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ATOMIC ENERGY COMMISSION

MEETING NO. 1228

NND 982027
SDT/LJD

Pages
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only
7/14/98

2:15 p.m., Tuesday, September 25, 1956

* * * * *

Present

Lewis L. Strauss
Thomas E. Murray
W. F. Libby
Harold S. Vance

K. E. Fields
William Mitchell

W. B. McCool
William L. Oakley

Also Present

John H. Burchard
Don S. Burrows
Comdr. John W. Crawford
W. Kenneth Davis
John A. Derry
Richard X. Donovan
Dr. Charles L. Dunham
Manuel Dupkin II
Paul C. Fine
Alfred S. Hodgson
E. B. Johnson
Jesse C. Johnson
George M. Kavanagh
Anneliese C. Kupsch
Marvin M. Mann

C. L. Marshall
Paul W. McDaniel
Frank K. Pittman
Calvin Potts
Harold L. Price
George F. Quinn
Charles H. Reichardt
C. A. Rolander, Jr.
Brig. Gen. Alfred D. Starbird
Wilbur A. Strauser
A. Tammaro
Ruth Thomas
Shelby Thompson
Harry S. Traynor
Allen J. Vander Weyden
John F. Worth

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8-25-95
W. Schmidt
8/30/95
W. Schmidt
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1. AEC 532/34 - Classification of the Controlled Thermonuclear Program

Mr. Marshall reviewed the recommendation set forth in AEC 532/34 for a future classification policy for Project SHERWOOD. He pointed out that under this policy, basic research related to Project SHERWOOD would be unclassified and technology important to the development of a controlled thermonuclear reactor would remain unclassified.

Mr. Murray inquired whether approval of these recommendations was necessary prior to Mr. Strauss' discussion with Sir Edwin Plowden on September 26, 1956. Mr. Strauss indicated that a decision by the Commission would be helpful in view of the tentative nature of the Commission's conclusions on the matter at previous meeting.

Mr. Libby said that he believed less declassification than that recommended would not achieve the results which the Commission believed important and therefore he would not favor taking any action if it were not possible to declassify the project to the recommended extent. He also said he believed it is possible to declassify basic information and to retain classification on process technology. In this connection, he referred to the example of the declassification of the basic gaseous diffusion theory in the Smyth Report.

Mr. Vance said he had suggested that the Commission consider its position on the question prior to the meeting with Sir Edwin Plowden because of the indications of a lack of unanimity in the UKAEA and the possibility that the U.K. would suggest somewhat less declassification than that recommended in AEC 532/34. He pointed out that the purpose of declassification of the project is to increase the number of scientists who could contribute to the project and thereby increase the chance of a major basic discovery or shorten the time required to achieve a feasible controlled thermonuclear reactor. He added that he would not favor any action

said that since the U.K. had not indicated that it wished to undertake a classified exchange of information on Project SHERWOOD, that he would first discuss this subject with Sir Edwin Plowden.

After further discussion, the Commission, with Mr. Murray, Mr. Libby and Mr. Vance voting in the affirmative and Mr. Strauss voting in the negative:

a. Determined that it is desirable to make an immediate approach to the U.K. authorities by appropri-

ate AEC representatives to collaborate in the preparation of a joint Controlled Thermonuclear Reactor Classification Guide, after the agreement mentioned in b below is executed, and subject to the following conditions:

(1) That the U.K. agrees to the declassification and classification principles set forth

(1) The declassification of all basic technical information concerning the controlled thermonuclear program, unless such information is deemed to be of critical importance in the development of a controlled thermonuclear reactor;

(2) Retention of classification on all technology concerning controlled thermonuclear reactors except that which is determined to be of non-critical importance in the development of a controlled thermonuclear reactor.

d. Noted that the classification guide to be pre-

consideration and approval;

it would be useful for him to state that due to fallout and decay the stratospheric reservoir of strontium 90 was the same

Page(s) 578 remain(s) classified.

The withheld page(s) will be coordinated with the
Department of Energy under NND 982027.

that a favorable recommendation would be submitted with the understanding that the USSR will expose U.S. plates in their accelerator when it begins operation.

Mr. Fields continued with a brief report on the AEC Laboratory Directors' Meeting and stated that a memorandum covering the meeting would be circulated to the Commissioners. In addition to other matters, he reported that the exchange of personnel between laboratories had been considered. Mr. Fields added that periodic meetings of the AEC Laboratory Directors seems an effective means of discussing over-all Commission programs and their relation to the AEC Laboratories. The next meeting, according to Mr. Fields, will possibly be held in January 1957.

c. Classification

the recently approved declassification guide into effect as soon as possible. Mr. Fields stated that the DOD's comments on the Guide had not yet been received, and suggested that an inquiry regarding the status of the comments be made at the 106th AEC-MLC Conference.

d. International Affairs

With reference to recent public discussion of the desirability of publishing the security annex to the Swiss Bilateral Agreement, Mr. Vander Weyden reported that all other countries having bilateral agreements with

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security annexes had indicated that they were unwilling to have their security annex published.

Mr. Vander Weyden stated that Mr. Munez of Brazil had informed Mr. Hall that the Brazilian AEC hoped the nationalization of atomic resources in Brazil would not affect present negotiations for a bilateral agreement. Mr. Vander Weyden added that work is proceeding on detailed plans for the Puerto Rican Atomic Energy Center.

