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Vol. 9 ^{c.1}
January 1989

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JOURNAL OF
GLENN T. SEABORG

Chairman, U.S. Atomic Energy Commission, 1961 - 1971

July 1, 1964 - December 31, 1964



Lawrence Berkeley Laboratory
University of California

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PUB-625

JOURNAL
OF
GLENN T. SEABORG

Chairman of the U.S. Atomic Energy Commission .

1961 - 1971

VOLUME 9

This work was supported by the U.S. Department of Energy
under Contract DE-AC03-76SF00098

PREFACE

During the ten years (1961- 1971) that I served as chairman of the U.S. Atomic Energy Commission I kept, on a daily basis, a rather complete journal. During the early years, off and on until 1969, I recorded my day's activities each evening at home in my study, in an unclassified, handwritten form in my large ledger type notebooks. This was augmented during each working day in my office by the dictation of memos to cover the content of telephone conversations, appointments, attendance at meetings, congressional hearings, etc. During my many trips within the United States and my visits to foreign countries (some 60 in all) I recorded my activities in little pocket notebooks which were transcribed when I returned home to my office. On some of these occasions, as well as for some appointments or meetings at home, my activities were covered by one of my able assistants or secretaries.

Finally, in 1969 I gave up altogether the laborious task of recording each day's activity by handwriting a summary at home during the evening. Rather, I covered each day's entire activity by producing memoranda during the day with the help of my secretaries and assistants. Thus, the journal began to be assembled each day on a current basis. In addition, the accumulated earlier material began to be assembled into daily journal form, a task that was soon completed. In both cases, the current and past material was augmented by daily attachments in numerous categories--selected incoming and outgoing correspondence and other relevant documents (deemed to be unclassified, with classified material placed in a separate file), and unclassified Summaries of Commission Meetings, and Commission Regulatory Meetings, and Notes on Information Meetings and Regulatory Information Meetings, so ably produced by Commission Secretary Woodford McCool and Director of Regulation Harold Price and their staffs.

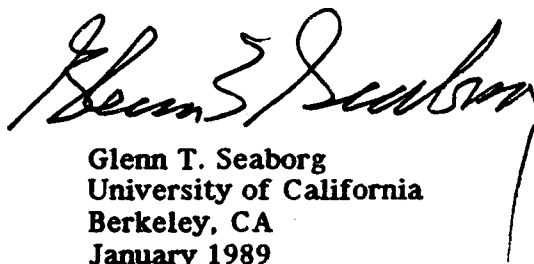
When I returned to the University of California, Berkeley, in November 1971, a couple of months after my tenure as Chairman of the Atomic Energy Commission, the two copies of my journal, which I presumed had been cleared, were sent there. Copy #1 eventually came to my Lawrence Berkeley Laboratory office and Copy #2 to my home, while the segregated, classified portions went to the local AEC-SAN office.

Due to the pressure of other activities no action was taken on my journal until early 1985, when I began working on editing my home copy (correcting spelling and typographical errors, adding first names or initials, etc.), preparatory to publication in DOE report form. About a year earlier, I had sent Copy #1, at their request, to the DOE History Division in Washington, D.C., for their use in the preparation of Volume IV of the official history of the Atomic Energy Commission. This led to questions as to whether my journal met present DOE declassification standards. As a result, a declassification officer was sent to my home in May 1985 to check my home copy (Copy #2). He made 162 deletions of a technical nature, which, in my opinion, reflected increased security standards but did not adversely affect the value of the journal. A second check, this time with my home copy sent to the Lawrence Livermore National Laboratory by a team of reviewers in October and November 1986, led to about 1,000 security actions (including the 162 deletions incurred in the earlier review). These actions included, in addition to deletions, the removal of 500 sections of or attachments to the journal for review by "other agencies" of our government or, in a few cases, of the British government. The majority of these documents have been returned to me either declassified or with some deletions. However, a number are still outstanding. I have decided to go ahead with the publication of my journal in the DOE report form with the intent of adding these now missing portions in an additional volume when they become available. Also, I have decided to proceed with such publication prior to the production of a name index; when this herculean task is completed, the name index will appear as an additional volume. It remains to be seen if a subject index will ever be added in such additional volumes. Although many news clippings are added as attachments, these were too numerous to include them all and, thus, there is a separate volume of these. (A little later Copy #1 underwent a similar security review, with similar results, and was returned to me.)

The journal consists of 25 volumes, averaging 700 pages each. This comprises about 15,000 items consisting of the approximately 4,000 daily journal entries and the average of about three attachments per day. The journal has three sections corresponding to each of the three presidents I served as chairman of the Atomic Energy Commission--the first six volumes covering the John F. Kennedy years (February 1, 1961- November 22, 1963), the next 11 volumes covering the Lyndon B. Johnson years (November 22, 1963- January 20, 1969) and the final eight volumes, the Richard M. Nixon years and a few months of post-AEC chairman activities in Washington (January 20, 1969- November 6, 1971).

I am indebted to my many assistants and to the secretarial staff that served so ably during my AEC chairmanship (see Page 1 of Introduction) and to the Commission's administrative staff (Appendix B to Introduction) and feel grateful for the team help of my fellow AEC Commissioners (Appendix A to Introduction).

I also want to acknowledge the invaluable help of my staff at Lawrence Berkeley Laboratory for putting this journal in publishable form--June Jackson, Sherrill Whyte, Grace Nubla, and Margie Hollander, and temporary assistants Susie Campbell and Mildred Varner.



Glenn T. Seaborg
University of California
Berkeley, CA
January 1989

INTRODUCTION

A complete introduction to the 25 volumes of my journal of 1961 to 1971, covering my years of service as Chairman of the Atomic Energy Commission, can be found at the beginning of Volume 1 (for Volumes 1-6, spanning the Kennedy years), at the beginning of Volume 7 (for Volumes 7-17 of the Johnson years), and at the beginning of Volume 18 (for Volumes 18-25 of the Nixon years). That introduction is written from the perspective of 1971, in order to reflect the attitudes expressed in my journal, which was written on a daily basis during that period. I express the points of view of that time rather than those of today (1989), which might occasionally be somewhat different.

In that introduction I describe in summary form my activities as AEC Chairman from early 1961 until late 1971. This includes my first meetings with President Kennedy and the commissioners and staff of the AEC; my reappointment as Chairman by presidents Kennedy, Johnson and Nixon; the change in composition of commissioners and staff over the years; the role of the Joint Committee on Atomic Energy (JCAE); the division of duties among the commissioners; our methods of conducting business at meetings; the Commission's system of advisory committees; problems created by our system of multiple headquarters; unsuccessful attempts to replace the five-member Commission with a single administrator; the special role of Admiral Hyman S. Rickover; my service on many government committees; my authorship of several books during his time; and my special relationships with my three presidents (Kennedy, Johnson and Nixon).

I include an historical summary of the major accomplishments of the Atomic Energy Commission during the period of my chairmanship. This is done in a topical manner, i.e., by describing in summary form the accomplishments in each of a selected number of subject areas over the ten-year period. This is in preference to dividing the account into three parts, covering the Kennedy, Johnson, and Nixon administrations, which would inevitably result in a good deal of repetition in thus describing each of the subject areas three times.

I chose to touch briefly (not in any order of priority) on the following subjects:

- I. The Limited Test Ban Treaty (LTBT)
- II. The Nonproliferation Treaty (NPT)
- III. The Strategic Arms Limitation Treaty (SALT) and ABM Treaty
- IV. The Cuban Missile Crisis
- V. The program of international cooperation, including my visits to 60 countries
- VI. The program for support of research
- VII. The Los Alamos Meson Facility and the 200 Bev Accelerator
- VIII. The National Transplutonium Production Program
- IX. The civilian nuclear power reactor program
- X. The Raw Materials Program
- XI. The Gas Centrifuge Program
- XII. The Cutback in Production of Fissionable Materials
- XIII. The Regulatory Program
- XIV. The Radioisotopes Program
- XV. The nuclear power in space program
- XVI. The nuclear weapons testing program
- XVII. The Plowshare Program
- XVIII. The Controlled Thermonuclear Research Program (CTR)
- XIX. The Nuclear Education and Training Program
- XX. The Technical Information and Exhibits Program

Following the summary I go on to some of the auxiliary and personal activities that are covered in my journal. I mention my extensive schedule of speeches, awards; our home in the Reno Park area of northwest Washington and its proximity to three levels of schools to accommodate our six children; the departure of our older children to attend colleges; the marriages of our two oldest children; the visits of my mother; our family vacations; my turn to hiking as a means of recreation; my membership on Boards of Directors (including the presidency of Science Service and my election to the presidency of the American Association for the Advancement of Science [AAAS]); and my many press conferences and appearances on the covers of Time and Newsweek.

I conclude the introduction with an expression of gratification that, with all this, I managed to read the scientific journals in my specialty, enabling me to stay abreast of my research field of transuranium elements and nuclear chemistry so that I was ready, in 1971, to return to the University of California in a position to resume research in my field.

Wednesday, July 1, 1964 - D.C.

At 10 a.m. I testified before the Subcommittee of the Senate Appropriations Committee regarding our FY 1965 AEC Appropriations Bill. I asked for \$4 million more to provide for the orderly close-out of Pluto, \$8 million more for physical research, more for special nuclear materials production and reactor development, i.e., partial restoration of House Appropriation Committee cuts.

At 12:15 p.m. I had lunch with Commissioner Polly Bunting at the Roger Smith Hotel. We discussed various problems between the Commission (especially Commissioner Ramey) and the staff.

At 2:45 p.m. I recorded with Hewlett and Brown for the Kennedy Library for the fifth and last time. This session was concerned chiefly with my personal recollections of Kennedy as a man, most memorable moments, accomplishments in science during his administration, etc.

Thursday, July 2, 1964 - D.C.

At 9:25 a.m. I received a telephone call from Douglass Cater (of the White House).
1. Cater said they would like our thoughts on the follow-up on the President's commitment to make a report to the Geneva Conference in September. I said that very soon we will have a couple of alternate drafts, embodying different policy levels of commitment. I said that these will probably require some coordination within government. Cater said they would like to see this at a very early stage.
2. He said he has been in conversation with Udall. Evidently, there is some strong interest in desalting using nuclear power from the City of Los Angeles. I said that one of our Commissioners has been out there talking to the Commissioners of the City of Los Angeles, and that I would imagine that this is perhaps being followed up as assiduously as possible. He said that we will hear from Udall regarding a luncheon meeting next week on the subject of the dual purpose reactors. I said I would like Commissioner Ramey to attend also.

At 10 a.m. I presided over Information Meeting 395 (notes attached).

At 11 a.m. I presided over Commission Meeting 2023 (action summary attached). This is Commissioner Polly Bunting's first Commission meeting.

At 12:30 a.m. I had lunch with Arnold Fritsch at the Roger Smith Hotel.

At 1:50 p.m. I attended the Cabinet Meeting held in the White House. Those present included President Johnson, Dean Rusk, Robert Kennedy, Celebrezze, Wirtz, Freeman, Robert McNamara, Gronouski, Udall, Dillon, Hodges, Shriver, Haworth, Weaver, Webb, Hornig, Gleason, Bundy, Ackley, Gordon, Bell, Dutton, Moyers, Heller, Reedy, Rowan, and Valenti. The President spoke first about the Civil Rights Bill and said it will be signed at about 7 p.m. in the East Room. He said it is important to impart to our top staff the sense of urgency in complying with this bill. There are long, tough, difficult days ahead; however, we should be inspired by how far we have already come. The Attorney General, the Justice Department, and Lee White will administer the implementation. He asked us to become familiar with the sections having to do with withholding funds in connection with non-compliance. He suggested that we make calls for compliance in speeches, department meetings, etc. He asked us to submit within a week a memorandum, through Lee White, on the steps we are taking to implement the bill, i.e., our formalized plan. This is to be followed by periodic reports as to progress.



UNITED STATES
ENERGY COMMISSION
WASHINGTON 25, D.C.

COPY NO. 2
July 2, 1964

DECL. BY DOE
NOV 86

INFORMATION MEETING 395

10:00 a. m. , Thursday, July 2, 1964 - Chairman's Conference Room, D. C. Office

1. Cabinet Meeting Today
2. Commissioners' Meeting with Edison Electric Institute This Afternoon
3. Commissioners' Luncheon Meeting with Secretary Udall and Others, 12:15 p. m. , Wednesday, July 8, Secretary Udall's Office
4. Presidential Statement for Third Geneva Conference

The Chairman noted the White House query and requested circulation of a draft statement for the Commissioners' review this weekend.
(Wells)

5. Secretary's July 1 Memorandum re Schedule of Commission Business for July-August and September

The Chairman noted the need to develop a definitive schedule of business for this period and requested coordination with Staff.
(Secy-Brown-GM-DR)

6. Federal Pay Bill

The Chairman reported briefly on his conversation with John Conway, JCAE Staff, last night, who said Senator Pastore would attempt to obtain revisions in the Senate version. Mr. Ramey thought the Senate would probably vote on the bill today and it would then be referred to conference.

7. AEC 867/90 and AEC 867/91 - Dispersal

Noted. To Staff for review. (Crowson)

8. Letters from Department of State and CIA re Gas Centrifuge

The Chairman noted receipt of the letters and requested preparation of a report to the White House. (Vinciguerra)

9. Rumanian Interest in a U. S. Nuclear Power Reactor

Mr. Brown said Mr. Sterling Cole had called yesterday to say that Rumania does wish to purchase a U. S. reactor and is discussing the matter with the Department of State now.

10. Contract Policy re Security Contractor at Las Vegas

Mr. Sterling Cole also informed Mr. Brown that he is representing Federal Service, Inc., the security contractor at Las Vegas, and that he thought the Commission's contract policy re spread of work should not be applied to service contractors such as Federal Service, Inc. Mr. Vinciguerra said a report will be forthcoming on this matter. (Vinciguerra)

11. Undersecretary of State Ball's June 29 Letter to Deputy Secretary of Defense Vance

Noted.

12. Pending Contractual Matters (June 26 Report)

In response to Mr. Hollingsworth's report on proposals for operation of Model City New York, Boron-10 Plant, the Commissioners agreed the Board's evaluation of the five firms should be circulated to the Commissioners without a recommendation.

Mr. Ramey requested information on the proposed contract with General Atomics for R&D for fission-heated thermionic cells. (Vinciguerra)

13. Status of the Revised NATO Agreement

14. Agenda for the Week of July 6

Approved. (Secy)

15. BoB Request for a GAC Study of Advanced Converter Reactors

In response to Mr. Ramey's query, the Chairman agreed the matter should be discussed with the GAC on Monday.

16. Fermi Award

The Chairman suggested Dr. Tape determine the status of this matter with the Joint Committee in preparation for discussion with the GAC on Monday.

17. Mr. Ramey's Report on the June 30 Interdepartmental Energy Study

18. Press Release re Status of the PLUTO Program

19. Approval of WHETSTONE I

For consideration today.

PRESENT

Dr. Seaborg
Mr. Ramey
Mr. Palfrey
Dr. Tape
Dr. Bunting

Mr. Hollingsworth
Mr. Vinciguerra
Mr. Abbadessa
Mr. Schur
Mr. Brown
Mr. McCool

DISTRIBUTION

Commissioners
General Manager
General Counsel
Secretary

W. B. McCool
Secretary

UNITED STATES GOVERNMENT

Memorandum

UNCL. BY DOE
REV 86

TO : Robert E. Hollingsworth, Acting
General Manager

DATE: July 2, 1964

Approved _____
R. E. Hollingsworth

FROM : W. B. McCool, Secretary

Date _____

SUBJECT: ACTION SUMMARY OF MEETING 2023, JULY 2, 1964, 11:00 A.M., ROOM 1113-B
D. C. OFFICE

SECY: ICB

Commission Business

1. Commissioners' Welcome to Dr. Bunting
2. AEC 151/05 - Proposal to Request Legislative Action to Remove
Certain Information From Formerly Restricted Data Category

Approved, as revised. (Marshall)

The draft letter to the Secretary of Defense is to be revised on the basis of the discussion at the Meeting. (Marshall)

A meeting between one or more of the Commissioners and BOD officials will be suggested in the letter to the Secretary of Defense. (Marshall)

3. AEC 1143/13 - Use of Idle Government Facilities for Private
Chemical Processing

Approved, as revised. (Baranowski)

The draft public announcement is to be re-written on the basis of the guidance received at the Meeting. (Baranowski)

The draft letters to the JCAE and the GAC are also to be revised. (Baranowski)

4. AEC 1143/11 - Fission Products Plant - Hanford, and
AEC 1143/12 - Appendix "A" to AEC 1143/11

Approved, as revised. (Hart)

The proposed formal invitation is to be revised in accordance with discussion at the Meeting. NUREC is to be appropriately informed. (Hart)

The Commission waived application of the criteria of over-concentration.

July 2, 1964

4. AEC 1143/11 and AEC 1143/12 (continued)

Recommendations concerning an appropriate weighting system for evaluation of a proposer's capability to operate the 200 Areas will be developed by staff for Commission consideration.
(Hart)

5. AEC 809/79 - Export of Neutron Tubes and Manufacturing Technology

Approved. (Marshall/Wells)

The Philips matter will be explored with the Department of State. (Wells)

The Commission requested additional information on the Philips tube. (Marshall)

6. Meeting with Department of State Representatives

Scheduled for 4:30 this afternoon. (Secy)

cc:
Commissioners

The President then called upon Attorney General Kennedy, who said that in many areas the difficulties are just beginning, for example, in the area of application to hotels, restaurants, etc., and trouble may break out this weekend. We are approaching a crisis for the country. He said there will be a big problem in September in the areas of schools where negroes and whites will be mixing socially for the first time because there are about 2,000 schools which are still not desegregated. He said this is the law of the land and, therefore, must be observed. The President then called upon Secretary Hodges, who described the set-up of the Community Relations Service, to be headed by Governor Collins. He said he sent out more than 3,000 letters in the past few days asking for cooperation, and said the President has asked some 200 people to serve on this committee.

The President then went on to speak on a second topic: The Great Society. He mentioned progress toward this in the tax cut, the civil rights bill, and the poverty program. He said that the economy will move forward in 1965, but that we must make room for new programs and eliminate obsolete ones. He said that there should be intensive budget planning in the next four months and that he is appointing task forces of experts to get ready to analyze problems and to make recommendations. He said these are confidential and must not be known by the newspapers. He mentioned task forces in many areas, including transportation, natural resources, health, efficiency and economy, civil rights, and foreign policy. He said that Moyers will coordinate this with the help of the Council of Economic Advisers and that people in our departments will be asked to help.

These task forces will report back before November 10th, and the programs should begin to be implemented in January for 1965. The President said he wanted an activist administration, not holding action, and asked that each of us cooperate on the task force program. Going on to a third area, the President said he wanted recommendations on the preparation of the Democratic Platform for this fall. Each of us should prepare position papers in our fields; this should be done personally and not be left to the career people in our departments. He will want these documents by July 17th. These documents are to cover the points in the paper (attached). He mentioned the individual assignments of all the Cabinet members present, and also mentioned individual assignments for Gordon, Webb and Shriver; for Hornig, he mentioned the area of science and atomic energy, and thus he will coordinate our input. Fred Dutton will serve as staff director of this effort.

At 2:30 p.m. Commissioners Gerald Tape, James Ramey, John Palfrey, Polly Bunting, members of the staff, and I met with representatives of the Atomic Energy Committee of the Edison Electric Institute--J. H. Ward, M. Joslin, J. H. Campbell, W. E. Cisler, C. B. Delafield, W. B. McGuire, R. Rinchliffe, William Webster, J. J. Kearney, P. Sporn--to discuss the possibility of increasing their interest in participating in AEC advanced converter prototype programs. Their interest seemed to be marginal.

At 3:50 p.m. I presided over Commission Meeting 2024 (action summary attached).

At 4:30 p.m., the Commissioners and I discussed with Wells, Smyth, and Carl Thomas the candidates for Director General of the International Atomic Energy Agency for the term beginning in the fall of 1965. There is some skepticism concerning a second term for Eklund, but the other Commissioners and I favor it.

Friday, July 3, 1964 - Washington - Virginia

I drove the family (Helen, Dave, Lynne, Steve, Eric, Dianne) to the Shenandoah National Park where we hiked the White Oak Trail.

903380

Your position papers on the 1964 Democratic Platform planks in your respective fields are due in Mr. Moyers' office on July 17.

They should cover the following:

- (a) The specific points that you propose be included in the Platform;
- (b) Supporting documentation, including relevant Presidential statements, factual data and other source materials;
- (c) An appraisal of likely major arguments against the proposals;
- (d) A statement on the extent to which the proposals exactly continue, modify or add to the 1960 Platform;
- (e) An analysis of the extent to which the 1960 Platform has been carried out, and the extent to which it has not.

UNITED STATES GOVERNMENT

Memorandum

UNCL. BY LAW
NOV 86

FROM : Robert E. Hollingsworth, Acting
General Manager

W. B. McCool, Secretary

SUBJECT: ACTION SUMMARY OF MEETING 2024, THURSDAY, JULY 2, 1964, 3:50 P.M.,
ROOM 1113-B, D. C. OFFICE

DATE: July 2, 1964
Approved: R. E. Hollingsworth
Date:

SECV:JCH

Commission Business

1. Report on J. E. Event
2. Authority for Resumption of HEMPSTONE I Events

The Commission concurred in the recommendation contained in General Crowson's June 24, 1964 Memorandum.

The Commission noted the White House will be informed of the substitute event. (Crowson)

3. ASG 534/22 - Labor Considerations at Hanford
Discussed.

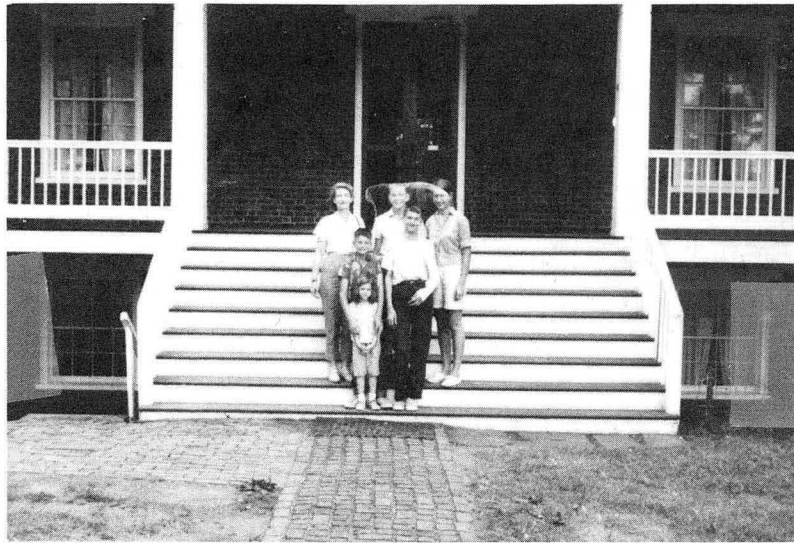
The Commissioners agreed replacement contractors should be urged to extend voluntary recognition to HAMEC. (Smith)

Information Items

1. Proposed Letter to Secretary Udall re Cooperative Effort in Nuclear Desealing
Approved, as revised. (Brown)
2. Meeting with Kentucky and Tennessee Congressional Delegations
Scheduled for July 7, 1964, 3:30 P.M., D. C. Office.
(Vinciguerra/Browning)
3. Chairman's Report on July 2 Cabinet Meeting
The Chairman requested a background report. (Brown/Vinciguerra)
4. 4:30 P.M., Meeting with State Department Representatives

cc:
Commissioners

We spent the night in the Lake Motel in Washington, Virginia.



Helen, Eric, Dianne, Steve, Dave, and Lynne at Appomattox, Virginia, July 4, 1964



Stephen, Dianne and David Seaborg at Appomattox, Virginia, July 4, 1964

Saturday, July 4, 1964 - Virginia

We drove down Skyline Drive and the Blue Ridge Parkway, emerging near Lynchburg, Virginia.

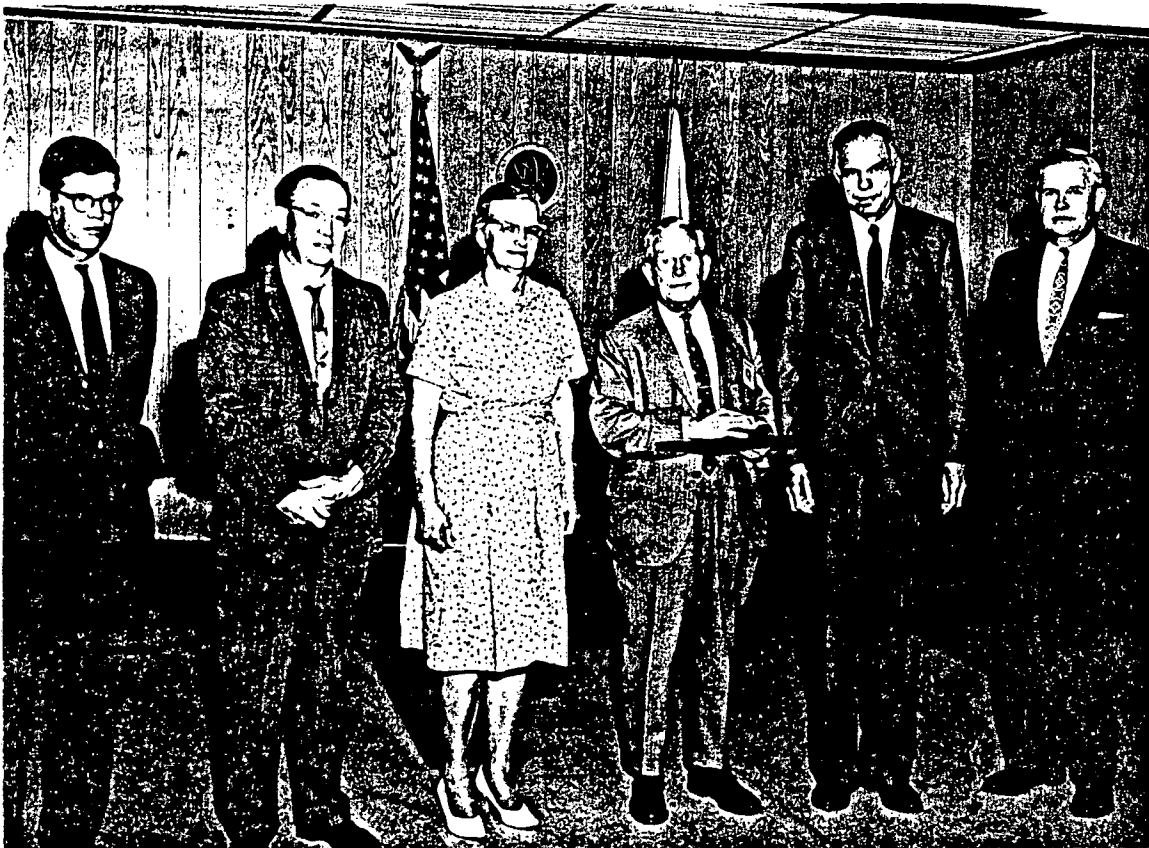
We visited various historic scenes at a recreated village in Appomattox, Virginia.

We spent the night in the Petersburg Motel.

Sunday, July 5, 1964 - Virginia Beach, Virginia

We drove to Virginia Beach and checked into our beach cottage, same one as last year (557 South Atlantic Avenue, Croaton, Virginia Beach). Pete and Bill Puppa joined us in the late afternoon after arriving by bus from Washington, D.C.

I left Virginia Beach, Virginia, at 7:40 p.m. on United Airlines Flight No. 751 and arrived in Washington, D.C. at 8:30 p.m.



Presentation of AEC Citation to Dr. Robert S. Stone, July 6, 1964

L to R: John G. Palfrey, James T. Ramey, Mary I. Bunting, Robert S. Stone,
Seaborg, Gerald F. Tape

Monday, July 6, 1964 - D.C.

At 10:15 a.m. I presided over Information Meeting 396 (notes attached).

At 11 a.m. Commissioners Gerald Tape, James Ramey, John Palfrey, Polly Bunting, and I attended the 89th Meeting of the General Advisory Committee held at the D.C. Office. Members of the GAC present at the meeting included L. R. Hafstad (Chairman), M. Benedict, J. C. Bugher, D. Froman, K. S. Pitzer, N. F. Ramsey, J. C. Warner, W. Webster, J. H. Williams, D. C. Sewell (Scientific Officer), and A. A. Tomei (Secretary).

The items discussed at the meeting included the Fermi Award, GAC report on advanced converters, FY 1965 budget status, the Geneva Conference, private ownership, gaseous centrifuge classification, underground tests for FY 1965, interdepartmental energy study, and the U.S.-USSR desalting exchange.

At 12:45 p.m. I had lunch with Commissioner Tape, and Larry Hafstad at the Metropolitan Club. We decided to ask Pitzer and Webster to accept a reappointment to the General Advisory Committee and to ask Warner to end his service with this term which ends August 1st. (I spoke to Warner and Pitzer to convey this information.)

At 2:30 p.m. I recorded, on film, an interview for NBC concerning my views on the United States' decision to drop the atom bomb on Japan, especially with respect to my participation in the Franck Committee Report. This interview was for the NBC White Paper program to be broadcast in December.

At 4:30 p.m. I presented an AEC Citation to Dr. Robert S. Stone for his work on medical protection during wars. The Citation was given in the presence of the GAC, Leon Jacobson, Stafford Warren, Mrs. Stone, the Commissioners, and members of the staff. The Citation included a medal and a pin.

I sent a note to Leif V. Gustafson, Membership Chairman, Swedish Club of Los Angeles, thanking the Board of Directors of the Club for making me an honorary member.

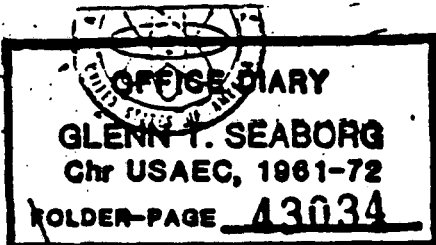
Tuesday, July 7, 1964 - D.C.

At 10 a.m. Commissioners Gerald Tape, James Ramey, and I attended, with Kenneth Holum and John Calhoun from the Department of Interior, a meeting in Hornig's office to discuss plans for the U.S.-USSR meeting on desalting to be held in Washington next week.

At 10:30 a.m. I attended the meeting of the President's Committee on Equal Employment Opportunity held in the Executive Office Building. After the meeting, Wirtz presented a copy of the Committee's progress report to President Johnson in a ceremony in the Rose Garden.

I had lunch at the White House with Gordon, Hornig, Roth, Reedy, Welsh and others.

At 3:30 p.m. Commissioners James Ramey, Gerald Tape, John Palfrey, Polly Bunting, members of the staff, and I met with representatives of the Tennessee Congressional Delegation and their assistants, and representatives of the local Chambers of Commerce to explain our decision to close down the AEC weapons fabrication facility at Clarksville, Kentucky. William Allen (Senator Albert Gore's Assistant) and Arch Northington (Clarksville, Chamber of Commerce) were their spokesmen.



INFORMATION MEETING 396

10:15 a. m., Monday, July 6, 1964 - Chairman's Conference Room, D. C. Office

1. Proposed Letter to Mr. Bundy, White House, re WHETSTONE I

The Chairman noted the proposed letter to the White House and suggested review with the Commissioners. (Brown)

2. Mr. Hollingsworth's July 2 Memorandum re Office of Economic Impact and Conversion

The Chairman noted receipt of the report.

3. Proposed Presidential Statement for the Geneva Conference

Mr. Ramey requested addition of an appropriate reference to the LAEA. (Brown-Wells)

4. Commissioners' Meeting with GAC This Morning

The Commissioners discussed the proposed action and information items which Dr. Tape described briefly, with particular attention to the forthcoming GAC report on the reactor program.

