

Statement by Felix Oboussier
Director General of the Euratom Supply Agency
of the
European Communities
at the Hearings on Uranium Enrichment
before the Joint Committee
on Atomic Energy of the U.S. Congress
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Mr. Chairman and Members of the Committee

It is an honour and a pleasure for me to appear today before your Committee in my capacity as Director General of the EURATOM Supply Agency of the European Communities.

According to the Treaty establishing the European Atomic Energy Community, the Supply Agency is the instrument to ensure a regular and equitable supply of nuclear fuel to all users in the nine Member States of the European Community. To fulfill this task the EURATOM Treaty has granted to the Supply Agency the exclusive right of concluding contracts relating to supplies of nuclear materials coming from inside and outside the Community.

From the very beginning of its activities the European Atomic Energy Community entered into very close relations with the United States and the U.S. Atomic Energy Commission. On November 8, 1958 an Agreement for Cooperation was signed establishing in particular the so-called Joint Nuclear Power Programme. Under this programme the first three nuclear power stations of the light water reactor type, developed in the United States, with a total capacity of about 700

MWe were built in the Community with a substantial support of the USAEC, which in particular assured these reactors of their supply with enriched uranium for twenty years under favourable conditions. As a counterpart the USAEC has received valuable information by a continuous flow of technical and economic data on the plant construction and operation.

Very soon the European Community and the USAEC agreed that their collaboration should not be limited to the Joint Research and the Joint Power Programme. Consequently an Additional Agreement for Cooperation was established and signed on June 11, 1960. It has been amended on various occasions, for the last time on February 28, 1973. This Additional Agreement, as amended, became the basis for our mutual cooperation and in particular for the supply of special nuclear materials by the USAEC to all users in the Community. Apart from supplies for research purposes, all enriched uranium required for power stations in the Community was supplied by the USAEC through contracts entered into with the Supply Agency on equitable terms and conditions equivalent to those given to the American utilities. We concluded not only enriched uranium sales contracts, but entered also into the first barter agreement with the USAEC, which can be considered as a transition to the toll enrichment contracts which became the principal if not the exclusive method of supply for power purposes as of January 1, 1969.

From that date on up to December 1972, when it was decided to stop signing contracts of the requirements type and to review the enrichment criteria, we have concluded 46 contracts with the USEAC con-

cerning the purchase of enrichment services. Some of these contracts were of the firm quantities type, mainly for research reactors, others have in the meantime terminated. But we still have 14 reactors supplied for periods up to December 31st 1995, which is at present the term of our Additional Agreement for Cooperation, on a requirements type basis, totalling an output of 8,000 MWe. In addition a firm quantity enrichment contract was signed on December 1971 for deliveries up to December 31, 1978, of first cores for eight power stations totalling 7,680 MWe.

As I received your invitation to appear before the Committee on rather short notice, it is unfortunately not possible for me to give precise figures with regard to the amounts of separative work already delivered or to be delivered in the future, nor to give an exact indication to what extent the corresponding payments have contributed to the U.S. balance of payments and will continue to do so in the future. I can, however, state that in 1971 and 1972 enrichment contracts have been concluded for a total amount of 22,500,000 units of separative work. At the price of \$32 kg units of separative work applicable at that time, this represents a value of 720 million dollars, not taking into consideration that deliveries after August 14, 1973, are subject to much higher prices.

Following publication of its new enrichment criteria in May 1973, the USAEC discontinued the requirements type contract, and elaborated its new contracts on a long term fixed commitment basis. As a result, our customers within the Community were rather concerned, and

a lot of criticism was brought from the Community side to the attention of the USAEC and of the Committee. Our customers principally objected to the commitment to agree upon annual deliveries of firm quantities fixed a long time in advance, while they had been used to order and to take only quantities they actually needed in a given year. In addition to this, their main concern focused on the envisaged long lead time of 8 years between signature of the contract and first delivery of enriched product. Our customers were told by the AEC that this lead time chosen to reflect the delay necessary for a new enriching plant to become operational corresponded as well to the period necessary to obtain the license for and to construct a nuclear power plant in the United States. This, however, up to now, is not the case in Europe, where it takes generally 5 to 6 years to build a nuclear power plant and to bring it into operation. Consequently our electricity producers - especially in Member States where the utility industry forms part of the private sector, and where individual companies have not the size of American utilities - were confronted with the problem of signing enrichment contracts for power stations they had not yet decided to build. As a result of this change in AEC's supply policy, only three contracts for power stations under construction or to be built with an output of 3460 MWe were signed with the USAEC in December 1973 at the end of the first transitional period. The utilities concerned were in the category of those Community customers, which had applied previously under the old criteria for a requirements-type contract and where the negotiations had been interrupted by the AEC when such con-

tracting was suspended on December 8, 1972. For the first ten years of deliveries these three contracts provided for the supply of 3.6 million units of separative work. At the time of signature the AEC received downpayments of \$3.935 million. Under these circumstances, other utilities had begun in the meantime to look for other sources of supply. I shall deal with this particular aspect later.

