference has been considered as the most appropriate occasion to discuss utilisation of our resources to equip Muslim States with the maximum number of such nuclear plants.

"International conspiracy against Muslim world"—this is the caption of the editorial of the daily 'Jasarat' of Karachi. The paper says that in his interview Gen. Zia made two points clear: first, that Pakistan is fully determined to acquire a nuclear reprocessing plant to meet its growing needs in various fields of economy and, second, that the real purpose behind opposing the delivery of the French plant is that Muslims should not have access to such facilities. The paper writes that Gen. Zia's resolve that "we shall certainly acquire a plant" implies that in case we fail to get the plant from France, other sources would be tapped. In the paper's opinion, America seems to have yielded to Israeli pressure because the latter considers the progress of the Islamic world as a big hurdle in the way of its aggressive designs. It appeals to the Muslim countries to treat the reprocessing plant as a common concern so that pressure from the United States and its Western allies can be rendered ineffective.

The daily 'Mashriq' in its editorial captioned "Pakistan won't yield to pressure" points out that Pakistan has given an assurance to France and international agencies that it would always be prepared for inspection of its installations. In spite of this America continues to exert pressure on both France and Pakistan to get the reprocessing plant deal cancelled. Gen. Zia has again described this pressure as "wholly unjustified". He has also made it clear that the guarantees offered by Pakistan for not utilising the plant to produce the bomb are more than sufficient and no other country would perhaps be ready to accept such restrictions.

The paper says that many Western countries possess atomic plants. India has already two plants and is now installing a third one. Israel too has a reprocessing plant. Then why is Pakistan alone being prevented from having such a plant? Did not the Indian atomic arsenal present a threat to Pakistan's security?

The daily "Nawa-i-Waqt" has suggested that the Pakistan Government as well as the Atomic Energy Commission should pay further attention to tapping other sources and also exploit their own resources to meet the technological needs of the country. With this purpose in view, close contact be established with Muslim countries and these matters be discussed threadbare. The paper hopes that once the Islamic world, especially Iran and Saudi Arabia, realise that opposition to the reprocessing plant is actually based on the belief that Pakistan is a part of the Islamic world, their sympathies with this country would be much deeper.

The Paper points out that at the time of signing the deal the International Atomic Energy Agency in which America has an effective say, was fully convinced that Pakistan needed such a plant to increase her energy production. Moreover, Pakistan had at later stages agreed to allow stringent conditions for inspection and supervision by the IAEA. In view of all these safeguards one cannot escape the conclusion that America and those under its influence do not want Pakistan to fight poverty, starvation and disease and add some amount of stability to its economic life.

The daily 'Imroze' of Lahore, while deploring the Big Powers' attitude towards smaller countries, says that like other developing countries Pakistan is engaged in a struggle against backwardness and is trying to achieve economic stability with whatever aid and resources it posses. All its efforts directed towards achieving a nuclear reprocessing plant are actually an inseparable part of the struggle.

"Imroze' observes that it is extremely painful to note that the Big Powers instead of extending all needed help to Pakistan, are creating hurdles in acquiring nuclear technology. The excuse made in this connection is that Pakistan would produce the atomic bomb and thus the efforts at international level for non-proliferation of atomic weapons would receive a setback. Such an argument, the paper maintains, is ridiculous in view of the assurances already given by Gen. Zia-ul-Haq.

Referring to the co-processing plant proposal, "Imroze" says that Pakistan while turning down the proposal has made it clear that co-processing technology has not yet reached its final stage even in the developed countries. How can Pakistan— a country about 50 years behind the developed world— accept such a proposal?

Analysing the situation that has arisen out of the delaying tactics adopted in the matter of reprocessing plant, 'Maghribi Pakistan' of Lahore observes that America and the western Powers have got deep rooted prejudices against the Islamic world, of which Pakistan is an inalienable part. The paper argues that a number of countries in the world have developed or acquired reprocessing plants. In our neighbourhood India plans to install a third one. So one can ask as to how just one more plant in Pakistan would lead to proliferation of nuclear weapons?

'Maghribi Pakistan' suggests that all Muslim countries should seriously take note of this deep-rooted prejudice and evolve a common programme of action. The paper recommends that the reprocessing plant affair be formally taken up in the first Asian Islamic Conference scheduled to be held in Karachi in July this year.

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persbericht over interview Militair Gezaghebber met "Washington Post" over nucleaire opwerkingsfaciliteit en daardoor geïnspireerde redactionele artikelen.

De Minister van Buitenlandse Zaken,
's-GRAVENHAGE

x

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Islamabad, 16 mei 1978.

CMLA justifies Pak requirement of nuclear plant

RAWALPINDI, May 11: The Chief of the Army Staff and Chief Martial Law Administrator, Gen. Mohammad Zia-ul-Haq, has said there is no justification why Pakistan should not acquire nuclear reprocessing technology which is badly needed to boost energy production.

He was explaining Pakistan's stand on the reprocessing plant issue during an interview with the correspondent of Washington Post in Rawalpindi.

He said Pakistan had accepted all international safeguards, even policing the plant internationally or by France, which no country in the world would accept. When the agreement was concluded, it had the concurrence of the International Atomic Energy Commission and also the understanding of the United States.

Then all of a sudden, when United States was to have elections and Mr. Carter talked about proliferation, the US stand was changed on the subject. "They tried to recommend to us to give it up. Now the point is, is it fair to assume that with one nuclear reprocessing plant and with all the safeguards in the world do I still make a bomb and is this one reprocessing plant going to cause proliferation?" the CMLA asked.

A BIG QUERY

Gen. Zia said a number of countries in the West, as well as the East, possessed nuclear plants but Pakistan was being singled out to be deprived of what it badly needed for its development. "We know Brazil is going to get it. There are three across the borders—two are already there and the third one is coming up—in India. The Jews have got it. Then why should Pakistan, which is considered part of the Muslim world, be deprived of this technology, particularly when we are a developing country and are very short of energy resources. I just see no reason why it is taken that just one extra plant will cause nuclear proliferation", he said.

Commenting on the suggestion that Pakistan should instead acquire co-processing technology, Gen. Zia said Pakistan could not accept a technology which had not been developed even in the West. He said: "Co-processing itself is not an established technology so far. Why should I accept a technology or say my last word on a thing the results of which even the West has not yet seen? Co-processing is still in the process of being evaluated and we are a developing country, already 50 years behind the others. So, I am only trying to acquire a technology which had been tested [illegible]

Asked if India's capability to make an atom bomb was a cause of concern for the Pakistanis, the Chief Martial Law Administrator said "not only Pakistanis but all the neighbouring countries."

He said each of the three Super Powers possessed nuclear power and potential, yet they were scared of each other. "And if they are scared of each other, we should be even more scared when we have nothing and somebody else has," he remarked.

ZIA'S INTERVIEW

Pakistan justified in acquiring reprocessing plant

ISLAMABAD, May 11: The Chief Martial Law Administrator, General Mohammad Zia-ul-Haq, has said that Pakistan is fully justified in acquiring nuclear reprocessing technology.

He said this technology was greatly needed to boost country's production.

The Chief Martial Law Administrator said this while explaining Pakistan's stand on the reprocessing plant issue during an interview with a correspondent of "Washington Post" here.

Gen Zia-ul-Haq pointed out that Pakistan has accepted all international safeguards which also included policing of the plant internationally or by France which no country in the world accepts.

He said that the agreement was concluded with the concurrence of the International Atomic Energy Agency and also the understanding of the United States. Then all of a sudden when the United States was to have elections Mr Carter talked about proliferation and the American stand was changed on the subject.

The Chief Martial Law Administrator said that it was not fair to assume that with one nuclear reprocessing plant and with all the safeguards Pakistan will still make a bomb or that one reprocessing plant could cause pro[illegible]

He pointed out that a number of countries in the West as well as in the East possessed nuclear plants, including India and Israel and now Brazil will also get it.

The CMLA asked then why should Pakistan be singled out and be deprived of this technology? He said Pakistan, which was considered a part of Muslim world, was also a developing country and short of energy resources and this technology was badly needed for its development.

Commenting on the suggestion that Pakistan instead acquire co-processing technology, Gen Mohammad Zia-ul-Haq said that Pakistan could not accept a technology which has not been developed even in the West.

He said Pakistan wanted to acquire a technology which has been tested in the West and that was reprocessing.

Asked on India's capability to make an atom bomb and whether it was a cause of concern to Pakistan he said not only for Pakistan but for all the neighbouring countries. Each of the super power, he added, possessed nuclear potential yet they were scared of each other. Pakistan, therefore, should be even more scared when it has nothing which somebody else has.

MORNING NEWS
JAMADI-US-SANI 5; 1398. SATURDAY; MAY 13, 1978

POOR MAN'S POWER

PAKISTAN has explained to the world umpteen times why it needs a nuclear reprocessing plant. France agreed to sign the contract for the supply of the plant following two-year long intense negotiations between Pakistan and that country. It was only after Pakistan was able to completely convince France that it had no intentions of using the facility for producing the bomb and that it badly needed it for boosting its energy production, that Paris drew up the contract documents.

The contract was then discussed threadbare by the International Atomic Energy Agency in February 1976. The IAEA carried out detailed studies of Pakistan's energy needs. The IAEA study judged Pakistan as one of the poorest countries in fossil fuel and recognised that it will need eight 600-megawatt complete units during 1982 to 1990 and nine 600 megawatt plus seven 800-megawatt units from 1990 to the year 2000. At the February 1976 meeting of IAEA the Pak-French contract received overwhelming support from its 34-members. No one opposed the agreement, 16 supported it and some expressed their reservations.

Finally on March 17, 1976, Pakistan and France signed a bilateral agreement for the construction of a nuclear fuel reprocessing plant. Following that a trilateral agreement on the application of safeguards on this plant was signed at the headquarters of the IAEA. There was nothing clandestine about the whole affair. The negotiations were held in the open and the contract was signed with the entire world including the US fully aware of its implications. No one, including again the US, raised any objection to the deal at the time of signing of the contract.