5. NSAM 305 - Dispersal

The General Manager noted plans to proceed and the Commissioners requested the White House be informed and a check on whether the Joint Committee is informed. (Erlewine-Crowson)

6. Congressman Morris' inquiry re AEC Response to United Nuclear Proposal on Consolidation of Ore Allocations

Mr. Ramey requested a review of the proposed response and Mr. Bokum's proposal. (Faulkner)

CLASSIFICATION CANCELLED *

BY AUTHORITY OF DOE/OC

J. Diaz 2/27/89
*Lt Col. Greboske TO DOE, OCT 7
Siobert dated 3/10/89
J. Zahn 2/27/89

<p>OFFICE DIARY</p> <p>GLENN T. SEABORG</p> <p>Chr USAEC, 1961-72</p> <p>FOLDER-PAGE <u>43035</u></p>

- 7. AEC Implementation of Title VI of the Civil Rights Bill
Mr. Ferguson will circulate a report. (GC)
- 8. Ceremony for Presentation of AEC Citation to Dr. Stone, 4:30 p.m. Today, Room 1113-B
- 9. Commissioners' Meeting with Kentucky-Tennessee Congressional Delegation, 3:30 p.m. Tomorrow, Room 1113-B

PRESENT

Dr. Seaborg
 Mr. Ramey
 Mr. Palfrey
 Dr. Tape
 Dr. Bunting

General Luedecke
 Mr. Ferguson
 Mr. Vinciguerra
 Mr. Brown
 Mr. McCool

DISTRIBUTION

Commissioners
 General Manager
 General Counsel
 Secretary

W. B. McCool
 Secretary

Wednesday, July 8, 1964 - D.C.

At 12:15 p.m. Commissioner James Ramey, Frank Pittman, and I attended a luncheon meeting in Secretary Udall's office with Hornig, Gordon, Cater, Lee White, Calhoun, and Holum to discuss the future program on nuclear desalination. We decided that a small group of representative will make the plans.

At 3:15 p.m. I presided over Commission Meeting 2025 (action summary attached).

Thursday, July 9, 1964 - D.C.

At 10 a.m. I conferred with John Erlewine to discuss his new duties as Congressional Liaison Officer. He will work much closer with the Commission than his predecessor, Donovan.

At 12:30 p.m. I attended a luncheon given by Senator Jennings Randolph (of West Virginia) in honor of the 100 boys of the National Youth Science Camp, held in Room 1202 of the New Senate Office Building. I was introduced by Senator Randolph after which I spoke on "Pioneering in the New World of Science." West Virginia Representative Ken Heckler and West Virginia University Professor Charles N. Cochran (Director of the Camp), Webb, and Haworth were also present at the luncheon. Dozens of boys came up to meet me after my speech to say how much they liked it.

Friday, July 10, 1964 - Germantown

At 9:45 a.m. I presided over the Commissioners Executive Session. The Commission decided to ask President Johnson to reappoint Webster and Pitzer to the General Advisory Committee and to appoint Steve Lawroski (in place of Jake Warner).

At 12:30 p.m. I had lunch with the Commissioners in the Germantown Cafeteria.

I called Larry Hafstad, Manson Benedict, Warren Johnson (out of town), Al Crewe, and General Luedecke to tell them that the AEC is considering appointing Steve Lawroski to the GAC. A question was raised about his appointment since he is a laboratory employee, but all agreed he would be a fine addition to the GAC.

At 2 p.m. I presided over Information Meeting 397 (notes attached).

At 3:20 p.m. I called Steve Lawroski to inquire if he would be willing to serve on the General Advisory Committee to the AEC. He said he would be extremely honored to do so but wondered if it would be appropriate for someone connected with a National Laboratory. I said that in his case we feel it would be all right. I said that I had already talked to Al Crewe and he is all for it. I cautioned him against announcing this decision since we have not yet checked with the President.

The Commissioners discussed candidates for General Manager and decided to interview Ed Bloch, Bob Hollingsworth, Dwight Ink, Dave Shaw, and Frank DiLuzio. (George Quinn and Sam Sapirie ruled themselves out). The Commission interviewed Bloch. At 6:10 p.m. I left Washington, D.C., on Piedmont Airlines Flight No. 67 and arrived in Norfolk, Virginia at 7:15 p.m. where Helen, Dianne, Eric and Steve met me.

I spent the night at our rented house at Virginia Beach where the family, plus Bill Puppa, is staying.

UNITED STATES GOVERNMENT

Memorandum

UNCL. BY DOE
NOV 86

TO : A. R. Luedecke, General Manager

DATE: July 8, 1964

Approved _____
A. R. Luedecke

FROM : W. B. McCool, Secretary

Date _____

SUBJECT: ACTION SUMMARY OF MEETING 2025, WEDNESDAY, JULY 8, 1964, 3:15 P.M.,
ROOM 1113-B, D. C. OFFICE

SECY:AJ

Commission Business

1. Approval of the Minutes of Meetings 2013, 2017, 2018 and 2019
Approved, as revised.

2. Approval of the Minutes of the 144th & 145th AEC-MIC Conferences
Approved.

3. AEC 25/306 - Proposed Navy Safety Rules
Approved. (Crowson)

4. AEC 780/21 - Award of AEC Citation
Approved. (Secy)

I will provide the Commission a suitable sample display case for the medallion.

5. Possible New Award

The Commissioners requested consideration of other awards as discussed. (Smith/Tackman)

6. AEC 636/10 - Public Health Service Report on Release of Radioactivity to Columbia River

Approved, as revised. (Woodruff/Baranowski)

The Commission requested revision of the tenor of the conclusions. (Woodruff/Baranowski)

A. R. Luedecke
Action Summary 2025

-2-

July 8, 1964

7. AEC 1143/14 - Proposal for Purchasing Sulphuric Acid for Richland Facilities

Discussed.

The Commission requested Associated Chemical and representatives of the Tri-City area be informed of the considerations which preclude a decision at this time. (Bloch)

8. AEC 331/133 - Use of Fermi Atomic Power Plant for AEC-Sponsored Research and Development

I will schedule this matter in the near future.

cc:
Commissioners



UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON 25, D.C.

o. 2

July 10, 1964

UNCL. BY DOE
NOV 86

INFORMATION MEETING 397

2:00 p.m., Friday, July 10, 1964 - Chairman's Conference Room, A-457

1. NTS Events for the Week of July 13

Noted.

2. Participation in Unclassified Research at California Institute of Technology by Polish National (see Mr. Wells' July 2 memorandum)

The Commissioners had no objection. (Wells)

3. Additional Fuel Requirements for the French Land-Based Reactor Prototype (See Mr. Wells' July 2 memorandum)

The Commissioners had no objection. (Wells)

4. Commissioners' Attendance at Geneva and Vienna, Conferences

The Chairman noted the President has approved plans for the Commissioners' attendance at the Conferences in September.

5. AEC Implementation of the Civil Rights Action

In response to the Chairman's query, Mr. Vinciguerra said a letter has been prepared for the Chairman's signature. The Chairman requested that Commissioners Palfrey and Ramey review the draft regulation in preparation for its transmittal by July 16.
(Vinciguerra-GC)

6. Staff Representation at the Geneva Conference

The Chairman suggested further consideration.

7. Pending Contractual Matters (July 2 Report)

Mr. Vinciguerra noted the proposed GE contract AT(04-3)-189 for the development of a nuclear thermionic fuel element is being pending the briefing on Monday, July 13. ~~This material~~

8. Agenda for the Week of July 13

Approved. (Secy)

9. Israeli Request for Release of Fuel Element Rejects

The Commissioners had no objection. (Wells)

10. Check for Refund for Over-Pricing

11. Sulphuric Acid Plant at Richland

The General Manager recommended, and the Commissioners agreed a local release should be made, as revised, and letters should be sent to the appropriate Congressional representatives. (Vinciguerra)

12. Conflict of Interest - Certification of Re-Exception

In response to the General Manager's request, the Commissioners agreed the exception should be made.

13. SLAC Power Supply (see the General Manager's July 9 Memorandum)

The Commissioners accepted the recommendation of the General Manager. (Derry)

14. Negotiations re BONUS Reactor

In response to Mr. Vinciguerra's report, the Commissioners suggested he inform Mr. Volpe that Mr. Sapirie will be in Puerto Rico on Tuesday and will discuss the matter with the Puerto Rico Water Authority Representatives. (Vinciguerra)

15. Federal Pay Bill

Mr. Vinciguerra reported that Mr. John Conway, JCAE, advises the Senate-House Conference Committee will request AEC comments on the proposed amendments and that additionally, Mr. Schuldt, BoB, has requested comments.

PRESENT

Dr. Seaborg
Mr. Palfrey
Mr. Ramey
Dr. Tape
Dr. Bunting

General Luedcke
Mr. Vinciguerra
Mr. Hennessey
Dr. Fritsch
Mr. Bloch*

DISTRIBUTION

Commissioners
General Manager
General Counsel
Secretary

W. B. McCool
Secretary

*Partial Attendance

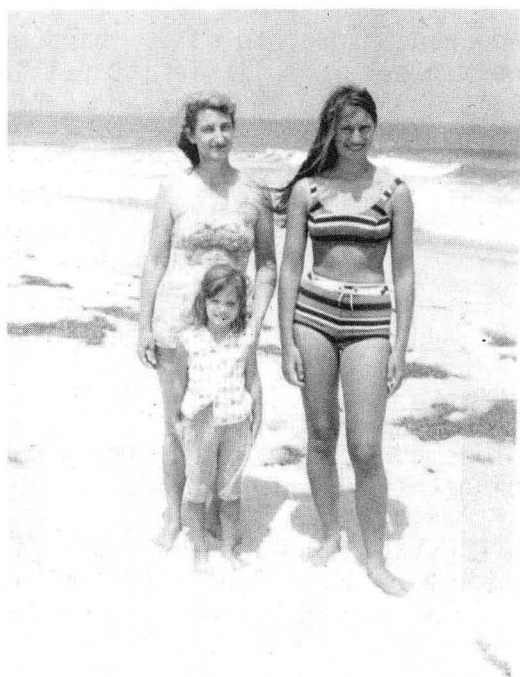
Saturday, July 11, 1964 - Virginia Beach, Virginia

We spent the day at Virginia Beach. We went swimming in the ocean.

In the evening I took all the kids (except Pete) to the Amusement Area. Dianne had great fun on the "Whirl-a-Way," the Roller Coaster, the Ferris Wheel, the Scooter, etc.



Eric, Steve and Dave Seaborg, Virginia Beach, July 11, 1964



Helen, Dianne and Lynne Seaborg



Dianne Seaborg in our house
at Virginia Beach, July 12th

Sunday, July 12, 1964 - Virginia Beach, Virginia

We spent the day at Virginia Beach and went swimming in the ocean.

I left Norfolk, Virginia, at 7:40 p.m., on United Airlines Flight No. 751 and arrived in Washington, D.C. at 9:50 p.m. We landed in a rain storm.

Monday, July 13, 1964 - D.C. - Germantown

At 9:35 a.m. I received a telephone call from President Beadle (of the University of Chicago). Beadle said that there will be a meeting of the Williams Committee tomorrow, and he has been asked to attend. The University has been asked to submit a statement on exactly what they have in mind, and he says they have done this. He said that the problem heretofore has been that the three-way contract has meant different things to different people. They have not tried to spell it out, and he said it would be a great help to know how we react.

What they have in mind is: 1. The University really means it when it says a three-way contract, not just a contract where the corporation is the prime contractor and they are completely at the corporation's direction. Chicago is proposing that it be provided that the corporation determine policy in the use of facilities and in outlining of Argonne programs and that its approval be received on any major appointments of top personnel. The University of Chicago then would be the manager-operator, but it would insist on some substantial authority and that it would have to have direct access to the AEC. 2. The alternative to this would be to end up with a management operating staff. Chicago thinks it would be a great mistake to switch to a completely new management operating staff, which would be directly responsible to the corporation, and of which Chicago would be only a member. He feels this would upset the Argonne staff very seriously; of course, he says that if the Commission feels strongly that this is the only solution, then the risk will have to be taken.

I asked Beadle to call Commissioner Tape and bring him up to date, which he said he would do. Beadle said that the group in the Midwest is split in its opinion: some want Chicago essentially out, and others don't. He said that Chicago wants to be in, provided they can get agreement on these two points.

At 10 a.m. I attended a meeting with Hornig, and representatives from the Department of Interior and the State Department to prepare for tomorrow's meeting with USSR representatives on desalination.

At 12 noon I had lunch with Arnold Fritsch and John Napier in the Germantown Cafeteria.

At 2 p.m. Pittman, Commissioner James Ramey and I met with Schwartz (United Nuclear) and a representative of General Motors to discuss the Military Compact Reactor (MCR) contract. They favor continuing the present contractual arrangement.

At 2:20 p.m. the Commissioners, members of the staff, and I heard a briefing by representatives of Los Alamos (Salmi and Rauken), General Atomic (Creutz, Smyth, Pidd), and General Electric (Volney C. Wilson, Miller, H. Gordon, Vorhies) on thermionics.

At 3:30 p.m. I presided over Commission Meeting 2026 (action summary attached). The Commission agreed on a basis for a negotiation with PRDC on the use of the Fermi reactor for irradiation of fuel elements.

I worked with Commissioner James Ramey on the atomic energy provisions for the Democratic Platform. 10-21264

UNITED STATES GOVERNMENT

Memorandum

UNCL. BY DOE
NOV 86

TO : A. R. Luedecke, General Manager

DATE: July 14, 1964

Approved

A. R. Luedecke

FROM : W. B. McCool, Secretary

Date

SUBJECT: ACTION SUMMARY OF MEETING 2026, MONDAY, JULY 13, 1964,
3:30 P.M., ROOM A-410, GERMANTOWN, MARYLAND

SECY:GF

Commission Business

1. Minutes of Meetings 2020 and 2021

Approved, as revised, subject to comments by Commissioner Ramey.

2. AEC 1143/15 - Selection of Contractor to Operate 100-300 Areas at Hanford

Approved, as revised. (Bloch)

The Commission noted it would review the tentative criteria on page 26 of AEC 1143/15.

The Commission requested the firms be reconsidered in accordance with the discussion at the Meeting, and the final evaluation be circulated for Commission review. (Bloch)

3. AEC 843/28 - Grace Company and Electro-Nucleonics Proposal

Discussed.

The Commission requested further consideration in conjunction with discussion of the draft Part 26 Regulation concerning privately developed restricted data in Category C-24. (Tremmel)

4. AEC 420/101 - Military Compact Reactor

Approved. (Pittman)

July 14, 1964

5. AEC 879/17 - AEC Sponsored Research and Development in the Yankee Reactor

Approved. (Pittman)

6. AEC 331/133 - Use of Fermi Atomic Power Plant for AEC-Sponsored Research and Development

Approved, as revised. (Pittman)

The Commission requested negotiations with PRDC as discussed at the Meeting. (Pittman)

7. AEC 1000/85 - Review of the IASL Plasma Thermocouple Program

Deferred.

8. AEC 842/27 - Administration of the Elk River Reactor Project

Deferred.

Information Items

1. Proposed Letter to Mr. Otero (See Mr. Wells' July 10, 1964 Memorandum to the Chairman)

To be reviewed by individual Commissioners.

2. Revised Schedule for Thursday, July 16

cc:
Commissioners

Tuesday, July 14, 1964 - D.C.

I sent my biweekly letter to the President (copy attached).

I sent a letter to President Johnson asking him to appoint Kenneth Pitzer, William Webster and Stephen Lawroski to the General Advisory Committee (copy attached).

At 12:30 p.m. I called Douglass Cater (White House). I asked Cater whether he has had a chance to study the proposed message by the President for the Geneva Conference, and he said he had not. I said I thought we should get at it pretty quickly because we probably should talk to the State Department, Bureau of the Budget, others in the White House, as well as the JCAE because there will be legislation involved. I told him that this message would be delivered on August 29th or 30th. I suggested that he might give thought to what kind of a conference we should have at State to begin with--Rusk, or Ball? And that we should pave the way for staff contacts. I said that, after Cater had looked at the message, I thought maybe we would send copies to Rusk and Kermit Gordon. I said we have in the meantime edited the message a little and that we would send him this later version. Cater said he would get to this before the end of the day.

At 12:45 p.m. I attended a luncheon given at Blair House in honor of the Soviet Delegation to the U.S.-USSR Conference on Desalting. Members of the Soviet Delegation included Fedor Petrovich Zaostrovskiy, Mikhail Petrovich Vukalovich, Georgiy Mikhaylovich Solov'yev, Nikolay Mikhaylovich Sinev, Aleksandr Il'ich Leypunskiy, Vitaliy Avramovich Klyachko, and Aleksandr Ivanovich Churin.

At 2:30 p.m. I attended the U.S.-USSR Conference on Desalting, speaking briefly on the U.S. civilian nuclear power program. Churin also gave a talk and surprised us with an announcement that the Soviets are building a 250 megawatt, 25 million gallon per day, fast neutron, dual purpose reactor near the Caspian Sea to be finished in 1966-67. The meeting went very well.

At 6:30 p.m. Commissioner James Ramey and I attended a reception at the Blair House, given by Ambassador Llewellyn Thompson, in honor of the Soviet group.

Wednesday, July 15, 1964 - D.C.

I sent letters to Rusk, Gordon, Cater, Bell, Hornig, and Bundy with copies of the proposed statement for President Johnson to make at the Geneva Conference. (President's actual statement attached.)

At 12:30 p.m. I had lunch with Commissioners John Palfrey and Gerald Tape.

At about 2:30 p.m. I returned the President's call from the Department of State, where I was attending the U.S.-USSR Conference on Desalting. The President said that Senator Clinton Anderson had called him to recommend the appointment of Frank DeLuzio as General Manager of the AEC. The President said he was passing this information on to me, but he wanted me to understand that the appointment should be made on the basis of qualifications and that the best man for the job should be appointed.

President Johnson then went on to refer to the leaks to newspapers, having in mind, I am sure, the Finney article regarding PLUTO which appeared in Monday's (July 13th) New York Times. He said he had discussed this with Senator Anderson, wondering whether Commissioner Ramey might be involved. I told him that I doubted that these leaks emanated from Commissioners very often. I said that, confidentially, I felt they came most often from the Joint Committee. He asked whether this would be the staff or the membership, and I said I thought it would be

July 14, 1964

UNCL. BY DOE
NOV 86

PERSONAL AND CONFIDENTIAL

Dear Mr. President:

I have the pleasure of submitting to you the regular biweekly report on significant developments in the atomic energy program.

1. Discontinuance of the PLUTO Program

The AEC informed the Lawrence Radiation Laboratory, Livermore, California, on July 1, that the PLUTO Program, initiated in 1957 to develop a nuclear ramjet reactor to power a low-flying missile, would be discontinued. The laboratory had only recently completed highly successful full power tests of the Tory II-C, a full-scale reactor of novel design. The shutdown of PLUTO activity at the Nevada Test Site will begin immediately. Congressional action on AEC's FY 1965 appropriations will determine the rate at which the program will be phased out.

2. Implementation of Civil Rights Act

In response to your request, the Commission has transmitted to Mr. Lee White a report on the activities being initiated to carry out AEC's responsibilities under the Civil Rights Act. A draft of proposed AEC regulations to implement Title VI of the Act is in preparation and will be transmitted to the Bureau of the Budget and the Department of Justice by July 16, 1964.

3. Exchange of Lands at Hanford

On Wednesday, July 8, 1964 Senator Jackson introduced S. 2004 which would exchange approximately 10,000 acres of public lands for about 7,000 acres of acquired lands within the AEC's Hanford project near Richland, Washington, and would authorize additional exchanges of up to 1,920 acres on an equal basis. This legislation has been recommended by the Department of the Interior and the Commission as a means of facilitating the Commission's efforts to prevent or reduce the adverse economic impact of actual or anticipated reductions in the Commission's programs in the Richland, Washington, area and provide a stimulus to private investment.

4. Spanish Reactor

The Spanish Government has given official approval to Union Electrica Madrileña (UEM) for the construction and operation of a 153 MWE nuclear power plant at Zorita de los Canes, outside Madrid. UEM is proceeding immediately with the construction. The contract calls for the completion of the pressurized water reactor, to be built by Westinghouse, by the end of July 1967.

5. Congressional Notes

On July 3 the Senate passed the AEC Omnibus Bill which amends the Atomic Energy Act of 1954, the Atomic Energy Community Act of 1955, and the Euratom Cooperation Act of 1958, with regard to patents; clarification of Price-Anderson indemnity; authorization to lease land and to sell or lease improvements located in or near Richland, Washington; and authorization to transfer to Euratom up to 70,000 kilograms of contained U-235 and up to 500 kilograms of plutonium. House action is scheduled for the week of July 20.

At its June 30 public hearings on proposed amendments to Agreements for Cooperation with Argentina, China, Greece, Iran, Thailand, and Viet Nam, the JCAE expressed satisfaction that all of those provided for the agreeing parties to request promptly that the IAEA assume responsibility for safeguards inspections. The Committee also considered an amendment to the Agreement with France which would remove the present 90 percent enrichment limitation on uranium transferred to France for use in research.

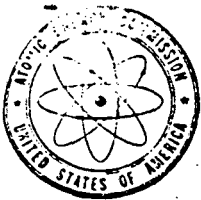
A Tennessee-Kentucky delegation met on July 7 with the Commissioners and AEC staff together with representatives from the offices of Senators Walters, Gore, and Cooper to discuss the Commission's announced plans to close the Clarksville, Tennessee weapons modification facility. The delegation (including an aide to Governor Clement of Tennessee and Chamber of Commerce representatives from Oak Grove and Clarksville, Tennessee, and Hopkinsville, Kentucky) was informed of steps that would be taken to lessen the impact of the closing scheduled for July 1966 and afterwards indicated a better understanding of the reasons for the closing.

Respectfully submitted,

(Signed) Glenn T. Seaborg

Glenn T. Seaborg

The President
The White House



UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON 25, D. C.

JUL 14 1964

UNCL. BY DOE
NOV 86

Dear Mr. President:

On August 1, 1964 the terms of Dr. Kenneth S. Pitzer, President, Rice University, Dr. John C. Warner, President, Carnegie Institute of Technology, and Mr. William Webster, President, New England Electric System, as members of the General Advisory Committee to the Atomic Energy Commission, will expire. You will recall that the General Advisory Committee is a statutory body established under Section 25 of the Atomic Energy Act and is composed of nine members appointed from civilian life by the President. The terms of the memberships are for six years.

The Commission recommends that you reappoint Dr. Pitzer and Mr. Webster for another term and that you appoint Dr. Stephen Lawroski of the Argonne National Laboratory to succeed Dr. Warner. Dr. Warner will have served two full terms upon the expiration of his present term.

I am enclosing brief biographical summaries on Dr. Pitzer, Mr. Webster and Dr. Lawroski together with draft letters of appointment to them for your possible use. I am also enclosing a proposed White House press announcement of the appointments and a draft letter of appreciation to Dr. Warner for his services.

Respectfully yours,

(Signed) Glenn T. Seaborg

Chairman

Enclosures
As noted above

The President
The White House

8/22/64

UNCL. BY DOE
NOV 86

MESSAGE TO THE THIRD INTERNATIONAL CONFERENCE ON PEACEFUL
USES OF ATOMIC ENERGY

I would like to extend my best wishes to all the delegates at this Third International Conference on the Peaceful Uses of Atomic Energy. A great challenge confronts you. You can hasten the day when the atom will be harnessed to hard labor for man's welfare. You can reduce the risk that the atom will be used for man's destruction.

We stand at the threshold of the age of nuclear power. But whether nuclear power will meet our needs tomorrow depends on our work and our wisdom today.

In the United States we have been working and learning. We have now learned how to build large-scale reactors whose electric power will be economically competitive in many parts of our country and the world. Our utility companies now aim to build or purchase reactors producing electricity at between four and six mills per kilowatt hour.

This achievement has come from fifteen years of concentrated research and development. The U. S. Government has spent more than \$1.6 billion on this effort. American private enterprise has spent an additional half billion dollars.

These expenditures are an investment by our people in the future of all mankind. Through our government and through private

enterprise, we are prepared to use this vast new technology to help other countries to meet their energy needs.

At present, the large-scale reactor offers the best hope of economic production of electricity. Not every country and not every community can use this large size. But our rapid rate of progress should soon lead to economic production in smaller reactors too.

A further application of nuclear energy will be large-scale desalting of water. The time is coming when a single desalting plant, powered by nuclear energy, will produce hundreds of millions of gallons of fresh water -- and large amounts of electricity -- every day.

Our government is proceeding with an aggressive program of nuclear desalting. What we learn in this program will be shared with other nations. Already we have begun cooperative exchanges with Mexico, with Israel, and with the Soviet Union. Today I invite all of you to join with us in this enterprise.

As we move ahead, we look to the International Atomic Energy Agency to play an ever larger role in these peaceful efforts. Already it has set standards for the care and keeping of nuclear materials. This achievement has raised our hopes for a workable system of world law on nuclear energy.

For almost twenty years, we have known the atom's terror as a weapon of war. Today, we begin to know its hope as a powerhouse of peace. Today, at last, we have good reason for belief that the atom can be made the servant, not the scourge, of mankind.

both the staff and the membership, from both sides of the aisle. During the course of the conversation the President asked that I look into this and call him back in a few days, but I believe our present discussion, when finished, probably took care of the matter to his satisfaction.

I attended the afternoon meeting of the U.S.-USSR Conference on Desalting; it continues to go well, but they do not want to effect a written agreement for cooperation during this trip. We worked out an itinerary for visits to U.S. desalting and AEC desalting areas (ORNL, ANL, Fermi, Dresden) next week.

Thursday, July 16, 1964 - D.C.

At 9:15 a.m. I had a meeting by appointment with J. Lorne Gray (President of Atomic Energy of Canada, Ltd.) in my office. Myron Kratzer (Deputy Director of International Affairs) was also present at the meeting. Gray said that he had two matters to discuss with me. First, he wanted to raise the question of the appointment of a Canadian, D. G. Hurst, to the post of Director of the Agency's Division of Reactors.

Gray said that Canada had made some mistakes in its appointments but had also sent some good people--for example, Dr. Jaffe. He was convinced that Hurst was a well-qualified candidate for the post in question. Gray went on to say that he took exception to the proposition that posts in the Agency should be reserved for nationals of specific countries, particularly technical posts. (In an earlier meeting with the staff, Gray noted that the post of Director of the Agency's Reactor Division had certain responsibilities affecting commercial interests and that a U.S. national in this post, even if he tried to be objective, could not help from "selling" United States reactors, since it would be these with which he was most familiar.) I noted that while we had one or two well-qualified candidates for this position as well, including one that Eklund had identified himself, we did not want to stand in the way of the appointment of a qualified Canadian and therefore, we looked on this appointment as one which the Director General should decide on its merits. Gray said that he understood this and that he had no objection to that in principal but did not want to put forward their candidate if it appeared he had no chance. He said he would discuss this with the Canadian Ambassador to the IAEA, Margaret Meagher, and would then decide whether to leave Hurst's name in the running or not.

Gray's second point was the question of U.S. pricing of heavy water. He said that Canada had decided to proceed with a heavy water moderated reactor power station for Ontario Hydro consisting of two 500 MW units with eventual space for four units. This plant, together with the CANDU reactor now under construction, would consume all of the first five years' output of Canada's first heavy water plant and they were considering the construction of a second plant. This would be done by Canadian industry with a possible Canadian government commitment to purchase a certain quantity of heavy water. In this regard, Gray said his Minister had inquired what the United States might do to its price for heavy water. Gray said that he did not care whether we lowered our price to \$19 U.S. (\$19 U.S. is equivalent to the projected Canadian price of \$20.50 Canadian) but they would be concerned if the U.S. price were lowered to a level such as \$15 which would undercut the Canadian market. I said that we had no intention of lowering our price simply to undercut the Canadian market.

I noted that our price was based on our costs and that we had said that we could lower the price somewhat if our production increased as a result of firm orders. A decrease of the size that Gray was concerned about, however, would involve the elimination of depreciation as a factor in our prices, and this would be a major policy shift. Gray said that, in view of his Minister's interest in this subject,

it might be raised in writing through Foreign Office channels. I said if this were done, we would be glad to respond in the same way. Gray also noted that the arrangement involving the sale of a large quantity of low cost hydro-electric power from the Province of Quebec to the Consolidated Edison Company of New York appeared to be virtually cancelled.

At 9:45 a.m. I presided over the AEC/MLC Meeting which was held in Room 1113-B.

At 11 a.m. Commissioners Tape and Palfrey, General Del Crowson, John S. Kelly, and I attended the Weapons Testing Review Committee meeting held in the Situation Room of the White House. Others present at the meeting included Adrian Fisher, Herbert Scoville (ACDA), W. Averell Harriman, Ragnar Rollefson, Leonard C. Meeker, Thomas Ehrlick (State), Harold Brown, W. Jack Howard, John E. Jackson (DOD), Major General F. J. Sackton, Colonel W. W. Stone (JCS), and General Marshall S. Carter (CIA). We discussed the State Department's paper on the Plowshare Program under the Test Ban Treaty. An implicit approval to the Sulky shot in December was given.

At 2:30 p.m. the Commissioners and I interviewed Frank DiLuzio for the position of General Manager. He made a very good impression.

At 3:40 p.m. I presided over Regulatory Information Meeting 125 (notes attached).

At 3:50 p.m. I presided over Information Meeting 398 (notes attached).

At 6 p.m. I left Washington, D.C. on Trans World Airlines Flight No. 63 and arrived in San Francisco at 8:10 p.m.

I stayed overnight in the Durant Hotel in Berkeley.

Friday, July 17, 1964 - Lafayette, California

I visited our home in Lafayette to discuss the situation with our tenant, Mrs. Strong; the place is in very good condition. Since the Strongs are leaving next Wednesday, I discussed the problem of finding a new tenant with the Mason-McDuffie Realty Company in their Lafayette office.

I had lunch with the chemistry group at the Lawrence Radiation Laboratory (Hyde, Ghiorso, Thompson, Hollander, Harvey, Street, Asaro, Reynolds, Diamond) and visited with them in the afternoon.

I drove with Harry Wellman and Clark Kerr to the Bohemian Grove to attend the Encampment and spent the night at the Wayside Log Camp.

Saturday, July 18, 1964 - Bohemian Grove, California

I spent the day at the Bohemian Grove, visiting many camps with Kerr. We had breakfast at the Pauley Camp (Owl's Nest) with Ed Carter, Governor Pat Brown, and others.

I saw part of the show entitled, "Cremation of Care."

Sunday, July 19, 1964 - Bohemian Grove, California - Chicago, Illinois

At 12:30 p.m. I gave the Lakeside Talk entitled, "Some Reflections Upon Our Atomic Energy Program," which was very well received.

At 4:05 p.m. I left San Francisco, California, with Kerr, on American Airlines Flight No. 922 and arrived in Chicago, Illinois, at 9:40 p.m. I told Kerr, 033



UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON, D.C. 20545

UNCL. BY DOE
NOV 86

COPY NO. 2
July 16, 1964

REGULATORY INFORMATION MEETING 125

3:40 p. m., Thursday, July 16, 1964, Chairman's Conference Room, D. C. Office

1. Finding of Practical Value (See Director of Regulation's and General Manager's July 15 Memorandum)

The Commissioners had no objection to the proposal. Mr. Price noted the telephone call from the Coal Association commenting on the timetable. (DR-GM)

2. Issuance of Order Extending Expiration of Provisional Operating Authorization No. DPRA-3, Allis-Chalmers Manufacturing Company, Docket No. 115-1 (See Mr. Price's June 25 Memorandum to the Commissioners)

The Commissioners had no objection to the recommendation. (Doan)

3. Up-dating of Brookhaven Report

Mr. Price noted plans to use Brookhaven Laboratory for this project.

PRESENT

Dr. Seaborg
Mr. Palfrey
Mr. Ramey
Dr. Tape
Dr. Bunting

Mr. Price
General Luedecke
Col. Hill
Mr. McCool

DISTRIBUTION

Commissioners
Director of Regulation
General Counsel
Secretary

W. B. McCool
Secretary



UNITED STATES
ATOMIC ENERGY
WASHINGTON

COPY NO. 2
July 16, 1964

INFORMATION MEETING 398

UNCL. BY DOE
NOV 88

3:45 p.m., Thursday, July 16, Chairman's Conference Room, D. C. Office

1. Proposed USSR Delegation Visit to Nuclear Installations (See Mr. Wells' July 16 Memorandum to the Commissioners)

Approved. (Wells)

2. AEC 867/88 - Dispersal

The Commissioners agreed this matter may be scheduled in August.
(Secy)

3. Response to Congressman Moss' June 30 Letter

The response is to be circulated for the Commissioners' information.
(Vinciguerra)

4. GSA July 9 Letter re D. C. Office Space

Noted. Staff will follow this matter with GSA. (Traynor)

5. Kermit Gordon's, BOB, July 15 Letter to the Chairman

Noted.

6. July 14 Letter from Max N. Kampelman

Mr. Ramey will prepare a reply.

7. July 6 Letter from Senator Pastore and Congressman Holifield

The Commissioners will consider a draft response for discussion with the Joint Committee.