Mr. Fine reviewed the discussions at the conference considering the proposed statute for the IAEA. He remarked that although the Russians have submitted no amendments to the draft charter, there seems to have been a change in their attitude toward IAEA since the spring meeting, when they appeared to agree with the draft statute.

Mr. Fine commented on efforts by India to undermine and weaken the safeguard section of the draft statute. He pointed out that a two-thirds majority was needed to modify the draft statute while ratification of the statute, as now written, requires a majority vote.

The possibility of India's negotiating a bilateral agreement was then discussed by the Commissioners; and Mr. Strauss observed that they were delaying negotiations until the completion of the present IAEA Conference.

Mr. Strauss said he believed that all possible major concessions regarding the draft statute had been made at the spring meeting, and he added that the State Department had previously assured him that the present conference would probably accept the draft statute. He said that he had requested the preparation of a letter to Ambassador Wadsworth urging him to maintain the U.S. position with respect to the draft statute.

1. Construction & Supply

After Mr. Derry briefly summarized the construction and supply activities, Mr. Strauss requested that he be provided with a group of current reactor photographs for use at the next NSC meeting.

The three-month delay in the construction of the engineering test reactor at Arco was then discussed and Mr. Davis reviewed the causes of this delay.

Mr. Derry then commented on the status of contractor selection for the AEC construction program.

g. Reactor Development

With respect to naval aircraft nuclear propulsion, Mr. Davis reported that the Bureau of Aeronautics is considering specifications and requirements for a nuclear powered seaplane which would utilize the General Electric direct cycle propulsion system.

Mr. Davis then reviewed the status of the Los Alamos power reactor experiment and the molten plutonium reactor experiment.

was being made in terms of American construction costs and operating conditions by the Atomic International Division of North American Aviation. He added that the November 22, 1956, British Symposium on gas-cooled reactors may be the source of more information on this type of reactor.

In response to Mr. Murray's inquiry concerning the General Dynamics contract, Mr. Davis responded that they were undertaking a study of a lithium-cooled reactor which would produce both tritium and power. He added, however, that the development of this type of reactor had not yet been authorized and that the technology of handling liquid lithium is a limiting factor.

Mr. Davis then mentioned the visit of Sir Roger Makins and Lord Harcourt to the MTR and other facilities at Idaho Falls and added that their main concern was the type of program which Great Britain should follow in developing nuclear power.

With reference to the nuclear-powered merchant ship, Mr. Davis reported that a public announcement had been made of the AEC-Maritime Administration agreement providing for a combination passenger-cargo ship with a pressurized water type reactor. He added that an attempt would be made to keep all data unclassified. Mr. Davis informed the Commissioners that design and specification work would be initiated by the Maritime Administration during October 1956, and that Babcock & Wilcox is beginning studies which

to the Los Alamos and Livermore test groups.

Mr. Libby remarked that the Department of State was obtaining information on the recent publicized fallout in Germany. He said that he believed that some radioactive rain would result from the recent Soviet weapons tests in the submegaton range, and Dr. Dunham said that this had been confirmed by a recent Public Health Service report from a western station.

Dr. Dunham stated that the one point detonation tests will be resumed at the Nevada Proving Grounds next spring, and that the test site is now being surveyed for plutonium surface contamination from the last tests. Mr. Libby referred to a briefing at Los Alamos, which gave some indication that the present tolerance limits to plutonium contamination were too low, and he requested that he be provided with a copy of Mr. Langham's report on this matter. Mr. Libby

Dr. Dunham informed the Commissioners that the Tripartite Conference to discuss techniques of analysis and methods of sampling and measuring radioactive fallout had been scheduled for October 18 and 19, 1956. Mr. Libby suggested that should the question arise at this meeting about the U.S. estimate of the amount of stratospheric strontium resulting from U.S. tests, that the figure which he is planning to use in his October 12, 1956 speech be used.

In answer to Mr. Strauss' question concerning the ACBM meeting, Dr. Dunham said that the ACBM had approved the criteria for the Nevada test site, and had recommended that the funds for training and use of radioisotopes at medical schools and other institutions be made available in a flexible manner.

Dr. Dunham then briefly referred to the discussions by the Office of Naval Research, the National Science Foundation and the Department of Interior concerning the need for a committee to consider problems of oceanography, geophysics, marine biology, meteorology and international law as it relates to these sciences.

Mr. Murray inquired about the status of recommendations on his suggestion* for a study of the biological consequences of atomic warfare, and Mr. Fields replied that recommendations on this matter would shortly be submitted.

*See memorandum from Mr. Murray to Mr. Strauss dated July 18, 1956. A copy of this memorandum is on file in the Office of the Secretary.

j. Legal

Mr. Mitchell briefly summarized pending litigation involving AEC.

k. Organization and Personnel

The Commissioners had no questions on the report by the Division of Organization and Personnel.

l. Security

Mr. Rolander briefly reported on activities of the Commission on Government Security Operations.

m. Finance

Mr. Fields referred to the apportionment of FY 1957 funds and stated that the BOB was releasing all funds except \$100,000,000. He said that release of the \$100,000,000 would be contingent upon receipt of information with respect to expenditures for the remainder of the calendar year 1956.

n. Information Services

The Commissioners had no questions on the report by the Division of Information Services.

7. Executive Session* - Continuation of General Manager's Monthly Report

a. Intelligence

b. Production

Separate Minutes for this part of the meeting have been circulated.

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c. Inspection

d. Military Application

W. B. McCool

Secretary

Approved by the Commission: Meeting 1254, December 12, 1956