At about this time the electioneering in the US switched into top gear. The Presidential candidates, incumbent Gerald Ford and Democrat candidate Jimmy Carter were vying with each other for the attention of the electorate which was passing through a process of self-censure begun in the aftermath of Vietnam debacle and Watergate scandle. It was Mr. Jimmy Carter who first discovered what the electorate was looking for in the next US President. The voters wanted a clean man, a man of peace and a man who could restore America's international image as civilised, just and powerful nation capable of leading the world. In order to convince the nation that he was the man it is looking for, Mr Jimmy Carter talked of the urgent need for a "just" settlement of the Middle East issue, majority rule in Africa, resolution of Panama canal dispute, withdrawal of forces from South Korea; he championed the cause of human rights the world over and expressed his deep concern over the prospect of nuclear weapon proliferation. Overnight he had swept the American electorate, which is by and large peace loving, off its feet.

In his enthusiasm to ensure his victory, Mr. Carter started a frontal attack on Ford Administration over its international nuclear policy and in the process raised for the first time his country's objection over the Pak-French nuclear contract. Suddenly Pakistan's right to acquire nuclear technology and its right to employ all possible means to eradicate hunger, poverty and disease from its land had become a hot election issue in the US. The Ford Administration which had not raised any objection earlier changed its policy and advised Pakistan and France to cancel the contract. Soon after entering the White House President Jimmy Carter stepped US pressure on the two countries to give up the deal.

The upshot of all this was that France failed to adhere to the schedule of the contract and at the moment it appears that Paris has adopted the attitude of "wait and see". With the time-schedule for the construction and delivery of the reprocessing plant having been upset it is now hardly possible for Pakistan to adhere to its nuclear programme. This means by the 2000 Pakistan would have slipped a long, long way down the poverty line.

The US voter who so enthusiastically endorsed President Carter's attitude towards Pakistan's right to acquire nuclear techonology did so because he was told only half the story. The second half of the story is a story of hunger, poverty and disease. The US public needs to be told this story to enable it to pass its impartial and unbiased judgement. The American Administration is in the best position to tell this story. It should tell the people of the US that Pakistan's total energy sources amount to 840 million tons coal equivalent as compared to the world average of 1,200 tons per capita. Thus Pakistan's average comes to only one per cent of the world average. The consumption of power resources in Pakistan stands at 0.2 tons per head as compared to two tons to the world average.

Without nuclear energy Pakistan's oil import bill would jump to one billion dollars which would be 50 per cent of the country's total foreign exchange earnings. This would mean more hunger, more poverty and more disease in Pakistan. On the other hand if Pakistan is allowed to go ahead with its nuclear programme, it could cut the cost of generation by 33 per cent annually and save about 60 to 70 million dollars every year. The programme, if implemented, would enable Pakistan to meet two-thirds of its projected power requirements from nuclear plants while the balance would be met from hydel and other power-generating sources.

The US public should also be told that Pakistan does not intend to make the bomb and has accepted nuclear safeguards through the supervisors of the IAEA and also safeguards proposed by the seven countries which supplied nuclear plants. And Pakistan has actively supported all efforts to find a political settlement of nuclear proliferation and it demands that nuclear-free zone be established in the region where it is located. It would also be useful to point out to the American public that Pakistan's nuclear programme, contrary to wild speculations, is economically viable.

The Chief Martial Law Adminstrator while talking to Washington Post correspondent has once again explained the reasons why Pakistan needs the reprocessing plant, and has once again given an assurance that his country has no intention of producing the bomb. The Washington Post instead of trying to find a connection between Pakistan's urge to acquire nuclear technology with India's bomb making capability try to convince its readers in the US and the American Administration that by following the present nuclear policy the US is only alienating its friends and strengthening the belief that a new form of imperialism is emerging through which colonialism will be perpetuated by imperialist powers through monopolising technology and discouraging developing countries access to it.

THE NEW TIMES
SUNDAY 14 MAY 1978

Reprocessing Plant

The Chief of the Army Staff and Chief Martial Law Administrator has again reaffirmed Pakistan's determination to get the reprocessing plant. While explaining Pakistan's position on the issue during an interview with the correspondent of "Washington Post", General Zia said there was no justification why Pakistan should not acquire nuclear reprocessing technology which was badly needed to boost energy production. In the immediate past there have been few deals between the two sovereign states that have received more world attention than Pakistan's nuclear reprocessing deal with France. While some powers have hotly debated it, others have furiously opposed the same. Within the country people have become sensitive on the issue. What has been the most agonising for them is the feeling that Pakistan is being signal out for special treatment on a matter that is of vital importance for them.

Pakistan does not dispute the concern expressed from certain quarters regarding proliferation and in order to eliminate all such apprehensions Pakistan apart from giving verbal assurances that it has no intention to squander its thin resources on manufacturing atom bomb, accepted all the safeguards including policing of the plant internationally or by France. Pakistan could not have possibly done more to provide guarantee of its peaceful intentions. As a matter of fact no other country would have agreed to the safeguards that Pakistan accepted. Furthermore the agreement when concluded had the concurrence of the International Atomic Commission and understanding of the United States. But now all these understandings are being set aside and suggestions are made to us to give up the deal.

Apart from the super powers and the countries in the industrialists west, there are states in the developing world that have reprocessing plants or are in the process of getting them. There are three across Pakistan's borders — two are already there and the third one is coming up — in India. Similarly Brazil will get one in the near future. In the Middle East, Israel has already got one. These plants hardly carry the safeguards that Pakistan has agreed to. In the light of this to assume that only a plant in Pakistan will cause proliferation, is least convincing. Similarly the suggestion that Pakistan instead should acquire co-reprocessing technology is hardly acceptable one for the country. Co-reprocessing is not yet an established technology. It is in the process of evaluation and Pakistan being a developing country can not possibly take a chance with a technology the result of which even the West has not yet seen.

In the last few years energy issue has developed into a major world problem. Its existing sources are being rapidly exhausted. Oil its main source does not appear to last long beyond this century. World is exploring other avenues so as to meet the future energy requirements. Pakistan being a developing country and with very little oil and other energy resources badly needs reprocessing plant. The country can not hope to achieve any significant progress without boosting its energy production. Those who are opposing Pakistan's nuclear reprocessing deal must realise that a strong and prosperous Pakistan is in the interest of region's peace and stability.

THE PAKISTAN TIMES
Published from Rawalpindi and Lahore.
May 14, 1978.

Not a point of honour

A nuclear reprocessing plant is not a point of honour with Pakistan but a dire necessity. If this country were to stick to traditional sources of energy, parts of its vast rural hinterland would still be without electricity come 2050. At the present rates of per capita energy consumption, Pakistan has a beggarly average of two hundred units to ten thousand units per head in the United States. Without energy to move the wheels of industry and agriculture, this country has but a very slim hope of ever providing its people with a fair deal. Already, the present power grid is under tremendous strain. It could reach breaking point within the next ten years if not supplemented with nuclear energy as soon as possible.

The Chief Martial Law Administrator's rejection of the co-processing plant proposal makes technological sense. Our friends would be doing us less than justice if they misinterpret it. Pakistan, as has been stressed time and again, cannot afford to experiment in a hitherto uncharted field. We are one of the poorest countries in the world in terms of fossil fuel resources. Our present generating capacity is around 2,500 megawatts. Energy planners project a per capita consumption of 850 kilowatt hours by the turn of the century which would still be far below the present world average. We import 87 per cent of our oil requirements and there is no immediate hope of reducing dependence on foreign oil. It would be cruel, too, to expect us to burn our gas reserves away. Even the oil-rich countries are now beginning to go in for nuclear power plants because using oil as a fuel is a luxury they can no longer afford. The problems which the energy-starved economies face in the Third World are of a frightening magnitude. The poor countries became poorer in the early seventies because of the oil crisis and the resultant inflation which made the task of balancing poor-nation budgets increasingly difficult. Our friends in the West have got to realise that developing countries need power more than anything else to get their static economies moving. They must help rather than hinder all projects which aim at providing vitally needed energy wherever possible. Pakistan has already assured the world community that it is willing to submit the reprocessing plant it wants to buy from France to the strictest possible international control. Our project has the concurrence of the IAEC. We do not see what more this country can offer in terms of guarantees. Surely, our friends do not want us to go back into the 8th century while the world moves into the 21st?

Improvements in PCSIR's working planned

The Pakistan Council of Scientific and Industrial Research (PCSIR) has suggested to the Federal Ministry of Science and Technology that the career structure of the Council needs to be overhauled and drastic improvements be made to relieve causes of frustration among scientists, it is learnt. The council has also made a number of proposals for further improving its overall working.

It has proposed that there should be efficient use of present training facilities. In this connection there was need for streamlining the procedure for nomination of candidates for various scholarships as quite a good number of them were wasted due to various reasons such as delays, etc.

The council has felt that more money was needed for research and development activities for the projects and capital equipment. In the view of the council this should receive top priority of the relevant authorities.

It has been pointed out that piecemeal allocation of funds distorts functioning of the Council and does not help working of big development projects.

Proposals for improving housing facilities for scientists and transport arrangement for the staff has also been recommended by the Council.—PPI

Nuclear talks

Munir leaves for London

KARACHI, May 14: Mr. Munir Ahmed Khan, Chairman, Pakistan Atomic Energy Commission, has flown to London to attend a meeting of selected group of distinguished international experts to review the future of nuclear energy and inter-related problems of proliferation and security, it was officially learnt here today.

The three-day meeting starting in London tomorrow will facilitate the first serious dialogue between some of the suppliers and recipients of nuclear technology.

The high-level consultative panel of experts has been set up by the Royal Institute of International Affairs and the Rockefeller Foundation. Besides Mr. Munir Ahmed Khan, the panel includes the atomic energy chiefs of Argentina, Brazil and India, some members of the Board of Governors of the International Atomic Energy Agency, and leading specialists from the United Kingdom, the United States, France and West Germany.

Apart from discussing nuclear energys important role in meeting the world energy demand, the experts will consider the fundamental problem experienced in its application and promotion.

The experts on the panel have been selected in their personal capacity.—APP.