8. Mr. Wells' July 10 Memorandum to the Commissioners re Agreement for Cooperation with Brazil

To be checked with Commissioner Ramey. (Wells)

9. AEC 1000/85 - Review of the LASL Plasma Thermocouple Program

Deferred.

10. Pending Contractual Matters

The Commissioners had no objection to staff proceeding with Contracts AT(04-3)-189 and AT(04-3)-167. (Scammahorn)

11. Agenda for the Week of July 20

Approved. (Secy)

12. General Manager's Memorandum re Access to Gas Centrifuge Information

To be cleared with the Commissioners. (Vinciguerra)

13. Commissioners' Luncheon with Mario Pedini, Tuesday, July 21

14. Schedule for Friday, July 17

PRESENT

Dr. Seaborg
Mr. Ramey*
Mr. Palfrey
Dr. Tape
Dr. Bunting

General Luedecke
Col. Hill
Mr. Hennessey
Mr. Vinciguerra
Mr. McCool

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Commissioners
General Manager
General Counsel
Secretary

W. B. McCool
Secretary

*Partial Attendance

confidentially, that I plan to return to the University of California next summer. He wants to discuss the position I will assume later.

At 10:40 p.m. I left Chicago, Illinois, on American Airlines Flight No. 692 and arrived in Washington, D.C., at 1:40 a.m.

The family drove home from Virginia Beach today.

Monday, July 20, 1964 - D.C.

At 1 p.m. I attended a luncheon at the White House in honor of Prime Minister Holyoake of New Zealand. President Johnson and Prime Minister Holyoake both gave fine little talks about our countries' friendship for each other.

At 3:15 p.m. I presided over Information meeting 399 (notes attached).

At 4:45 p.m. I met with Maurice Faure (Member of the French Parliament). Faure is in this country to discuss the peaceful and military nuclear programs from the standpoint of de Gaulle's policies in France, of which he is apparently critical.

I heard from Norris Bradbury, Sam Sapirie, Kenner Hertford, and others regarding DiLuzio's qualifications as General Manager. The responses are generally favorable but with some disturbing factors.

I took Dave, Steve, Eric, and Dianne, with Jim Haddow, to dinner at the Hot Shoppes Cafeteria at Connecticut and Albermarle because Helen is sick with a stomach flu.

Tuesday, July 21, 1964 - D.C.

At 9:30 a.m. I called Elmer Staats (BOB). I told him that Holifield is sending a letter over to Chairman Tom Murray of the Post Office and Civil Service Committee which has jurisdiction over the Pay Bill, and he makes quite a case for the House version of the bill, which would put the Commissioners in level 3 instead of level 4 as they are in the Senate version, and in making that case he strongly urges that all Commissioners be equal. Staats said he felt the danger here is that we are going to end up at the lower level.

Staats says that someone in the AEC is doing a lot of lobbying on the Hill and he feels this will not help our case; we may all end up in level 3. I asked if he thought there was any danger of this since the Chairman is now in level 2 in both bills. He said all he could do was to give me the sense of his discussions; there is the two level difference in three agencies, i.e., AEC, Federal Reserve Board and Council of Economic Advisors, and in other agencies such as the Labor Relations Board, the Chairman is at level 3 with the Board members at level 4 (one level difference). He thanked me for calling.

At 12:20 p.m. I had lunch with Arnold Fritsch, and we discussed my Geneva and Vienna schedules for lunches, dinners, the group to accompany me to visit the N.S. Savannah in Sweden, etc.

At 2:30 p.m. I received a telephone call from Maurice Goldhaber and Reynolds of the Brookhaven National Laboratory. They explained their concern over the bubble chamber proposal; although it is of great interest to them, they would like to have it only in second priority to the conversion of the AGS. It is their feeling, however, that the \$65 million needed for the AGS is so big it can't be approved this year, but it is their understanding that conditions will be very different next year. They would like very much, therefore, to have a feeling from me of what their chances would be next year of getting the conversion of the AGS if the bubble

UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON, D.C. 20545

COPY NO. 2
July 20, 1964

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NOV 56

INFORMATION MEETING 399

3:15 p.m., Monday, July 20, Chairman's Conference Room, D. C. Office

1. July 14 Letter from Mr. Robert Goheen re Contract Administration

The Chairman suggested Commissioner Bunting review the letter.

2. Federal Pay Bill - Proposed Letter from Congressman Holifield to Congressman Murray

The Commissioners approved the staff's comments, as revised, and requested Mr. John Conway, JCAE, be informed at once. (Vinciguerra)

3. AEC 580/211 - Stockpile

Noted. In staff review.

4. Chairman's Statement for IAEA (See Mr. Wells' July 16 Memorandum)

The Chairman suggested the Commissioners' comments be given to Mr. Fritsch.

5. Mr. Woodruff's July 7 Memorandum re NaK Leak in SNAP⁹ 10-A System

Noted.

6. AEC 1000/85 - Review of the LASL Plasma Thermocouple Program

The Commissioners had no objection to transmittal of the letter to LASL, recognizing the need to be alert to review each similar situation as it arises. (Pittman)

7. Personnel Matters (See General Manager's June 11 Memorandum and Mr. Vinciguerra's May 28 Memorandum)

Approved in part. The Commissioners wish to see some of the candidates on Thursday. (GM- Tackman)

8. AEC Citation (See Mr. Clark's July 15 Memorandum)

Approved with revisions. (Secy-Clark)

9. Letter to Mr. Gordon

Mr. Ramey discussed briefly the current meetings and the letter from the Department of the Interior. The draft AEC letter will be circulated shortly for the Commissioners' review.

10. Commissioners' Meeting, 10:30 a.m., Tomorrow

11. Proposed Letter to the Joint Committee re GE Testimony

To be circulated for the Commissioners' review. (Brown)

12. Meeting of the Test Review Committee

The Chairman reported that

a. AEC accepted the Department of State document with an added agreement to continue a review of standards.

b. SULKY and WHETSTONE II are approved for planning purposes. (Kelly-Crowson)

13. Reduction of Employees at Y-12

14. Proposed Change in Name of Hanford Laboratory

The Commissioners requested a memorandum. (Vinciguerra)

15. General Manager's Memorandum re Access to Gas Centrifuge Information

Mr. Vinciguerra noted he had not obtained comments from all the Commissioners. (Vinciguerra)

PRESENT

Dr. Seaborg General Luedecke
Mr. Palfrey Mr. Hollingsworth
Mr. Ramey Mr. Hennessey
Dr. Tape Mr. Vinciguerra
Dr. Bunting Mr. Brown
 Mr. McCool

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General Manager
General Counsel
Secretary
 W. B. McCool
 Secretary

chamber were accepted this year. I told them I thought they should submit to us, in writing, their thinking on this, as well as any information on what the conversion would entail, and we would take a look at it.

At 3:50 p.m. I had a meeting by appointment with Chauncey Starr and Robert Loftness (of Atomics International). Starr explained his philosophy of why it is important to go through a stage of advanced converters before we reach the breeder stage. He said that utilities don't have this point of view because theirs is not a long range objective from the standpoint of the country as a whole. He explained how the Sodium Graphite Reactor (SGR) can breach the gap from advanced converters to breeders through the concept of the Sodium coupled Core Reactor (SCCR), in which a slow neutron reactor is coupled with a fast neutron reactor in varying proportions. The SCCR solves the safety problem because of its longer neutron life-time. He also pointed out the advantages of the SGR for dual purpose electricity and desalting, pointing out that the advantages are greatest here for private utilities where the cost of the power must bear more of the cost of the water and that the advantage is not so great for public financing. He gave me a brochure entitled, "Role of SGR in the AEC Program," from which he spoke during our discussion and which summarizes the points that he brought out in good fashion.

At 4 p.m. I had a meeting by appointment with Alvin Weinberg. We discussed a number of matters: 1. He said they had been doing some thinking at Oak Ridge about using the now economical large water cooled nuclear power reactors to furnish power for the gaseous diffusion plants. Their calculations show that, if they had a 1000 megawatt electric power reactor for each of the three plants and purchased uranium at \$6 a pound, the cost of highly enriched U-235 would drop to \$5.30 a gram. This, of course, bears on the desalting program. It might make enriched uranium reactors attractive. 2. He said that he thought we were talking about fast breeders too much to the exclusion of thermal breeders in our program. I told him that the BOB had exactly the opposite point of view. 3. He said that the National Institutes of Health seem to be planning to establish major new research centers. They are interested in building the Biology Division at Oak Ridge into such a research center, with the cooperation of the AEC. Kenneth Endicott, Director of the National Cancer Institute has discussed this with Weinberg. He says in anticipation of this, Oak Ridge probably will be requesting more space. 4. He inquired about the status of the nuclear desalting program and I said support for this in the Executive branch is picking up. 5. He is a member of the Subcommittee of the National Academy of Sciences working on answers to the questions on basic research put by the Daddario Committee. He is worried about how agencies like the AEC will be able to put the seemingly required larger proportion of their funds into basic research in the future.

Helen and I had dinner at the Palfrey's in honor of the Wellses' departure for their stay in Vienna.

Wednesday, July 22, 1964 - Germantown

AT 11:10 a.m. I presided over Commission Meeting 2027 (action summary attached).

The Commission tentatively decided to offer the General Manager position to Robert Hollingsworth, Deputy General Manager to DiLuzio, and Associate General Manager to Ink. I saw Hollingsworth and he said that he would agree to a three-year term and would cooperate with the Commission on a reorganization.

At 2:30 p.m. I presided over Commission Meeting 2028 (action summary attached).

The Commission discussed the Salmon shot of Project Dribble (a 5 kt event in Tatum Salt Dome to improve capability of detecting nuclear detonations), scheduled for September, and decided to consider it further in view of the safety and small venting risks involved.

Memorandum

ENCL. BY DOE
NOV 86

TO :

R. E. Hollingsworth, Acting
General Manager

DATE: July 22, 1964

Approved

R. E. Hollingsworth

FROM :

W. B. McCool, Secretary *(initial signed
W. B. McCool)*

Date

SUBJECT:

ACTION SUMMARY OF MEETING 2027, WEDNESDAY, JULY 22, 1964,
11:10 A.M., ROOM A-410, GERMANTOWN, MARYLAND

SEGY: ICB

Commission Business

1. Minutes of Meeting 2022

Approved, as revised.

2. Use of Fermi Atomic Power Plant for AEC-Sponsored
Research and Development

The Commission agreed the Joint Committee should be
informed. (Vinciguerra)

3. AEC 1000/89 - Contract for Operation of CAMM Facility
at Hertford

Approved, as revised. (Scammahorn)

The Commission agreed paragraph 18.a. should be
revised. (Scammahorn)

The Commission requested the public announcement
be revised. (Scammahorn)

4. AEC 357/7 - Extension of Contract with Management
Services, Inc.

Approved, as revised. (Scammahorn)

Mr. Sapirie should be informed of the basis on which
the Commission authorized negotiations. (Scammahorn)

The Commission requested a staff paper be developed
re-examining Commission policy in this area. (Scammahorn)

July 22, 1964

5. AEC 1149/2 - Consolidation of Fuel Fabrication Activities

Approved, as revised. (Baranowski)

The Commission agreed to a one-year extension. (Baranowski)

The Commission requested an appropriate report be prepared for its consideration in approximately six months. (Baranowski)

Information Items

1. House Approval of Omnibus Bill

Noted.

2. Joint Committee Hearings on Pluto

The hearings have been scheduled for Tuesday afternoon, July 28, 1964. Dr. Harold Brown is to be the principal witness. AEC is to be represented. (Erlewine)

3. House Appropriations Committee Hearing on Cost Accounting

The Commissioners are to be kept informed.
(Abbadessa/Erlewine)

cc:
Commissioners

UNITED STATES GOVERNMENT

Memorandum

UNCL. BY DOE
NOV 86

DATE: July 22, 1964

R. E. Hollingsworth, Acting
General Manager

Approved R. E. Hollingsworth

W. B. McCool, Secretary *Original signed
W. B. McCool*

Date _____

SUBJECT:

ACTION SUMMARY OF MEETING 2028, WEDNESDAY, JULY 22, 1964, 2:30 P.M.,
ROOM A-410, GERMANTOWN, MARYLAND

SECY:GF

Commission Business

1. Proposed Visit of Japanese National to ANL

The Commission noted that the visitor's visa would be checked upon his arrival. (Traynor)

The Commission noted that COO and ANL would be notified of the deviation from policy. (Hollingsworth)

The Commission noted that the JCAE would be informally notified of the situation. (Hollingsworth)

Commissioner Ramey requested consideration of the possibility of employing the visitor at the University of Chicago, with permission to visit ANL. (English)

2. AEC 809/30 - Export of Neutron Generators

Approved, as revised. (Wells)

The Commission noted that the comments of Sandia Corporation would be circulated tomorrow. (Wells)

3. AEC 809/81 - Export of Neutron Generator Parts

Approved. (Wells)

4. AEC 1029/30 - Salmon Event - Project Dribble

Discussed.

cc:
Commissioners

Thursday, July 23, 1964 - Germantown

The Commissioners and I met with Frank DiLuzio to offer him the position of Deputy General Manager; he is interested and will let us know. I called Clint Anderson on this (in Albuquerque) and he thinks this would be a fine arrangement.

At 10:15 a.m. I had an appointment meeting with Dr. Henry Smyth. 1. He reiterated his concern regarding the re-election of Sigvard Eklund as Director General of the IAEA. He said that Eklund is very unpopular with the IAEA staff. I said that Commissioner Tape will investigate this during his visit to Vienna next week. A good plan might be to assume the posture that we tend to favor Eklund's reappointment, but we feel that in fairness, some thought should also be given to other possible candidates. 2. He reiterated his concern about how the IAEA is treated at the State Department. Cleveland gives it no attention at all, and he essentially reports to Carl Thomas. I agreed that Hornig and I might work on this situation later in the year, after our return from Vienna, or perhaps after the election. He also wants me to speak to Rabi about the possibility of Rabi's terminating his membership on the SAC, due to the efficiency involved in having the Ambassador to the IAEA (i.e., Smyth) also serve on the SAC. 3. He said that he might go on half-time at Princeton in the fall, thus freeing himself for more time with the IAEA. He mentioned the election and that he might submit a pro forma resignation after the election. If he continues after that time, which he may do, and which I said I hoped he would do, it might be on the basis of contributing even more of his time since he is considering retiring from Princeton at the beginning of the year.

At 11:50 a.m. I presided over Commission Meeting 2029 (action summary attached).

I met with Admiral Rickover to discuss the letter I received from Governor Brown (of California) dated July 22, 1964, saying that the State of California wants an arrangement with the AEC to build, cooperatively, a 500 megawatt, 15 MGD (million gallons per day) desalting plant to pump water from the Feather River over Tehachapi. This looks very good, but will be very difficult to fund with everything else in sight as competition.

At 1 p.m. I had lunch in the Germantown cafeteria with Howard Brown and Arnold Fritsch.

At 1:30 p.m. I left Germantown for the D.C. office.

At 2:15 p.m. I attended a briefing at the White House of several hundred leading business men, with President Johnson, Robert McNamara, Dean Rusk, Adlai Stevenson and others. President Johnson introduced me first among the agency heads present as a Nobel Prize winner, distinguished American and public servant, and a leader of great programs for the peaceful and military uses of atomic energy; most of the terms used were laudatory.

The Commission interviewed Campbell and Holstad, from Richland, for the job of Manager of the Hanford Operations Office.

At 5:05 p.m. I met with William Kobin (National Educational Television), Howard Enders, Harold Mayer (of a commercial firm), and Duncan Clark, Ed Wilber, and Keith Snider (AEC's Division of Public Information), to discuss the proposed film the NET might make for the AEC about our programs. I expressed dissatisfaction with their plans.

UNITED STATES GOVERNMENT

Memorandum

UNCL. BY DOE
NOV 86

TO : A. R. Luedecke, General Manager

DATE: July 23, 1964

Approved _____

A. R. Luedecke

FROM : W. B. McCool, Secretary

Date _____

Original signed
by B. McCool

SUBJECT: ACTION SUMMARY OF MEETING 2029, THURSDAY, JULY 23, 1964, 11:50 A.M.,
ROOM A-410, GERMANTOWN, MARYLAND

SECY: ICB/AJ

Commission Business

1. AEC 935/12 - Development of Heavy Water Moderated Power Reactors
AEC 935/13 - Supplement to AEC 935/12

Approved, as revised. (Pittman)

In authorizing staff to proceed with preliminary negotiations, the Commission emphasized its desire that the Savannah River Laboratory capability be utilized in the program proposed by CE and AI or otherwise.

2. AEC 777/105 - Advanced Converter Reactor Concepts

Discussed.

The Commission agreed staff could proceed with more detailed discussions with Rochester Gas & Electric, Holyoke and Sierra Pacific.

The Commission noted a response to Governor Sawyer's letter would be prepared. (Pittman)

The Chairman suggested the California Proposal be discussed tomorrow. (Pittman/Secy)

Information Items

1. Joint Committee Hearings on Pluto

It was noted an additional executive session had been scheduled for Wednesday, July 29, 1964. Commissioner Ramey will testify. (Erlewine)

July 23, 1964

2. Commissioners' Meeting with Members of the New Jersey Commission on Radiation Protection

To be scheduled for 4:00 p.m., Wednesday, July 29, 1964.
(Price)

3. NTS Event

Noted.

4. Appeal by the Woodside Community

It was noted Woodside's appeal had been placed on the Calendar of the U. S. Circuit Court of Appeals for late October or early November.

5. Reduction of Employees at Y-12

6. Announcement re SLAC Power Line Poles

Noted.

cc:
Commissioners

Helen and I attended a farewell reception given in honor of General Luedecke at the Officers Club at the Bethesda Naval Hospital. John Vinciguerra, Chet Holifield, Craig Hosmer, Al Luedecke, and I spoke. There were hundreds of AEC people in attendance.

Friday, July 24, 1964 - D.C.

At 9:50 a.m. I presided over Information Meeting 400 (notes attached).

I answered (copy attached) Governor Brown's letter saying that his proposal for a dual purpose, seed and blanket reactor will need further study after which he, Udall, and I should discuss it with President Johnson. I saw Udall at a Soviet Embassy reception later and he agreed to this procedure.

I called Hosmer's, Holifield's and also Pastore's assistants to describe our plans for the position of General Manager and Deputy General Manager.

At 11 a.m., Commissioner Palfrey and I met with McGeorge Bundy (of the White House) to explain the possible damage from the Salmon (Vela) shot scheduled for the Mississippi salt dune in September. He agreed we should go ahead with the shot.

At 12 noon I had lunch at the Roger Smith Hotel with Howard Brown, Arnold Fritsch, James Hill, and John Napier. We discussed plans for office operations during my vacation, and also went over plans for operation of the Commission by the Commissioners during my absence.

At 2:50 p.m. I presided over Commission Meeting 2030. The Commissioners discussed the SALMON event - Project DRIBBLE and noted the importance of an effective public information program.

At 3 p.m. I presided over Information Meeting 401 (notes attached).

At 3:15 p.m. I had an appointment meeting with representatives of the City of San Diego--Mayor Frank Curran, Deputy Mayor Ivor deKirby, Councilman Harry Schiedle, and City Manager Thomas W. Fletcher. They wanted to discuss the possibility of building a dual purpose nuclear plant for the generation of electricity and the desalting of water to the extent of 50 million gallons a day in the San Diego area. I told them that the Atomic Energy Commission would be interested in a proposal from a San Diego utility for a cooperative venture along these lines.

At 6:30 p.m. I attended a reception at the Russian Embassy in honor of the Soviet Delegation on Desalting.

Saturday, July 25, 1964 - Shenandoah National Park

The entire family drove to Shenandoah National Park. We stopped for breakfast in the Hot Shoppe in Arlington (just off the Key Bridge on Highway 50) to have breakfast with the Jerry DeGabrieles, the Robert Prices, and Hilma Howser.

We checked into the Skyland Lodge and then spent the day hiking. We went to a campfire program after dinner. We stayed in Evans Cabin.



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INFORMATION MEETING 400

9:50 a.m., Friday, July 24, Chairman's Conference Room, D. C. Office

1. AEC 649/52 - California Proposal for Cooperative Arrangements for Thorium Seed and Blanket Nuclear Central Power Station

To be discussed this afternoon at 2:30. (Secy)

2. Designation of Acting Chairman

3. Chairman's Meeting with Dr. Weinberg, ORNL

The Chairman reported briefly on several matters raised by Dr. Weinberg during their recent meeting.

4. Chairman's Discussion with Dr. Chauncey Starr re Advanced Converter Reactors

5. Chairman's Meeting with Ambassador Henry Smyth

6. Draft Presidential Message to the Third Geneva Conference

The Chairman discussed briefly the draft paper which has been developed in staff meetings with White House and other representatives. Commissioners Ramey and Palfrey will now follow this matter closely with staff and move it to a meeting of the Principals and appropriate discussion with the Joint Committee.

7. Mr. Ramey's Letter to Dr. Homi J. Bhabha re U.S. - Indian Cooperation on Thorium Reactors

8. Large Scale De-salting Plants - Cost Sharing Arrangements

The Chairman noted Kermit Gordon, BOB, has apparently not received the Commission's recent letter and requested a check on its status. Mr. Ramey is following this project closely.

CLASSIFICATION CANCELLED
WITH DELETIONS
BY AUTHORITY OF DOE/OC

REVIEWED BY R. HAMBURG DATE 4/23/86
J. Diaz 7/1/86

9. July 9 Letter from F. H. Panton, British Embassy

Noted.

- ✓ 10. Proposed Letter to Nicholas Johnson, Maritime Administrator

The General Manager will review the proposed letter.

11. General Crowson's July 21 Memorandum on Readiness Tests

Approved, subject to Dr. Tape's review. (Crowson)

12. Proposed Agreement for Cooperation with Brazil

Approved. (Wells)

- ✓ 13. Chairman's Speeches in Geneva, Brussels and Vienna

The Chairman requested circulation for the Commissioners' review. (Vinciguerra)

14. AEC 1029/30 - Salmon Event - Project DRIBBLE

The Chairman and Mr. Palfrey will discuss this matter with Mr. Bundy, White House staff, this morning and the Commission will consider the matter this afternoon at 2:30. (Secy)

- ✓ 15. NASA Planning Report

The Chairman suggested Mr. Ramey follow this matter.

- ✓ 16. N. S. SAVANNAH (See Mr. Price's July 22 Memorandum)

Mr. Hollingsworth said staff would like an opportunity to review this matter prior to a decision. The Commissioners agreed to consider it next week. (DR-GM)

17. AEC 478/62 - Proposal to Exhibit "Atoms-at-Work" in Poland and Czechoslovakia

Approved. (Wells)

OFFICE DIARY

GLENN T. SEABORG

Chr USAEC, 1961-72

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18. Appointment of Deputy Manager, ALOO (See Mr. Vinciguerra's July 23 Memorandum)

For consideration at this afternoon's meeting. (Secy)

19. Participation by USSR National on Unclassified AEC Research at the AEC Computing and Applied Mathematics Center - New York University (See Mr. Wells' July 22 Memorandum)

Approved. (Wells)

20. Proposed Letter to the Joint Committee re GE Testimony

The Commissioners thought the letter should be deferred pending a meeting next week with GE representatives. (Vinciguerra)

21. Designation of Pacific Northwest Laboratory (See Mr. Vinciguerra's July 22 Memorandum)

The Commissioners will consider this matter further. (Vinciguerra)

22. Agenda for the Week of July 27

Approved. (Secy)

23. NTS Events

The General Manager noted [REDACTED] that there are no other events scheduled until August 19.

RECEIVED

24. U.S. Delegation to IAEA Conference in Vienna (See Mr. Wells' July 18 Memorandum)

Approved. (Wells)

25. Films for Geneva Conference

Dr. Tape noted the films will be available for the Commissioners review. (Secy)

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GLENN T. SEABORG
Chr USAEC, 1961-72
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26. Proposed TV Film on AEC

The Chairman noted his meeting with TV representatives.

PRESENT

Dr. Seaborg
Mr. Ramey
Mr. Palfrey
Dr. Tape
Dr. Bunting
General Luedecke
Mr. Hollingsworth
Mr. Vinciguerra
Col. Hill
Dr. Pittman*
Mr. Brown*
Mr. McCool

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Commissioners
General Manager
General Counsel
Secretary

*Partial Attendance

W. B. McCool
Secretary

July 24, 1964

UNCL. BY DOE
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Dear Sir:

I appreciate receiving your letter of July 22, 1964 in which you propose a cooperative arrangement with the Commission for a thorium seed-blanket reactor plant of about 525,000 electrical kilowatts to supply power to the pumping plants of your state water project.

Specifically you propose that the State fund 80% of the construction cost of this nuclear central station with the remaining 20% provided by the Commission to cover necessary design assistance and first time charges; further, you propose that the Commission furnish the first nuclear core and that the State reimburse the Commission for the energy produced so the total cost of power to the State is no greater than 3.5 mills per kilowatt hour at your Tehachapi pumping station load center over the life of this core.

The Commission concurs that the cooperative project you propose would be an important step in the conservation of our natural fuel and water resources and would be mutually beneficial to the State of California and to the Nation. We also believe it would be prudent to design and locate this nuclear plant so that in addition to providing electric power for your water project it can also furnish steam for the 15 million gallon per day desalination plant you presently have under consideration.

In your letter you recognize there are a number of points on which detailed discussions are still necessary. There also remain points we feel require clarifications. Accordingly, we have asked Admiral Rickover to explore with Director Harne further details of a cooperative arrangement. We shall also wish to continue our exploration begun with the Department of Interior earlier this year concerning the cooperative role of the Department. As discussed at our meeting in Secretary Udall's office on January 10, 1964, we

The Honorable Edmund G. Brown

July 24, 1964

may thereafter wish to talk jointly to President Johnson and Secretary Udall regarding this project.

Cordially,

(Signed) Glenn T. Seaborg

Glenn T. Seaborg

The Honorable Edmund G. Brown
Governor of California
State Capitol
Sacramento 14, California

cc: Honorable Chet Holifield
House of Representatives

FRITSCH:lab
Dispatched 7-24-64, 6:30 p.m.

Distribution:
Commissioners
Secretary
General Manager
General Counsel
Director of Regulation
Director, Division of Reactor Development
Director of Congressional Relations
Manager, Naval Reactors, DRD



UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON, D.C. 20545

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INFORMATION MEETING 401

3:00 p.m., Friday, July 24, 1964 - Chairman's Conference Room, D. C.

1. Geneva-Vienna Conference Planning

The Chairman suggested it would be desirable for the Secretary to plan to be available in Europe during portions of the Geneva and Vienna Conferences. (Secy)

2. Appointment of Deputy General Manager Albuquerque Operations Office (see Mr. Vinciguerra's July 23 Memorandum)

Approved. (Tackman)

3. Exchange of Gas Centrifuge Information with the United Kingdom

The Chairman and Dr. Tape noted they had read the paper and thought it might be desirable to continue the exchange for the year remaining under the existing Agreement for Cooperation. The paper is scheduled for consideration on Monday.

4. Consideration of WHETSTONE Events

In response to Mr. Hollingsworth's query, the Chairman thought the schedule should be discussed in early August and when Dr. Tape is here. (GM)

5. Chairman's Meeting with San Diego Officials This Afternoon

The Chairman said he had met briefly with San Diego representatives who had indicated their interest in a desalting project. He said he had assured them the Commission would be pleased to review a proposal if one can be developed.

6. Joint Committee Executive Session Hearing on the Agreement for Cooperation with NATO, 10:00 a.m., Thursday, July 30

Mr. Palfrey will testify. (Erlewine)

7. AEC 649/52 - California Proposal for Cooperative Arrangements for Thorium Seed and Blanket Nuclear Central Power Station

The Commissioners discussed the proposed letter to Governor Brown and approved a revised version. A copy of the letter will be transmitted to the Joint Committee. (Pittman-Erlewine)

8. Letter to the Sierra Pacific Power Company re Spectral Shift Power Reactor Project

Dr. Pittman suggested, and the Commissioners agreed, that the letter should not indicate consideration of this project in conjunction with Holyoke and the Rochester Gas and Electric proposals. Alternatively, they may be informed that the Commission will look further at the proposal in light of additional analyses, including the GAC study. (Pittman)

9. Discussion of Advanced Converter Reactor Concepts

PRESENT

Dr. Seaborg
Mr. Palfrey
Mr. Ramey
Dr. Tape
Dr. Bunting

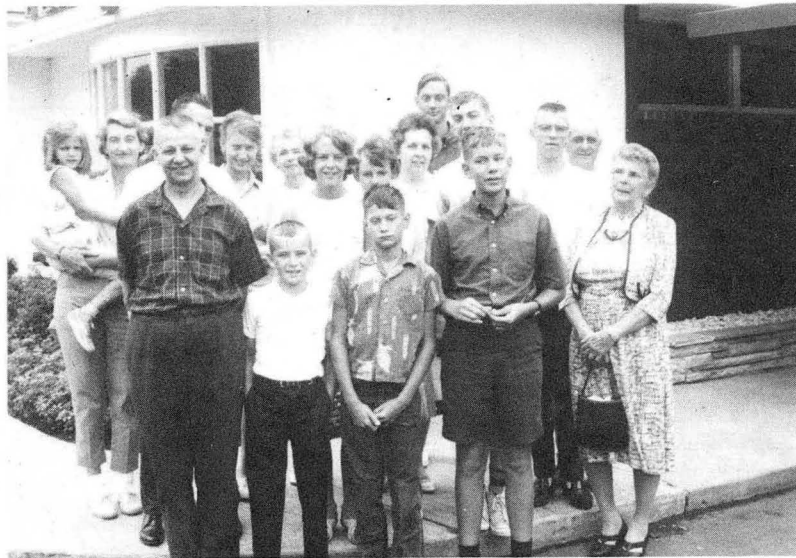
Mr. Hollingsworth
Dr. Fritsch
Mr. McCool
Dr. Pittman*

DISTRIBUTION

Commissioners
General Manager
General Counsel
Secretary

*Attendance for latter part of the meeting.

W. B. McCool
Secretary



Hot Shoppes Restaurant, Arlington, Virginia, July 25, 1964

Front: L to R: Robert Price, Chris De Gabriele, Eric and Steve Seaborg,
Hilma Howser

Middle: L to R: Pete De Gabriele, Roberta Price, Carolyn De Gabriele,
Louise Price, Dave Seaborg, Greg De Gabriele

Back: L to R: Helen (holding Dianne), Lynne Seaborg, Viola De Gabriele,
Pete Seaborg, Jerry De Gabriele

Sunday, July 26, 1964 - Shenandoah National Park

We had breakfast, buffet style, at the Skyland Lodge.

We went hiking and attended a campfire program after dinner.

Monday, July 27, 1964 - Buena Vista, Virginia

We drove along Skyline Drive and the Blue Ridge Parkway to Highway 60 where we turned west to Buena Vista. We checked into the Barnes Motel in Buena Vista.

Dave had an infected foot (heel) that needed attention so we went to the Medical Center to have it checked by a doctor there.

We visited the campus of Washington and Lee University, including the Lee Memorial Chapel which contains Robert E. Lee's office as he left it. We visited Lee's tomb on the campus and the tomb of "Stonewall" Jackson and also the tombs of his wife and family in the cemetery. We also visited Virginia Military Institute (VMI). Helen and Dave didn't make these visits because of Dave's sore foot.

[At 2:40 p.m. Commission Meeting 2031 was held (action summary attached).]

Tuesday, July 28, 1964 - Shenandoah Valley

We drove along the Blue Ridge Parkway, stopping at the shops at Peaks of Otter, to Roanoke, Virginia, and then took Highway 220 to Martinsville, Virginia, where we checked into the Fairystone Motel (Rooms 30 and 31).

[At 11 a.m. Commission Meeting 2032 was held (action summary attached).]

[My biweekly report to the President was sent today (copy attached).]

Wednesday, July 29, 1964 - Stuart, Virginia - Blowing Rock, North Carolina

We visited the Fairy Stone State Park in Stuart, Virginia, where we searched for and found a number of fairy stones. Steve was particularly adept at spotting them. We hiked the Iron Mine Trail, which passed many old iron mines, charcoal pits, etc.

We then drove back to the Blue Ridge Parkway and on to Blowing Rock, North Carolina, where we checked into the Hemlock Motel (a large home that has been converted into a motel).

[At 11:20 a.m. Commission Meeting 2033 was held (action summary attached).]

Thursday, July 30, 1964 - Blowing Rock, North Carolina - Asheville, North Carolina

We visited Grandfather Mountain where we walked on the "Mile High Swinging Bridge" (elevation 5,305 feet), except Dave (who was encumbered by his sore foot) and Helen (who stayed with Dave). We took a number of pictures here.