Due to the events of late fall 1973 in the Middle East and their effect on the world oil market, which particularly hit the European electricity producers, the nuclear power programs of the Member States of the Community were revised. They were either significantly extended or accelerated. As a consequence a considerable increase in the demand of separative work was foreseeable.

To get a clear view of the new situation, the Supply Agency started early 1974 a market enquiry to obtain detailed indications about the planning of nuclear power stations which would require their first enriched uranium during the AEC's second transitional period, i.e. between July 1, 1978, and June 30, 1982. The result of this enquiry has shown, that not less than 110 reactors totalling roughly 120,000 MWe were scheduled to receive their first fuel during the said transition period. Of these 110 reactors 5% has indicated that they intended to contract with the USAEC before June 30, 1974, 20% were undecided with regard to their choice of supplier, and 75% expressed their preference to contract with another source.

The USAEC's Mission in Brussels with which the Supply Agency has

very close and fruitful relations, has been informed about the results of this enquiry. It was agreed that in view of the June 30 deadline all applications for contracts with the USAEC should be filed with the U.S. Mission by June 1, thus allowing AEC's Headquarters to prepare the final contracts and to return them to the Mission before June 20 for examination by the customers involved and for signature.

I wish to stress on this occasion that at that point in time the information available to us did not suggest that the AEC's contracting capability could be exhausted prior to June 30 deadline. On the contrary, the latest official publications indicated that the AEC would reach its limit of contracting capability only in late 1974. As late as at the U.S. Atomic Industrial Forum's International Conference on Uranium Enrichment in Reston (Virginia) on April 23/26, 1974, Mr. J.E. Connor, AEC Director of Planning and Analysis, explained to the participants that the AEC would be in a position to delay by one or two years, if not more, the moment when new enrichment capacity had to be brought into operation. This was confirmed in a speech delivered by Commissioner Larson.

Prior to June 1, 1974, the Supply Agency introduced to the AEC's Brussels Mission 24 applications for long term fixed commitment contracts, indicating, however, that some applications were only on a provisional basis as some utilities had not yet received the necessary authorization by competent authorities, such as their supervisory board. Updated technical information of contract applications was continuously passed on to the U.S. Mission in Brussels by the Supply Agency.

In spite of AEC's efforts, these contracts were not available for signature to the Supply Agency until Wednesday, June 26, 1974. At the same time the Supply Agency was informed that the AEC representative had no authorization to sign the contracts, that a decision had been taken to suspend signing contracts as the AEC might be approaching the limit of its contracting capability, and that possible remedies to this unexpected situation were being examined, with the objective of rapidly finding an equitable solution.

To demonstrate the firm intent of its customers to contract with the USAEC the Agency signed, with the approval of the utilities involved, unilaterally on Friday, June 28, 1974: -

15 long term fixed commitment contracts including first core deliveries, covering a total capacity of 18,500 MWe.

At the same time we passed to the USAEC the necessary downpayments, an amount of US \$ 20.35 million.

In addition another contract was unilaterally signed covering the reloads from 1979 to 1988 of eight reactors with 7,680 MWe, where the first core had been previously contracted for with the AEC.

This reflects in our relationship with the USAEC the situation as of to-day. The reaction of the European Commission and its customers to the unexpected development was conveyed on several occasions to high level U.S. officials, including the Secretary of State. This

matter was also raised last week in the European Parliament and replied to by the responsible Commissioner Vice President Simonet.

At this point in my statement I feel necessary to give to the Members of the Commission some information with regard to the overall situation of the Community in the field of uranium enrichment.

I should start by saying that the USAEC was the first to propose in the late sixties discussions on the possibility of building a new enrichment plant on a multinational basis using the U.S. gaseous diffusion technology. The European Commission and the Member States of the Community have carefully examined this proposal but concluded that the conditions linked to the proposal from the U.S. side were too strict and severe and not sufficiently attractive.

At the same time plans were developed in the Community to create European enrichment capacities. While the French Government and in particular the Commissariat à l'Énergie Atomique concentrated their efforts on the gaseous diffusion system, a technique they had successfully developed and improved at Pierrelatte, the Governments of Germany, the Netherlands and the United Kingdom entered into an Agreement on uranium enrichment by centrifuges.

At present the situation is as follows:

EURODIF, a corporation under French law, had decided in December 1973 to start the construction of a gaseous diffusion plant at Tricastin in France, with Italian, Belgian and Spanish participation.