COPIE-MEMORANDUM

OA/ZA

DIO/OV via Souschef DOA

23 februari 1978

no. 29/78

Onderwerp: **Pakistaans Kernwapen**

Vanmorgen werd aan een besoek gebracht door een Pakistaans journalist die met een Hammerskjöld beurs een reis maakt langs o.m. een aantal West-Europese hoofdsteden. In het gesprek bleek dat hij er als volstrekt vanzelfsprekend van uitging dat de bedoeling van de aankoop van een opwerkingsfabriek in Frankrijk door Pakistan de ontwikkeling van een kernwapen is.

Hij zei er van overtuigd te zijn dat India reeds over een kernwapen beschikt.

Hoewel het hier uiteraard om de mening van een individuele Pakistaan gaat, is het allerminst onwaarschijnlijk dat zijn visie door velen in de Pakistaanse bovenlaag gedeeld wordt.

1100 - 11 - '76 - 610266F

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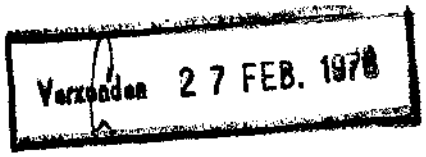
SOZA
KEMA (Arnhem)



Na verzending ter visie aan:

PAKISTAN ATOMIC ENERGY COMMISSION
PO BOX 1114
ISLAMABAD.

No. SC-III( )/78 Dated: February 18, 1978

Dear Colleague,

You will be pleased to know that Pakistan Atomic Energy Commission is organizing the Third International Summer College on Physics & Contemporary Needs at Nathiagali, Pakistan from 17th June to 6th July, 1978.

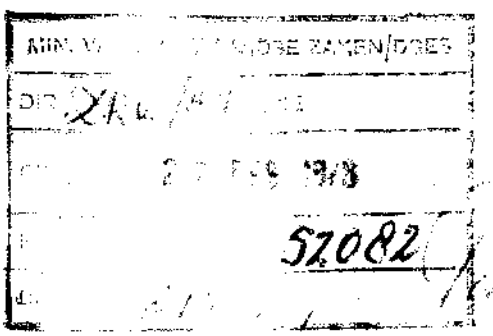
I am enclosing the leaflet of Summer College and one set of application form which you or some of your colleague in your University/ Establishment may like to fill and send to the concerned persons.

Yours sincerely,

M Aslam

(DR. MOHAMMAD ASLAM)
Scientific Secretary
Summer College Nathiagali

The Minister



PAKISTAN ATOMIC ENERGY COMMISSION

THIRD SUMMER COLLEGE ON PHYSICS AND CONTEMPORARY NEEDS

Nathiagali, Pakistan

June 17 - July 6, 1978

Co-sponsored by
International Centre for Theoretical Physics
Trieste, Italy.

The Third International Summer College on Physics and Contemporary Needs will be held at Nathiagali, Pakistan from June 17 to July 6, 1978. The College will be supported by the Pakistan Atomic Energy Commission and cosponsored by the International Centre for Theoretical Physics. Financial support from Swedish International Development Agency(SIDA)may also be forthcoming.

Lectures will be given by eminent scientists and engineers on the subjects of:-

PHYSICS, ENERGY AND NATURAL RESOURCES

Nuclear Energy in the context of Energy Systems, Advanced and non-conventional energy sources including solar energy.
Proper significance of nuclear energy for developing countries.

PHYSICS AND TECHNOLOGY

Physics of Amorphous Solids, Computational Methods in Physics

PHYSICS AND FRONTIERS OF KNOWLEDGE

Particle Physics

This year the emphasis will be on Nuclear Energy in the context of Energy Systems. In addition there will be a few lectures on Science and Development with particular reference to developing countries.

1. PURPOSE AND NATURE

The lectures will be given by a distinguished international faculty. The College is intended for physicists with post doctorate research experience and nuclear engineers from developing countries. There will be an average of about three lectures per day (five days per week) together with specialized

Candidates should preferably have completed several years of study and research after a first degree. Preference will be given to those involved in teaching activities in some university or research institute. This College is also open to postdoctoral scientists from advanced countries. It will be conducted in English, and as such, participants must have an adequate knowledge of that language.

II. PARTICIPATION

Candidates should complete and sign both the attached requests for participation forms and return one copy to:

The Deputy Director,
International Centre for Theoretical Physics
P.O.Box 586, I-34100 Trieste, Italy.

and the second copy to:

Professor Riazuddin
Department of Physics
Quaid-i-Azam University
P.O. Box 1090,
Islamabad - Pakistan.

As a rule, travel costs to and from Nathiagali, as well as subsistence expenses of the participants, are borne by the home institutions. However, funds are available from the Pakistan Atomic Energy Commission which will permit the organizers to give financial grant an allowance to a limited number of participants from developing countries who will be selected by a Selection Committee.

Deadlines for the receipt of request for participation forms

The deadline for the receipt of request for participation form and request for financial grant is the 31st March, 1978. If financial support is not required then request for participation can be made upto 15th April, 1978.

The decision of the Selection Committee will be communicated to all candidates as soon as possible.

Further information is available from the Scientific Secretary, Pakistan Atomic Energy Commission, P.O. Box No. 1114, Islamabad - Pakistan(Telex No. PK-5725, Grams: ATCOM,Telephone: 24148) and from the International Centre for Theoretical Physics, P.O. Box 586, I-34100, Trieste, Italy.

PAKISTAN ATOMIC ENERGY COMMISSION

THIRD SUMMER COLLEGE ON PHYSICS AND CONTEMPORARY FIELDS

Nathiagali, Pakistan

June 17 - July 6, 1978

Cosponsored by
International Centre for Theoretical Physics
Trieste, Italy.

REQUEST FOR PARTICIPATION FORM

INSTRUCTIONS

Each question must be answered clearly and completely. Type or print in ink. If more space is required, attach additional pages. Two sets of the form are provided for each candidate. One is to be forwarded to the International Centre for Theoretical Physics, P.O.Box 586, I-34100 Trieste, Italy, and one to the Department of Physics, Quaid-I-Azam University, P.O. Box 1090, Islamabad, Pakistan not later than 31st March, 1978.

A recent photograph of the candidate should be attached here, signed legibly on the reverse side.

PERSONAL DATA

Surname	First name	Middle name(s)	Sex	Marital status

Home address Tel.No.

Mailing address
Please indicate whether

Home ☐ Inst ☐

Full address of Institution Tel.No. Date of birth
Year. Month. Day

Place of birth(city and country) Nationality now Nationality of birth

Name and address of person to notify in case of emergency- Relationship

EDUCATION (higher degrees)

University or equivalent Name and place	Years attended From	to

---

Seminars, summer conferences or research activities attended

Name and place	Year

SCIENTIFIC EMPLOYMENT AND ACADEMIC RESPONSIBILITY

Research Institution or University Name and place	Period of duty from	to	Academic responsibilities

Present employment and duties, particularly in relation to your department.

Give a brief account of your work, its highlights, your present research problems in relation to the programme you are herewith requesting to attend.

LIST YOUR SCIENTIFIC PUBLICATIONS including books and articles, Unpublished works may also be mentioned (use extra page if necessary).

Foreseen employment on return to home country after the College

If appropriate, it would be of assistance to the Organizing Committee if this request were accompanied by a letter from a senior member of your department indicating the relevance of your request to the continuing work of your institution.

Indicate below your proficiency in the English language

	Good	Average	Poor
Reading:	☐	☐	☐
Writing	☐	☐	☐
Speaking	☐	☐	☐

IMPORTANT: APPLICABLE ONLY FOR CANDIDATES FROM DEVELOPING COUNTRIES:

I am requesting financial assistance as follows:

Travel	
Subsistence	

Signature . . . . .

I certify that the statements made by me in this request for participation are true and complete. If selected as a participant of the above College, I undertake to:

a) attend the lectures, seminars and specialized colloquia in accordance with the programme of the College,
b) refrain from engaging in political, commercial or any activities other than those covered by my work programme.

I certify that I understand that all organizations supporting and sponsoring the Summer College as well as the host country are not responsible for costs due to death, injury, sickness or disability sustained or incurred in the course of travel to and from the College and while attending the College.

Pakistan Atomic Energy Commission

THIRD INTERNATIONAL SUMMER COLLEGE ON PHYSICS & CONTEMPORARY NEEDS

NATHIAGALI, PAKISTAN

June 17 — July 6, 1978

Co-sponsored by

INTERNATIONAL CENTRE FOR THEORETICAL PHYSICS, TRIESTE, ITALY

The Third Summer College on Physics and Contemporary Needs is being organized, with lectures given by eminent scientists and engineers from all over the world on the subject of :

☐ PHYSICS, ENERGY AND NATURAL RESOURCES

Nuclear Energy in the context of Energy Systems, Advanced and non-conventional energy sources including solar energy. Proper significance of nuclear energy for developing countries.

☐ PHYSICS AND TECHNOLOGY

Physics of Amorphous Solids, Computational Methods in Physics.

☐ PHYSICS AND FRONTIERS OF KNOWLEDGE

Particle Physics.

This year the emphasis will be on Nuclear Energy in the context of Energy Systems. In addition there will be a few lectures on Science and Development with particular reference to Developing countries.

The college is intended for physicists with postdoctoral research experience and nuclear engineers particularly from developing countries. There will be an average of about three lectures per day (five days per week) together with specialized colloquia.

Candidates should preferably have completed several years of study and research after a first degree. Preference will be given to those involved in teaching activities in some University or research institute. This college is also open to postdoctoral scientists from advanced countries. It will be conducted in English, and as such, participants must have an adequate working knowledge of that language.

As a rule, travel costs to and from Nathiagali, as well as subsistence expenses of the participants, are borne by the home institution. The Organizing Committee will be pleased to book accommodation for participants on request. The hotel charges amount to $15 to $20 per day per person for complete boarding and lodging in the best hotels available at Nathiagali. Funds are available from the Pakistan Atomic Energy Commission which will permit the organizers to grant an allowance to a limited number of participants from developing countries who will be selected by the Selection Committee. The transport from International Airport Rawalpindi-Islamabad to Nathiagali will be provided free of cost to all participants. The closing date for requests for financial assistance is March 31, 1978. The closing date for requests for participation, where no financial assistance is required, is April 15, 1978.