We then continued south on the Blue Ridge Parkway to Asheville, North Carolina, where we checked into the Heart of Asheville Motel (Rooms 211 and 212).

UNITED STATES GOVERNMENT

Memorandum

UNCL. BY DOS
NOV 86

TO : R. E. Hollingsworth, Acting
General Manager

DATE: July 27, 1964
Approved _____
R.E. Hollingsworth
Date _____

FROM : W. B. McCool, Secretary

SUBJECT: ACTION SUMMARY OF MEETING 2031, MONDAY, JULY 27, 1964, 2:40 P.M.,
ROOM 1113-B, D. C. OFFICE

*Original signed
W. B. McCool*

SECY:AJ

Commission Business

1. AEC 25/307 - Proposed Air Force Safety Rules

Approved. (Crowson)

Commissioner Ramey requested verification that appropriate background investigations have been conducted. (Crowson)

2. AEC 25/308 - Proposed Air Force Safety Rules

Approved. (Crowson)

3. AEC 1038/39 - Increased Costs for LaCrosse Boiling Water Reactor

The Commission had no objection to transmittal of the letter to the JCAE. (Pittman)

If the statutory 15 percent overrun limitation is exceeded, the matter will be resubmitted for Commission consideration. (Pittman)

4. AEC 132/71 - Report of the Division of Inspection

Discussed. (Nelson)

The Commission noted the desirability of keeping the Commission informed on such matters as LRL travel voucher violations.

(Vinciguerra)

5. AEC 782/52 - Cooperation with the U.K.

Approved, as revised. (Walls)

6. Proposed Contract for Security Services at NTS

The Commission had no objection to your recommendation.

July 27, 1964

Other Business

1. Senate Mark-up of FY 1965 Appropriations Bill

You said appropriate staff would be available for the Wednesday, July 29, 1964 hearing.

2. Discussion with JCAE Staff re PRDC Proposal for Fermi Reactor

If a briefing for the JCAE cannot be scheduled, a letter will be sent. (Pittman/Erlwine)

3. Status of Cost Reduction Program

The Commission noted a draft of the next report should be available for Commission review during the week of August 24, 1964.

(Abbadessa/Vinciguerra)

cc:
Commissioners

UNITED STATES GOVERNMENT

Memorandum

TO : R. E. Hollingsworth, Deputy
General Manager

FROM : W. B. McCool, Secretary

SUBJECT: ACTION SUMMARY OF MEETING 2032, TUESDAY, JULY 28, 1964, 11:00 A.M.,
ROOM 1113-B, D. C. OFFICE

Original Signed
W. B. McCool

UNCL. BY DOE
NOV 86

DATE: July 28, 1964

Approved _____
R. E. Hollingsworth

Date _____

SECY:JCH

Commission Business

Employment of Japanese National at ANL

The Commission had no objection to your recommendation regarding the sequence of notification.

Mr. Ramey suggested discussion with University of Chicago Management. (Vinciguerra)

Other Business

1. JCAE Release of Mr. Sporn's Updated Statement on Nuclear Power

Staff is reviewing the statement and will prepare a brief AEC announcement. (Pittman/Clark)

2. Commissioners' Meeting re Israeli Desalting Proposal

Scheduled for 8:45 a.m., July 30, 1964.

3. N. S. SAVANNAH

Noted for consideration tomorrow or Thursday.

cc:
Commissioners

July 28, 1964

UNCL. BY DOE
NOV 86

PERSONAL AND CONFIDENTIAL

Bi-Weekly Report to the President

1. Nuclear Criticality Accident

A nuclear criticality accident occurred Friday evening, July 24, at United Nuclear Corporation fuel recovery plant at Wood River Junction, Rhode Island. The accident resulted in the death of a company employee. The information received from AEC inspectors at the plant confirms that there was no public hazard as a result of the accident. The work was being performed under a license from the Commission and a complete investigation will be made by the Commission. The findings will be made public when they are completed.

2. ICAE Hearings

- a. The first, to be held July 28-29, will be to hear from AEC, Department of Defense, and contractor witnesses on the PLUTO program. Indications are that the hearings are not intended as an attempt to revive the PLUTO program, but rather to assemble a history of the project, including accomplishments and technological developments.
- b. The second hearing is scheduled for July 30 on the PLUTO Agreement. Testimony will be received from AEC, Department of Defense and State Department witnesses. Some time later this year the Committee expects to hold open hearings on the same subject.

3. International Activities

- a. The Tenth Annual Report of the United Kingdom's Atomic Energy Authority (UKAEA) was released on July 16 at a press conference in London. At the press conference, Sir William Penny, Chairman of the UKAEA stated that the UKAEA would like to modify the Capenhurst diffusion plant for the economic production of slightly enriched uranium.

- b. The West German firm of Kernkraftwerk Baden-Muerttenburg Planungs GmbH (KMP) has awarded a contract to build a 202 MW pressurized water reactor using 3 percent enriched uranium, at Obrigheim on the Neckar River, to the Siemens-Schuckertwerke/Westinghouse Group. Construction will begin in September 1964, with the completion date set for the spring of 1967.
- c. The International Atomic Energy Agency's Desalting Panel will meet in Vienna on September 8, 1964. The meeting will be attended by Commissioner Ramey.
- d. Commissioner Tapp and five other senior U.S. scientists are participating in the International High Energy Accelerator Conference to be held in Vienna July 29-30 under sponsorship of the IAEA. Scientists from the U.S.S.R. and Western Europe are also participating. Possible international cooperation in the design and construction of future high energy accelerators will be discussed, continuing the discussions on this subject which were held last year at Dubna.

Memorandum

UNCL. BY DOE
NOV 88

TO : R. E. Hollingsworth, Deputy
General Manager

DATE: July 29, 1964

FROM : W. B. McCool, Secretary

Approved R. E. Hollingsworth

Date _____

Original signed
W. B. McCool

SUBJECT: ACTION SUMMARY OF MEETING 2033, WEDNESDAY, JULY 29, 1964, 11:20 A.M.,
ROOM 1113-B, D. C. OFFICE

SECY:ICB

Commission Business

1. N. S. SAVANNAH

Mr. Conway is to be informed of maintenance status.

A technical report on the recent European trip is to be circulated.

The Commission noted Mr. Price's recommendation that future voyages be made under the safety criteria of the June 4 memorandum and authorization pending further staff analysis of the calculations. (General Manager/Dir. of Regulation)

2. Fatal Accident at United Nuclear Corporation

Mr. Price reported on his telephone conversation with Mr. Conway.

It was noted a statement is in preparation to be used in response to inquiries.

Information Items

1. Mr. Price's July 23, 1964 Memorandum re San Onofre License

To be discussed later.

2. Extension of Employment of UK Scientist at IASL

Approved, subject to the concurrence of Commissioner Palfrey.

3. Proposed Letter to the JCAE re HR 10687

To be checked with individual Commissioners by noon tomorrow. (Vinciguerra)

July 29, 1964

4. Mr. Vinciguerra's July 28 Memorandum to the Commissioners re Proposed Economic Impact Study

Staff is to review the matter with Commissioner Ramey. (Ohlke)

5. Letter from Public Service Corporation of Colorado re Power for Rocky Flats

6. Meeting with COO Officials re Employment of Aliens

7. PSAC Request for August 5 SNAP Briefing

The Commission is to be kept informed. (Vinciguerra)

8. Personnel Matter

The Commission had no objection to your recommendation.

9. Commissioner Ramey's Conversation with Senator Gore

Staff is to review with Mr. Ramey background on Hanford and community assistance information which the Senator requested. (Ohlke)

cc:
Commissioners



Grandfather Mountain, North Carolina, July 30, 1964
L to R: Eric, Stephen, Dianne, Peter and Lynne Seaborg

Friday, July 31, 1964 - Asheville, North Carolina

We, except Helen, visited the Thomas Wolfe home.

We visited Bat Cave and Chimney Rock (which we went up in an elevator). We had dinner at a wonderful restaurant, "Thorpe's Cast Iron Cookery," run by several old ladies, near Chimney Rock. We had a good view of Hickory Nut Falls.

[At 10:30 a.m. Information Meeting 402 was held (notes attached).]



ATOMIC ENERGY COMMISSIC
WASHINGTON, D.C. 20545

COPY NO. _____
July 31, 1964

UNCL. BY DOE
NOV 86

INFORMATION MEETING 402

10:30 a.m., Friday, July 31, Chairman's Conference Room, D. C. Office

1. Annual Report to the Federal Radiation Council (See Mr. Thompkins' July 29 Letter)

Mr. Ramey suggested a report be circulated for the Commissioners' review this weekend. An extension of the August 1 deadline should be explored. (Hill-DR)

2. Nuclear Tests (See Mr. Hollingsworth July 30 Memorandum)

The Commissioners will review the letter to the White House with the proposed statement and consider the desirability of an informal check with White House staff. (GM)

3. Symposium on the Physics and Chemistry of Fission (See Mr. Hollingsworth's July 30 Memorandum)

Mr. Ramey suggested Dr. Tape review the proposal. (GM)

4. Letter to the Joint Committee re H. R. 10687

Noted for transmittal today. (Hill)

5. WHETSTONE I (See General Crowson's July 27 Memorandum)

Noted for Commission review in early August. (Hill-Secy)

6. Special Test (See General Crowson's July 24 Memorandum)

The letters have been dispatched to the Secretary of State and the Secretary of Defense.

7. Pending Contractual Matters (July 24 Report)

Noted. The Commissioners discussed briefly with Mr. Hollingsworth the status of staff discussions with PRDC.

8. AEC Directive re Procedures for Programmatic Funding Changes

Mr. Hollingsworth recalled the discussions with the Joint Committee regarding agreed procedures for program changes within the revised authorization language. The Directive to staff is to be circulated for the Commissioners' review. (GM)

9. Public Information Policy re Test Readiness Program

In response to Mr. Hollingsworth's query, the Commissioners suggested the proposed policy be circulated for review and discussion on Monday when Dr. Tape returns. (GM)

10. Presidential Message for the Third Geneva Conference

Mr. Ramey discussed briefly his conversation with Mr. Douglass Cater, White House staff, regarding the proposed statement by the President on fuel leasing assistance for power reactors in developing nations. Mr. McGeorge Bundy later called Mr. Ramey to say that the President would probably not wish to make the statement as now drafted. White House staff is now working on a draft. (Hill)

11. July 30 Letter to Mr. John Conway, JCAE, with AEC Comments on Mr. Philip Sporn's Statement to the JCAE re Nuclear Power

Mr. Ramey said the Joint Committee will probably release the Sporn statement and the AEC comments today.

12. Proposed Letter to the Joint Committee re Gas Centrifuge

Mr. Ramey discussed briefly the revised letter which will be transmitted today. (Hill)

3. N. S. SAVANNAH

Mr. Hollingsworth noted the SAVANNAH had been authorized to depart Hoboken, New Jersey, last night.

PRESENT

Mr. Ramey Mr. Hollingsworth
Dr. Bunting Col. Hill
 Mr. McCool

DISTRIBUTION

Commissioners
General Manager
General Counsel
Secretary

W. B. McCool
Secretary

Saturday, August 1, 1964 - Ashville, North Carolina

We all visited the Thomas Wolfe home in Ashville. We had dinner in Horne's Restaurant.

Helen and Lynne went to the Thomas Wolfe Playhouse in the evening and saw the play, "The Disenchanted."

We again spent the night in the Heart of Ashville Motel.

Sunday, August 2, 1964 - Gatlinburg, Tennessee

We drove to Cherokee, Tennessee, where we had lunch. We had a look at Ounaluftee Indian Village. We then drove to Newfound Gap and as we drove down toward Gatlinburg, we saw a "Bear Jam" (that is, a group of bears feeding along the side of the road, which held up traffic as people viewed them).

We checked into Watson's Motel in Gatlinburg (first Rooms 8 and 9, and then Rooms 23 and 24).

Monday, August 3, 1964 - Gatlinburg, Tennessee

We took a hike to Laurel Falls, starting at Fighting Creek Gap.

Information Meeting 403 was held at 10:05 a.m. The Commissioners acted on the following: 1. Space Technology Panel Briefing--Commissioner Tape noted Hornig's letter of July 31st to Ramey and asked that arrangements be made for the briefing; 2. Hollingsworth noted briefly a call from Staats, BOB, and the need for discussion with Commissioners Ramey and Tape regarding personnel ceilings. (This discussion was held immediately after the meeting.)

At 10:15 a.m. Regulatory Information Meeting 126 was held (notes attached).

Tuesday, August 4, 1964 - Gatlinburg, Tennessee

We took a hike in the Cherokee Orchard area.

Wednesday, August 5, 1964 - Gatlinburg, Tennessee

We drove to Alum Cave Parking Area and hiked along Alum Cave Creek under Arch Rock and on to Alum Cave Bluffs where we had a picnic lunch.

Helen and Lynne then hiked on up to the top of Mt. Le Conte while the rest of us hiked back to our car and drove back to our motel. Helen and Lynne joined us for dinner at a restaurant in Gatlinburg after they hiked down from Mt. Le Conte (16 miles round-trip hike).

Thursday, August 6, 1964 - Gatlinburg, Tennessee

We all drove to Cades Cove and visited the reconstructed area, where we took pictures. We saw the Oliver House, the Myers barn and the Cable corn mill.

Pete and I took a rather long hike, starting at the Cades Cove general area. We talked about his decision to attend Harvard.



UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON, D.C. 20545

UNCL. BY DOE
NOV 86

COPY NO. 2
August 4, 1964

REGULATORY INFORMATION MEETING 126

10:05 a.m., Monday, August 3, Chairman's Conference Room, D. C. Office

1. Criticality Accident at United Nuclear Corporation Recovery Facility

Mr. Price reviewed the facts as developed to date. He stated that the composition of the Committee of Experts referred to in his memorandum of July 31, 1964, to the Commissioners had been changed to the following: Herbert Kouts, Chairman (in place of David B. Hall); Richard L. Doan; Wayne C. Bills; Warren E. Winsche (in place of Floyd Culler); Hugh Paxton (in place of Clarence Schuske); and Marvin Mann. Mr. Price would expect the Committee to be able to prepare a preliminary report within several weeks. Commissioner Tape emphasized the importance of determining the facts and reaching conclusions so that they might be recorded appropriately in a report. He also stressed the importance of getting appropriate information to the five licensed scrap recovery firms. It was noted that Dr. Mann will be visiting these firms for detailed discussions within the next two to three weeks. (DR)

2. Federal Radiation Council Report

Commissioner Tape reported briefly on Commissioner Bunting's comments and indicated that it would be appropriate to dispatch the report. (Hill)

3. Kansas State Agreement

Mr. Price noted proposed publication in the Federal Register and requested scheduling of the agreement for Commission approval, if possible, September 18. (Secy)

4. Federal Power Commission Report

Mr. Price reported that his staff had been asked informally by Mr. Blum of FPC to review a comprehensive FPC report which Mr. Swidler was anxious to publish without delay. Dr. Beck stated that

the 15th chapter covering nuclear power was very negative in tone and that he had not been successful in getting revisions he felt desirable. Accordingly, he had asked Dr. Pittman to inquire into the matter with FPC. Commissioner Tape suggested Commissioner Ramey might wish to call Mr. Swidler. (Pittman)

PRESENT

Dr. Tape
Mr. Price
Mr. Hollingsworth
Dr. Beck
Mr. Mann
Mr. Schur
Col. Hill
Mr. Yore
Mr. Hobbs

DISTRIBUTION

Commissioners
Director of Regulation
General Counsel
Secretary

F. T. Hobbs
Acting Secretary



Cades Cove, Great Smokies Mountains, Tennessee, August 6, 1964

Lynne, Eric, Peter, Dianne, David and Stephen Seaborg

Friday, August 7, 1964 - Gatlinburg, Tennessee

We drove the one-way Cherokee Orchard-Roaring Fork Self-guiding Motor Nature Trail (some ten miles long). We passed several pioneer farmstead buildings, the Ephraim Bales Place and the Old Tub Mill along the way.

At 4 p.m. Information Meeting 404 was held (notes attached).

Saturday, August 8, 1964 - Gatlinburg, Tennessee; Greeneville, Tennessee

We left Gatlinburg, then drove to Sevierville where we took Highway 411, off to the right, and drove on to Greeneville, Tennessee. Here we visited the home and tailor shop of President Andrew Johnson (Andrew Johnson National Monument). We also visited the Davy Crockett Birthplace Memorial near Greeneville at Limestone and took pictures there. We saw the Marker at Limestone inscribed, "On this spot Davy Crockett was born August 17, 1786."

We stopped at the Visitor's Information Center at Bluefield, West Virginia. From here we walked out to an area with a magnificent view. We didn't take a ride on the interstate little railroad (Virginia and West Virginia) because of the long wait required.

We drove on to White Sulphur Springs, West Virginia, where we checked into the Village Motel. We visited the famous Greenbrier Hotel where Sam Snead served as golf pro. We visited Organ Cave near White Sulphur Springs.



UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON 25, D.C.

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August 10, 1964

UNCL. BY DOE
NOV 86

INFORMATION MEETING 404

4:00 p.m., Friday, August 7, 1964, Chairman's Conference Room, D.C. Office

1. Test Readiness (See General Crowson's July 27 Memoranda, Mr. Hollingsworth's July 31 Memorandum and AEC 1130/9)

The Commissioners approved the proposed letter to Mr. Bundy contingent upon completion of coordination with DOD and the White House. The Director of Public Information will coordinate with DOD following which contact with the White House will be considered. (Crowson-Clark-Hill)

2. WHETSTONE I Test Series

The Commissioners discussed the series as presented in General Crowson's memorandum of July 27 and his memorandum of the same date on ALVA taking the following actions: [REDACTED] approved; CANVASBACK, approved; ALVA, approved, ~~DELETED~~ contingent upon review by Dr. Seaborg; HADDOCK, approved; [REDACTED] approved, noting Col. Wolfe's indication that the proposed date had been changed [REDACTED] GUANAY, approved; FOREST, approved; ROUGH, approved; [REDACTED] ~~DELETED~~ noted current status of processing, to be approved at a later date. (Crowson)

3. Designation of the "Pacific Northwest Laboratory" (See Mr. Vinciguerra's July 22 and July 29 Memoranda)

Approved, subject to further review by Commissioner Ramey. (Vinciguerra)

4. IAEA Symposium on Pulsed Neutron Research, Karlsruhe, Germany, May 10-13, 1965 (See Mr. Hollingsworth's August 4 Memorandum)

Approved.

The Commissioners requested that decisions on AEC participation in foreign symposia such as this be made in the future by the General Manager and submitted for the information of the Commissioners.

CLASSIFICATION CANCELLED
WITH DELETIONS
BY AUTHORITY OF DOE/OC
REVIEWED BY [Signature] 7/1/86
DATE

[Signature] 7/1/86

Establishment of Ad Hoc Committee to Review Program at the Puerto Rico Nuclear Center (See Mr. Hollingsworth's August 3 Memorandum)

Noted. In response to Dr. Tape's observation that some external participation in the Committee might be useful, Mr. Hollingsworth reported that he was exploring this with the Rockefeller Foundation. (Wells)

6. Reprogramming Actions and Related Reporting to the JCAE (See Mr. Hollingsworth's July 31 Memorandum)

The Commissioners approved the proposed Immediate Action Directive contingent upon revisions to exclude the examples of "new items" as given in the second paragraph of page 2 and the handling of this aspect of the matter by means of a separate budget instruction. (Abbadessa)

7. PRDC

Messrs. Hollingsworth and Erlewine reviewed the status of coordination with JCAE. The Commissioners requested preparation of an appropriate letter to the JCAE providing the necessary information and the subsequent submission of a report on the need for a fast reactor test facility. (Erlewine)

8. Personnel Matters

9. Operating Procedures

Discussed briefly; to be considered further at a later date. (GM)

10. Proposed Letter to the Secretary of Defense re France and Turkey

Approved, subject to review by Commissioners Tape and Ramey. (Hill)

11. B&W Proposal on Advanced Marine Demonstration Reactor (AMDR) B&W Proposal 30-3009 (See Mr. J. W. Landis' August 1 Letter)

Colonel Hill noted receipt of the subject proposal and that it had been referred to the General Manager for appropriate action. The Commissioners requested a brief summary of the three proposals received on the maritime reactor. (Pittman)

Agenda for the Week of August 10

Approved, as revised. (Secy)

PRESENT

Mr. Palfrey
Mr. Ramey
Dr. Tape
Mr. Hollingsworth
Mr. Vinciguerra
Mr. Schur
Mr. McCarthy*
Mr. Erlewine*
Col. Wolfe*
Mr. Anderson*
Col. Hill
Mr. Hobbs

DISTRIBUTION

Commissioners
General Manager
General Counsel
Secretary

F. T. Hobbs
Acting Secretary

*Partial Attendance

Sunday, August 9, 1964 - Cass, West Virginia; Green Bank, West Virginia

We drove to Cass, West Virginia, where we found the Cass Scenic Railroad closed for the day. We visited the Wildlife Museum in Cass depot.

We then drove on to Green Bank where we took part in a conducted tour of the National Radio Astronomy Observatory.

We then drove on to the Pocahontas Motel (where we checked in) beyond Durbin, at Cheat Mountain. We took a hike to Gaudineer Knob Tower (elevation 4,445 feet) in Monongahela National Forest. Near here, the younger children shared some supper with some picnickers.

We returned to the Pocahontas Motel, played with Patsy, the three-legged fawn, and had dinner.



Pocahontas Motel, Monongahela National Forest, West Virginia, August 9, 1964
L to R: Patsy (deer), David and Dianne Seaborg with Suki

Monday, August 10, 1964 - Riverton, West Virginia; Staunton, Virginia

We drove up to Seneca Caverns in Riverton, West Virginia, and stopped for a visit.

We drove to Staunton, Virginia, where we visited the birthplace of President Woodrow Wilson.

We spent the night in the Rocket Motel in Staunton.

Tuesday, August 11, 1964 - New Market, Virginia

We drove to New Market, Virginia, where we had lunch, after attempting to visit Shenandoah National Park which was prevented due to very heavy fog. We visited the site of the Civil War Battle of New Market (May 15, 1864) where boys (18-20 years) from Virginia Military Institute (VMI) fought so heroically as confederates under General Breckinridge.

We then drove back to our home in Washington, D.C.

Wednesday, August 12, 1964 - Home

I worked at home reading a tremendous stack of AEC papers, signing letters, answering mail, etc.

At 11:05 a.m. Commission Meeting 2034 was held in my absence (action summary attached).

At 2:50 p.m. Commission Meeting 2035 was held in my absence (action summary attached).

Thursday, August 13, 1964 - Home

I worked at home on AEC papers, etc.

At 9:55 a.m. Regulatory Information Meeting 127 was held in my absence (notes attached).

At 10 a.m. I called Maritime Administrator Nicholas Johnson. I returned his call and he told me he is leaving for Europe this weekend. We discussed several things: 1. Claims from New York Ship Building that they are up against the anti-deficiency statute. Alternate actions: a. they agree to much less; b. AEC pay some; c. Maritime goes to Congress for supplemental. There is \$3 or \$4 million at issue. Maritime has \$2-1/2 million which means they are short \$150,000 to \$1,020,000 which they would need from the AEC. I told him I would get him an answer by tomorrow. The total is \$33 or \$34 million. 2. Status of Joint Group. Maritime feels there is some purpose to continuing this group. I said I would look into this. 3. Problem of future of NS Savannah. Also, problem of future research on nuclear power for merchant ships. Johnson is not convinced of economic future--principal problem is manning. All of \$10 million R&D goes into nuclear power plants. They will have to curtail Savannah operations.

At 10:30 a.m. Information Meeting 405 was held in my absence (notes attached).

Friday, August 14, 1964 - Home

I worked on AEC papers, etc, at home.

Memorandum

FROM : R. E. Hollingsworth, General Manager DATE: August 12, 1964
 Approved _____
 F. T. Hobbs, Acting Secretary *Original signed by F. T. Hobbs* Date _____
 R. E. Hollingsworth

SUBJECT: ACTION SUMMARY OF MEETING 2034, WEDNESDAY, AUGUST 12, 1964,
 11:05 A.M., ROOM A-410, GERMANTOWN, MARYLAND

SECY:AJ

Commission Business

1. AEC 720/158 - Proposed Exception to AEC Pricing Policy
 Approved, as revised. (Keto)
2. AEC 1157 - Loan of Heavy Water to Spain for the DON Reactor Project
 Approved. (Kratzer)
3. AEC 994/20 - Transfer of Commercial AEC Radioisotope Production and Distribution Activities to Private Industry

Approved, as revised, and subject to Commission review of the revised language for the first paragraph on page 48 of AEC 994/20. (Fowler)

The Commission requested the Committee on Isotope Production and Distribution be notified of the Commission decision prior to publication in the Federal Register. (Fowler)

4. AEC 958/14 - Claim by Puerto Rico Water Resources Authority

The Commission instructed staff to negotiate with PRWRA in accordance with the discussion at the Meeting.
 (Vinciguerra)

cc:
 Commissioners

UNITED STATES GOVERNMENT

Memorandum

UNCL. BY DOE
NOV 86

R. E. Hollingsworth, General Manager

DATE: August 12, 1964

Approved

R. E. Hollingsworth

FROM :

F. T. Hobbs, Acting Secretary

Date

*Original signed by
F. T. Hobbs*

SUBJECT:

ACTION SUMMARY OF MEETING 2035, WEDNESDAY, AUGUST 12, 1964, 2:50 P.M.
ROOM A-410, GERMANTOWN, MARYLAND

SECY:GF

Commission Business

1. AEC 651/4 - Selection of Operating Contractor for Boron-10 Plant

Discussed.

The Commission selected NUMEC to operate the Model C Boron-10 Plant, and authorized negotiations to proceed. (Bloch)

2. AEC 337/43 - Tarapur Atomic Power Station Supply Contract

Approved. (Kratzer)

The Commission noted that the action would not serve as precedent for future contracts. (Kratzer)

3. AEC 843/29 - Control of Private R&D

Discussed.

The Commission had no objection to discussions with the AIF. (Quinn)

The Commission requested rescheduling following further review of Appendix "A". (Secretary)

4. AEC 843/28 - Grace Company and Electro-Nucleonics Proposal

Deferred.

5. AEC 645/5 - Acquisition of Additional Land at Brookhaven

Deferred.

6. AEC 89/18 - Revision to Procedures re Employment of Non-Soviet Bloc Aliens

Deferred.

7. Briefing on Computer Services

Rescheduled for 11:00 a.m., August 13, 1964, Room 1113-B,
D. C. Office.

cc: Commissioners



UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON, D.C. 20545

UNCL. BY DOE
NOV 86

COPY NO. 2
August 13, 1964

REGULATORY INFORMATION MEETING 127

9:55 a. m., Thursday, August 13, 1964 - Chairman's Conference Room, D. C. Office

1. Report on United Nuclear Corporation Incident - Draft Preliminary Statement, and United Nuclear Corporation (Mr. Price's August 12 Memoranda)

The Commissioners noted Mr. Price's plan to meet with United Nuclear Corporation representatives later in the morning and reviewed the proposed preliminary public statement. The Commissioners requested that the proposed statement be revised, particularly so that the first paragraph would give appropriate emphasis to the tentative nature of the information contained in the announcement. Following appropriate revision today, the statement will be circulated by the Director of Regulation to the Commissioners for clearance. (DR)

2. Proposed Additional Condition for Construction Permit for San Onofre Reactor, Docket No. 50-206 (Mr. Price's July 23 Memorandum)

Approved.

3. Meeting with National Coal Policy Conference, Inc., and National Coal Association - August 17, 1964 (Mr. Price's August 12 Memorandum)

In lieu of the course of action proposed in Mr. Price's memorandum, the Commission requested announcement of the proposed hearing, arrangement of such pre-hearing conferences as might be desirable after the expiration of the 90-day waiting period, such pre-hearing conferences to be open to the public. -

PRESENT

Dr. Tape
Mr. Palfrey
Mr. Ramey

Mr. Price
Dr. Mann
Mr. Hollingsworth
Mr. Vinciguerra
Mr. Hennessey
Col. Hill
Mr. Hobbs

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Commissioners
Director of Regulation
General Counsel
Secretary

F. T. Hobbs
Acting Secretary

081

INFORMATION MEETING 40510:30 a.m., Thursday, August 13, 1964 - Chairman's Conference Room, D. C. Office1. Request of United Nuclear Corporation (Mr. Vinciguerra's August 10 Memorandum)

Discussed. The Commission requested that the matter be resolved, if possible, through the use of an independent consultant who would advise on the technical aspects of the problem, and that the legal aspects of the matter be coordinated with the General Counsel.
(Faulkner-Hennessey)

2. Presidential Statement to Third International Conference - Geneva

Reviewed and revised, subject to further review by the Chairman. (Hill)

3. Pending Contractual Matters (July 31 and August 7 Reports)

The Commission requested additional information on the proposed renewal of the Holmes and Narver contract as noted in the August 7 report.
(Vinciguerra)

4. Draft of Chairman Seaborg's Brussels Speech

The Commissioners will review and provide their comments to Mr. Napier. (Napier)

5. U. S. Statement for IAEA's Eighth General Conference

The Commissioners will review and provide their comments to Mr. Napier. (Napier)

6. Letter Agreement with GE (Mr. Vinciguerra's August 12 Memorandum)

Discussed. To be scheduled for further review. (Vinciguerra)

7. Personnel Matter - Deputy Manager, San Francisco (Mr. Hollingsworth's August 12 Memorandum)

The Commission accepted the General Manager's recommendation. (Tackman)

8. Adjustments to the FY 1966 Stockpile (General Crowson's August 3 Memorandum)

The Commission approved the proposed letter to Deputy Secretary of Defense Vance. (Crowson)

9. Proposed Letter to the President Requesting Authorization for U. K. Test (General Crowson's August 11 Memorandum)

Approved. (Crowson)

10. Proposed Letter to Secretary of Labor Wirtz

Approved, as revised. (Vinciguerra)

11. Plans for Implementing Pay Bill After Execution

The Commission authorized the General Manager to take the following actions upon and after the enactment of the Government Employees Salary Reform Act of 1964:

- (1) . Establish the basic rate of compensation for the following AEC positions at \$24,500 per annum, and make compensation at such rate retroactive to the extent authorized by law:

Assistant General Manager for Operations
Assistant General Manager for Research and Development

Director, Division of Military Application
Director, Division of International Affairs
Director, Division of Production
Director, Division of Raw Materials
Director, Division of Biology and Medicine
Director, Division of Reactor Development
Director, Division of Research
Director, Division of Inspection

Controller

Assistant General Manager for Administration
Assistant General Manager for Plans and Production

Manager, Albuquerque Operations Office
Manager, Oak Ridge Operations Office

- (2) Adjust the rates of compensation for other AEC employees in accordance with the Government Employees Salary Reform Act of 1964, and the Atomic Energy Act of 1954, as amended, and make compensation at such adjusted rates retroactive to the first day of the first pay period which begins on or after July 1, 1964.

12. Managers' Meeting

It was decided that the Managers' meeting of August 21 and 22 would be held in Washington, instead of Chicago, for possible attendance by the Commissioners on Saturday, August 22. (GM)

13. Agenda for the Week of August 17

Approved. (Secy)

14. Agreement with Portugal

Approved. (Wells)

15. Hearing on Desalination

Mr. Ramey noted that the hearing on desalination is scheduled for 2:00 p. m., Tuesday, August 18, and that an introductory statement will be made by the Chairman, to be followed by his testimony and that Messrs. Pittman and Williams will be present. The statements are being prepared by staff. (Pittman-Erlewine)

16. Briefing on Computer Services

Rescheduled for 3:00 p. m. today, Room 1113-B.

17. Proposed Letter to the President re Agreement with Brazil

Approved; to be transmitted today.