The plant is scheduled to be brought into operation by the end of 1978. Its production programme is:

1979	3,500,000 units of separative work
1980	6,900,000 units of separative work
1982	7,400,000 units of separative work
1983	9,000,000 units of separative work

URENCO, the British-German-Dutch corporation, which operates already test facilities in the United Kingdom and the Netherlands, will bring two centrifuge plants of 200,000 separative work units per year capacity each into operation by 1976. A firm decision has been taken to increase the annual capacity at the end of 1976 from 400,000 of separative work units to:

1,500,000 separative work units in 1980
2,500,000 separative work units in 1982

URENCO hopes to increase its capacity by 1985 up to 5 to 10,000,000 separative work units per year, but at present no decision has been taken for the period beyond 1982.

Both companies announced that they have received sufficient orders to accomplish their programmes and that, under their present planning and taking pending negotiations into consideration, they are not able to accept more requests for long term contracts.

In 1973, the Soviet-Union entered into the market by offering conversion and enrichment services to utilities in the free world.

In 1971 the Soviet-Union had already signed with the French Commissariat a l'Energie Atomique a contract for the supply of enriched uranium to the Fessenheim I plant of Electricite de France. Subsequently, this possibility was given also to other utilities in the Community. During 1973 nine contracts were signed by our Agency and German and Belgian utilities with the Soviet organisation Techsnabexport for slightly more than 5,000,000 kg units of separative work and early 1974 by an Italian customer for additional quantities.

The utilities in the European Community have welcomed this development in the field of enrichment as it has been by tradition one of their basic principles to diversify their sources of supply. This is also the reason why it has been stressed always from their side that - while favouring the construction of enrichment facilities in the Community - this European enrichment should not have as a consequence to close the Common Market and to abandon our external sources. This point of view has been shared by the European Commission which declared on various occasions that in view of the old and well established friendly relations and cooperation with the United States, which have made in the past the Community a very, if not the most important customer of the AEC, the Community should and will also in the future cover a substantial part of its enrichment requirements from the USAEC.

I might add that in the field of highly enriched uranium the U.S. Government will continue to be the only source of supply in the

foreseeable future for power reactors. This is of particular importance with regard to the interest which is given world-wide to the development of High Temperature Reactors. In 1972 the Supply Agency has already concluded with the AEC a contract for the long term supply of highly enriched uranium to a 300 MWe High Temperature Reactor prototype. Among the contracts requested by the Supply Agency is one for which the utility is seriously considering a 1,300 MWe advance version of this same type reactor. Needless to say we consider as a question of great importance that this contract be signed by the AEC.

As a general conclusion, I have to say quite frankly that the customers in the Community have been shocked by the absolutely unexpected decision of the USAEC, shortly before the end of the second transition period with the June 30 deadline, to suspend signing contracts; the more so, as all publications and statements of the preceding two months indicated that the limit of contracting capability would be reached at a later point in time than previously forecasted.

What do the utilities in the Community expect as a result of this period of interruption of AEC's contracting activity and of examination and discussion before the Committee of possible solutions to remedy this very grave and dangerous situation, in particular the customers who were informed that their contracts were not signed by the USAEC by June 30, deadline?

1) Of course they hope that a close and detailed review and re-examination might show that the situation is less drastic than it was thought to be on June 19, 1974, and that all contracts signed unilaterally and accompanied by the corresponding down payment can be accepted and countersigned by the USAEC. They have no possibility of addressing themselves to one of the new European enrichment plants for the critical period of first deliveries from 1978 to 1982. To conclude appreciably more contracts with Techsnabexport raises new questions.

2) Experience in the past has proven the USAEC to be an absolutely reliable and non-discriminatory source of supply. We hope that this will continue in the future.

3) If it would appear to be unavoidable to fix priorities among the pending contract applications we would expect these priorities to be established on an equitable basis as between Community customers and other customers of the AEC, either domestic or foreign. Serious concern and criticism has been brought to the attention of my Commission and the Supply Agency that, while our contracts, introduced in due time, were not signed, the United States entered into new enrichment contracts with Egypt, Israel and Iran up to the very last day of June 30, 1974.

4) A decision, whatever its consequences might be, must be taken quickly. Nothing would be worse than to leave the utilities with an established investment programme and nuclear power plants

under construction, in a situation of ambiguity and continuing uncertainty.

5) If the AEC should feel that its foreign partners could contribute to a solution of the present situation, the Commission of the European Communities, as one of the oldest, most important and faithful customers of the USAEC, is prepared to enter into corresponding discussions. We want to avoid that the energy crisis shifts from the oil sector to the nuclear field.

We all realize more than ever that as a result of the limitations on availability of energy resources, whether conventional or nuclear, the Western Alliance is confronted with serious new issues affecting both economic and political stability of its members. Thus, the availability of enrichment services must be viewed in a broader context than merely basing decisions upon normal commercial and economic criteria.

Mr. Chairman, this concludes my prepared statement. Should the Committee have any further questions, I will be glad to answer to the best of my knowledge.