Nathiagali is in the famous Himalayan range and is at an elevation of 8200 feet. Its range after range of green hills are covered with forests of pines and fir trees. On a clear day it offers a spectacular view of snow-clad 'Nanga Parbat' of Kashmir hills in the foreground and towering Kurakaram range in the background. The weather in Nathiagali during Summer is very pleasant and temperatures range from 41° to 77° F (5° to 25° C). It is on the outskirts of Kaghan Valley which is about 96 miles long. The landscape of Kaghan Valley is varied and colourful, the atmosphere serene, calm and blissful. Majestic, towering mountains, foaming streams, lush green terraced fields, azure lakes and snow-clad peaks all combine to present a scenic panorama of rare charm and enthralling beauty.

During the week-ends two excursion trips will be arranged to historic Khyber Pass and Peshawar city, to city of Lahore which is famous for its historic buildings and our ancient heritage. The transport facilities for all the excursions will be free of cost. However, overnight stay may have to be borne by the participants. In Lahore and Peshawar it would amount to about $50 per day in best hotels available for complete boarding and lodging. Hiking expeditions and horse-riding trips will be arranged for interested participants around Nathiagali.

Further information is available from the Scientific Secretary, Summer College, Pakistan Atomic Energy Commission, P.O. Box No. 1114, Islamabad, Pakistan (Telex No. PK-5725, Grams : ATCOM, Telephone : 24148) and from the International Centre for Theoretical Physics, P.O. Box 586, I-34100, Trieste, Italy. Requests for participation must be sent in duplicate, one to Deputy Director ICTP, and the other to Professor Riazuddin, Department of Physics, Quaid-e-Azam University, P.O. Box 1090, Islamabad, Pakistan.

ZENDBRIEF

161/50

Persweergave van officiële verklaring d.d. 7 dezer m.b.t. pakistaans-franse overeenkomst inzake nucleaire opwerkings faciliteit.

Ministerie van Buitenlandse Zaken
'-GRAVENHAGE-

x

x dzz telex no. 40099 d.d. 10-1-1978.

De ... uist XXXXX terugverwacht

MIN. V... ...E ZAKEN
DIR. ...
INGEK. 12 ... 1978
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DOSSIER ...13 339.2

Islamabad, 10 januari 1978.

ROYAL NETHERLANDS EMBASSY. ISLAMABAD. 1602

Pakistan will not accept change in agreement for N-plant supply

MN **From Our Special Correspondent**

ISLAMABAD, Jan. 7: The Pakistan Government will not accept any change or modification in the 1976 agreement with France for the supply of nuclear reprocessing plant. This was stated here today by a Pakistan Foreign Office spokesman.

The spokesman was commenting on French newspaper Le Monde's report of Jan. 6, published on the eve of US President Carter's visit to Paris which said that France was seeking to re-negotiate the agreement for the nuclear reprocessing plant with Pakistan, suggesting its replacement with a co-processing plant.

The spokesman reaffirmed determination of the Pakistan Government to pursue with France the implementation of the 1976 agreement.

He recalled the assurances given publicly on Sept. 9 last by the French Foreign Minister declaring that France would abide by the agreement and honour its signature.

It is understood that Pakistan had rejected as far back as September last any suggestion to revise the 1976 agreement and replace the reprocessing plant with a co-processing plant based on unproven technology and having limitations so far as its advantages are concerned.

Mr Agha Shahi, Secretary-General Foreign Affairs, had met the French Foreign Secretary in Paris in early September and later in the same month in New York where he was stated to have made it abundantly clear that no change in the agreement would be acceptable to Pakistan.

The co-processing plant is believed to be based on unproven technology and will imply basic changes in what Pakistan wants for itself. A major handicap in the co-processing plant is that Pakistan will continue to depend on supplies of fuel from outside for its reactors.

It is believed that while the reprocessing plant will enable Pakistan to feed fuel to breeders and keep using waste indefinitely, in the case of co-processing plant such long-range use of fuel waste would not be possible. Even perfection of this new technology might take some time which Pakistan can ill-afford to waste.

The British news agency Reuter quoting well-informed sources in Paris, also reported yesterday that France was making new proposals designed to modify the contract.

Change in re-processing plant accord not acceptable

Pakistan to reject any French move to re-negotiate N-deal

From Our Islamabad Bureau

JAN. 7: Pakistan will not accept any change or modification in the agreement signed with France for the procurement of a nuclear re-processing plant.

This was stated here today by an official spokesman who was commenting on French Press reports to the effect that France was seeking re-negotiation of its agreement on the supply of re-processing plant to Pakistan in order to effect some modifications. The French newspaper "Le Monde", in a report carried on the eve of U.S. President Jimmy Carter's visit to Paris said that the proposed modification would mean the supply of "co-processing" plant instead of the re-processing plant.

The official spokesman reaffirmed the determination of the Government of Pakistan to continue to pursue with France the implementation of 1976 agreement. The spokesman recalled that the French Foreign Minister had as late as September last year publicly declared its intention to honour its signature on the agreement. These reassurances were reiterated both at Paris and New York after a meeting with the Secretary-General of Foreign Affairs, Mr. Agha Shahi.

Meanwhile competent technical quarters here emphasised that the technology for the socalled "co-processing plant" had not yet acquired any practical significance as this technology was still not a proved one.

APP adds: The British news agency Reuter, quoting well-informed sources in Paris, reported yesterday that France was making new proposals designed to modify the contract.

AMBASSADE DE FRANCE
AU PAKISTAN

Islamabad, 7th January 1978

N° 01/D

The Embassy of France presents its compliments to all Diplomatic, Consular and United Nations Missions in Islamabad and has the honour to inform them that H.E. Mr. Pol Le Gourriérec, Ambassador of France, has left Pakistan today for about ten days.

During his absence, Mr. Denis Nardin, Counsellor, will be in charge of the mission in the capacity of Chargé d'Affaires a.i.

The Embassy of France avails itself of this opportunity to renew to all Diplomatic, Consular and U.N. Missions in Islamabad the assurances of its highest consideration./.

To all Diplomatic, Consular
and U.N. Missions in Pakistan
ISLAMABAD

MORNING NEWS

MUHARRAM 29, 1398 MONDAY, JANUARY 9, 1978.

THE REPROCESSING PLANT

ACCORDING to a newspaper report, published on the eve of US President Carter's visit to Paris, France is seeking to renegotiate the agreement for the nuclear reprocessing plant with Pakistan, suggesting its replacement with a co-processing plant. Obviously, such a position cannot be acceptable to Pakistan. The accord is not negotiable, howsoever great the pressure may be from any quarter. Pakistan is determined, and rightly so, to pursue with France the implementation of the 1976 agreement. It is strange that despite India's refusal to accept full-scale safeguards for its nuclear facilities, the US would continue to supply nuclear material to India, while it is opposed to Pakistan's purchasing a nuclear reprocessing plant from France with all necessary safeguards and assurances that the plant would be used for peaceful purposes. The queer logic is not understandable. Pakistan's need for such a plant is evident from the following facts.

The per capita electrical energy consumption in Pakistan is expected to increase from the present 150 KW to 800 KW by the year 2000. And since the country's known fossil fuel reserves of coal, oil and gas are extremely limited, it has to rely heavily on nuclear energy. According to an estimate, hydro, coal and gas all put together, will hardly meet 50 per cent of the nation's electricity requirements, leaving a demand-supply gap of 15,000 MW by the end of the century. In the situation, nuclear energy offers the only economical and practical answer to the problem of power shortage in Pakistan.

It is against this background that Pakistan has drawn up a comprehensive plan to set up nuclear power projects in the country. And since such a programme requires an assured supply of nuclear fuel (uranium) to run its reactors and needs facilities to refine, fabricate and reprocess this fuel, the country signed an agreement with France in 1976 for the acquisition of a nuclear reprocessing plant.

When natural uranium burns in a reactor, nearly 96 to 99 per cent of it remains unspent. Simultaneously a new fissionable material called plutonium is also produced which can be used in running fast breeder reactor. Hence, Pakistan urgently needs fuel reprocessing facility to separate plutonium and uranium from the unspent fuel and recycle it in reactors for power production.

Recycling of uranium alone will result in saving of more than 20 per cent of fuel required by the end of the century. Separation of plutonium and recycling it in subsequent fuel loadings will result in additional savings of 10 per cent in Uranium feed. Moreover, plutonium mixed with depleted uranium can also be used in heavy water reactors resulting in decreasing uranium requirements by 50 per cent. In view of the cost and difficulties associated with the import of uranium it is a considerable saving and calls for the early establishment of a reprocessing plant.

It would indeed be sad if France, which is full committed to abide by the agreement and honour i signature, should now try to go back on its wor under US pressure. Pakistan has already rejected ar suggestion to revise the 1976 agreement. It will b unwise on its part to acquire a co-processing pla based on unproven technology and having limite advantages. The co-processing plant will make Paki tan slavishly dependent on supplies of fuel from ou side for its reactors which will be a major disability

Pakistan will remain firm in its resistance to th efforts being made by some nations to block th transfer of nuclear technology to the developin nations. It is even more immoral for some influenti world Powers to force Pakistan to give up its effor to lend its nuclear power programme a stable bas These Powers, in order to tailor the world to suit their global interests, have on occasions tried t create regional leadership by boosting up one countr or the other in an area and ignoring the interests c all other nations inhabiting the region. South Asia i one such region where the Big Powers have frequen ly tried to prop up India, a nuclear weapon State, a the leader of neighbouring countries. Pakistan, whic has been forced to defend itself in four wars agains its neighbour within 24 years and lost half its terr tories in the process, has to be extremely wary c hegemonyism or anything smacking of that.

397/116

Artikel uit "Pakistan Times" d.d. 22 januari j.l. betreffende uranium exploratie in Pakistan.

De Minister van Buitenlandse Zaken
's GRAVENHAGE.

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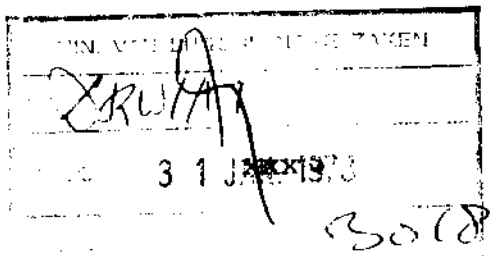

Islamabad, 22 januari 1978.