PRESENT

Dr. Tape
Mr. Palfrey
Mr. Ramey

Mr. Hollingsworth
Mr. Vinciguerra
Mr. Hennessey
Col. Hill
Mr. Nininger*
Mr. Shute*
Col. Wolfe*
Mr. Napier*

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Commissioners
General Manager
General Counsel
Secretary

F. T. Hobbs
Acting Secretary

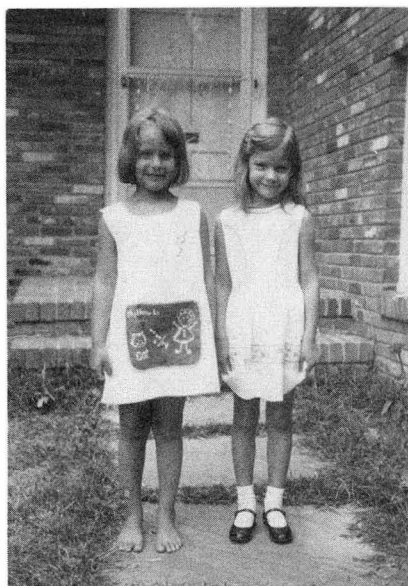
*Partial Attendance

At 11:45 a.m. I called Bill Surface of the New York Times. I referred to his letter (copy attached) of July 30, 1964, and gave him my impressions of Brezhnev, who has been mentioned as a possible successor to Khrushchev, based on my meeting with him in his office in the Kremlin on May 29, 1963. Surface will send me his write-up for checking of any quotes.

The entire family had a picnic at the Meadowbrook area of Rock Creek Park in connection with Steve's birthday. David Lee, Bill Puppa, Arthur and Jimmy Cobb, and others attended the picnic with us.

Saturday, August 15, 1964 - Home

I worked at home on AEC papers, signed letters, made phone calls, etc. A big question to be resolved by Monday is McNamara's request to declassify the megatonnage of the U.S. nuclear weapons stockpile for use in his talk to the Democratic Platform Committee on Monday. I have put this question to the White House as a matter of policy since it is essentially a political matter.



Dianne and Abbe Kaufman, August 1964

JH

Bill Surface
119 East 30th Street
New York, New York 10016
July 30, 1964

UNCL. BY DOE
NOV 86

Mr. Glenn T. Seaborg, Chairman
Atomic Energy Commission
Washington 25, D.C.

BS & rs

Dear Mr. Seaborg:

I am a magazine and book writer and have done articles for Reader's Digest, Saturday Evening Post, Life, New York Times Magazine, etc. I am doing an article on possible successors to Premier Khrushchev -- I'm concentrating on Leonid Brezhnev -- for Family Weekly, a Sunday magazine that appears in 150 newspapers and has a circulation of 4.6 million. It is tentatively a Reader's Digest reprint.

I understand you had a long meeting with Brezhnev last year and would deeply appreciate your comments on him. May I telephone you to ask a couple of questions? Anything attributed to you will be submitted for your approval.

Thanks very much.

Sincerely,

Bill Surface
Bill Surface

BS:rs

Sunday, August 16, 1964 - Home

Helen and I drove Dianne, Lynne, David Lee, Dolores Conrad (Lynne's friend) to Mrs. Lee's (David's mother) place in the mountains near Cactoctin Forest (near Thurmont, Maryland) where the three of them will stay for a few days while camping.

We had a picnic lunch at one of Cunningham Falls State Park areas.

Monday, August 17, 1964 - D.C.

At 9:55 a.m. I presided over Information Meeting 406 (notes attached).

At 12:45 a.m. I had a luncheon appointment with Leland Hazard (Pittsburgh Plate Glass Company) at the Lawyers Club. He said that he would like me to make suggestions for an academic chemist who might serve as a member of the Board of Directors of the Pittsburgh Plate Glass Company, giving about 10% to 20% of his time as a consultant. I said that I would let him know if I had any ideas along these lines.

At 2:10 p.m. I called Alton Blakeslee (Associated Press, New York). I called him with respect to his letter (copy attached) of August 12th, requesting an interview with regard to a series of articles he is writing for Associated Press under the general title, "Science in Our Lives." He wants about an hour, if possible, and would like to do this before I leave for Europe. I told him that I would send him some of my speeches to look over prior to our meeting, which we set for 10 a.m., Friday, August 21st.

The Commission made a determination for McNamara that the megaton total of our nuclear weapons stockpile can be declassified.

The Commission was briefed on Department of Defense procedures for taking a worldwide inventory on their nuclear weapons. We will write the DOD a letter suggesting the role of the AEC in this matter.

At 2:55 p.m. I recorded a greeting to be used at the American Chemical Society dinner on August 31st in honor of Division Officers at their September meeting in Chicago.

At 3:30 p.m. I received a telephone call from James Davenport (Southern California Edison, Los Angeles). He said that Jim Henderson in his office had told him of my telephone call last Friday, and he understood that I would be unable to meet either the day of October 2nd or October 9th for the ground breaking ceremony for their San Onofre Reactor (Camp Pendleton Plant). I told him that was true, that I would be out of town on the 9th and I had an engagement in Washington on October 3rd. He said he understood from Miss Cecil that I had another engagement on the 9th, but there might be a chance for the 2nd; at least he hoped so as these two dates had been checked out with the JCAE members and others. He then asked if I had any suggestions as to whom might come from the Commission, and I told him I would take it up with the Commissioners and let him know.

I received from Bill Moyers' Democratic Platform Committee comments on administration achievements for my comments.

Tuesday, August 18, 1964 - D.C.

At 9 a.m. (in Udall's office) I participated in the signing of the Desalination

UNCL. BY DOE
NOV 86

COPY NO. _____
August 17, 1964

INFORMATION MEETING 406

9:55 a.m., Monday, August 17, Chairman's Conference Room, D. C. Office

1. Declassification of Proposed Statement by Secretary of Defense
(Document LXI-6918)

Following presentation by the General Manager, the Commission:

- a. Determined that the statements quoted in paragraph 2 of LXI-6918 can be published without undue risk to the common defense and security.
- b. Authorized the declassification of the statements quoted in paragraph 2 of LXI-6918.
- c. Noted that declassification of these statements reveals approximate total megatonnage of the U.S. atomic weapons stockpile at the end of FY 1960 and FY 1962, and
- d. Requested that the proposed letter to the Department of Defense be revised to show that the Atomic Energy Commission "joins the DOD in determining" in lieu of the Atomic Energy Commission "has determined" and that this revision also be appropriately factored into the proposed letter to the JCAE. (Marshall)

2. Tripartite ANL Agreement

The Chairman noted current difficulties in reaching agreement and requested that Commissioner Tape continue to follow the matter on behalf of the Commission.

3. President's Remarks for the Geneva Conference

The Chairman requested Col. Hill to work out with Commissioners Ramey and Tape revisions which they felt desirable following which he would pass along to the White House the revisions by telephone. (Hill)

4. TV Filming of Commission Meeting

After a brief discussion, the Commission agreed to schedule the filming Thursday morning during consideration of AEC 1051/7 - Safety Review of Aerospace Projects. (Clark-Secy)

5. FY 1965 Budget

The General Manager reported that the FY 1965 appropriations bill passed Friday, August 14, and reviewed briefly the approved figures.

6. Maritime Reactor Program

The Chairman reported briefly on a call he had received from Nicholas Johnson, Maritime Administrator, regarding the claim by New York Shipbuilding Co. The General Manager reported that he had held discussions with Mr. Johnson August 14 and had reached an understanding on those elements which are clearly AEC responsibility and those which are clearly Maritime's, leaving a gray area involving possible mixed responsibilities. The General Manager stated he had asked the Deputy Controller to review the gray area taking a liberal approach in determination of what AEC could properly pay for under the Joint Agreement. The General Manager also reported that the question of what to do next with the SAVANNAH had been raised by Mr. Johnson and that he had agreed to study this and advise Maritime. The General Manager mentioned also that the subject of the joint office was also raised. He expressed the belief that an AEC office, rather than a joint office, would be indicated if a land based prototype were undertaken whereas a joint office would probably be indicated if a shipboard prototype were undertaken. (Pittman)

7. Personnel Matter

Discussed briefly and deferred until the information meeting August 19.

8. Letter Agreement with GE

The Commission asked that the proposed letter to GE be revised to request information developed by GE and to offer to provide AEC information to the extent permitted by security considerations. The Acting Assistant General Manager will redraft the letter and circulate to the Commissioners for review. (Vinciguerra)

9. Transfer of Land to the Navy

The Commission requested that action be deferred until land legislation now pending before Congress is passed and staff has had opportunity to discuss the matter informally with Congressman Aspinall's staff in the light of the new legislation. Following such discussions the matter should be re-presented to the Commission for consideration. (Bloch)

10. Agenda for Week of August 17

Noted.

11. Private Ownership Bill

The General Manager reported that the bill was scheduled on the House Consent Calendar for today.

12. Executive Pay Bill

The General Manager reported conversations with Roger Jones, BOB, in which he was informed that the Assistant General Manager for Research & Development and the Assistant General Manager for Operations will be placed in level V.

13. Sealevel Canal

The General Manager reported the scheduling of a Senate Appropriations Committee hearing for today and said that appropriate staff were attending.

14. AEC 580/213 - Current 1964 Planning Estimates

In response to the General Manager's inquiry, the Commission requested that the paper be submitted for discussion without recommendations.

15. Director of Inspection Access to Custody and Dispersal Information

In response to the General Manager's inquiry, the Commission requested that the Director of Inspection attend Commission briefings on custody and dispersal but should initiate studies in these areas only on specific request of the Commission. (Crowson-Nelson)

16. Consultant Contract for General Luedecke

The Commission had no objection with the General Manager's oral recommendation that a no-fee consultant type contract with former General Manager Luedecke be executed subject to appropriate coordination with the Administrator, NASA. (Vinciguerra)

PRESENT

Dr. Seaborg
Mr. Ramey
Dr. Tape
Dr. Bunting

Mr. Hollingsworth
Mr. Vinciguerra
Mr. Hennessey
Mr. Ink
Col. Hill
Mr. Hobbs

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Commissioners
General Manager
General Counsel
Secretary

F. T. Hobbs
Acting Secretary

THE ASSOCIATED PRESS
GENERAL OFFICE
50 ROCKEFELLER PLAZA
NEW YORK 20, N. Y.

UNCL. BY DOE
NOV 86

August 12, 1964.

Dr. Glenn T. Seaborg,
Chairman,
Atomic Energy Commission,
Washington, D. C. 20545.

Dear Glenn:

Before you leave for Geneva, could you spare me an hour or two for an interview on a topic which I believe will interest you very much?

I am writing a series of five articles for AP under the general title of "Science in Our Lives."

Each is based upon talking with one scientist who is a statesman in his own field, for his views upon present trends and anticipated developments in that field, how it is changing our thinking, what it means to the public, or, indeed, any aspect that most interests the man himself. I'm submitting each story written after the interview for approval or corrections before publication.

So far I've talked with Lloyd Berkner about geophysics, George Beadle about biology, Irvine Page about medical research, and Herbert Friedman concerning space-astronomy research.

I would very much like to have your views concerning atomic energy, nuclear physics and chemistry, on whatever aspects you believe most merit discussion.

Can we set a date that would fit into your busy schedule, at any time or place? I'll keep my time free until I hear from you, and I do hope you can set some appointment.

With best wishes,

Sincerely,

PE
Alton Blakeslee.

Study Agreement, with Udall and Skinner (of the Los Angeles Metropolitan Water District), for a dual purpose desalting and electrical nuclear plant for the Metropolitan Water District.

At 12:30 a.m. I had lunch with Colonel James Hill and Arnold Fritsch.

At 2 p.m. I attended the meeting of the Federal Council of Science and Technology, held in Room 208 of the Executive Office Building. The main business was the adoption of a plan to have the federal agencies that are supporting research projects in universities devote three percent of the total funds to general research purposes.

I talked to Bundy who said that President Johnson has decided to ask McNamara not to reveal the megatonnage stockpile figures that the Commission declassified yesterday on a contingency basis. Bundy wanted my advice and I said that I agreed because I felt a study of the pros and cons should be made first.

The House passed the Private Ownership of Nuclear Fuels Bill today!

I discussed with Keeny, Penney's aid, the United Kingdom's request for an option to buy ten tons of weapon grade U-235 as a hedge against an agreement to cut off the production of fissionable materials. I will discuss this with Penney when I see him in order to try to learn more of what is behind the request.



Contract signing for study of sea water conversion plant, August 18, 1964

Seated L to R: Robert Skinner (MWD General Manager and Chief Engineer), Stewart Udall (Secretary of the Interior), Seaborg, Joseph Jensen (MWD Board Chairman)

Standing L to R: Kenneth Holum (Assistant Secretary for Water & Power), Craig Hosmer, Senator Thomas Kuchel, Senator Pierre Salinger, James Ramey, Charles MacGowan (Director of the Office of Saline Water)

Wednesday, August 19, 1964 - D.C.

At 10 a.m. I presided over Regulatory Information Meeting 128. The Commissioners discussed the following: 1. The Commission requested that the Governor of Kansas be advised that October 27th would be preferred for the signing ceremony of the Kansas City Agreement and that Commissioner Palfrey will plan to represent the Commission. 2. The proposed preliminary report with regard to the United Nuclear Corporation accident was approved by the Commission with revisions. Price indicated that an advance copy would be provided the Joint Committee and a copy would be placed in the Public Document Room with the news media being informed of its availability.

At 10:15 a.m. I presided over Information Meeting 407 (notes attached).

At 11:45 a.m. I presided over Commission Meeting 2036 (action summary attached).

At 12:30 p.m. I had lunch with a group in Udall's office--Udall, Holm, Commissioner Ramey, John Williams, Pittman, Hornig, Cater, Gordon, and others--to discuss the progress of the AEC-Interior program on desalting for which a report to the President is due September 11th.

I continued to talk to the White House regarding the possibility that the President will make a statement or have a signing ceremony in connection with the signing of the Private Ownership Bill.

At 2:15 p.m. I received a telephone call from W. Q. Smith (of du Pont Company, Parkersburg, West Virginia, and a friend from wartime Metallurgical Laboratory days). He called to invite me to speak at an October meeting of the joint local professional societies in their city. I thanked him and told him it would be impossible for me to do this as I am now over-committed.

At 2:40 p.m. I presided over Commission Meeting 2037 (action summary attached).

At 8:30 p.m. Helen and I attended the "Salute to Congress" reception given by President and Mrs. Johnson on the South Lawn of the White House. We saw a program that consisted of old presidential campaign songs and also heard the President speak.

Thursday, August 20, 1964 - D.C.

At 11:45 a.m. I presided over Commission Meeting 2038. The Commissioners acted on the following: 1. The Poodle Space Propulsion System was discussed. The matter will be reviewed during discussion of the FY 1966 budget. 2. The revision to procedures regarding employment of Non-Soviet block aliens was discussed. The Commission authorized changes as discussed at the meeting. General Crowson reported on developments re: the ALVA event. We were informed of the accidental landing of a private plane at NTS.

At 12:30 a.m. Commissioner Ramey and I had lunch with Lewis Strauss and Bill Libby, at the Metropolitan Club.

Strauss and Libby offered to find private money (up to \$500 million) for financing nuclear desalting plants.

At 2 p.m. I received a telephone call from President Alvin Eurich (of Aspen Institute for Humanistic Studies, Aspen, Colorado). He invited me to visit Aspen on the 26th of September, or a week later, to attend one of their program meetings on the implications of development of science and technology in government relations and education. I told him that was impossible as I would be in Europe



COPY NO. 2
August 19, 1964

INFORMATION MEETING 407

10:15 a. m., Wednesday, August 19, 1964 - Chairman's Conference Room, D. C.

1. Declassification of Proposed Statement by Secretary of Defense

The Chairman reviewed developments following Information Meeting 406, including an alternate DoD statement which may be submitted in due course to AEC for clearance. The Commission requested the General Manager and the General Counsel to review the matter and advise the Commission on any further action required.

In response to Commissioner Ramey's request, the General Manager will look further into the status of General Crowson's earlier letter to the Joint Committee.

2. Private Ownership

The Chairman noted passage of the bill and reviewed with the Commission a suggested statement for possible use by the President in a forthcoming press conference. After revision of the proposed statement, the Commission agreed it should be transmitted promptly under cover of a letter suggesting the possible desirability of a signing ceremony which would be attended by appropriate industrial and Congressional representatives. The Commission requested that former Commissioner Wilson be notified appropriately. (Hill)

3. Meeting with Secretary Udall

At the Chairman's request, Commissioner Ramey reviewed the discussions he and the Chairman had during their meeting yesterday with Secretary Udall on desalting. Mr. Ramey also reviewed briefly the status of the AEC and Interior reports due for delivery to the President September 11, indicating that he expected the reports, including a possible joint covering report or statement, to be essentially in final form before his departure for Geneva. (Pittman)

4. Desalination Hearing, August 18

Mr. Ramey gave a brief review of the hearing, which he and Commissioner Bunting attended.

5. August 17 Letter from William H. Orrick, Jr., Justice Department, re Los Alamos Telephone Facilities

To be rescheduled for later consideration. (Secy)

6. KIWI Reactor Test, August 28

The Commission noted that the schedule would not permit participation by a Commissioner.

7. Southern California Edison Electric Company Ground-Breaking Ceremony, October 2, Camp Pendleton

The Chairman noted receipt of an invitation to attend and that he unfortunately would not be able to do so until October 27. It was agreed that Mr. Ramey would plan to represent the Commission at the ceremony on October 2.

8. Visits of Political Candidates to NTS

The Commission approved the General Manager's proposal to arrange for unclassified visits and briefings when requested, provided the arrangements assure strictly comparable treatment of such visitors. (Vinciguerra)

9. FY 1966 Budget

In response to the Chairman's inquiry on the status, the Controller reported that the budget paper will be circulated to the Commission on Friday for discussion next week. (Abbadessa)

10. Letter to Kenneth Holum, Assistant Secretary, Department of Interior, re Metropolitan Water District of Southern California

The Chairman signed the letter following review by the Commission.

11. Lease of Land to the State of Washington (Mr. Bloch's August 11 Memorandum)

Approved.

12. Renewal of Contract AT(04-3) 424 with Holmes & Narver, Inc.

Approved. (Vinciguerra)

13. Pending Contractual Matters - August 14 Report

Mr. Vinciguerra called attention to the recommendation by the New York Operations Office Manager of the selection of Hittman Associates for the design analysis for SM-1A Core III at an estimated cost of \$95,000. The Commission requested that the General Manager provide a memorandum giving additional information on this item. (Vinciguerra)

14. Handling of Pending Contractual Matters During the Absence of the Commission

The Commission requested that pending contractual matters be cleared during the August 28-September 18 period by the available Commissioner, who would refer any questionable cases to the absent Commissioners.

15. Advanced Converter Concepts to be Selected

In response to Mr. Ramey's suggestion, the Commission requested that an advance briefing on the advanced converter program be scheduled for later this week. The Commission agreed with the General Manager's suggestion that the briefing also include two additional items, (a) maritime program, and (b) the fast breeder program. (Pittman-Abbadessa-Secy)

16. NATO Hearing, 10:00 a. m., August 18

Commissioner Palfrey gave a brief report on the hearing which he attended.

17. Personnel Matters

Discussed.

PRESENT

Dr. Seaborg
Mr. Ramey
Mr. Palfrey
Dr. Tape
Dr. Bunting

Mr. Hollingsworth
Mr. Hennessey
Mr. Abbadessa
Mr. Vinciguerra
Col. Hill*
Dr. Fritsch*
Mr. Hobbs

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Commissioners
General Manager
General Counsel
Secretary

F. T. Hobbs
Acting Secretary

*Partial Attendance

UNITED STATES GOVERNMENT

Memorandum

UNCL. BY DOE
NOV 86

R. E. Hollingsworth, General Manager

DATE: August 19, 1964

Approved

R.E. Hollingsworth

F. T. Hobbs, Acting Secretary

Date

ACTION SUMMARY OF MEETING 2036, WEDNESDAY, AUGUST 19, 1964, 11:45
A.M., ROOM 1113-B, D. C. OFFICE

SECY:ICB

Commission Business

1. Minutes of Meetings 2023, 2024, 2025, 2026, 2027, 2028, 2030, 2031 and 2032

Approved, as revised, subject to comments by Commissioner Ramey on Meetings 2024, 2025, 2027, 2028, 2030, 2031 and 2032.

2. AEC 352/46 - Sale of Materials, Components and Services to the United Kingdom

Approved. (Crowson)

Commissioner Ramey reiterated his request for a briefing on UK security cases and procedures. (Waters)

3. AEC 1143/16 - Selection of Contractor for Performance of Radiation Protection Services at Richland

Approved. (Scammahorn)

4. AEC 1143/17 - Criteria and Weighting for 100-300 Areas at Hanford

Approved. (Scammahorn)

5. AEC 1142/18 - Criteria and Weighting for 200 Areas at Hanford

Approved. (Scammahorn)

6. AEC 131/114 - Extension of On-Site Service-Type Contracts

Discussed.

To be rescheduled for the afternoon Meeting. (Secy)

cc:
Commissioners

UNITED STATES GOVERNMENT

Memorandum

UNCL. BY DOE
NOV 86

R. E. Hollingsworth, General Manager

DATE: August 21, 1964

FROM :

F. T. Hobbs, Acting Secretary

Approved R. E. Hollingsworth

Date _____

*Original signed by
F. T. Hobbs*

SUBJECT:

ACTION SUMMARY OF MEETING 2037, WEDNESDAY, AUGUST 19, 1964,
2:40 P.M., ROOM 1113-B, D. C. OFFICE

SECY:JCH

Commission Business

1. AEC 181/114 - Extension of On-Site Service-Type Contracts

Approved, as revised. (Scammahorn)

The Commission noted that consideration would be given to whether the incumbent contractor should be invited to submit a proposal on a case-by-case basis. The Commission also noted the JCAE would be appropriately notified. (Scammahorn)

2. AEC 780/22 - Amendment to Atomic Energy Commission Citation

Approved, as revised. (Tackman)

3. AEC 1132/29 - Allocations Within Approved 1964 Budget

Approved, as revised. (Abbadessa)

The Commission noted the Controller's proposed revision of the third paragraph of the letter to the JCAE. (Abbadessa)

The Commission also noted the Controller would review all proposed reprogramming actions for possible "new program" items and report on the matter during his forthcoming presentation on the FY 1966 Budget Estimates. (Abbadessa)

4. AEC 645/5 - Acquisition of Additional Land at Brookhaven

Discussed.

The Commission agreed with your recommendation that steps be taken to obtain an option on the additional land adjacent to the South Tract. No commitment is to be made regarding possible disposal of the North Tract. (English)

5. AEC 550/213 - Current 1964 Planning Estimates

Discussed.

The Commission approved the proposed letter to the MLC, as revised, to note that AEC is studying the matter and would subsequently be in further contact with the DOD. (Crowson)

The Commission requested:

(a) an additional column in the table on page 10 indicating the possible penalties; and

(b) preparation of a draft letter for the Principals summarizing the current situation with respect to both U-235 and Pu for Commission consideration looking toward a possible briefing session with ACDA and DOD. (Crowson)

6. AEC 843/29 - Control of Private R&D

Discussed.

Staff discussions with AIF should proceed and the matter should be rescheduled for further consideration in October, 1964. (Quinn)

7. AEC 843/28 - Grace Company and Electro-Nucleonics Proposals

The Commission denied Grace's request without prejudice to further consideration. (Rubin)

8. Electro-Nucleonics' Request for an Access Permit

Denied. (Rubin)

9. AEC 890/116 - Chairman's Brussels Fuel Supply Policy Speech

Approved, as revised. (Kratzer)

10. AEC 1158 - POODLE Space Propulsion System

Deferred.

August 21, 1964

11. AEC 89/18 - Revision to Procedures re Employment of Non-Soviet Bloc Aliens

Deferred.

Other Business

1. Report on ALVA Event

The Commission noted an appropriate public announcement would be made. (Done)

2. Classification Policy for Lasers (See also Mr. Marshall's July 16, 1964 Memorandum)

To be considered later.

cc:
Commissioners

for nearly a month in September and I have speaking engagements in October. He said they would be having other meetings, and he would be in touch with me. He then asked if there was a possibility of giving two weeks to one of their Executive programs in the summer of 1965, the first one beginning the last week in June, and after that, one coming every two weeks through July and August. I asked him the nature of these programs and he said that corporation executives would come in for a period of two weeks to do basic reading for purposes of discussion--largely a matter of exchanging views on various matters. Such people have attended these meetings as: Jim Killian, Lee DuBridge, Supreme Court Justices Byron White, Potter Stewart and William Brennan. I told him that 1965 didn't look very likely, but another year might. He said that Jim Conant would be there in 1965. He said he would be in touch with me later.

At 3:15 p.m. I presided over Commission Meeting 2039 (action summary attached). This meeting was filmed in color for National Educational Television.

I heard from Cater and he said that the President, due to pressure of time, has decided not to be filmed giving his message to the Geneva Conference. I sent a letter to the President asking him to reconsider (copy attached).

Friday, August 21, 1964 - D.C.

At 9:40 a.m. I returned Roy Dunn's (President, Potomac Electric Power Company) telephone call of yesterday. As President of the Southeastern Electric Exchange, he invited me to give a talk at their annual meeting next March at Boca Raton, Florida. The dates of the meeting are March 29, 30 and 31, 1965, and they would like me to speak on Tuesday morning, March 30th. They would like to hear me speak on the future of atomic power. I said I would have to check my schedule and could let him know in a month or two, and he said that would be fine.

At 9:45 a.m. I called Spurgeon Keeny. I told Keeny that I had looked into the legalities regarding the U.K. matter (their request for an option to buy 10 tons of U-235). Our lawyers say that it would require an amendment to our bilateral, with congressional action, and it would have to lie before the JCAE for 60 days, which is not subject to waiver. That rules out anything for this session. Keeny said that it might be necessary at some time to work fast on this matter; therefore, he asked for a one-page statement giving a general background, and also indicating what parts are classified. (I called Frank Parks and asked him to prepare such a statement--copy attached.)

At 11:30 a.m. I presided over Information Meeting 408 (notes attached). We discussed my letter to Nicholas Johnson, Maritime Administrator regarding licensing of the N.S. Savannah and later I dispatched a letter to him (copy attached).

I was interviewed by Alton Blakeslee of the Associated Press, New York, concerning an article on nuclear science which is to be run in the Sunday papers sometime in September.

I had lunch with my son, Pete, and Commissioner Palfrey at the Roger Smith Hotel.

I talked to the Area Office Managers at a meeting called by Robert Hollingsworth (General Manager). I told them of our confidence in Hollingsworth as the new General Manager, and of our hope to use this change as a revitalization for the AEC.

I worked on a revised presidential statement that I might have to give for President Johnson at the Geneva Conference. I also worked on the problem of getting the President to make a statement in connection with his signing of the Private Ownership Bill.

VERNMENT

UNCL. BY DOE
NOV 86

MEMORANDUM

TO : R. E. Hollingsworth, General Manager DATE: August 20, 1964
 Approved _____
 R. E. Hollingsworth

FROM : F. T. Hobbs, Acting Secretary ^{Original} _{Signed by} Date _____

SUBJECT: ACTION SUMMARY OF MEETING 2039, THURSDAY, AUGUST 20, 1964, 3:15 P.M.
 ROOM 1113-E, D. C. OFFICE

SECY:JCH/ICB

Commission Business

1. AEC 1051/7 - Safety Review of Aerospace Projects

The Commission agreed that NASA and DOD should be approached on the establishment of a committee of about nine members, including three from each of the agencies involved, and perhaps two members of the ACRS; the three agencies would agree on the selection of a Chairman. At some future date, in discussing various alternatives with respect to committee staff, AEC would propose the use of technical review staff reporting to the Director of Regulation. (GM/DR)

2. Pre-Budget Review Briefing on Advanced Converter, Maritime, and Fast Breeder Reactor Programs

Discussed.

cc:
Commissioners

August 20, 1964

UNCL. BY DOE
NOV 86

Dear Mr. President:

I would like to urge that you film the Message to the Third Geneva Conference on the Peaceful Uses of Atomic Energy, which your Holy Cross Speech indicated you would give. In light of the very fine press reception received by your remarks in June, we naturally hoped that you would see fit to make an actual appearance (filmed) on this important occasion in Geneva. Incidentally, President Eisenhower participated in the previous conference in 1958 through a publicly heard telephone conversation with Secretary General Hammarskjold.

At first we hoped that there might be a televised discussion via satellite between you and Secretary General U Thant. Unfortunately, as it developed, no communications satellite would be in convenient position. It was at that time that we suggested that a color film clip be used. This film would be shown on the evening of August 30 at the opening of the U. S. Atoms for Peace exhibit in Geneva. A large turnout is anticipated for this formal opening since it does not conflict with any of the other conference engagements. We expect that Secretary General U Thant, Under Secretary de Seynes and other UN representatives would be in attendance as well as many of the delegates and dignitaries from the seventy-odd nations participating in the conference.

Besides the obvious impact such a personalized message would have on the delegates to the conference, it was expected that a general release of this film would be made to the European and domestic television and press. It would seem likely in light of the earlier interest evidenced after your Holy Cross speech that portions of this film clip would be picked up rather broadly by the television networks, in the U. S. as well as abroad.

Respectfully submitted,

151

Glenn T. Seaborg

The President
The White House



WASHINGTON, D.C. 20545

OFFICE DIARY
GLENN T. SEABORG
Chr USAEG 1981-72
FOLDER-PAGE 44115

August 21, 1964

UNCL. BY DOE
NOV 86

903592

MEMORANDUM FOR CHAIRMAN SEABORG

SUBJECT: COOPERATION WITH THE UNITED KINGDOM

Accommodating the UK interest in securing an option on 10 tonnes of U-235 for use in weapons, exercisable any time prior to December 31, 1969, would present the procedural problems mentioned below.

The U. S. Agreement for Cooperation with the UK on the Uses of Atomic Energy for Mutual Defense Purposes is in three parts - the basic agreement, a Technical Annex and a Security Annex. The basic agreement is unclassified and has been published widely. On its face (Article III bis A 4.) provides that the U. S. will transfer prior to December 31, 1969, special nuclear material to the UK for weapons use in such quantities as may be agreed.

DELETED

This would require following the statutory procedures applicable to a new Military Agreement for Cooperation, i.e., negotiation, approval by the President, submission to the Congress (not the Joint Committee on Atomic Energy) and referral to the Joint Committee for a period of 60 days while Congress is in session. (This 60-day period cannot be waived unless the waiver is by an Act of Congress approved by the President).

Going through this procedure with a classified amendment to a document whose existence is classified is not impossible, as it was done in 1961, but it presents problems and requires close cooperation with the Joint Committee on Atomic Energy. This is evident as the submission to the Congress is intended to give any Congressman, not merely the Joint Committee, an opportunity to introduce a concurrent resolution, which if passed, would prevent an agreement or amendment from becoming effective. In 1961 an amendment to the Technical Annex was identified in the transmittal letters to the Speaker of the House and the President of the Senate merely as a document concerning certain details of cooperation with the UK under the Agreement. The Joint Committee did not file a report on the amendment with the Senate and the House as it has done with all other Military Agreements for Cooperation.

Franklin N. Parks
Franklin N. Parks
Assistant General Counsel
Military Applications

CLASSIFICATION CANCELLED
WITH DELETIONS
BY AUTHORITY OF DOE/OC

Carol A. Rogers 4/24/86
REVIEWED BY *[Signature]* DATE 7/11/86

August 21, 1964

UNCL. BY DOE
NOV 86INFORMATION MEETING 40311:30 a.m., Friday, August 21, Chairman's Conference Room, D. C. Office1. Letter to Secretary of Labor Wirtz

The Commission noted the letter would be signed by the Chairman and dispatched. (Fritsch)

2. Draft Letter to Mr. Webb, NASA

To be revised before dispatch. (Fritsch)

✓ 3. Letter to Nicholas Johnson, Maritime Administrator

The Chairman noted that he had signed the letter for dispatch following review by the Commissioners. (Fritsch)

4. Letter from E. Abbott Goldberg, Acting Director, California Department of Water Resources

Mr. Ramey will review the matter with Interior.

5. Letters to the Secretary of Defense and Senator Pastore re Curtailing Gas Centrifuge Exchange

The Chairman signed the letters.

6. Letter to Sir William Penney

At Dr. Tape's suggestion, the Commission agreed that dispatch of the letter to Sir William Penney being prepared by DIA should be delayed until the Chairman has had an opportunity to see Sir William in Geneva. (Fritsch)

7. Electric Power Supply - Rocky Flats Plant (Mr. Bloch's August 20 Memorandum)

The letter to the Controller-General was approved for dispatch subject to review by Commissioner Ramey. (Bloch)

8. Presidential Statement for Geneva Conference

The Chairman reported briefly on the status.

9. Cooperation with South Africa (Mr. Kratzer's August 14 Memorandum)

The Commission agreed that any decision to defer shipment should be handled as a diplomatic matter as recommended by Mr. Kratzer.

