January, 1958
Memorandum by Robert Schaetzel to Max Kohnstamm, 'Points to be Presented to Euratom Commission'

Citation:

Summary:
This memo to Max Kohnstamm includes several points pertaining to the United States' anticipated comprehensive agreement with Euratom to be presented to the Commission.

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English

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POINTS TO BE PRESENTED TO EURATOM COMMISSION

1) The U.S. is interested in establishing a broad, comprehensive agreement with EURATOM. However, it probably will take a year to develop such an agreement because:

   a) there will have to be extensive discussions with the Congress prior to their ratification (2/3 Senate or joint resolution) and because of election year they probably will adjourn in July;
   b) it will take time for EURATOM to develop their overall program and determine what areas of information, forms of cooperation, and materials (way we make commitments) will be required.

2) The U.S. may be able to get special authorization this year to proceed with an immediate specific program of cooperation to meet urgent requirements.

3) From visit of "Wiseman", their report "Target for EURATOM", and discussions with Mr. Armand since the report was written, the U.S. has assumed that it is important to start as soon as possible on the development and construction of several (e.g., 1,000,000 kw) large prototype reactors of the LWR and RXR types. (Advanced stage of development; promise of early realization of economic power.

4) A cooperative program on these reactors would benefit the U.S. as well as EURATOM, since the information developed would complement our own domestic program. (Less expensive for program in Europe as capital costs lower; conventional power higher.)

5) A cooperative program of this type would get EURATOM off to a fast start with a substantive program and would establish a close EURATOM/U.S. working relationship from the start.

6) This working relationship would provide the framework for the early solution of several important fringe problems, such as training, education, insurance, patents etc. and would provide the basis for broader cooperation in other areas such as chemical separations, fast reactors and basic research.
7) If Euratom desires to proceed with a joint nuclear power program, the U.S. will seek specific congressional authorization, to allow it to participate in the program, during the current series of congressional hearings.

8) The congressional authorization which the U.S. would seek would permit participation along the following lines:

   a) **Capital Costs**: it would be difficult for the U.S. to contribute directly to the capital costs for reactors to be built in other countries since we do not support the capital costs for private reactors in the U.S. However, the U.S. is prepared to seek specific authorization which would permit us to make available to Euratom up to £100,000,000 on long term loans at a reasonable interest rate.

   b) **Fuel Cycle Costs**: If Euratom undertakes such a program the U.S. would try to make special provisions with regard to the fuel cycle. Although we would hope to plan the exact provisions jointly with Euratom, we have in mind terms which would provide an incentive for early participation of utilities.

      In our domestic program we have offered the early participants the opportunity to lease the fuel rather than purchase it. We also have offered to purchase the plutonium, for unrestricted use, at a price which is higher than the fuel value price. (We would hope that the incentives provided would be comparable in financial benefit to the incentives provided in our domestic program.)

      We would hope that whatever special provisions are made with regard to the fuel cycle, they can be offered to Euratom and through Euratom to individual utilities within the Community of Six.

   c) **Assurance of Fuel Supply**: We would propose to supply all of the special nuclear material required to fuel reactors built under this program for an operating period of 20 years.

      (Way we make commitments.)
d) Reprocessing: The U.S. would reprocess the spent fuel elements delivered to us from these reactors (under the same conditions and terms as are offered to domestic licensees); in addition, it would work cooperatively with Euratom in establishing a reprocessing facility in Europe. (Note: $250 - 60 \times 10^6$ capital costs in early years and provide time until load builds up.)

e) Joint Research and Development Program: A definite Euratom/U.S. program of research and development on the PWR/BWR reactors built under this program. This will have as its primary objective the improved performance of these reactors and lowering of fuel cycle costs including development of processes for the recycle of plutonium. Engineering development and testing of fuel assemblies, components, and auxiliary equipment would be included. U.S. portion not to exceed $10,000,000 per year for 10 years. Joint planning and execution. (Own experience earlier 20 4W-40 MW reactors; current experience AML-BWR, double power 1/2 coat.)

f) Close Cooperation: There would be arrangements, within the framework of the cooperative program for the rapid exchange of technical information through reports, visits, and exchange of personnel. A close working relationship would be developed such as between the U.S. and Canada. (Liaison Office functions)

g) The training of scientists and engineers is recognized by Euratom to be one of its major early programs, and the U.S. would assist Euratom in developing and implementing a cooperative training program to meet specific objectives.

h) The U.S. would continue a strong domestic program of research and development on advanced reactor types, basic reactor technology, fuels and materials, reactor safety, etc., and providing such information to Euratom to assist them in meeting their longer
range objectives. I look forward to seeing cooperation in these fields under a broad comprehensive agreement.

i) Implicit in the cooperative program with EURATOM would be the understanding that all information developed, including design, construction, and operating data, would be equally available to U.S. industry. Of course, the purpose the whole program is to provide information which will be available to European and U.S. industry.