Promising finds in Punjab

Sind, NWFP

Big headway in uranium search

From Our Islamabad Bureau

JAN. 21: Irrespective of all the handicaps, Pakistan has made noticeable headway in nuclear mineral exploration and process development studies with a view to eventually running reactors—KANUPP to begin with—on local fuel.

Through its intensified prospecting programme since fiscal year 1975-76, the Pakistan Atomic Energy Commission identified a number of promising uranium-bearing formations. Three different types of ore were located in the Punjab, Sind and the NWFP. Also, to ensure accuracy of results, pilot plants and laboratory facilities were completed some time ago.

The Atomic Energy Commission reports that apart from improving efficiency of the pilot plant it set up for the purpose, it also designed a production plant on a semi-industrial scale to process uranium oxide it found at Baghalchur in Dera Ghazi Khan District of the Punjab. It also undertook initiation of a process at the drilling site to improve uranium recovery at substantially lower cost. The Commission's explorers believe that total ura-

(Continued on Back Page, col. 3)

Uranium

(Continued from Page 1, Col. 3)

nium reserves would prove substantial in the 120 mile belt they have discovered in the district. However, they have not disclosed any estimates.

Apart from Dera Ghazi Khan the explorers located a likely site near Sihawa village in Jhelum District. By initial indications the site was adjudged as promising as the one in Dera Ghazi Khan. Drilling undertaken there strengthened hopes of finding an unoxidised zone of uranium somewhere blow the water table.

In Sind, zircon-bearing sands were identified along the coast near Karachi. Although the site near Karachi was said to be the most promising in the province, two more prospects were also located. The other two areas were considered likely to bear large reserves but of a low grade ore.

Setting up a of a mineral separation plant for bulk processing of the sands is in hand. Testing at laboratory scale is continuing. The beach sands contain substantial tonnage of zircon and other minerrals. The exact extent of the reserves and their grades, however, have yet to be determined.

The showings in the NWFP on the other hand, have been rather poor, for the ore there presents problems in uranium separation. All the same, the Commission's experts have thought of improving economics of exploration through a programme to recover nibium and tantalum elements as by-products. Field studies have made quite some progress in this direction.

292/97

Persknipsels over jongste ontwikkelingen in de openbaarheid m.b.t. een nucleaire opwerkingsinstallatie in Pakistan.

De Minister van Buitenlandse Zaken
's-GRAVENHAGE.

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AFGESCHREVEN:

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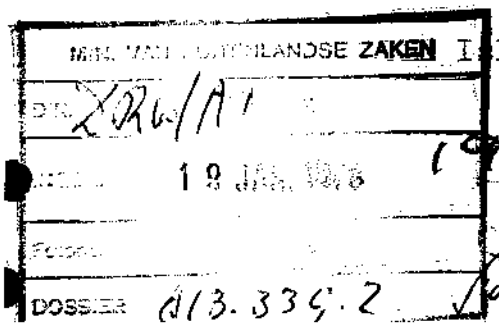

Islamabad, 17 januari 1978.

DAWN

Tuesday, January 10, 1978

Pakistan and the Reprocessing Plant

THE statement by a Foreign Office spokesman that the Pakistan Government would not accept any change or modification in its agreement with the French Government for the supply of a nuclear reprocessing plant should help dispel any doubts that might have arisen on this score as a result of a recent report in the foreign Press. According to a French daily paper, France is seeking to renegotiate the deal with Pakistan in order to substitute a co-processing plant for a reprocessing one. Incidentally, a co-processing plant has limited functions in that it does not separate plutonium, and its technology is in an experimental stage. It is widely known that since 1976 when the reprocessing plant agreement was concluded between Islamabad and Paris, both Capitals have come under pressure from Washington to abandon the contract ostensibly to minimise the danger of nuclear proliferation. But until now not only has Pakistan firmly stood by the deal but the French Government has reaffirmed on more occasions than one its clear intention to honour the nuclear contract.

Pakistan's position on a nuclear reprocessing plant is not negotiable and this fact will be better appreciated if it is recognised that the Government's stand is based not on any political consideration or thoughts of grandeur but on its down-to-earth economic need for preparing to meet the future demand for energy. The Pakistan Atomic Energy Commission has estimated in a long-term study that by the turn of the century Pakistan's energy requirement will be in the neighbourhood of 30,000MW. But in view of the shortage of fossil fuels and hydroelectric power, and the rising cost of imported oil, the country will have to rely on nuclear energy as an economical source of power supply. Hence it is planned to meet nearly 50 per cent of the country's power requirement through nuclear reactors. A sound nuclear programme can be developed only through the acquisition of a complete nuclear fuel cycle which is now recognised as being indispensable for a long-term nuclear programme. A nuclear reprocessing plant not only enables the natural uranium which is not fully spent in a reactor to be recycled but also produces plutonium which serves as the fuel for fast breeder reactors. These reactors are expected to be commercially in use during the next decade.

As for the debate on nuclear proliferation and the fears expressed in certain quarters that Pakistan might use the plutonium separated in a reprocessing plant to make and explode a nuclear device, the assurance given by the Pakistan Government that it will not use its nuclear capacity for military purposes should be accepted in good faith. Moreover, Islamabad has, unlike some other countries, accepted all international safeguards and provisions for inspection laid down by the International Atomic Energy Agency. These safeguards should provide the surest guarantee against nuclear proliferation.

What gives rise to concern is that the Press reports regarding the French move to seek a modification of the deal were published on the occasion of President Carter's visit to Paris implying that American interest in the issue continues unabated. This has implications for Pakistan-American relations since the American Administration's attitude towards the transfer of nuclear technology in general and the Pakistan-France nuclear deal in particular has been spelled out clearly on a number of occasions. In fact at one stage, the nuclear issue became a cause of recrimination and resentment between the two Governments and it was feared that it might sour their bilateral relations. Normally differences in one specific area of foreign policy should not be allowed to prejudice a durable bilateral relationship. But initial reactions on both sides in this case were rather sharp and this was unfortunately reflected in the posture the US adopted towards the South Asian region. Thus the American Deputy Secretary of State, Mr Warren Christopher, went on record as saying last July that the US expected India to take the position of leadership in South Asia. A few weeks later, Mr Robert Goheen, the American Ambassador in New Delhi, went a step further and declared that India was "the pre-eminent nation on the subcontinent" and that the US had stopped trying to treat Pakistan as India's equal. Such views caused serious concern in Pakistan because the main thing about them was not that they referred to the fact of India's size but that they actually accorded New Delhi a position of hegemony in the region, something which would encourage it further to dictate terms to its smaller neighbours. This obviously militated against the basic concept of sovereign equality of all States which forms the basis of the international political system today. It comes as a source of great relief that the US Government has done some rethinking on this issue. During his visit to India, which, it seems, went off well except for the differences on the nuclear issue, President Carter refrained from issuing to India a certificate of "pre-eminence" in the region. On his departure from New Delhi, the American leader sent a message to General Mohammad Zia-ul-Haq in which he significantly upheld "the belief that the sovereign equality, security and integrity of every nation is essential for world peace and stability". President Carter also reiterated that "support for the territorial integrity, development and independence of Pakistan remains an enduring principle of American foreign policy". This highly significant statement by the US Chief Executive has the positive effect of over-ruling and nullifying the two subordinate US officials' doctrine prescribing a scheme of unequal relationships in South Asia.

The two earlier American statements had caused concern in South Asia because they seemed to allude to the desirability of promoting Indian hegemony in the region. President Carter has thus removed the impression that US policy is in any way directed towards promoting the dominance of one South Asian country over the others. His reaffirmation of the principle of the sovereign equality of States is also reassuring for Pakistan in the context of its relations with a Super Power. By recognising the principle that the disparities of power need not be institutionalised in the relationships between a major State and its smaller partner, the United States has paved the way for a healtheir pattern of bilateral ties with Pakistan. America's relations with Pakistan should be able to withstand the strain of disagreement on this or that specific issue. There is thus no reason why such divergence of views as exists on the nuclear reprocessing plant should impair the strength of US-Pakistan ties. Each of the two Governments will have to concede to the other the right to adopt a position it considers to be consistent with its own national interest. The United States has set a precedent in the case of the German-Brazilian deal for a reprocessing plant which still stands and more recently in the case of Japan with which the US has reached a limited agreement allowing Tokyo to begin operating a nuclear reprocessing facility at Tokai Mura. And lastly, while Pakistan stands by its decision on the reprocessing plant, it has to get used to the idea that the project lacks America's blessings and that differences on one specific issue need not detract from the vitality and durability of Pakistan-American friendship.

PAKISTAN TIMES

French pledge to 'honour contracts it signs' welcomed

Pakistan demands implementation of N-deal as it stands

ISLAMABAD, Jan. 10: Pakistan has demanded implementation of its agreement on nuclear reprocessing plant with France as it presently stood, without any modification.

A spokesman of the Pakistan Ministry of Foreign Affairs today said all international safeguards to prevent misuse of plutonium as prescribed by the International Atomic Energy Agency, have been written into the agreement.

With reference to the French Foreign Ministry's statement of Jan. 9, the spokesman stated that Pakistan welcomed the declaration that France always honours the contracts it signs.

Giving the Pakistan Government's reaction to the other contents of the French statement the spokesman said that on Sept. 8, 1977, when the French Foreign Minister had proposed to Pakistan's Secretary-General for Foreign Affairs, in their meeting at Paris, that Pakistan join France in a study to consider a modification of the Franco-Pakistan agreement on the reprocessing plant so that the production of plutonium may be prevented, the Secretary-General for Foreign Affairs had fully explained why Pakistan was not in a position to accept this proposal. This was further explained by the Secretary-General to the French Foreign Minister on Sept. 26 in the course of their meeting in New York, he said.

The spokesman emphasised that Pakistan has neither the intention nor is there the possibility of her being able to divert plutonium separated in the reprocessing plant for any non-peaceful purposes in view of the strict international safeguards of the Vienna-based International Atomic Energy Agency which have been written into the agreement on the reprocessing plant.

The spokesman reiterated his earlier statement of Jan. 8 that Pakistan wanted implementation of its agreement with France as it presently stood, without any modification.