10. Chairman's IAEA Speech

The Chairman requested the Commissioners review and that the matter be scheduled for consideration at the Information Meeting, Monday, August 24. (Wells)

11. Public Information Policy on Test Readiness (Mr. Vinciguerra's August 18 Memorandum)

The Commission approved the proposed letter to Mr. Bundy with revisions and noted that the Chairman would add a hand-written postscript. (Vinciguerra-Fritsch)

12. Pending Contractual Matter Report No. 63 (Mr. Hollingsworth's August 18 Memorandum)

Discussed. The Commission had no objection to the selection of Hittman Associates, as proposed. (Vinciguerra)

13. Atomic Industrial Forum Proposed Study on Toll Enrichment (Mr. Quinn's August 18 Memorandum)

Discussed. The Commission had no objection to the proposed course of action. (Quinn)

14. Letter to G. E. re Gas Centrifuge (Mr. Vinciguerra's August 20 Memorandum)

To be revised. (Vinciguerra)

15. Participation in Halden Project (Mr. Vinciguerra's August 20 Memorandum)

The Commissioners had no objection to the General Manager approving the proposed course of action.

16. Classification Policy for Lasers (Mr. Marshall's July 16 Memorandum)

Approved. (Marshall)

17. Citation Ceremony for Hood Worthington, 12:00 noon, Monday, August 24

18. Agenda for Week of August 24

Approved. (Secy)

19. Proposed DOD Letter

Noted.

20. Proposed Board of Appeals

The Commission requested that the paper be scheduled for Tuesday, August 25. (Secy)

21. PLOWSHARE

The General Manager reported briefly on the interest of the Governor of Alaska in PLOWSHARE.

22. FORTUNE Magazine Article

The General Manager reported his understanding that Charles Murphy was preparing an article on the control of nuclear weapons. (Clark)

23. Field Managers' Meeting, August 21-22

The General Manager noted his understanding that the Chairman would attend a portion of today's meeting and invited the other Commissioners to attend also today or on Saturday, if possible.

24. Personnel Matter

25. AEC 89/18 - Revision to Procedures re Employment of Non-Soviet Bloc Aliens

In response to Dr. Tape's inquiry, the Commission agreed that its decision at Meeting 2038 placed ORINS in the same category as Ames, Berkeley and BNL. (Traynor)

26. AEC 1051/7 - Safety Review of Aerospace Projects

In response to Dr. Tape's inquiry, regarding implementation of yesterday's decision at Meeting 2039 the Commission agreed that during the period August 28-September 18 the available Commissioner should proceed as necessary with top level discussions with NASA and DOD. (GM-DR)

PRESENT

Dr. Seaborg
Mr. Palfrey
Mr. Ramey
Dr. Tape
Dr. Bunting

Mr. Hollingsworth
Mr. Vinciguerra
Mr. Hennessey
Dr. Fritsch*
Mr. Hobbs

DISTRIBUTION

Commissioners
General Manager
General Counsel
Secretary

F. T. Hobbs
Acting Secretary

*Partial Attendance



UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON, D.C. 20545

UNCL. BY DOE
NOV 88

AUG 21 1964

Dear Mr. Johnson:

This is in reply to your letter of June 10, 1964, concerning the licensing of the U.S. SAVANNAH and assumption of full responsibility for the vessel by the Maritime Administration. I regret this delay in replying but, as you no doubt are aware, in the interim your letter has been discussed in meetings between our staffs. Consequently, I am here essentially reiterating the information provided at these meetings. For ease of reference, my response to your points is in the order that they appear in your letter.

1. The second paragraph of your letter makes inquiry as to what is involved in obtaining a license and the terms of that license in coming years. I am enclosing a copy of Part 50 of the Commission's regulations, which set forth the requirements for licensing of reactors. This formal process is initiated by the applicant filing an application for a license. This application is normally accompanied by documents which describe the facility, its potential hazards, and the devices and procedures by which reasonable assurance of the health and safety of the public will be achieved. In the case of the U.S. SAVANNAH, the formality of submitting this information may be satisfied in part by your identifying in the application those portions of documents already submitted to the Director of Regulation relating to description of the facility, its safeguards, and procedures which represent your proposed plans for operation of the vessel. Our staff has, in fact, assembled a listing of the information and data already in the files which might be relevant to a formal application, and would be pleased to make this available if this would be helpful.

You may, of course, make any revisions in the material already submitted and should file, in addition, any further materials which, in composite, would accurately describe the present design of this ship as well as your proposed procedures and methods of operating the U.S. SAVANNAH. When this application, with appropriate attachments, has been filed, it will be the responsibility of the regulatory staff to recommend to the Commission whether or not the material presented provides reasonable assurance that the health and safety of the public would be adequately protected. This is the same decision we are required to make for any land-based, licensed nuclear facility. As used

here, "health and safety" refers only to radiological aspects and is related to "nuclear safety" in the operation of the reactor power plant.

For land-based reactors, Part 100 of the Commission's regulations describes criteria for selection of reactor sites. Part 100 procedures are not directly applicable to the N.S. SAVANNAH, although the basic principles incorporated therein are applicable and will be reflected in an appropriate set of criteria for port operation.

The Commission's staff will be pleased to work closely with the staff of the Maritime Administration in reaching satisfactory solutions to the problems of operating a merchant ship under AEC regulatory surveillance, but the final resolution of a long-term operating basis which incorporates the maximum convenience to the ship and at the same time provides adequate protection to the health and safety of the public, must depend upon extension of successful operating experience and further understanding of the many complex factors involved.

2. Your third paragraph indicates that, of the items in the Interagency Agreement which should be clarified, the most important is the role of AEC in the negotiation and approval of bilateral acceptance agreements in connection with the operation of the N.S. SAVANNAH. I want to assure you that AEC will continue to assist your organization to the extent you may request in working out such agreements with foreign countries, as well as modifications to existing agreements that may be necessary. Additionally, AEC will need to continue to approve the liability provisions of the acceptance agreements in view of our responsibility under the Atomic Energy Act for administering Price-Anderson provisions generally.

3. Your ~~third~~ paragraph also indicates concern that the bilateral agreements might be further complicated in the matter of nuclear indemnity. We do not believe that the negotiation of such agreements will be complicated by any gap or lack of continuity in nuclear indemnity protection, since Price-Anderson indemnity protection will be afforded when the ship is licensed.

4. In your fourth paragraph the point is made that Maritime Administration's financial situation could be affected if licensing involves a requirement for private nuclear liability protection on the ship. On this, I would advise that such protection would not be

required of Maritime Administration while the vessel is operated by Maritime Administration or a general agent for Maritime Administration.

5. Your fifth paragraph indicates that it was our suggestion that Maritime Administration assume all responsibilities on October 1, 1964 whether the U.S. SAVANNAH is licensed or still jointly owned, except that responsibility for nuclear safety would remain in the Joint Group. I would like to clarify this by pointing out that General Leedecke's May 23 letter to you contemplated that, although Maritime Administration would assume full financial responsibility for the vessel on October 1, the AEC-MA Joint Group would, in the event the ship was not licensed by that date, continue to have the administrative responsibility for the safety aspects until such time as the vessel became licensed. After licensing, both financial and administrative responsibility with respect to nuclear safety would rest with the Maritime Administration, subject to the licensing and regulatory requirements of the Commission.
6. In the discussion in your fifth paragraph regarding Maritime Administration's assumption of financial responsibility for "nuclear safety", a definition of this term is requested. From the discussions by AEC staff with the Joint Group, it is understood that the intent was to obtain a definition of "nuclear safety" as it relates to the financial responsibility of a licensee, vis a vis the safety requirements imposed by the Commission in carrying out its licensing and regulatory responsibilities. In the licensing relationship, the licensee assumes full operational and financial responsibility for nuclear safety. The role of the Commission is one of establishing minimum safety requirements under which the licensee may operate, and conducting inspections to assure compliance.
7. Finally, in your fifth paragraph, the ACRS request for "time to melt" studies is referred to as illustrative of a situation giving rise to financial uncertainty insofar as nuclear safety is concerned. With respect to these particular studies, the initial funds for them were provided from AEC's FY 1964 funds, and we are providing from our FY 1965 funds the remaining amount which the AEC-MA Joint Group has estimated will be required for these studies which are expected to be completed by October 1, 1964. However, AEC will not be in a position to assume financial responsibility for safety requirements after October 1 since the FY 1965 budgets for both agencies have been

Honorable Nicholas Johnson

- 4 -

submitted to Congress on the basis of the Maritime Administration assuming full financial responsibility for the vessel from that date forward.

I trust my comments on the points raised in your letter will be helpful in establishing common understandings on which our agencies may proceed toward our joint objective of the SAVANNAH being operated on a licensed basis as a further demonstration of the feasibility of nuclear propulsion for commercial maritime application.

Sincerely yours,

(Signed) Oscar T. Sorenson

Chairman

Honorable Nicholas Johnson
Maritime Administrator
Maritime Administration

Enclosures:
AEC Regulations - Parts 50 and 100

At 4:45 p.m. I called Louisiana Congressman James Morrison (Chairman, Post Office and Civil Service Committee) to express appreciation on behalf of the Members of the Commission for the fine work he did on our behalf on the Pay Bill. He was most appreciative of the call and added that, if we ever need his help, we should just let him know.

I received the first copy of our book, Education and the Atom, as well as the other three books in the Geneva presentation set.

I wrote to my mother telling her of our European trip plans and that I will be speaking in Los Angeles, October 27th.

At 9:45 p.m. (at home) I received a telephone call from the White House informing me that the President will film a statement for the Geneva Conference at 2 p.m. tomorrow.

Saturday, August 22, 1964 - D.C.

At 9:30 a.m. I was filmed, in color, at the Naval Research Laboratory, for a five-minute sequence describing the Scientific Revolution and the AEC nuclear power program for use in the National Educational Television's film on the AEC.

I was present during the filming, in color, of a four-minute statement by President Johnson at 2 p.m. in the White House, for use at the opening session of the Third Geneva Conference on the Peaceful Uses of Atomic Energy. I also had my picture taken while presenting President Johnson with the four-volume Geneva presentation set.

At my request, the President agreed to meet the U.S. Geneva Conference representatives next week, and to have a signing ceremony for the Private Ownership Bill.

Sunday, August 23, 1964 - Home

I read AEC papers, worked on speeches, worked on the FY 1966 budget, etc.

Pete, his friend (Jan Faul), Dave, Steve, and I visited Dumbarton Oaks Park and took a hike there.

Dan Wilkes dropped by, after his arrival from California, this afternoon preparatory to his European trip as a member of our delegation.

Monday, August 24, 1964 - D.C.

At 10 a.m. I presided over Information Meeting 409 (notes attached).

At 12 noon I presented the AEC Citation (which includes a medallion and a pin) for Meritorious Contributions to the Atomic Energy Program to Hood Worthington, in the presence of Mrs. Worthington, the Commissioners, members of the staff, and many of Hood's former colleagues.

At 12:45 p.m. the U.S. Representatives to the Third Geneva Conference, their alternates, and I met with President Johnson to give him information about the Conference. He wished us Godspeed and expressed his satisfaction with the progress in nuclear energy and its contribution to peace. He spoke especially about his interest in desalting. He also said that he thought that I am doing an outstanding job.



Presentation to President Johnson of four-volume set of books written for the Third United Nations International Conference on Peaceful Uses of Atomic Energy August 22, 1964



UNITED STATES
AEC ENERGY COMMISSION
WASHINGTON, D.C. 20545

COPY NO. _____
August 24, 1964

INFORMATION MEETING 409

UNCL. BY DOE
NOV 86

10:00 a. m., Monday, August 24, 1964 - Chairman's Conference Room, D. C.

1. President Johnson's Statement for the Third Geneva Conference

The Chairman reported briefly on his meeting with the President on Saturday morning and the filming of the President's statement for the Geneva Conference.

2. Signing Ceremony for the Private Ownership Bill

The Chairman said the President had agreed to participate in the ceremony. The Commissioners discussed briefly the arrangements to provide for appropriate Congressional participation and attendance by representatives of the AIF, Consolidated Edison, the EEI, Public Power, labor and other representatives. The Chairman suggested review of the proposed statement. (Brown)

3. President's Meeting with U. S. Representatives to the Third Geneva Conference, 12:30 p. m. Today at the White House

4. Public Information Policy on Test Readiness (See General Manager's August 18 Memorandum)

The Commissioners requested revision of the proposed statement and agreed it should be cleared with the White House. (Brown-Clark)

5. Proposed Letter to the President re Approval of WHETSTONE II (See General Manager's August 22 Memorandum)

The Chairman requested review by the Commissioners. (Brown)

6. Chairman's Proposed Speech at the Eighth General Conference of the IAEA at Vienna

The Commissioners discussed briefly several revisions and noted the need for appropriate clearance of the statements on page 5. Any additional comments may be sent to the Chairman's office. (Fritsch)

7. Proposed Feather River Project with the State of California

The General Manager will provide a cost estimate breakdown prior to the Chairman's 3:30 meeting this afternoon with Admiral Rickover.

8. AEC Citation Award Ceremony for Hood Worthington, 12 noon Today

9. Walker Cisler's August 13 Letter re PRDC

The General Manager suggested, and the Commissioners agreed, the letter should be discussed during the forthcoming budget review. (Pittman)

10. Proposals on Fission Products Plant

The Commissioners accepted Mr. Vinciguerra's recommendation for a 30-day extension of the October 15 submission date. Mr. Vinciguerra will confirm Richland Operations Office concurrence.

11. Power for Rocky Flats (See Mr. Bloch's August 20 Memorandum)

Mr. Ramey requested a cost analysis and report on the policy implications. (Bloch)

12. Fermi Award

The Commissioners discussed briefly the suggestion by Dr. Tape.

PRESENT

Dr. Seaborg
Mr. Ramey
Mr. Palfrey
Dr. Tape
Dr. Bunting

Mr. Hollingsworth
Mr. Vinciguerra
Mr. Hennessey
Mr. Brown
Dr. Fritsch
Mr. McCool

DISTRIBUTION

Commissioners
General Manager
General Counsel
Secretary

W. B. McCool
Secretary



Hood Worthington and Seaborg during presentation of the AEC Citation for Meritorious Contributions to the Atomic Energy Program, August 24, 1964

At 1:30 p.m. I attended a luncheon, at the Army-Navy Town Club (Red Room), given by Copeland (President, du Pont Company) in honor of Hood Worthington.

At 2:40 p.m. I met with John Gardner (Chairman) and Cannon (Executive Secretary) of the President's Task Force on Education. I gave them a copy of my book, Education and the Atom.

At 3:30 p.m. I met with Admiral Rickover who again requested my support of the Seed and Blanket Reactor in the FY 1966 budget.

I heard from the White House that President Johnson will have a signing ceremony for the Private Ownership Bill at 11:30 a.m. Wednesday, August 26th. I tried to arrange for the Joint Committee on Atomic Energy to attend but was unsuccessful since the Democrats are attending the Democratic Party Convention in Atlantic City.

At 4 p.m. I had a meeting by appointment with Ambassador W. C. Naude of South Africa, and R. G. Shuttleworth (Scientific Attache, Embassy of South Africa) in my office. They called on me to extend me an invitation to the inauguration of the South African Reactor Centre at Pelindaba on July 20, 1965. They handed me an invitation from the Deputy Chairman of the Board, acting on behalf of the Minister of Mines and Chairman of the Board.

Tuesday, August 25, 1964 - D.C.

At 10:45 a.m. I presided over Commission Meeting 2040 (action summary attached)..

At 12:30 p.m. I had lunch with Professor Vitalii Goldanskii at the Roger Smith Hotel.

At 1:55 p.m. I received a telephone call from the Deputy Secretary of Defense Cyrus Vance. He called regarding a speech he will be giving on Thursday, August 27th at the Veterans of Foreign Wars convention. He referred to the megatonnage question. He believes he has avoided any problem by not referring to any numbers. He will send a copy of the speech over shortly for review.

At 3:20 p.m. I presided over Commission Meeting 2041 (action summary attached). The Commission met to consider the FY 1966 budget due at the Bureau of the Budget on September 30th. One of the big issues is the nature of the advanced converter(s) to be included. It looks as though we will choose the Advanced Gas Cooled Reactor (of General Atomics) over the Sodium-Graphite Reactor (of Atomics International), plus Rickover's Seed and Blanket Reactor (in cooperation with the State of California).

I sent my biweekly letter to the President (copy attached).

I made numerous telephone calls inviting people to attend the Private Ownership Bill signing ceremony to be held by President Johnson tomorrow.

Wednesday, August 26, 1964 - D.C.

At 10:05 a.m. I presided over Commission Meeting 2042 (action summary attached). The Commission worked on the FY 1966 budget.

At 11:30 a.m. President Johnson signed the Private Ownership Bill in the Cabinet Room of the White House. He gave pens to the Commissioners and me during the ceremony. Among those present were Congressmen Holifield, Price and Westland, Senator Jackson, Ed Bauser, Jack Newman, Robert Hollingsworth, Ernest Tremmel, George Quinn, Larry Hafstad, McGeorge Bundy, J. H. Ward, W. P. Gullander, M. Cr **121**

UNITED STATES GOVERNMENT
Memorandum

UNCL. BY DOE
NOV 86

R. E. Hollingsworth, General Manager

DATE: August 25, 1964

FROM :

W. B. McCool, Secretary

Approved R. E. Hollingsworth
Date _____

Original signed
W. B. McCool

SUBJECT:

ACTION SUMMARY OF MEETING 2040, TUESDAY, AUGUST 25, 1964,
10:45 A.M., ROOM 1113-B, D. C. OFFICE

SECY:EOB

Commission Business

1. AEC 88/13 - Establishment of Board of Contract Appeals and
Revision of Contract Appeal Procedures

Approved, as revised. (Hennessey)

The Commission agreed the amendment should become effective
60 days after publication rather than 45. (Hennessey)

The Commission had no objection to the proposed format.
(Hennessey)

2. AEC 1132/29 - Allocations Within Approved 1965 Budget

Mr. Abbadessa reported on EOB actions and said an appropriate
letter would be prepared for the Chairman's signature on Friday.
He added he would try to brief JCAB staff on Thursday. (Abbadessa)

3. AEC 1151/8 - FY 1966 Budget Estimates and
AEC 1151/9 - Statistical Tables for FY 1966 Budget Estimates

Discussed.

The Commission tentatively approved the following program
goals:

<u>Operating Expenses</u>	(in thousands)
Raw Materials	\$212,770
Special Nuclear Materials	303,144
Weapons	755,000

August 25, 1964

Capital Equipment

(in thousands)

Raw Materials	\$ 35
Special Nuclear Materials	18,465
Weapons	70,000

Construction

Raw Materials	25
Special Nuclear Materials	11,150
Weapons	50,950

The Commission also tentatively approved the following:

Reactor Development

Naval Propulsion Reactors	
Operating	- \$96,300
Capital Equipment	- 6,319
Construction	- -----

The Commission agreed to add \$1.9 million to the Construction Budget for the Weapons Program for Flood Prevention and Control at the Kansas City, Missouri facility. (Abbadessa)

The Commission requested the draft letter to the BOB be revised to refer to the two-reactor aircraft carrier. (Abbadessa)

Mr. Abbadessa noted a staff paper is being developed on funding for the Civilian Power Program.

Information Item

White House Signing Ceremony for Private Ownership Bill, August 26

cc:
Commissioners

MENT

Memorandum

UNCL. BY DOE
NOV 86

TO : R. E. Hollingsworth, General Manager

DATE: August 26, 1964

FROM : W. B. McCool, Secretary *Original signed
W. B. McCool*

Approved: R. E. Hollingsworth

Date: _____

SUBJECT: ACTION SUMMARY OF MEETING 2041, TUESDAY, AUGUST 25, 1964, 3:20 P.M.,
ROOM 1113-B, D. C. OFFICE

SECY:GF

Commission Business

AEC 1151/3 - FY 1966 Budget Estimates and
AEC 1151/9 - Statistical Tables for FY 1966 Budget Estimates

The Commission tentatively approved the General Manager's recommendation for Operating Expenses, Equipment and Construction for the Division of Reactor Development with the following exceptions:

		<u>From</u>	<u>To</u>
Large Seed and Blanket	Operating	\$91,000	\$31,000
Advanced Space Power System	Operating	20,000	23,500
	Equipment	0	800
	Construction	0	19,325

The Commission noted that it would reconsider the Advanced Converter - Gcs, the Fast Fuels Reactor, and the Electron Linear Accelerator, ORNL.

The Commission requested exploration of the possibility of a contract with Sierra Pacific for power reactor studies. (Pittman)

The Commission requested that applicable portions of the heavy water R&D activity be shown as part of desalination activity. (Abbadessa)

The Commission also requested inclusion of \$300,000 for the variable spectrum test reactor for the Richland Laboratory. (Abbadessa)

Information Items

1. DOD Declassification Request

The Chairman noted briefly a telephone call from Deputy Secretary Vance in which it was stated that a statement would be sent to AEC for declassification for a speech scheduled for August 27. The Chairman indicated that he would discuss the matter with Mr. Bundy.

2. Test Readiness (Mr. Clark's August 25 Memorandum)

Approved. The Chairman indicated that he would discuss this matter by telephone with Mr. Bundy. (Crowson/Clark)

3. KIWI Test Announcement (Mr. Clark's August 25 Memorandum)

The Commission requested low key local release. The Commission noted the circumstances involved in this case and requested that in the future similar proposed announcements for possible White House use be cleared in advance with the Commission. (Clark)

4. Proposed Letter to Senators Kuchel and Salinger

Approved, as revised, for early dispatch. (Brown)

5. Guard Services at NTS

The Chairman noted receipt of information from Counsel for FSI regarding the propriety of award of the guard services contract at NTS. The General Manager recommended and the Commission approved the initiation of an investigation of these allegations and other pertinent facts relating to the selection and award. In view of the pending litigation, the investigation will be initiated after appropriate clearance by the General Counsel. During the interim period the Commission authorized a three month extension of the FSI contract to permit completion of investigation and report to the Commission. (Scammahorn/Nelson)

6. Democratic Convention Film

In response to the General Manager's inquiry regarding appropriate disposition of questions raised by John Finney, the Chairman said he would discuss the matter with Mr. Bundy.
(Clark)

7. Visits of Political Candidates to NTS

The Commission reaffirmed its decision as made in Information Meeting 407 on August 19, 1964. (Vinciguerra)

8. Visit of Polish National to Columbia

The Commission had no objection to the General Manager's recommendation. (Kratzer)

cc:
Commissioners

BY CANCELLED

August 25, 1964

Seaborg (326766)

AA Jennings, OC, DOE
4/25/88

177

(6) Report to White House

mems

PERSONAL AND CONFIDENTIAL

Dear Mr. President:

I have the pleasure of submitting to you the regular biweekly report on significant developments in the atomic energy program.

1. Desalting

- a. **Contract with Metropolitan Water District -** The AEC and the Department of the Interior entered into contract with the Metropolitan Water District of Southern California on August 18, 1964, for a study of the economic and engineering feasibility of a nuclear fired dual purpose plant to produce from 150 to 750 MW of electricity and 50 to 150 million gallons of potable water per day. Signing the agreement were Secretary of the Interior Udall and myself, representing the two Federal participating agencies, and Robert A. Skimmer, MWD General Manager and Chief Engineer. Under the contract, Metropolitan will have the overall responsibility for the conduct of the study by an engineering firm to be selected by Metropolitan subject to the approval of Interior and AEC.
- b. **U.S. - Israeli Discussions -** Talks to define the scope and requirements of a nuclear power desalting plant in Israel proceeded on schedule during the U.S. team's visit to Israel in July and early August. The early sessions were devoted to presentations by the Israeli team of Israel's power and water development, and forecasts of future needs. The U.S. team presented data on desalting programs and power units for desalting plants. The teams then visited various desalting plants under construction and in operation. At the closing session, the two teams agreed in principle to undertake such studies as are necessary during the latter part of August, and renew talks after September 20. The International Atomic Energy Agency has offered its facilities in Vienna as a site for future meetings.

c. Commissioner Ramey and Assistant Secretary of the Interior Holm testified before the Joint Committee on Atomic Energy (JCAE) on August 18 concerning water desalting programs in the U.S. and throughout the world. The Committee stated its intent to hold further hearings early next year after submission of the Interior-AEC report on desalting to you.

2. Hearing on NATO Agreement

On August 18, the Subcommittee on Agreements for Cooperation of the JCAE heard testimony from the Department of State in support of the proposed new NATO agreement in an open hearing. Representative Rosenthal (D-N.Y.), sponsor of one of four resolutions introduced in the House on August 17 in opposition to the agreement, testified against the agreement as did representatives of the Women's Strike for Peace and the Women's International League for Peace and Freedom. As reported earlier, the JCAE held an executive hearing on the agreement on July 30 at which representatives of State, DOD, and AEC testified.

3. Exchange of Lands at Hanford

To aid the Commission in its diversification efforts within the Hanford (Washington) Project, Senator Jackson and Representative Aspinall in July introduced companion bills that would permit the AEC to offer land and facilities to private business for conduct of private as well as Government activities under arrangements which would enable and justify private investment and construction or expansion of facilities. The House approved this legislation on August 11 and the Senate approved it on August 19.

4. U.S.-U.S.S.R. Exchange (LOU)

Pursuant to the Memorandum of Cooperation between the AEC and the U.S.S.R. State Committee on the Utilization of Atomic Energy, Soviet officials have indicated that they are prepared to receive a U.S. delegation of radioactive waste disposal specialists in October, and will send a Soviet delegation in November. The exchange of power reactor delegations is expected to take place in December. The Soviets have also indicated that they are prepared now to consider specific U.S. nominations for the long term exchange of specialists.

5. Belgium-Netherlands Agreement with U.S.S.R. [REDACTED]

The American Embassy in Brussels has reported on plans by Belgium and the Netherlands to conclude a civil uses atomic energy agreement with the U.S.S.R. The agreement would be concluded between the atomic energy commissions of the countries concerned, and would provide that the respective national atomic energy centers exchange documents and other information, and arrange visits of scientists.

This will be my last report until my return from Europe. As you know, I will be leaving this weekend to participate as the U.S. representative to the Third International Conference on the Peaceful Uses of Atomic Energy in Geneva. Following that, I will be serving as the U.S. representative to the Eighth Annual General Conference of the International Atomic Energy Agency which will open in Vienna on September 14th. I expect to return on September 17th and apprise you of these two Conferences in my next report of September 22.

Respectfully submitted,

Glen T. Seaborg

Glen T. Seaborg

The President
The White House

UNITED STATES GOVERNMENT

Memorandum

TO : R. E. Hollingsworth, General Manager

DATE: August 27, 1964

FROM : W. B. McCool, Secretary

Approved R. E. Hollingsworth
Date _____

Original signed
W. B. McCool

SUBJECT: ACTION SUMMARY OF MEETING 2042, WEDNESDAY, AUGUST 26, 1964,
10:05 A.M., ROOM 1113-B, D. C. OFFICE

SECCY:AJ

Commission Business

- AEC 1151/8 - FY 1966 Budget Estimates.
- AEC 1151/9 - Statistical Tables for FY 1966 Budget Estimates and
- AEC 1153/1 - AEC Policy on Mason Facilities

Discussed.

Reactor Development

The Commission tentatively approved the proposed method to apply the \$39 million previously appropriated in 1964, for support of a cooperative gas-cooled reactor prototype. The Commission also tentatively approved an estimate of \$5.5 million for design work for a fast fuels test reactor, instead of the \$75 million construction estimate recommended by the General Manager. (Pittman/Abbadessa)

Physical Research

The Commission tentatively approved the General Manager's recommendations with the following changes:

<u>Operating Expenses</u>	<u>(In thousands)</u>	
	<u>From</u>	<u>To</u>
Medium Energy Physics	\$ 8.5	10.5
Chemistry Research	50.5	50.75
Metallurgy & Materials Research	25.2	25.45
Controlled Thermonuclear Research	24.0	25.0
Change in Total	\$248.0	251.5

Physical Research (cont'd.)

	(In thousands)	
	<u>From</u>	<u>To</u>
<u>Capital Equipment</u>		
Low Energy Accelerators	\$ 4.0	6.5
Change in Total	\$49.0	51.5
<u>Construction</u>		
Los Alamos Meson Facility, LASL	2.0	53.486
New Laboratory for Research Sciences, Princeton University	0	1.6
Particle Physics Laboratory, University of Pennsylvania	3.5	3.0
Change in Total	\$68.340	123.126

Information Items

1. Special Study

The Chairman referred to Mr. John Finney's New York Times Article of August 26 and requested preparation of a study for possible later use. (Vinciguerra/Crowson)

2. George Washington University's Request for Study Funds (See George Washington University's August 20 Letter to the Chairman)

The Chairman said he approved the request subject to the views of the other Commissioners. (Vinciguerra)

3. Proposed Atomic Safety and Licensing Boards for Bodega, Malibu, Jersey Central, Niagara Mohawk, PRDC (Mr. Price's August 25 Memorandum)

The Chairman suggested the Commissioners submit their comments to Mr. Price. (Director of Regulation)

4. United Nuclear Accident Report (Mr. Price's August 26 Memorandum)

Noted.

cc: Commissioners

UNITED STATES GOVERNMENT

Memorandum

TO : File

FROM : W. B. McCool, Secretary

SUBJECT: SPECIAL STUDY

SECT:AJ

DATE: August 28, 1964

Original signed
W. B. McCool

1. At Meeting 2042 on August 26, 1964, the Chairman referred to Mr. John Finney's New York Times Article of August 26 and requested preparation of a study for possible later use.

2. It is our understanding the Divisions of Military Application and Classification will comply with the above request.

cc:

Chairman
General Manager
Deputy General Manager
Acting Asst. General Manager
Asst. Gen. Mgr. for Admin.
General Counsel
Director, Military Application
Director, Classification
Director, Public Information



President Johnson signing the Private Ownership Amendment to the Atomic Energy Act of 1954
Oval Office, August 26, 1964

L to R: Holifield, Price, Westlund, Tape, Ramey, Jackson, Palfrey, Seaborg, Newman, Bunting, Tremmel, Gifford, Radin, Welch, Gullander, Hollingsworth, Booth, Quinn, Cross, Hafstad, Ward, Roddis, and Bauser



Signing of the Private Ownership Agreement by President Lyndon B. Johnson, August 26, 1964

Louis Roddis, Alex Radin, Nat Welch, Robert Gifford and Archibald N. Booth.

At 12:25 p.m. I presided over Commission Meeting 2043 (action summary attached).

During the last few days I have carried on conversations with Deputy Secretary of Defense Vance, who wants to declassify a weapon yield, together with concomitant reduction in total megatonnage, which would have revealed the total stockpile megatonnage. I objected, saying that Vance's statements in his V.F.W. speech in Cleveland tomorrow should be of a more general nature.

I wrote to Dr. F. Skiddy von Stade, Jr., Dean of Freshmen at Harvard, my thoughts about Peter, in answer to von Stade's letter.

Thursday, August 27, 1964 - D.C.

At 10:35 a.m. I presided over Commission Meeting 2044 (action summary attached). The Commission finished the work on the FY 1966 budget which is to go to the Bureau of the Budget during our absence in Europe in September.

At 12:30 p.m. I attended a luncheon in the Reading Room of the National Academy of Sciences, given by Harrison Brown, in honor of Ragnar Rollefson who is finishing his term as Science Advisor to the Department of State.

I sent a letter to the President requesting his approval for WHETSTONE II, the second quarter underground testing program, and also SULKY, the Plowshare cratering shot.

At 3:25 p.m. I presided over Information Meeting 410 (notes attached).

Friday, August 28, 1964 - Washington - Geneva

I flew with Dan Wilkes, Arnie Fritsch, and Mr. and Mrs. Ramey on Eastern Flight No. 84 which left from National Airport at 7:30 a.m. and arrived in New York at 9:15 a.m. I then continued on TWA Flight No. 802 to Geneva which left New York at 10 a.m. and arrived in Geneva at 11:30 p.m. I checked into the Du Rhone Hotel. The delegates to the Third Geneva Conference on the Peaceful Uses of Atomic Energy are Hornig, Rabi, Seitz, Smyth and I.

Saturday, August 29, 1964 - Geneva

I conducted a press conference at 11:30 a.m. at Palais des Nations. U.S. delegates and alternates Ramey, John Palfrey, Isidor Rabi, Frederick Seitz, Henry Smyth, and Roger Tubby sat at the table with me. After this, I visited the U.S. exhibition in the Palais des Expositions. I visited the headquarters for the U.S. delegation to the Geneva Conference at the Gatt Building. I had dinner with Wilkes and Fritsch in the Du Rhone Hotel and then took a walk with them in the old section of Geneva.