A statement issued by a spokesman of the French Foreign Ministry in Paris yesterday said: "France always honours the contracts that she signs. The aim of the contract which was negotiated with Pakistan some years back was the reprocessing of nuclear fuel".

It said that within the frame work of "the efforts which have been made on a world-wide scale to prevent the proliferation of nuclear weapons", French Foreign Minister De Guiringaud had proposed as early as the 9th September, 1977, to Mr. Agha Shahi, Pakistan Secretary-General for Foreign Affairs, to "consider" a modification of the reprocessing plant which would avoid the production of pure plutonium. "In fact Pakistan will not be able to utilise, in its breeder reactors, the plutonium extracted in the plant before 15 or 20 years. Besides, the Pakistan Government has always affirmed that it does not wish to acquire plutonium for military purposes"—APP.

EDITORIALS

France's second thoughts?

Price vigilance

THE PAKISTAN TIMES

Published from Rawalpindi and Lahore.

January 11, 1978.

FRANCE'S SECOND THOUGHTS?

Washington has perhaps succeeded in sowing doubts in Gaulish mind about Pakistan's nuclear reprocessing plant. Until only recently the French were vehement in turning down all American remonstrances — even more brusquely and outspokenly than Pakistan itself could afford. One recalls the umbrage the French Foreign Minister took at Dr. Kissinger's suggestion when the latter was on his dissuading mission in August 1976 and briefly stopped over in France on way back from Pakistan. The French line had throughout been that the agreement with Pakistan was signed on guarantees of complete safeguards under International Atomic Energy Agency's auspices, that France was fully satisfied with these and could never consider pulling out of the deal, and that if ever a review was possible it could only be at Pakistan's own request. When the French President visited Mr. Carter after the latter's election the Pakistani plant was high on the agenda and M. Giscard d'Estaing was reported to have made his country's stand clear to his host.

What has happened now to make Paris suggest modifications to Islamabad, to ask that the reprocessing plant be substituted with, as the jargon goes, a co-processing device which happens to eliminate the controversial plutonium factor? No explanation has been offered and it is not clear why the complete faith in IAEA safeguards has suddenly become less complete. Has the French election next March anything to do with it? It seems unlikely. France's own nuclear policy, is doubtless an election issue and a potentially divisive factor within the left alliance itself. The policy on sales to South Africa, though modified, may also provide some grist to the opposition mill. But the contracted supply to a country like Pakistan has no possibility of becoming an internal issue. Any hedging on it, on the other hand, can quite conceivably turn into a source of embarrassment to the ruling coalition one of whose claims to electoral support is its independence in foreign relations which appeals to the Frenchman's strong nationalistic sentiment. The news of Quai d'Orsay's rethinking on the Pakistani plant was leaked out on the day of President Carter's stopover. The significance of this will not be missed.

Whatever the reasons for France's present tractibility, it may yet be guided by its own judgment and refuse to be unduly pressurised. Pakistan has made its position clear. Reprocessing is unarguably a vital need for it. It has drawn up its longer-term energy-generation plan on that basis, which includes a series of nuclear reactors. It cannot at this stage opt for an untried process which is also likely to impose a heavy burden of wastage. There is almost a world-wide consensus of experts that reprocessing is vital to Third World's fuel problems. The IAEA has ruled that, the Atomic Energy Authority of the U.K. has recently expressed the same view in categorical terms. And the last U.N. General Assembly session adopted a resolution to similar effect. Creating hurdles in efforts in this direction on the plea of non-proliferation — which can anyhow be ensured only through political means—is indefensible, entirely so in the case of a country which has unlike some others submitted itself to stringent safeguards. American concern is clearly illogical. It will at any rate be hoped in Pakistan that France will resist the new pressure, just as it has done in the past. Islamabad itself has made it clear that it will make no compromise on its legitimate need, whatever the circumstances. This firm resolve has overwhelming popular support.

MORNING NEWS

Pak stand on French nuclear accord lauded

12.11.78 MN

Mr. Mohammad Faridul Haq Secretary-General Motamar Al-Alam Al-Islami (Pakistan) has vehemently supported the stand taken by the Pakistan Government refusing to negotiate the question of modifying the agreement with the French Government on the nuclear reporcessing plant.

In a statement issued here yesterday Mr Faridul Haq said that the stand of Pakistan Government on the question of nuclear reprocessing plant is not negotiable as it is vital for her economic development.

The energy requirements of the country in the near future are estimated at about 30,000 kilowatt and Pakistan is capable of meeting less then half of this requirement, he added.

He said the rising cost of imported oil and the shortage of Hydero-electricity has compelled the country to rely on nuclear energy as an economical sources of power supply. It is in the national interest to acquire a complete nuclear reprocessing plant which produces poltinum which serves as the fuel for fast breader reactors which are likely to be in commercial use during the next few years by the time when plant is commissioned for use.

He said in order to dispel fears about the possible misuse of plotinum separated by reprocessing plant, the Government had already provided all safe-guards and provided for inspection as perscibed by the international community and there is no reason to doubt it.

Mr. Marid said the West German Government had already honoured its agreement for the supply of a nuclear reprocessing plant to Brazil which was concluded in 1975.

Likewise United States of American has allowed Japan to operate a plant at Tokai Mura, he added.

Mr Haq condemned the Jewish lobby which is putting all types of obstacles and psychological propaganda to stop the establishment of nuclear reprocesing plant in Pakistan because it will, be the only plant in the area after Israel.

He urged the Government to stress upon the French Government the need of fulfilling her contractual obligations as an honourable and civilised nation and at the same time to mobilise all possible means to accelerate the setting up of the plant ahead of the schedule on top priority basis.—APP.

NEW TIMES

FRENCH DECLARATION

It is of course a matter of great satisfaction that France has made it clear that it is her policy to "honour the contracts it signs". Nonetheless France did ask Pakistan to join her in a study to consider a modification in the Franco-Pakistan agreement on the sale of reprocessing plant. Pakistan reacted sharply to this suggestion and emphasised that Pakistan would insist upon the implementation of its agreement with France without any modification. At this late stage when Pakistan has made its future plans on the assumption that reprocessing plant will be sold by France any change or revision in the sale agreement is simply unthinkable. The suggested Coprocessing plant falls far short of our needs.

For a developing country like Pakistan which needs cheaper and better fuel to keep its various projects moving, reprocessing plant is a necessity. The fear of proliferation is imaginary at least in the case of Pakistan for two simple reasons. Firstly Pakistan after acquiring the reprocessing plant will not be able to utilise in its breeder reactors the plutonium extracted in the plant before fifteen to twenty years. This surely is a very very long time in which the world can change upside down. Secondly Pakistan has neither the ambition nor the resources to acquire plutonium for military purposes. Furthermore the agreement signed between France and Pakistan contains all international safeguards to prevent any misuse of plutonium as prescribed by the International Atomic Energy Agency.

MORNING NEWS

PAEC launches uranium prospecting programme

ISLAMABAD, Jan. 12: The Pakistan Atomic Energy Commission has launched a much larger programme of uranium prospecting in the country on the basis of the experience gained during the UNDP-assisted programme concluded recently in Dera Ghazi Khan region, according to official sources here.

Mostly indigenous effort is involved in the expanded programme.

At the same time the small pilot plant connected with uranium development, which has been in operation for some time by PAEC, has given valuable experience for building a bigger plant.

Official sources say that exploration of significant proven reserves of uranium is being planned in the Baghalchur area west of D.G. Khan. Some promising areas in various parts of the country have also lately been identified.

Aeromemic surveying has also been introduced and essential laboratory facilities for identification and analysis of minerals are being established.

Several promising deposits have been detected which are now being assessed for their mineral potential.

Some of these deposits also contain sizeable quantities of thorium which may prove to be useful for advanced reactors in the future, the sources said.

Demand for uranium has grown in the world with the increasing emphasis on nuclear power plants in the wake of oil crisis. Although the present known resources of uranium can meet the demand until mid-1980s, political considerations and pressures may pose supply problems in the near future, and diminishing stocks in the longer term, unless substantial new uranium deposits are found and developed.

Although a fairly abundant element in the earth's crust, it has been estimated by the United Nations that only about 15 per cent of the land surface of the earth has been explored for uranium. Most of this exploration has been done in and by the industrialised countries.

Only fifteen of the nearly 130 developing countries are known to have commercial uranium deposits.

Proven uranium deposits are being exploited in Gabon and Niger, and are known in abundance in Central African Empire, Zaire and Zambia in Africa, and in Brazil, Argentina Chile, Uruguay and Mexico in South America.

In Asia, India is developing its uranium resources, and Pakistan and Turkey are evaluating uranium-bearing rocks.—PPI.

CITY PAGE

Reprocessing plant to help introduce fast breeder reactors

Pakistan's approach to acquire reprocessing technology will help her gain "very valuable experience in reprocessing of nuclear fuels over the next ten years and step by step will prepare itself for the introduction of plutonium recycle and later fast breeder reactors when they become commercial".

According to a report published in "Pak Atom" a publication of Pakistan Atomic Energy Commission (PAEC), the plutonium recovered from the reprocessing plant can be used to fuel the future fast breeder reactors because it was highly unlikely that other countries will have large quantities of plutonium to spare for exports along with fast breeder reactor plants.

The report also refers to the view advanced by USA and Canada having large uranium reserves that breeder reactors may not be necessary as there was enough uranium in the world to ensure adequate supplies for present types of reactors and certain kinds of convertors.

This view the report stated was strongly opposed by West Germany and Japan which lack indigenous supplies. They contend that once through fuel cycle where irradiated fuel was stored indefinitely it was unsafe from the point of environmental considerations and also not further non-proliferation goals.

According to them the safest way to handle plutonium was not to store it inside the irradiated fuel but recover and burn it as quickly as possible. The report further stated it was expected that he argument for postponment of reprocessing technology and its introduction on a large scale will be debated in the experts group which will meet under the auspices of international fuel cycle evaluation (INFCE) study launched in October last.

Pakistan because of its limited resources cannot take interest in enrichment of fuels but all other steps are manageable and within the resources and technological competence of Pakistan. Of these steps fuel reprocessing was extremely crucial.

The existing power reactor types burn only 13 per cent of uranium. These reactors are not attractive from the point of conservation and optim utilisation of uranium.