Sunday, August 30, 1964 - Geneva, Chamonix, Geneva

Fritsch, Wilkes and I were driven, in the Cadillac placed at our disposal, to Chamonix, France (about 50 miles), where we took the funiculaire to the 12,000-foot level of Mont Blanc. We took numerous pictures and movies on the way to the summit, as well as at the summit. We returned to Palais des Expositions where at 3 p.m. I showed U Thant, a large group of conference and UN officials (including Edward R. Gardner, Executive Director of the U.S. Delegation, and Vasily Emelyanov, who is President of this Conference), along with U.S. delegates and alternate delegates, through the U.S. exhibit, starting with the four-minute greeting by President Lyndon Johnson by means of a color movie. I attended a reception in 135

UNITED STATES GOVERNMENT

Memorandum

UNCL. BY DOE
NOV 86

TO : R. E. Hollingsworth, General Manager

DATE: August 27, 1964

Approved R. E. Hollingsworth

FROM : W. B. McCool, Secretary

Date _____

Original signed
W. B. McCool

SUBJECT: ACTION SUMMARY OF MEETING 2043, WEDNESDAY, AUGUST 26, 1964,
12:25 P.M., ROOM 1113-B, D. C. OFFICE

SEARCH

Commission Business

AEC 1151/8 - FY 1966 Budget Estimates and
AEC 1151/9 - Statistical Tables for FY 1966 Budget Estimates

Discussed.

Biology & Medicine

The Commission tentatively approved the General Manager's recommendations with the following changes:

<u>Construction</u>	<u>From</u>	<u>To</u>
	(In thousands)	
Counting & Instrument Laboratory, University of Utah	\$ -0-	250
Total	13,185	13,435

The Commission noted that the Division of Biology and Medicine would be prepared to defend appropriately the estimates for off-site research and would report on the ad hoc group's review of the procedures and controls for awarding off-site contracts. (Dunham)

Commissioner Ramey noted the importance of phased coordination of the proposed biology laboratory at Richland with Battelle. (Dunham)

Physical Research

The Commission approved the addition of \$2.5 million to the Physical Research Construction budget for the acquisition of additional land at BNL.

Training, Education & Information

The Commission tentatively approved the General Manager's recommendations with the following changes:

<u>Operating Expenses</u>	<u>From</u> (In thousands)	<u>To</u>
Nuclear Materials and Services	\$ 548	1,048
Rental of Computer Equipment	0	50

The Commission noted a staff paper was in preparation on the matter of assistance to universities for research reactors. (Poor)

The Commission noted the desirability of a briefing session for JCAE staff on the proposed Training, Education and Information budget estimates attended by Commissioners Tape and Bunting and appropriate AEC staff. (Poor)

The Commission requested a briefing in the Fall of 1964 on the Technical Information Program. (Brunenkant)

Isotopes Development

Commissioner Ramey requested an appropriate memorandum on the proposed Novawood Pilot Plant and further consideration of the DID program on Thursday, August 27. (Fowler)

Civilian Applications of Nuclear Explosives

The Commission tentatively approved the General Manager's recommendations. (Abbadessa)

Community

The Commission tentatively approved the General Manager's recommendations. (Abbadessa)

cc:
Commissioners

Memorandum

TO : R. E. Hollingsworth, General Manager

DATE: August 23, 1964

FROM : W. B. McCool, Secretary

Approved R. E. Hollingsworth

SUBJECT: ACTION SUMMARY OF MEETING 2044, THURSDAY, AUGUST 27, 1964, 10:35 A.M.
ROOM 1113-B, D. C. OFFICE

Original signed
W. B. McCool

Date _____

SECY:IC3

Commission Business

- AEC 1151/8 - FY 1966 Budget Estimates,
- AEC 1151/9 - Statistical Tables for FY 1966 Budget Estimates and
- AEC 1151/10- FY 1966 Budget Estimates - Laboratories

Approved, as revised. (Abbadessa)

The Commission approved the following amounts for submission to the BOB:

<u>New Obligational Authority</u>	(in thousands)
Operating Expenses	\$2,444,111
Capital Equipment	194,825
Construction	<u>286,151</u>
Total New Obligational Authority	\$2,925,037

The draft letter to the BOB is to be revised in accordance with discussion at the Meeting. (Abbadessa)

The Commission noted that funds for "Heavy Water - General" would be presented to the BOB under the "Desalination Program". (Abbadessa)

You said material would be developed for consideration by the Commissioners upon their return from Europe in compliance with the August 27 letter from the BOB. The Chairman, in particular, noted the importance of a forceful and succinct statement re SNM production.

August 28, 1964

Isotopes Development

The Commission approved inclusion of the following requests in support of the POODLE space propulsion system:

	(in thousands)
Operating Expenses	\$4,700,000
Construction	3,000,000

(Abbadessa)

The Commission agreed to leave the question of the location of the POODLE test facility open. (Fowler)

Program Direction & Administration

The Commission approved the General Manager's recommendations.

The Commission noted your reservation on the breakdown of the personnel increase.

Reactor Development (Construction)

The Commission approved the recommendation that \$4,800,000 be requested for construction of an Electron Linear Accelerator at ORNL.

2. AEC 777/106 - Advanced Converter Concepts to be Selected

Approved, as revised. (Pittman)

The Commission approved the revised proposed funding arrangement and agreed staff could undertake negotiations with GA and RG&E in accordance with the guidance given at the Meeting. (Pittman)

The Chairman requested staff prepare appropriate background summary information on:

- a. the proposed RG&E cooperative arrangement;
- b. planned action with respect to the AI liquid metal reactor program; and

August 28, 1964

- c. planned action with respect to the AI and CE D₂O moderated reactor program.

(Pittman)

The Commission agreed Mr. Staats and Senators Pastore, Cannon and Bible should be informed, in that order, of the Commission decision.

The Commission noted staff would attempt to negotiate appropriate study contracts with Sierra Pacific and Holyoke.

(Pittman)

The draft letter to B&W is to be revised. (Pittman)

3. AEC 1159/1 - AEC Portion of Joint AEC-Interior Desalting Program

Approved, as revised. (Pittman)

The DSD Report is to be revised in accordance with discussion at the Meeting. (Pittman)

4. Briefing on Cost Reduction

The Commission had no objection to the proposed report.

Commissioner Ramey requested a briefing prior to submission of the next report. (Slaton)

Executive Session Items

1. Chairman's Telephone Conversations with Mr. Staats and Senator Pastore
2. Chairman's Telephone Conversation with Mr. Staats re Desalination of Colorado River Water

cc:
Commissioners



August 27, 1964

INFORMATION MEETING 410

3:25 p.m., Thursday, August 27, 1964 - Chairman's Conference Room, D. C. Office

1. Cooperative Arrangement with the State of California for the Thorium-Seed & Blanket Large Power Reactor

Approved with revisions. (Pittman-Scammahorn)

2. Personnel Matters

3. NIH Research at Oak Ridge

4. Letters of Invitation to the SALMON Event

The Chairman signed the letters of invitation and requested preparation of a letter invitation to Vice Chairman Holifield. (Brown)

5. Letter to the General Advisory Committee

Approved with revisions. The Joint Committee is to be informed. (Brown-Vinciguerra)

6. Midwest-Argonne Management (see Dr. Tape's August 27 Memorandum)

Dr. Tape's proposed letter to Messrs. Beadle and Williams was approved.

7. Proposed Appointment to the Advisory Committee on Reactor Safeguards

Approved. (Secy)

8. Letter to the President re WHETSTONE II

Approved. (Brown-Crowson)

9. United Nuclear Consolidation Request (see General Manager's August 26 Memorandum)

The Commissioners accepted the General Manager's recommendation and are to be informed of the guidelines which will be established for the study. (Quinn)

10. Public Notice Transfer of Commercial AEC Radioisotope Production and Distribution Activities to Private Industry (See Mr. Vinciguerra's August 26 Memorandum)

11. PRDC (See Walker Cisler's August 13 Letter)

The Commissioners accepted the General Manager's recommendation to negotiate an irradiation program at 35 percent base load. Discussions with the Joint Committee and a safety review by the Hazards Staff. (Pittman-Scammahorn-Woodruff)

12. Proposed French Visit for Discussions of SNAP Technology (See Mr. Vinciguerra's August 26 Memorandum)

The White House is to be informed. It was noted that Mr. Sievering's discussions in Europe will be confined to a definition of the information the French desire. (Kratzer-Vinciguerra)

13. Proposed Export of IBM Computer to France

The General Manager recommended, and the Commissioners agreed, an evaluation should be obtained and transmitted to the Department of State. (Crowson-Kratzer)

14. Participation by Polish National in Unclassified AEC Research at Indiana University (See Mr. Kratzer's and Mr. Vinciguerra's August 26 Memoranda)

Approved.

15. Pending Contractual Matters (August 21 Report)

Noted.

16. Proposed AS&L Boards (See Mr. Price's Memoranda of August 25 and 26)

The Commissioners had no objection to Mr. Price's recommendation. (DR)

17. Los Alamos Telephone Facilities (See August 17 Letter from Mr. Orrick, Justice Department)

The General Counsel recommended, and the Commissioners agreed, an appropriate letter submitting the matter to the Justice Department should be prepared. (GC)

18. George Washington University Letter of August 20 re Study Contract

Deferred. (Secy)

19. Sierra-Pacific Proposal

Senator Cannon called the Chairman and will schedule with the General Manager's office a meeting after next Tuesday. Commissioners Palfrey and Tape and staff will discuss the matter with Senator Bible at 2:30 p. m. tomorrow. The letters are to be held pending these discussions. (Vinciguerra-Pittman)

20. Guard Services Contract at NTS

The Chairman noted the telegram from FSI and Mr. Vinciguerra said Mr. Wackenhut will be requested to discuss the matter with staff in Washington. (Vinciguerra)

21. One-Day Visit of Soviets to Los Alamos

The Commissioners had no objection to the General Manager's proposal. (Kratzer)

22. Joint AEC-Interior Report on Large-Size Nuclear Desalting Program (See General Manager's August 27 Memorandum)

Approved in principal. The report will be reviewed further in Geneva.

23. Proposed Letter to Sir William Penney

The letter is not to be sent. The Chairman will discuss it with Sir William in Geneva. (Brown-Kratzer)

24. Appointment of Chairman of Board of Contract Appeals

Approved. (Tackman)

PRESENT

Dr. Seaborg
Mr. Palfrey
Mr. Ramey
Dr. Tape
Dr. Bunting

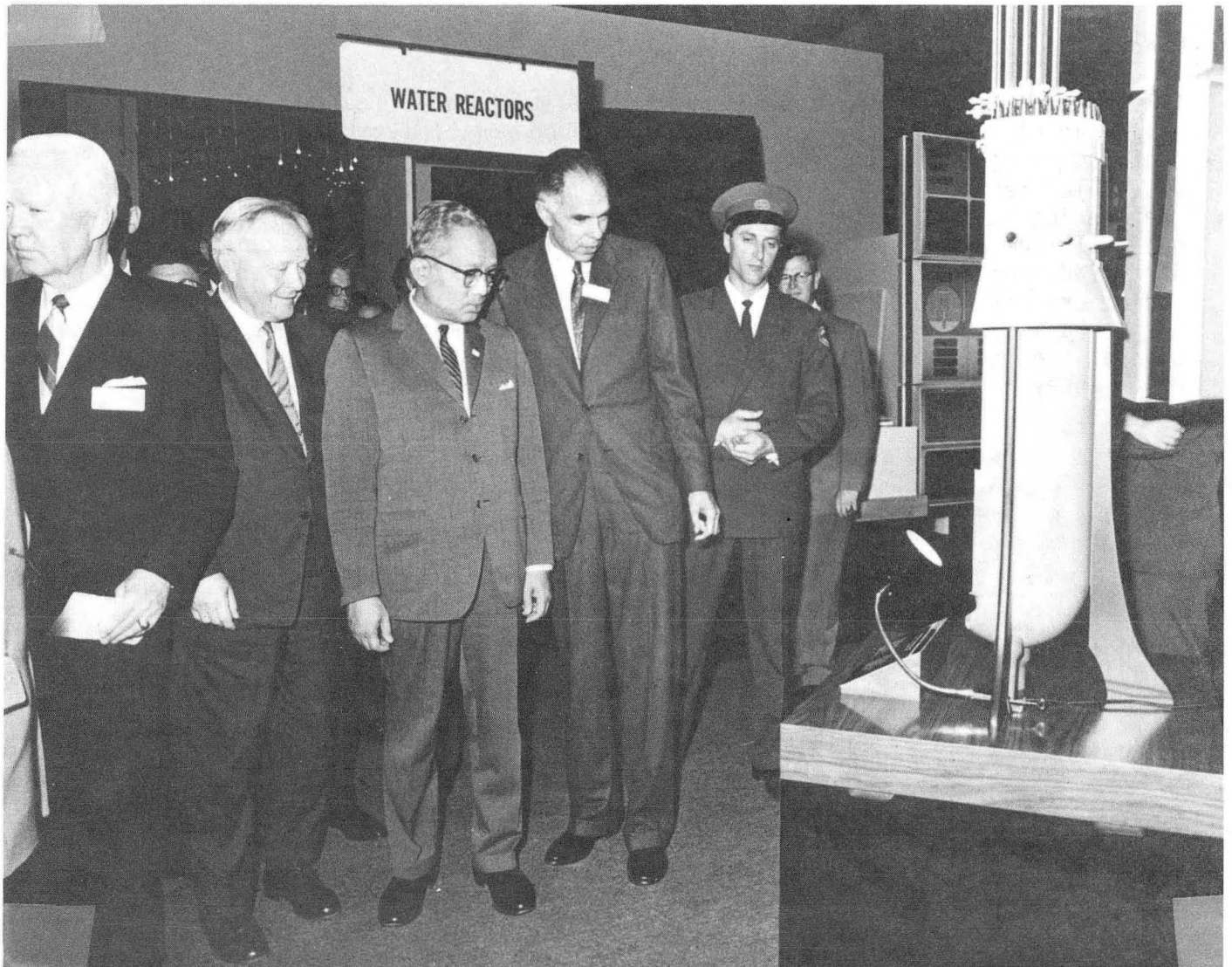
Mr. Hollingsworth
Mr. Vinciguerra
Mr. Hennessey
Mr. Brown
Admiral Rickover*
Mr. Leighton*
Mr. McCool

DISTRIBUTION

Commissioners
General Manager
General Counsel
Secretary

W. B. McCool
Secretary

*Attendance for Item 1 only.



Tour of U.S. Exhibit at Third Conference on Peaceful Uses of Atomic Energy, Geneva, August 30, 1964.

L to R: E. R. Gardner, V. Emelyanov, U Thant, Seaborg

Palais des Exhibitions given by U Thant. I had dinner with Fritsch and Wilkes at the Du Rhone Hotel.

Monday, August 31, 1964 - Geneva

I met with U.S. delegates and alternate delegates, chiefly to discuss plans of action in case any countries tried to introduce political matters into the Conference. (This didn't happen.) I gave a short greeting to about 100 of our U.S. delegates at the AEC mission headquarters in the Gatt Building. I attended the opening session, at which I read a message from President Johnson (the filmed one). It was a good, successful, nonpolitical opening. I had lunch with Chauncey Starr (advisor to the U.S. delegation), Ramey and Polly Bunting to discuss the new Sodium Graphite Reactor (SGR) proposed by Starr. I attended the afternoon session at the Palais des Nations on economics of nuclear power. I attended the reception, also at the Palais des Nations, given by U Thant, Vasily Emelyanov (President of Conference), and Sigvard Eklund. Helen arrived in Geneva this morning.



Opening of Plenary Session, Third International Conference on the Peaceful
Uses of Atomic Energy, Geneva, August 31, 1964

First Row - L to R: Seaborg, D. Hornig, H. Smyth, F. Seitz

Second Row: J. Ramey, M. Bunting, R. Tubby, J. B. Anderson

Third Row, partly hidden: E. R. Gardner

Tuesday, September 1, 1964 - Geneva

I met with the U.S. delegates, alternates, and others at 9 a.m. to discuss the day's issues and program. I met with John Simpson of Westinghouse regarding his concern over the conference's publicity. I recorded a radio interview, regarding my relatives in Sweden, with Gustav Swensson of Sveriges Radio. I hosted a luncheon at the Richmond Hotel with Helen for representatives of specialized international agencies, at which I gave copies of our four AEC presentation volumes to Eklund, Phillippe de Seynes (UN), Gerald C. Gross (International Telecommunication Union), David A. Davies (World Meteorological Organization), Grundy (World Health Organization), and Piccagli (International Bank for Reconstruction and Development).

During the afternoon I visited CERN with Gerald Tape, Donald Hornig, and Polly Bunting.

I attended the Canadian reception with Helen at Restaurant du Parc des Eaux Vives and had dinner with her at the Chandelier Restaurant.

Commissioner Wilson passed away this evening in a Geneva hospital, following a severe stroke, subsequent to a smaller stroke on Monday morning. This was a great blow to all of us, because he seemed to be quite well when we saw him at the tour of the U.S. exhibit on Sunday (August 30th). He was extremely pleased at the passage of the private ownership (of nuclear fuel) legislation and at the knowledge that I had a pen for him which was used by President Johnson in signing the bill.



Presentation of books on nuclear energy to Sigvard Eklund, September 1, 1964, Geneva

Wednesday, September 2, 1964 - Geneva

I met with U.S. delegates and alternate delegates at 9 a.m. to discuss current events. I discussed the High Temperature Gas-Cooled Reactor (HTGR) prototype with Fred de Hoffmann and Robert E. Ginna (of Rochester Gas and Electric), and possible SGR prototype with Starr and James F. Davenport (Southern California Edison), and Samuel B. Nelson (Metropolitan Water District) along with other members of our delegation.

At 10 a.m. in the Exhibit Hall I toured exhibits and took pictures with Fritsch. At 11 a.m. I met in the Palais des Expositions with a large group of European and American utility people, and others, under the sponsorship of the Atomic Industrial Forum (Charles E. Robbins, Director), to explain the private ownership of nuclear fuel legislation. I was filmed in an interview on nuclear power for the U.N. Helen and I went to the U.K. reception at the Palais des Nations, and the Italian reception at the Restaurant du Parc des Eaux Vives.



With Charles Robbins, in Palais des Expositions. Geneva, September 2, 1964

Harry Smyth and Algie Wells at right

Thursday, September 3, 1964 - Geneva

I met with the U.S. delegates and alternate delegates at 9 a.m. to discuss current issues. At 9:45 a.m. I met with press representatives Irwin Goodwin (Newsweek), Loory (New York Herald Tribune), Bob Toth (Los Angeles Times), and others. I met with Ginna and de Hoffmann, who said they agree to the AEC terms for the HTGR prototype. I attended a session of the 17-nation disarmament conference in Palais des Nations. At 2:30 p.m. I flew with the heads of atomic energy delegations and representatives of 15 countries to Malmö, Sweden, in a special plane (U.S. Air Force C-54), and then went by bus to Hälsingborg where we boarded the N.S. Savannah.

Among my guests aboard the plane from Geneva to Sweden were: Eklund, Brynielsson, Gunnar Randers (Managing Director, Institute for Atomic Energy, Norway), J. H. de Boer (Netherlands), Bertrand Goldschmidt (Director of Foreign Relations and Programs, Commissariat a l'Energie Atomique, France), A. N. Petrosyants (Chairman of USSR State Committee for the Utilization of Atomic Energy), Carlo Salvetti (Vice President National Committee for Nuclear Energy, Italy), Siegfried Balke (Federal Republic of Germany), Oscar A. Quihillalt (President, National Atomic Energy Commission, Argentina), I. H. Usmani (Chairman, Pakistan Atomic Energy Commission), Homi J. Bhabha (Chairman, Indian Atomic Energy Commission), Sir William G. Penney (Chairman, U.K. Atomic Energy Authority), General Letor (President, Center for Nuclear Energy Studies, Mol, Belgium), Anton Moljk (Professor, University of Ljubljana, Yugoslavia), Luiz Cintra do Prado (Chairman, Nuclear Energy Commission, Brazil), and Sakuji Komagata (Commissioner, Atomic energy Commission, Japan), as well as Smyth and John B. Anderson (Member of Congress from Illinois and member of JCAE), and USAEC staff members Arnold Fritsch, Les Staebler and Richard Doan.

Helen and Wilkes came up by commercial airlines. We spent the night aboard the N.S. Savannah. (List of room number assignments attached.)

Friday, September 4, 1964 - Hälsingborg to Malmö

I took Andronik Petrosyants, Nikola Khlopin (Scientific Head of the Kurchatov Nuclear Institute and developer of the Ice Breaker Lenin) with their interpreter Igor Tikhonov on an early morning tour of the control room and main machinery spaces of the N.S. Savannah.

I sailed with the atomic energy group, plus a large group of Swedish industrialists, on the N.S. Savannah from Hälsingborg to Malmö. The Swedish group on board also included Professor Torsten Gustafson of the University of Lund, Secretary Gunnar Lange and Under Secretary Von Sydow of the Ministry of Commerce and Industry. I took the opportunity to urge on them, in a conversation at which Eklund was present, the desirability of having the IAEA assume responsibility for administering the safeguards currently provided for under the U.S.-Swedish bilateral Agreement for Cooperation. Unfortunately, they appeared to resist this idea. On the other hand, discussion with Director Sune Wetterlundh of the Swedish Atomkraft Konsortiet (AKK) indicated that the Swedish utilities were inclined to favor the IAEA even to the extent of obtaining reactor fuels through the Agency channel.

We left at 10 a.m. and arrived at 3 p.m. I introduced the atomic energy representatives from the 15 countries to the assemblage aboard as pictures were taken. I spoke to the group at this ceremony on board at Malmö. I flew with Fritsch to Stockholm on Scandinavian Flight No. 168 after a television interview in Malmö (which was later used on the Swedish national television). Helen and Wilkes followed on a later plane.



On board N.S. Savannah in cruise from Hälsingborg to Malmö, September 4, 1964.

L to R: A. R. Fritsch, U. M. Staebler, (back) Gunnar Randers, (front) Harry Brynielsson, J. H. de Boer, John B. Anderson, T. Gustafson, Bertrand Goldschmidt, Carlo Salvetti, Siegfried Balke, Richard L. Doan, Oscar A. Quihillalt, H. D. Smyth, Seaborg, I. H. Usmani, Homi J. Bhabha, Sir William G. Penney, General Letor, Anton Moljk, Luiz Cintra do Prado, Sakuji Komagata, Daniel M. Wilkes.

N. S. SAVANNAH

Voyage #2
Sept. 3, 1964

HALSINGBORG TO MALMO, SWEDEN PASSENGER LIST

NO.	NAME	ROOM NUMBER
1	Dr. Glenn T. Seaborg	17
2	Mrs. Seaborg	17
3	Mr. Nicholas Johnson	19
4	Mrs. Johnson	19
5	Dr. Arnold R. Fritsch	20
6	Mr. Daniel Wilkes	20
7	Mr. Um Stabler	20
8	Sir William C. Fenney	21
9	Dr. Hond J. Bhabha	24
10	Professor Dr. J. H. de Boer	23
11	Dr. Gunnar Randers	23
12	Dr. Henry D. Smyth <i>Hbst</i>	25
13	Mr. Richard L. Doan <i>Sir Reata</i>	25
14	Mr. Milton C. Edlund <i>Licensing</i>	25
15	Dr. Harry Brynielsson	26
16	Mr. Gustafson	26
17	Mr. Eklund	26
18	Mr. Khlopin	27
19	Mr. Petrcyants	27
20	Mr. Tikhonov	27
21	Mr. Balke	28
22	Dr. Bertrand Goldschmidt	28
23	Mr. Letor	28
24	Congressman J. B. Anderson	29
25	Mr. John Erlewine	29
26	Dr. Salveti	30
27	Dr. Moljk <i>Merk</i>	30
28	Ambassador J. Graham Parsons	18
29	Mrs. Parsons	18
30	Direktor K. A. Fallenius	22
31	Consul. General Backe	22
32	Admiral Oscar D. Quihillalt	1
33	Dr. I. H. Usmani <i>Quillot</i>	2
34	Commissioner Sakuji Komagata	9
35	Mr. Luis Cintre do Prado	11



Demonstration Run, N.S. Savannah, Hälsingborg to Mälmo, Sweden, September 4, 1964
L to R: A. M. Petrosyants (Chairman, State Committee of the Council of Ministers
of the USSR for the Utilization of Atomic Energy), Helen and Glenn Seaborg

Saturday, September 5, 1964 - Stockholm

I met from 11:15 to 11:55 a.m. with Prime Minister Tage Erlander (in his office) and cabinet and senate member Olof Palme. I explained why the U.S. and Eklund want Sweden to transfer safeguards from the U.S.-Swedish bilateral to the IAEA. I explained the safeguards system and said it wouldn't interfere with development of nuclear power in Sweden. I suggested a six-month trial on one reactor, if he didn't want to agree to immediate transfer. He said he had talked to Lange, Minister of Commerce and Industry, this morning (I said I had talked to him for nearly an hour yesterday), and he thought Lange is coming around to agreeing to this step. Erlander indicated he thought that he could get his Cabinet to agree to a trial basis as I suggested. We also discussed the possibility of an international accelerator. I explained the USSR position. I said I thought this was more likely with a 1000 BeV, than with the 200 BeV accelerator. He asked what I thought about the Swedish nuclear power programs, recalling our conversation in 1964. I gave a generalized reply, saying Swedish uranium is expensive, but a Swedish type of reactor could be important in the 1970s. I explained our U.S. reactor export policy and our private ownership legislation, and our guarantee of fuel availability for the life of a reactor. I extended greetings from Helen and told him about my ancestors' home in Skansen.



Visit to ancestral home, Laxbrostugan, Skansen Park, Stockholm, September 5, 1964

Included are the Seaborgs, Karl and Jenny Adolfsson, Bengt and Britta Adolfsson, Gösta and Irene Adolfsson and their children Eva and Lena, Karin and Per Möller and their son Göran, Ruth Kjellgren, Albert and Maria Eriksson and their daughter Lena, Gösta Berglund

Helen did some shopping for gifts. She and I gave a luncheon for our relatives (a total of 36 in the party) at Solliden Restaurant in Skansen. The group included Karl and Jenny Adolfsson, Bengt and Britta Adolfsson, Gösta and Irene Adolfsson and their children Eva and Lena, Karin and Per Möller and their son Göran, Ruth Kjellgren, Albert and Maria Eriksson, their daughter Lena, son Gustav and grandson Dan, Olof and Eivor Bloom and their children Anita, Per and Berit, Siv and Peter Lindkvist, Gösta and Ingrid Berglund and their daughter Britt, Gun and Hans Grill, Tora Bäcklin, and Carl and Monica Tersmeden. (Carl is a second cousin on the Seaborg side, all the others are relatives, and spouses, on my mother's side.) Then we all visited the ancestral home at Laxbrostugan in Skansen and took pictures. Helen and I had dinner in our Grand Hotel room with Karl and Jenny Adolfsson, Per and Karin (Adolfsson) Möller and their son Göran.



Additional group at Laxbrostugan, September 5, 1964

Included are the Seaborgs, Eivor Bloom and children Anita, Per, and Berit, Siv and Peter Lindkvist, Tora Bäcklin, Gösta and Ingrid Berglund and daughter Britt, Gun and Hans Grill, and Bengt Adolfsson

Sunday, September 6, 1964 - Geneva

I flew to Geneva via Copenhagen on Scandinavian Flight No. 405 which left Stockholm at 1:30 p.m. and arrived at Copenhagen at 2:45 p.m.) and Swissair Flight No. 263 (which left Copenhagen at 3:15 p.m. and arrived in Geneva at 5:45 p.m.) with Wilkes and Fritsch. Helen came on a separate plane. Helen and I had dinner at the Du Rhone Hotel, where we are staying. I read AEC papers in the evening.

Monday, September 7, 1964 - Geneva

I held the morning meeting of our U.S. delegates at 9 a.m. I met with Kenneth Holum (Department of Interior) and Ramey to sign a letter to President Johnson, Kermit Gordon (Director, Bureau of the Budget), et al., on our nuclear desalting program, due September 11th. I worked with Fritsch, Wilkes and my staff on my summary remarks for tomorrow night. Helen and I went to lunch at Villa Primerose, Geneva-Vesenaz, home of German Ambassador and Mrs. von Keller, with Mr. and Mrs. William Penney, Mr. and Mrs. Vasily Emelyanov, Heinz Maier-Leibnitz, Ishrat H. Usmani, and others. Helen and I went to the Spanish, ASEA (the Swedish national electrical concern), and Indian receptions. (ASEA reception was given by Ake C. Vrethem.)

Tuesday, September 8, 1964 - Geneva

I held the morning meeting of our delegates, as usual at 9 a.m. In the morning I had an interview with Joe Lubin ("Voice of America"), taped, and David Egli (Swiss Broadcasting Corporation). I had lunch at the Hotel President with the Mexican delegation, Dr. Nabor Carrillo Flores, host. I worked on my summary lecture much of the day. I gave the summary lecture of the Third Geneva Conference at the Palais des Nations at 9 p.m., which Helen attended. There was a large crowd. The lecture seemed to be well received.

Following are some excerpts from these remarks:

"It is a great honor to be assigned the task of summing up this memorable conference. After attempting to digest the enormous and diversified content of the sessions, I assure you that the challenge is equal to the honor. I therefore approach the task with humility....

Before I begin my discussion of the conference itself, I should like to remark briefly upon a matter of historical significance which has been noted by other speakers. We have met in approximately the 25th anniversary year of the great discoveries which are responsible for our being here today...

The magnitude of the accomplishment in this quarter of a century can be appreciated in retrospect. Some of you will recall, as I do, the impact on nuclear science laboratories around the world of the startling reports in late 1938 and early 1939 of the discovery in Germany of nuclear fission by Otto Hahn and Fritz Strassman, with elucidations by Lise Meitner and Otto Frisch. In only four years the late Enrico Fermi and his colleagues had operated a reactor. Even so, in this period many of us would have been content with the thought that nuclear power might be an economic reality by the turn of the century. I find it astonishing that so much has been accomplished in only twenty-five years.

The contribution of the three International Conferences to this stage of progress has been immeasurable. The first conference, in 1955, dropped the shrouds of secrecy from many aspects of nuclear energy, and began a renewal of the channels of communication between nuclear scientists and engineers of

world. In the second conference, communications and international cooperation were further expanded, and fusion research was removed from the pale of secrecy. The third conference, bringing us to the borders of the age of nuclear power, might be called the Conference of Fulfillment...

If we are to implement the major conclusion of this conference--that nuclear power will become an increasingly powerful force in the world's work--it will be necessary to evolve as rapidly as possible an appropriate world body of nuclear law. Considerable progress has been made in the development and application of appropriate safeguards under the aegis of the International Atomic Energy Agency. As Dr. Sigvard Eklund, Director General of the IAEA, told us, it is important to have accepted an 'international safeguard system now when the number of power reactors is still small.' The future growth of the international atom must be paralleled by the future growth of an effective safeguards system."

Back home, Peter took Dianne to Murch School today to start kindergarten.



Wednesday, September 9, 1964 - Geneva

I held the regular morning meeting of U.S. delegates. At 10:30 a.m. I met with Dr. Pierre Guillaumat (Electricite de France). I had lunch at Ambassador Roger W. Tubby's with Bill Foster, Ambassador Clare H. Timberlake, and Ambassador Blumenthal. I heard Smyth's talk at the Palais des Nations. Fritsch and I flew to Brussels on Swissair Flight No. 130 which left Geneva at 6:15 p.m. and arrived in Brussels at 8:30 p.m. Helen and Dan Wilkes took an earlier plane. We stayed at the Metropole Hotel in Brussels.

Thursday, September 10, 1964 - Brussels

I met with John Tuthill, our Ambassador to the European Communities, and staff at his headquarters to discuss the meeting with Euratom officials. Then I went to the Euratom headquarters to meet with President Pierre Chatenet, Euratom Commissioners Paul de Groot, Emanuel Sassen, and Robert Margulies to discuss USAEC-Euratom relationships. I emphasized the U.S. determination to terminate bilaterals and thereafter channel through the Euratom Supply Agency whatever special nuclear materials we provide for member countries. I also discussed the Geneva Conference, the fast breeder exchange of information program, cooperation in organic coolant-D₂O moderator reactor development, the executive merger of the European Community, etc. Fritsch, Myron Kratzer (Director, USAEC Division of International

Affairs), Russell Fessenden (Tuthill's Deputy), Tuthill, Charles Schank (USAEC Scientific Representative in Brussels), Dixon Hoyle (USAEC Division of International Affairs) et al., participated. I went to lunch with the same group, hosted by Chatenet at Val Duchesse.