Maximum utilisation of uranium, according to the report, can be achieved in a fast breeder which can utilise through successive recycling about 80 per cent or more of uranium.

The report also refers to the study of long term role of nuclear power in Pakistan by international Atomic Energy Agency (IAEA) which confirmed the country's urgent need for nuclear power and concludes that Pakistan will have to rely heavily on nuclear power stations over the next 25 years.

For this reason Pakistan must ensure a greater degree of self-reliance regarding fuel. It will be unwise to build a number of nuclear power stations for which fabricated fuel will have to be imported from abroad or irradiated fuel had to be sent outside for reprocessing.

Keeping in viw PAEC's experience with KANUPP, it was necessary to have uninterrupted flow of fuel and provision of reprocessing services, the report said.—PPI

earch for uranium

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Proven uranium deposits are being exploited in Gabon and Niger and are known in Algeria, Central African Empire, Zaire and Zambia in Africa, and in Brazil, Argentina, Chile, Uruguay and Mexico in South America.

In Asia, India is developing its uranium resources and Pakistan and Turkey are evaluating uranium-bearing rocks.—PPI.

JANUARY 15, 1978

REPROCESSING PLANT

Technology to help recycle plutonium

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For this reason Pakistan must ensure a greater degree of self-reliance regarding fuel. It will be unwise to build a number of nuclear power stations for which fabricated fuel will have to be imported from abroad or irradiated fuel had to be sent outside for reprocessing.

Keeping in view PAEC's experience with KANUPP, it was necessary to have uninterrupted flow of fuel and provision of reprocessing services, the report said.—PPI.

DIRECTORAAT-GENERAAL
EUROPESE SAMENWERKING

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Verzonden 5 JAN. 1978

Na verzending ter visie aan:

Chef DRW
DRW/AT (v Galen Last)
Mr. Brands

[18]

AMBASSADE VAN HET KONINKRIJK DER NEDERLANDEN

ROYAL NETHERLANDS
EMBASSY

DIR. ...
INGEK. 2 JAN 1978
No. 1105

No. 4234/1096 Islamabad, 22 december 1977.

Persberichten betreffende situatie
op het nucleaire front in Pakistan.

./. Hiernevens gelieve U enige persberichten van de laatste week aan te treffen betreffende het in hoofde dezes genoemde onderwerp, ten vervolge op laatstelijk mijn 3525/895, d.d. 25 oktober jl.

De Ambassadeur

G.J. Jongejans

De Minister van Buitenlandse Zaken
'S-GRAVENHAGE.

9005-2-76

PAKISTAN TIMES

Uranium hunt going well

PESHAWAR, Dec. 15: Mr. Munir Ahmed, Chairman of the Pakistan Atomic Energy Commission, said today that Pakistan's progamme to find uranium in various parts of the country was going on smoothly.

Addressing a news conference here, Mr. Munir Ahmed said that geological survey had revealed the existence of formations of uranium of different types at various places in the country. One such formation extended from Dera Ghazi Khan to D.I. Khan on one side and to Baluchistan on the other. Similarly, there were formations in NWFP too, he said.

He said that the Pakistan Institute of Nuclear Science and Technology had made a plastic detector to find the uranium, without much drilling. The detector is placed in a specific area, which after a couple of weeks develops cracks, indicating the existence of uranium.

Mr. Munir disclosed that work on the Nuclear Energy Research Centre for Food and Agriculture, being set up at Tarnab, near Peshawar at a cost of Rs. 2.25 crore has been half completed. He had met the Provincial Governor and asked for early release of funds for expeditious completion of the project. The Governor was quite sympathetic to his request.

Mr. Munir said the Institute of Radiotherapy and Nuclear Medicines (IRNUM), in Peshawar, now doing research on prevention and treatment of cancer, would have its bed capacity doubled from 36 to 70. He was happy to note that the Institute was also extending health facilities to Afghan nationals as a gesture of Pakistani goodwill to Afghanistan.—APP.

MORNING NEWS

PAEC CHAIRMAN SAYS

Uranium exists in D. G. Khan, other areas

MN

From Our Correspondent

PESHAWAR, Dec. 15: The Pakistan Atomic Energy Commission Chairman, Mr. Munir Ahmad, said here today that geological survey had revealed the existence of formations of uranium deposits at various places in the country.

Addressing a Press conference, he said that one such formation existed in Dera Ghazi Khan to D.I. Khan which extended to Baluchistan, Sind and even up to Pothohar Valley.

He, however, said that there was at least a five-year gap between the discovery of uranium field and rendering at a mineable one.

Agency report adds:

He said that geological and aerial techniques were being used to detect the existence and quality of the uranium.

PLASTIC DETECTOR

He said that the Pakistan Institute of Nuclear Science and Technology had made a plastic detector to find the uranium, without much drilling.

The detector, he said, was placed in a specific area, which after a couple of weeks, developed cracks, indicating the existence of uranium. This practice, he said, normally saved large scale drilling.

The PAEC Chairman said that work on the Nuclear Energy Research Centre for food and agriculture, being set up at Tarnab, near Peshawar at a cost of Rs 2.25 crore had been completed half-way.

IRNUM

Mr. Munir also referred to the Institute of Radiotherapy and Nuclear Medicines (IRNUM) established in Peshawar for the treatment of cancerous diseases and said that the Commission proposed to double its bed capacity, from 36 to 70 beds with a view to expanding more health facilities.

He said that some other facilities were also being expanded at the Institute for which the Provincial Government would provide Rs. 20 lakh. The Commission, he said, spent about Rs. 40 lakh last year on the maintenance of the institute and treatment of patients.

He revealed that an agricultural research centre would be established in Baluchistan.

GREAT RELUCTANCE

Mr. Munir Ahmad, has said that there was "great reluctance" for transfer of technology on the part of the developed countries to the developing ones.

PAEC centres develop high yield plants

By H. A. HAMIED

The two Atomic Energy Agricultural Research Centres at Tandojam and Faisalabad have conducted a number of research investigations and obtained significant results in some studies. In plant breeding, a large number of promising mutants have been selected.

According to the Pakistan Atomic Energy Commission a cluster mutant of cotton with better yield, fibre length and quality is in its final stages of trial.

Another mutant 189/73 gave highest yield at Bahawalpur and proved to be a good variety at Sukkur and Khairpur in zonal trials conducted by the Pakistan Central Cotton Committee.

It is expected that Basmati mutants EF-29-1 and EF-29-2 which mature three weeks earlier and retain original grain characteristics will be submitted to the Provincial Action Committee for approval after they have been tested for disease-resistance.

Similarly a fine grain mutant and two early-maturing rice mutants evolved from IRRI varieties are undergoing trials at several places in Sind. The M-17 wheat variety derived by radiation mutation has given an appreciably high yield in Mianwali and Bahawalpur areas. Similarly M-432 outyielded all other varieties in a coordinated yield trial and showed best adaptability. It also has a higher degree of rust-resistance.

The studies on nitrogen and phospherous requirements, method and time of application for cotton and rice have been completed with the help of stable isotopes and radio-isotopes. Interesting results have been obtained regarding zinc requirements and its inter-action with copper for rice and other crops.

ENTOMOLOGY

In entomology, studies on rearing on artificial diets, ecology and the behaviour of sterile males of fruit flies have been completed. A request has been made to the Government for the setting up of a pilot scale field trial. Success has been achieved in rearing pink bollworm, rice stem-borer and other insects in the laboratory.

Dose requirements for prevention of sprouting in onion, potatoes and garlic have been obtained. The results are ready for commercial utilization.

The radiation techniques have definite advantages over conventional agricultural methods in certain areas. With these techniques, some of the problems can be solved more quickly and accurately and in this way the radiation techniques both complement and supplement the conventional techniques used in agricultural research.

The need for co-ordination and planning at national level, however, is a must in order to decide the priorities and the specific targets to be achieved. These targets then can be assigned to different institutes for execution.

Work on uranium extraction going on well, says Munir

From Our Staff Correspondent

PESHAWAR, Dec. 16: The Pakistan Atomic Energy Commission Chairman, Mr. Munir Ahmad Khan has said the difficulty in the transfer of "sensitive technology" is the major problem faced by Pakistan in her nuclear development.

Addressing a Press conference here yesterday, he said the nuclear Powers were chary of passing on the nuclear know-how to developing nations "lest they should become a potential danger to world peace". Another reason, he observed, perhaps lay in their apprehension that these nations might become their rivals in this field and capture the world market.

In view of the stiffening attitude of these Powers, he said, it was imperative for us to evolve indigenous technology. The present brain-drain was bleeding us white and we had to focus our attention on the advanced technical training of our talented post-graduates, he added.

The AEC chief stated that the advanced training facilities in nuclear technology offered by the Commission at its Centre for Nuclear Studies in Islamabad and at its Technical Centre in Karachi were not being availed of by a sufficiently large number of talented youth and many of those who went to either of these centres soon became drop outs for lack of interest and hard work.

URANIUM EXPLORATION

He deplored that the people were so obsessed by politics that the fundamental needs like education were ignored. "We must produce highly educated, dedicated and motivated youth to work for national progress", he pointed out.

Mr. Munir Ahmad further said that Pakistan's uranium extraction programme was "going on quite well". Geologically speaking, the country had the most favourable uranium formations in various areas and the AEC was employing nuclear techniques to divine the deposits. That naturally led to a considerable saving as drilling was restricted to such places where the existence of deposits was much more certain.

MUNIR SAYS: DAWN

Production of nuclear energy necessary

20.12.77 D

By Our Staff Reporter

The acquisition of the means of producing nuclear energy is not for political benefit nor a prestigious goal, but an imperative in view of the large quantity of oil Pakistan has to import at high cost.

This was stated last evening by Mr. Munir Ahmed Khan, Chairman, PAEC, while addressing the Institute of International Affairs.

He said, four and a half million tons of crude oil is being imported by Pakistan at a cost of 450 million dollars, which is 40 per cent of the foreign exchange earnings of the country.

The Chairman of the PAEC said that by 1985 the crude oil will be selling at 25 dollars per barrel, as against the present rate of 12 dollars per barrel and if the country does not go ahead with unclear energy, the entire foreign exchange earnings will have to be spent on the import of oil.

In his view, coal, gas, hydro should not be used but preserved for other uses and unclear energy should be used which will be cheaper source of all available energies. He quoted the example of Iran which is going nuclear for energy purposes, although it is one of the major oil producing countries.

Uranium, he said, has been found in Dera Ghazi Khan over an area of 50,000 square miles which will meet the requirements of the future nuclear power stations for some time.

Pakistan's own uranium will be used in power reactors, he said, in about a year's time.

Mr. Munir Ahmed Khan said that our strategy should be to see that unlimited resources of energy is produced without importing a drop of oil.

The fossil fuel which is available in the country is limited and is not going to increase, except in the case of gas. Gas, he added, can be used for other purposes such as making of chemicals, fertilizers, plastic etc.

By 2000 AD the total power requirements will be in the region of 2,600 million kilowatts — hydro, thermal and nuclear. Nuclear energy is the only source which is sophisticated and can be generated according to the requirements.

"It will be fatal mistake to think that nuclear fuel will always come from other countries", he said, adding that nuclear recycling is a must.

Pakistan, he said, has sufficient experience in nuclear technology and can operate all nuclear power stations to be set up in the country in future.

Mr. Munir said that the five-year period average of the KANUPP's availability factor is 73 per cent which is highly favourable.

The gas reserves found at Pirkoh, even if it equals the Sui reserves, cannot meet the country's energy requirements, he said.

MORNING NEWS

Pakistan must have its nuclear programme: Munir

MN By Our Staff Reporter 20.12.77

The Chairman of Pakistan Atomic Energy Commission, Mr Munir Ahmad Khan, said here last evening that there was shortage of energy in Pakistan and that if any country in the world required it, it was this country.

He was speaking on the "Imperatives of the Nuclear Programme" last evening at the Pakistan Institute of International Affairs.

He stressed that there were limited conventional resources of energy available in Pakistan today and in the forseeable future there was no chance of the situation changing.

He said that to reduce the strains on the national economy it was necessary to have a nuclear programme.

Mr Munir Ahmad referred to what he called danger signals, which were already noticeable in today's world. This meant that oil would be a high-priced commodity in the forthcoming eighties, and that Pakistan could not afford to get caught in the alarming situation of a doubling of the existing oil prices, he added.

He said it was necessary to face facts squarely, and determine whether Pakistan needed to go nuclear for the sake of prestige, or for political reasons, or for ulterior motives, or was it mere slogan-raising, or whether there was a real compelling need.

He said that there was fierce and furious politics of energy that was going on, and referred to the United States which was importing 40 per cent of its energy requirements. He said that as against this Pakistan was importing 87 per cent of her energy needs.

He observed that ther was limited availability of conventional energy resources of Pakistan, and that there were serious constrains on their growth. People generally talked about possibilities of discovering large quantities of oil in Pakistan and believed that this would solve all the energy problems.

Pakistan at present imported 4.5 million tons of oil, costing 450 million dollars. He explained that this was 40 per cent of Pakistan's present foreign exchange earnings.

He cautioned that there was no point in doing wishful thinking and imagine that Pakistan would be exporting oil in the early eighties.

According to estimates, Pakistan's oil needs would grow from 4.5 million tons to about 8.10 million tons by 1985, and even if oil was discovered they would first have to meet domestic needs rather than export it, or use it for power generation.

He stressed that while Pakistan was going nuclear it must be borne in mind that nuclear energy was the cheapest source available.

OIL DEMAND

He said the demand for oil was increasing and in the next ten years the demand would outstrip the supply in the world and the prices would be much higher than now.

Pakistan must plan in such a way that in the year 2000 her oil and gas reserves are used for energy requirements, and that electricity comes mainly from the nuclear sources. The hydro-sources of power will taper off in the coming years, and coal will be a strong competititor, he said.

He added that even if oil was cheap its import would make Pakistan dependent on it and that therefore it was the best to go nuclear as it was the cheapest source.

Referring to the Karachi Nuclear Power Plant, he said the KANUPP's availability factor since its inception was comparable favourably to the availability of such plants anywhere in the United States, or Canada or France.

He said the average availability factor was 73 per cent and that often it went up to as much as 90 per cent.

He said the record of KANUPP was proud presentable and comparable to that of the other countries.

Mr Munir Ahmad Khan through the help of slides and charts focused attention on conventional energy resources in Pakistan, on the location of Pakistan energy sources, and the gross national product as being related to the consumption of energy in a country.

He said Pakistan today was consuming one-tenth of energy and electricity as compared to the consumption levels in the world.

He said Pakistan had sufficient reserves of uranium to meet its requirements for the forseeable future. The uranium would be used for operation of the Karachi Nuclear Power Plant.

The PAEC Chairman answered a number of questions after the his speech.

PAKISTAN TIMES

Indigenous uranium for KANUPP in near future

KARACHI, Dec. 19: Pakistan Atomic Energy Commission Chairman Munir Ahmed Khan said here tonight that the Pakistani scientists would be able to run the Karachi Nuclear Power Project (KANUPP) on indigenous supplies of uranium ore in the near future.

The country had enough potential for uranium production to meet the requirements of its nuclear energy programme in the foreseeable future, he added.

Speaking at the Pakistan Institute of International Affairs on the "Imperatives of Our Nuclear Programme," Mr. Munir said Pakistan would have to rely on nuclear energy for its economic and industrial development because of the comparative scarcity of other energy resources.

Elaborating his point, he said the energy resources of Pakistan, including oil, gas, coal and hydro-electricity were "almost insignificant" as compared to the world standards. This could become a serious constraint on this country's future progress unless the unlimited source of nuclear energy was utilised.

Hence there was ample need and justification for the use of nuclear energy for peaceful purposes, specially economic and industrial development. The Gross National Product of a country had a direct relationship to its energy consumption. Without substantial input of energy there could be no meaningful development.

At present Pakistan's per capita energy consumption was one-tenth of the world average, which underlined the economic backwardness of this country.

Talking about the search for oil in the country, he said there was no contradiction at all in finding and developing other sources of energy and the development of nuclear power projects for economic purposes.

In view of the ever-increasing prices of oil in the international market, it would become most difficult for countries like Pakistan to depend on oil for their energy requirements.

As regards the natural gas found in abundance, he said using gas as an energy source was not its best utilisation. Gas could be better and more usefully utilised for the production of fertilisers, petrochemicals and other purposes.

Mr. Munir said 26 per cent of the country's energy requirements would be met by nuclear power by the end of this century. At the same time, natural gas would meet 33 per cent, oil 21 per cent, coal nine per cent and nydro-electricity 11 per cent of the total energy requirements of Pakistan.

These estimates have been made in a study conducted with the assistance of the International Atomic Energy Commission recently.—APP.

3525/895

krantenberichten d.d. 23/10/77 betreffende nucleaire plannen.

De Minister van Buitenlandse Zaken
<u>'s-GRAVENHAGE.</u>

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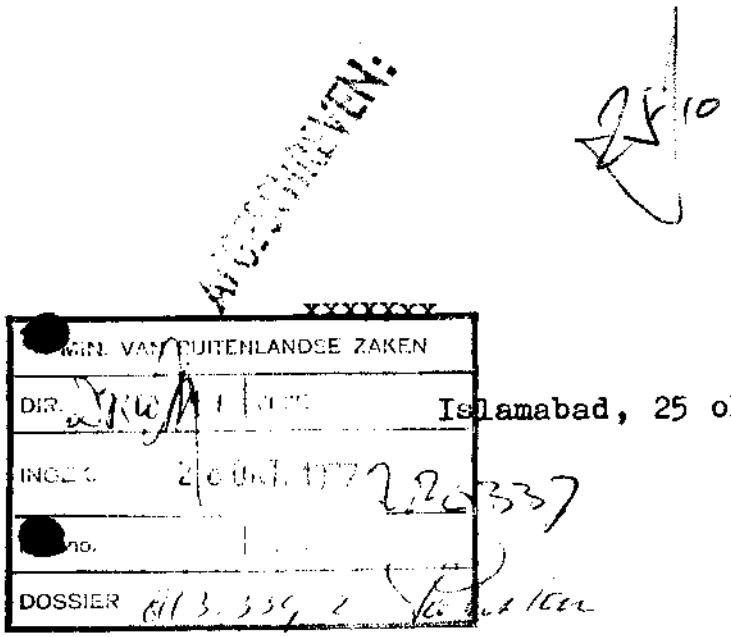

Islamabad, 25 oktober 1977.

PAEC's power expansion programme

KARACHI, Oct. 23: Pakistan Atomic Energy Commission has drawn up an optimum power expansion programme for the country based upon hydro, thermal and nuclear plants including size and timing of various units to be installed during 1980-2000.

Official sources said here today that the programme had been prepared as a result of study on long-term power requirement of Pakistan undertaken by the International Atomic Energy Agency in collaboration with PAEC in 1972.

The study envisaged an increase in per capita consumption to 800 kwh by the year 2000 from the present 150 kwh. Studies were also conducted to determine optimum economic and technical size of plants in North-Sukkur-Quetta Grid and Karachi-Hyderabad-Lasbela Grid separately as well as for the combined system.

The analysis of the optimised growth of power system indicates that by 1990 the system will have hydro and nuclear generation in equal proportions (38 per cent each approximately) with conventional thermal plants including gas turbine contributing 24 per cent.

The terms of energy generated the respective share would be 49 per cent nuclear, 46 per cent hydro and five per cent by oil, coal and gas.

It is estimated that by the turn of the century the approximate contributions from various sources will be nuclear 16,000 mw, hydro 8,000 mw, coal 1,000 mw and gas 2,000 mw.—PPI

PAEC draws up power expansion plan

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The sources said it was found that power plants of following sizes would be more appropriate from economic and technical points of view.

Plant size mw: Karachi-Hyderabad-Lasbela system for year 1980 250; for 1985 350; for 1990 500; for 1995 600; for 2000 700.

North Sukkur-Quetta system: 600; 600; 700; 800 and 1000 from 1980 to 2000 with a gap of five years.

Combined system: 600, 700, 800, 1000, 1200.

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Kopie gezonden aan:

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Na verzending ter visie aan:

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DRW/AM
mr. Brands