Helen visited Ghent with Mrs. Tuthill, Mrs. Fessenden, and Mrs. Schank. Later Helen, Dan, Arnie, and I visited Waterloo. Helen and I had dinner at the Metropole Hotel, and walked around the old part of town after dinner.

I would like to add a few words of explanation about some of the subjects discussed in our meetings in Brussels. These reflected changes that were developing in the relationships between the three European communities and in Euratom's relationships with its member states. Negotiations have been under way between Euratom, the European Coal and Steel Community, and the European Economic Community that have resulted in a treaty providing for their eventual unification in one overall organization.

This merging of the Communities, which is to start in June 1967 with the fusion of the three executive commissions, is to take place gradually with a view to completion by June 30, 1970. While the merger plan appears to represent a significant step toward stronger European unity, it is sure to have some effect--just what, cannot yet be known--on Euratom programs. One uncertainty, for example, is the financing of nuclear research activities. So far these activities have been conducted according to five-year plans for which funds were approved at the start of each five-year period. The second such multiannual program was initiated in 1963. The approach that will be taken by a unified Commission, within the broader framework of the merged Communities, toward the financing of nuclear activities is an unknown factor. Considering our cooperative activities with Euratom in research, we are of course intensely interested in plans and expectations for the future, and ways in which our collaboration might be affected by the contemplated merger.

The matter of terminating the bilateral agreements the United States has signed with all Euratom members (except Luxembourg) before Euratom came into being is also one of great concern to the United States. For various reasons, particularly in order to support the European Community concept and also in order to permit the widest possible administration of Euratom safeguards on special nuclear materials within the Community, we consider it desirable to allow the bilaterals to lapse on reaching their termination dates. This "fold-in"--as the step is dubbed--will in no way interfere with cooperative activities under way with the separate member states. Our position is that the change will merely mean that U.S.-origin special nuclear materials for their national programs will be supplied through the Euratom Supply Agency under our agreements with the Community; but Euratom member states are somewhat apprehensive lest fold-in have an unfavorable effect on our bilateral collaboration.

In light of our discussions, it seems clear that most of the member nations will go along with our position without strong objection. France can be expected to present difficulties, but the primary concern of the other members appears to be simply a desire for reassurance that termination of the bilaterals will not adversely affect our support for their national programs. I feel that the strong personal assurances I am able to give, reinforcing communications and other discussions, do much to allay misgivings on this score.

The future relationships between Euratom and its member states are of importance to us also in our arrangement for exchange of information in the field of fast breeder reactors, on which we reached agreement in May 1964. Through this arrangement, we

have access to information about member nations' work in this field by virtue of Euratom's pertinent "Contracts of Association" with its members. Whether these contracts will be continued and what Community funding (if any) will be provided for fast reactor research are, therefore, questions that significantly affect the usefulness to us of our arrangement with Euratom in this area.



Visit to Waterloo, September 10, 1964

L to R: Arnie Fritsch, Seaborg, Helen Seaborg

Friday, September 11, 1964 - Brussels

I gave a talk on the past, present, and future U.S. nuclear fuel supply policy, to invited guests of Foratom at the Shell Auditorium. The talk was well attended. I was introduced by William A. de Haas of Phillips, President of Foratom, an international organization of non-governmental nuclear associations of European countries. Later, I had lunch at Ambassador John Tuthill's with Paul de Groote, Robert Margulies, Emanuel Sassen, Jean-Marc Boegner, Albert Borschette, des Muelen, Ugo Mosca, de Haas, Alphonse Huss, General Lucien Leboutte, Giorgio Riccio, John Schatzel, Myron Kratzer and Charles F. Schank (USAEC Scientific Representative, Brussels).

In my Foratom talk I first stressed U.S. cooperation with Euratom and paid tribute to the latter's "leadership in finding new and constructive means for organizing peaceful nuclear power." After referring to the widespread, growing confidence in the potential contribution of nuclear power generation, I spoke briefly of certain reactions to the advances achieved in power reactor manufacturing. One of these reactions I deplored:

"A second--and most regrettable--reaction is a growth in the tendency toward economic nationalism in reactor manufacturing competition. We know that certain types of reactors have become identified with certain nations. Technological-economic advances in one nation are sometimes viewed as an economic threat in a country emphasizing another type of reactor.

The entry of economic nationalism into the nuclear power field is most unfortunate. Nuclear power rose from one of the most remarkable chapters of the history of international cooperation in scientific research and development. The names of the collaborators--Hahn, Joliot-Curie, Bohr, Fermi, Rutherford, Lawrence--belong to many countries. The subsequent evolution of nuclear power development has been marked by further international collaboration. While certain countries have since chosen to concentrate on specific power reactor types, there has been international cross-fertilization in the development of almost every reactor concept. And the same collaboration will continue in the future, as witness the recently concluded arrangement between Euratom and the United States for an extensive exchange of information on fast breeder reactors."

Turning to the principal subject of my address, I gave a full exposition of our fuel supply policy, emphasizing particularly the availability of fuel material, or enrichment capability, the toll enrichment arrangements authorized by recently passed legislation, the basic procedures (Agreements for Cooperation, followed up with supply contracts) through which customers abroad could obtain U.S.-enriched uranium, the terms and conditions offered in U.S. supply contracts, the fact that our charges were based on actual production costs and were the same for foreign and domestic customers. In conclusion, I reiterated the fundamental U.S. policy of cooperation with the European Community.

I had lunch with a number of people at Ambassador Tuthill's, and later Fritsch and I flew to Berlin via Frankfurt on Sabina Flight No. 723 (leaving Brussels at 3:35 p.m. and arriving at Frankfurt at 5:00 p.m.) and on Air France Flight 372 (leaving Frankfurt at 6:15 p.m. and arriving in Berlin at 7:15 p.m.) Helen and Wilkes flew on an earlier flight. We stayed at the Hilton Hotel. Later Helen and I took a walk around town, including a stroll through the zoo.

Saturday, September 12, 1964 - Berlin

Helen, Dan, Arnie, and I toured West Berlin. We saw the Berlin Wall at several points, the Brandenburg Gate, the Kaiser-Wilhelm Institute (Hahn's Laboratory) in Dahlem, Wannsee, the Reichstag Building, and many other points of interest. We saw the Nefertite at the Museum which is at the Berlin Free University.

Sunday, September 13, 1964 - Berlin to Vienna

I flew with Fritsch to Vienna via Frankfurt on British European Airways Flight No. 1625. We left Berlin at 7:20 a.m. and arrived in Frankfurt at 8:50 a.m. On Lufthansa Flight No. 300 we left Frankfurt at 9:40 a.m. and arrived in Vienna at 10:50 a.m. Helen and Dan came on later flights. Helen and I took an auto tour and a walk in the Stadtpark before dinner in the International Hotel where we are staying and took a walk through the shopping district after dinner.

Monday, September 14, 1964 - Vienna

I presided over a meeting of the U.S. delegation at the U.S. Mission headquarters. I am serving as the U.S. Representative to the Eighth General Conference of the IAEA and Commissioners Bunting, Palfrey, Ramey and Tape are serving as Alternate U.S. Representatives. Former Congressman Carl T. Durham, Isidor Rabi, Algje Wells,



Seaborgs at Brandenburg Gate, Berlin, September 12, 1964

Myron Kratzer, and Robert Slawson are serving as Advisors to our Delegation.

I held a press conference, along with Tape, Ramey, and Smyth, at the Intercontinental Hotel, which was well attended. I attended the opening session of the Eighth General Conference of the IAEA at the Hofburg; this was uneventful, and fortunately with no controversy. Helen also attended with Mrs. Smyth after lunch. Helen and I went to the reception of the IAEA Board of Governors, given by Chairman Carlo Salvetti, and the Japanese reception, and then took a long walk in the Vienna business and shopping area.

Tuesday, September 15, 1964 - Vienna

I gave the first talk in the General Debate of the IAEA at the Hofburg. It seemed to be well received. I had lunch at Eklund's home with Salvetti, Michel Michaels, Smyth, Gunnar Randers, Henri F. Eschauzier (President of the Conference), Penney, and others. I told Eklund he has my support for election to a second four-year term next year. Helen took Mrs. Algie Wells, Mrs. Frank Church, and Mrs. Gerald Tape to lunch. I talked to Penney regarding difficulties in the U.K.-U.S. fast reactor exchange. I went with Helen to the Austrian reception at Belvedere Castle. Helen and I took a walk in the Vienna shopping area.

Wednesday, September 16, 1964 - Vienna

I hosted the traditional U.S. luncheon at the Intercontinental Hotel for some 150 guests (chart of seating arrangement attached). Helen went to lunch at the Eklunds. Helen and I went to the USSR reception at the Soviet Embassy.

Thursday, September 17, 1964 - Vienna - D.C.

I went to the Hofburg to see people and say goodbye. I flew back to Washington with Fritsch on Pan American Flight No. 1 and a MATS plane via Frankfurt, London, and New York. We left Vienna at 11:45 a.m. and arrived in Washington at 8:15 p.m. Helen flew back on another plane.

Friday, September 18, 1964 - Home

I read AEC papers at home all day.

Saturday, September 19, 1964 - Home

I read AEC papers, and journals all during the day at home.

I received a memorandum from Harry S. Traynor regarding Khrushchev's statement concerning the development of a new weapon (copy attached).

Sunday, September 20, 1964 - Home

I read AEC papers and also material in preparation for the rather difficult Executive Session JCAE Hearing scheduled for Wednesday, September 23rd, in which we will be asked to explain our reversal of position on the construction of a Spectral Shift Prototype for the Sierra Pacific Company in Nevada, and our proposal to use the Fermi Reactor in Detroit for irradiation of nuclear fuel (Pu) with fast neutrons (which Senator Anderson opposes in line with his opposition of everything connected with Walker Cisler and the Fermi Reactor).

Helen drove Pete (along with Dianne) to Cambridge, Massachusetts, today, preparatory to his starting his first school year at Harvard. This is both a happy and a sad day--sad because this means Pete has left the fold only to return for visits.

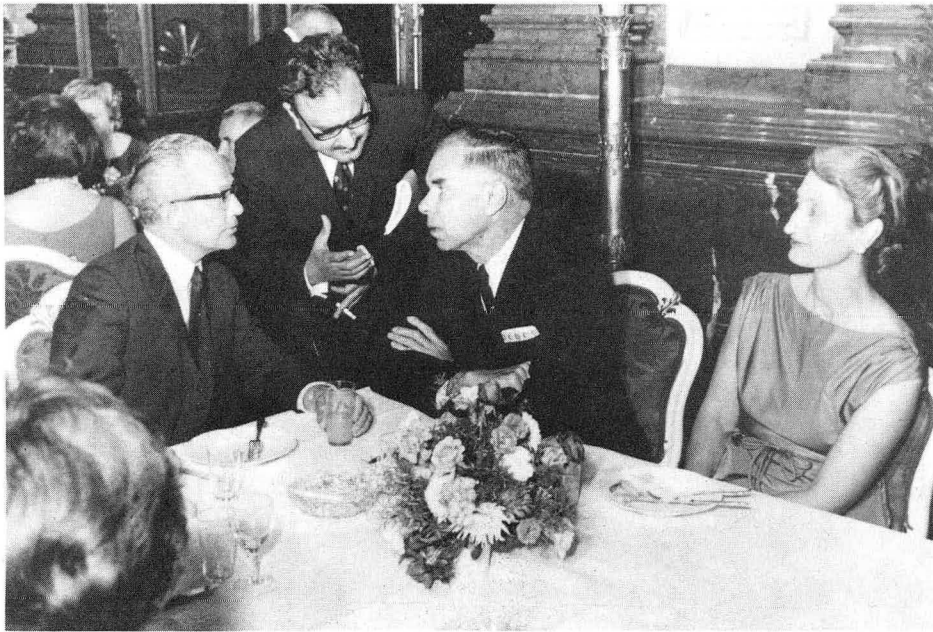


Seaborg with G. Anouzoa (Cameroon) at the opening session of the 8th General Conference of the IAEA, September 14, 1964, Vienna



Japanese Delegation Reception, Vienna, September 14, 1964

L to R: Helen Seaborg, W. B. McCool (Secretary of the USAEC),
Marie Janinek (Secretary to Seaborg), I. I. Rabi, Seaborg



Austrian Government Reception, Schloss Belvedere, Vienna, September 15, 1964
L to R: H. F. Eschauzier (Netherlands), A. Salam (Pakistan), Seaborg and
Mrs. Seaborg



U.S. Luncheon at the 8th General Conference, Vienna, September 16, 1964
(Clockwise around the table): H. D. Smyth, R. Hirsch (France), William
Penney (U.K.), H. F. Eschauzier, Seaborg, S. Eklund, and V. S. Emelyanov

1164
DR. GLENN T. SEABORG

C-1 NETHERLANDS: Mr. Eschauzier
U.K.: Sir William Penney
FRANCE: Mr. Hirsch
U.S.: Dr. Smyth



IAEA: Dr. Eklund
USSR: Prof. Emelyanov
AUSTRIA: Dr. Haymerle

MR. JAMES T. RAMEY

C-2 SWEDEN: Dr. Brynielsson
LUXEMBOURG: Dr. Thill
HOLY SEE: Dr. Folsom
IAEA: Mr. Hall



MEXICO: Dr. Macia
GHANA: Dr. Baffour
BRAZIL: Prof. do Prado

MR. JOHN PALFREY

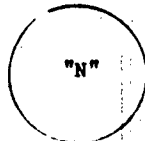
C-3 CANADA: Dr. Gray
U.S. Mr. Trevithick
AUSTRIA: Mr. Polaczek
IAEA: Prof. Yagodin



ROMANIA: Prof. Hulubei
NEW ZEALAND: Mr. Zohrab
UAR: Dr. Nabulsi

DR. GERALD F. TAPE

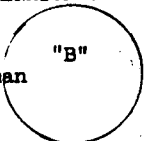
C-4 INDIA: Dr. Bhabha
PERU: Mr. BONGE CORDILLO
CZECHOSLOVAKIA: Mr. Neumann
IAEA: Mr. Goswami



NETHERLANDS: Prof. de Boer
GREECE: Prof. Symeonidis
SOUTH AFRICA: Mr. Roux

SENATOR FRANK CHURCH

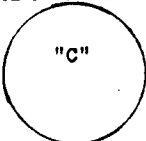
L-1 AUSTRALIA: Prof. Baxter
JAPAN: Amb. ;"chida
IAEA: Mr. McKnight
GERMANY: Dr. Schulte-Meerman



ITALY: Prof. Salvetti
U.S.: Mr. Fennemore
NORWAY: Dr. Randers

MR. ALGIE WELLS

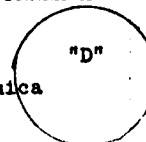
L-2 PAKISTAN: ^{Prof. Salom} ~~Dr. Usmant~~
U.K.: Mr. Michaels
COLOMBIA: Dr. Marulanda
SPAIN: Mr. de Erice



POLAND: Mr. Billig
U.S. Mr. Sorkin
U.A.R. Amb. Hedayat

MR. FRANK HEFNER

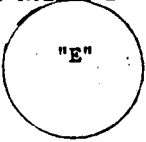
L-3 BRAZIL: Mr. Bittencourt
FINLAND: Prof. Laurila
YUGOSLAVIA: Prof. Salom-Sulca
SOUTH AFRICA: Mr. Sele



~~CHINA: Mr. ...~~
PHILIPPINES: Mr. Afable

MR. ROBERT BARLOW

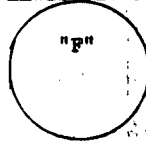
L-4 PORTUGAL: Leite-Pinto
SYRIA: Sammon
CHINA: Liu
U.S.: Jacques



AFGHANISTAN: Kokar
CAMEROON: Anouzoua
MOROCCO: Charfi

DR. LEWIS GEVANTMAN

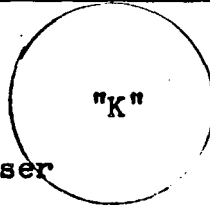
L-5 KOREA: Yun
LEBANON: Donato
MONOCO: Crovetti
U.S.: SLAWSON



SAUDIA ARABIA: Kazim
NIGERIA: Abubakar
NICARAGUA: DE GLOGER

CONGRESSMAN DURHAM

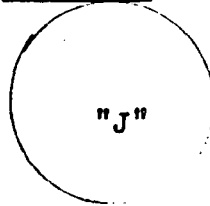
R-1 CANADA: Amb. Meagher
GABON: Mr. N'Guema N'Dong
CHILE: Mr. Arteaga Barros
SWITZERLAND: Prof. Hochstrasser



ARGENTINA: Adm. Quihillalt
SPAIN: Prof. Otero
ICELAND: Mr. Eggerz

DR. RABI

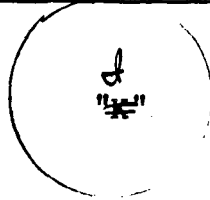
R-2 FRANCE: Dr. Goldschmidt
U.S.: Dr. Fritsch
INDONESIA: Mr. Darusman
TUNISIA: Dr. Torki



IAEA: Dr. Seligman
HOLY SEE: Father Hesbufgh
DENMARK: Mr. Koch

MR. NATHANIEL WELCH

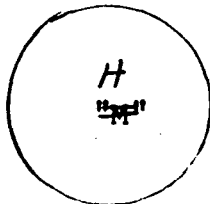
R-3 ARGENTINA: Prof. Bancora
U.S.: Miss Gough
CONGO: Mgr. Gillon
VIET-NAM: Prof. Le-Van-Thoi



PHILIPPINES: Mr. de Castro
CEYLON: Mr. Perera
~~CHINA: Dr. Lee~~
Senegal: Dr. Baguerre.

MR. MYRON KRATZER

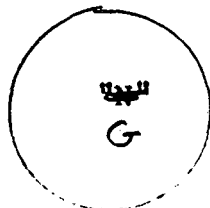
R-4 BRAZIL: Mr. Franco-Netto
U.S.: Mr. Langland
BULGARIA: Prof. Nadjakov
BURMA: Mr. Bwa



AUSTRIA: Dr. Thirring
TURKEY: Mr. Karatay
EL SALVADO: Mr. Chavez

MR. WILLIAM YEOMANS

R-5 IRAQ: Mr. Majid
ALGERIA: Mr. Rahmouni
U.S.: Mr. Friedland
Uruguay: Francella



HUNGARY: Dr. Tetenyi
CONGO: Mr. Tshibalanga
HONDURAS: Mr. Englander

SEP 17 1964

MEMORANDUM FOR CHAIRMAN SEABORG
COMMISSIONER BUNTING
COMMISSIONER PALFREY
COMMISSIONER RAMEY
COMMISSIONER TAPE

THROUGH GENERAL MANAGER

SUBJECT: KHRUSHCHEV STATEMENT

The following has been received in response to a Headquarters request for comment on the report that Khrushchev had stated that the Soviet Union had developed a "monstrous horrible weapon" that could annihilate life on earth.

From J. S. Foster, Livermore: "It is not possible to make any substantive comments and evaluation of the 'new weapon' referred to by Khrushchev on the basis of the statements made by Khrushchev. It might be helpful to know where Khrushchev was 'yesterday,' since Khrushchev stated he had just seen the 'new weapon'. As far as we know the cobalt bomb mentioned by British sources is nonsense."

From R. W. Henderson (Sandia Corporation): "Regarding Khrushchev's statement the following is all we can offer: It sounds to us like Khrushchev is talking about something other than nuclear weapon capability. This could range all the way from chemical and biological up through some 'unconventional' uses of nuclear weapons. We are not competent to comment on chemical and biological possibilities. One might suggest that in the latter area nuclear weapons might be used to trigger the release of energy from natural sources, i.e., Tsunami or weather control. Another possibility is an extra atmospheric burst of a very large bomb which could be used as heat source to put heavy amounts of thermal energy over large portions of a continental area. As a delivery means the Soviet Union has at its disposal missile systems which could put 25,000 pounds or possibly more, out of the atmosphere at inter-continental ranges. Probable yields for this payload are in excess of 100 megatons. However, this does not lead us to the conclusion that this would be a weapon capable of threatening genocide. He probably had something else in mind, however, which achieved operational status after alternate blasts of lukewarm sake and vodka."

From Jare H. Hall, Los Alamos: "Reference our telephone conversation concerning USSR announcement of mass destruction capability. As I said, other than that unmentionable (1,000 megaton - Ed.) device, my only immediate suggestion is that the ignition of the atmosphere has reared its head.

"In 1944 or 1945 Teller and Konopinski investigated theoretically the possibility of ignition of the atmosphere by a very large explosion. Their conclusions were negative and are reported in a LA or LAMS document. Subsequent exhuming of the topic by Professor Gregory Breit (as late as about a year ago) with emphasis on pertinent cross sections has confirmed the original negative conclusion. As I mentioned, Carson Mark will be visiting CIA on Thursday, September 17, and can discuss this with Mr. McCone, if desired."

This information has been transmitted to the national intelligence community.

A Reuters London dispatch (September 17) reports later Khrushchev statements on the matter which give the impression of "sabre rattling".

"Moscow, 17 September -- Nikita Khrushchev confirmed tonight that the Soviet Union possesses a 'terrible weapon' but denied he ever said it could destroy the whole of humanity.

"The Soviet Premier said he was misquoted when Japanese sources reported he had disclosed the existence of a 'total annihilation' weapon in a talk with Japanese members of Parliament here Tuesday. 'I didn't say anything about unlimited power,' Khrushchev told western reporters at a diplomatic reception.

"Khrushchev denied that he had meant to threaten anyone when he described the weapon to the visiting Japanese. He told them he saw the weapon near Moscow on Monday.

"'I said that scientists showed me a terrible weapon on the previous day, which shows what mankind can do,' he explained.

"Khrushchev said his remarks had been 'misinterpreted, but not deliberately.'

"The Soviet Prime Minister, in good spirits, seemed to shrug off the incident.

"He said he had read foreign press reports quoting him as saying the mystery weapon could destroy all life on earth.

"Khrushchev said his remarks were translated from Russian into Japanese and then into English 'and they didn't come out the same way'.

"I can see how it all happened,' he said.

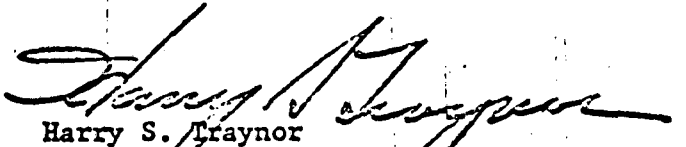
"Khrushchev did not explain whether the weapon he saw was a new addition to the Soviet arsenal, or whether he had merely inspected it himself for the first time.

"The Soviet leader exchanged banter with western and Indian reporters at a reception, given by the visiting President of India, Dr. Sarvailli Radhakrishnan, at Moscow's Sovietskaya Hotel.

"Khrushchev said that nothing he told the Japanese should have been taken to mean the weapon had unlimited power.

"He also denied that it was a new-type nuclear bomb.

"It cannot be a nuclear bomb, because I saw it near Moscow; a nuclear bomb needs testing, and we are not testing now,' he said." (End of Reuters dispatch)


Harry S. Traynor
Assistant General Manager
for Administration

Monday, September 21, 1964 - D.C.

At 10:10 a.m. I presided over Commission Meeting 2045 (action summary attached).

At 11 a.m. Commissioner Ramey, Conway, Bauser, and I met with Senator Anderson to try and convince him that our contract with the Fermi Reactor operator will be to our advantage and will not constitute a "bail out." Anderson wasn't unfriendly, although not very pleased with the prospect of such a contract. He asked us to send a letter to the JCAE explaining why it is to our advantage; I have the impression that he will not oppose us on this.

At 12:30 p.m. I had lunch with Arnold Fritsch and John Napier.

At 2:30 p.m. I received a telephone call from Elmer Staats. He called to tell me that Williams has called a meeting of his Committee on MURA to meet in Chicago on Wednesday, and he has some indication that the Chicago representatives would not be attending. Against that, he said, is the indication in the letter that was sent from Williams to Beadle in August that they will report back to their parent bodies. He said the thought occurred to him that if this meeting could be postponed until Tape returns from Europe, it might be wise. I told him that Beadle is for postponing the meeting, but I understand that Williams wants to go ahead. I said that I had a call from Beadle today. He said he gathered that Williams is ill. He (Staats) feels the time has about come when we will have to do something.

At 2:45 p.m. I presided over Information Meeting 411 (notes attached).

At 4:20 p.m. I received a telephone call from Jim Maxfield. Jim called me regarding three items: 1. He said he has been to the Midwestern Governors Conference as guest speaker and talked about interstate cooperation on nuclear energy. During the Conference they investigated the possibility of the formation of an Interstate Nuclear Board comprising the 12 midwestern states along the same lines as the Southern Interstate Nuclear Board (SINB). He said he plans to be in Washington on October 5th and 6th and will try to give me a little more information at that time. 2. Jim talked to Governor Anderson of Kansas, who told him they have published their agreement and are expected to take over licensing and regulation of nuclear materials (radioactive isotopes) from the AEC shortly. Governor Anderson hopes that I or one of the Commissioners can attend the signing ceremonies. I said I will have to look up the date and see what I can do. 3. He said he and Bob Gifford would like me to be the guest speaker at the Southern Governors Conference on October 13th. He believes it is important for the Governors in SINB to have the opportunity of hearing my views. I said I understand and I would like to come but that particular day is almost impossible. He suggested they might use their plane to take me from San Antonio to Houston or Dallas, but I told him my meeting is in the middle of the day with the General Advisory Committee; since I already missed a meeting earlier, I don't feel I can miss another, especially the first day of the meeting. I said there is no question about wanting to meet with the Southern Governors, and we will try to work out something.

Tuesday, September 22, 1964 - D.C.

At 9 a.m. Delmar Crowson, Dixon Hoyle and I met with the President's Science Advisory Committee (PSAC). We explained the United States' sale of some 400 kilograms of plutonium to Euratom for use in their fast reactor program. The PSAC is alarmed that this will advance Germany's nuclear weapon capability on the basis of their cheating and using some plutonium to develop this capability. I explained Euratom's safeguards system and our (U.S.) monitoring of this system. I also emphasized the fact that the United Kingdom would have sold the plutonium to **170**

UNITED STATES GOVERNMENT

Memorandum

UNCL. BY DOE
NOV 86

TO : R. E. Hollingsworth, General Manager

DATE: September 21, 1964

FROM : W. B. McCool, Secretary

Approved R. E. Hollingsworth

Date _____

SUBJECT:

ACTION SUMMARY OF MEETING 2045, MONDAY, SEPTEMBER 21, 1964,
10:10 A.M., ROOM 1113-B, D. C. OFFICE

SECY:GF

Commission Business

1. Proposed Joint AEC-Interior Letter to the President
Transmitting Reactor Development Program for Large
Scale Desalting Plants Report

Approved. (Pittman)

The Commission requested the Report be revised in accordance
with the discussion at the Meeting. (Pittman)

2. Proposed Testimony for JCAE Hearing on Advanced Converters -
September 23, 1964

The Chairman requested appropriate revisions.
(Brown/Pittman/Erlewine)

3. Proposed Statement Before JCAE on Fermi Reactor

The Commission requested revision in accordance with dis-
cussion at the Meeting. (Pittman)

4. AEC Resolution on Death of Former Commissioner Wilson

Approved. (Secy)

Information Item

Accident at NTS

cc:
Commissioners



ENERGY COMMISSION

WASHINGTON, D.C. 20545

COPY NO. _____
September 21, 1964

INFORMATION MEETING 411

INCL. BY DOE
NOV 86

2:45 p.m., Monday, September 21, Chairman's Conference Room, D.C. Office

1. Testimony for September 23 Joint Committee Hearing on Advanced Converters

The General Manager reported revised testimony is in preparation. Mr. Ramey requested a check on the language with respect to prototypes in the FY 66 budget. (GM)

2. Morning Meeting with Senator Anderson to Discuss the Proposed Use of the PRDC Reactor

The Chairman and Mr. Ramey reported briefly on their meeting today. The Senator requested a letter describing the proposed arrangement. Mr. Hennessey's September 20 memorandum to the Commissioners re PRDC's obligation to operate the Fermi reactor was circulated at the meeting.

3. Settlement re BONUS Reactor Claim

Messrs. Hollingsworth and Vinciguerra discussed briefly the status of negotiations with the Puerto Rico Water Authority representatives. The Commissioners accepted the General Manager's recommendation for a proposed settlement. (Vinciguerra)

4. Proposed Note to Editors on NERVA Reactor Test (GM's September 18 Memorandum)

Approved. (Clark)

5. Proposed Press Conference

The Commissioners thought it would be desirable for the Chairman to have lunch with Messrs. Finney and Simmons and determine the desirability of a background press conference. (Brown)

6. Richland Computer Services (General Manager's September 15 Memorandum)

Approved. (Vinciguerra)

7. Minutes of U. S. - French Meeting (Mr. Kratzer's September 1 Memorandum)

Approved. (Kratzer)

8. Control of Private Restricted Data (General Manager's September 17 Memorandum)

Approved. (Tremmel)

9. Export of Neutron Generator Drawings to U. K. (Mr. Kratzer's September 11 Memorandum)

Approved. (Kratzer)

10. September 23 Special Committee Meeting

The Chairman will call Llewellyn Thompson. (Brown)

11. WHETSTONE Program

Noted.

12. Chairman's Attendance at PSAC Tomorrow

13. Meetings re SULKY Event

The Chairman noted the meeting of the Special Committee during the week of October 5 and the meeting in Dr. Hornig's office on Wednesday. (Kelly)

14. September 16 Letter from Senator Cannon re Exhibit in Southern Nevada

The Commissioners requested preparation of an early positive response suggesting assignment of a traveling exhibit. (Brunenkant)

15. Guard Services at NTS

The General Manager reported briefly on the recent discussions.

16. Chairman's Discussion of Fast Reactor Exchange with Sir William Penney in Vienna

17. General Manager's Report on Strikes at NTS

18. General Manager's Report on GE Representatives Discussion of Reactor Catalog (General Manager's September 18 Memorandum)

19. Staff Analysis of FY 66 Budget

The General Manager reported staff has developed alternative cases which will be circulated for Commission consideration next week. (Abbadessa)

20. Anticipated Major Actions for Balance of Calendar Year

The General Manager will circulate to the Commissioners a list of anticipated actions for the Commissioners review. (GM)

21. Schedule of Major Programmatic Briefings

The General Manager noted the need for briefings for the senior staff on such matters as implementation of private ownership legislation and hoped the Commissioners could attend as their time permits. (GM-Secy)

22. General Manager's Meeting Last Friday with Vice Chairman Holifield re Los Alamos Telephone System

The General Manager reported briefly on his discussion with Mr. Holifield of the representation of the Universal Telephone Company to the Congressman.

23. Special Committee Study of Raw Materials Program

In response to Mr. Ramey's query, Mr. Hollingsworth said the establishment of the special committee will be expedited.

24. Letter to Senator Pastore re Testing Program with PRDC Facility

Approved, with revisions. (Pittman)

25. Personnel Matters (Executive Session)

The Commissioners approved the General Manager's recommendations.
(Tackman)

PRESENT

Dr. Seaborg
Mr. Ramey
Dr. Bunting

Mr. Hollingsworth
Mr. Hennessey
Mr. Ink
Mr. Vinciguerra
Mr. Brown
Dr. Fritsch
Dr. Pittman*
Mr. Eriewine*
Mr. McCool

DISTRIBUTION

Commissioners
General Manager
General Counsel
Secretary

W. B. McCool
Secretary

*Attendance for Item 24.

Euratom if the United States hadn't, which would have resulted in even less U.S. control.

At 11:05 a.m. I presided over Commission Meeting 2046 (action summary attached).

At 12:30 a.m. I had lunch with Arnold Fritsch and Colonel James Hill.

At 2:30 p.m. I met with Congressman Melvin Price to discuss the controversy which is raging over the contractor operation of Argonne National Laboratory.

At 3:15 p.m. I had my picture taken with Congressman Charles Gubser (of California) in connection with the Stanford Linear Accelerator.

I sent my biweekly letter to President Johnson (copy attached). This covers my attendance at the Third Conference on the Peaceful Uses of Atomic Energy at Geneva, my meeting in Brussels with Euratom Commissioners, and my attendance at the Eighth General Conference of the IAEA in Vienna.

I received a request from Horace Busby (of the White House) asking my help in preparing President Johnson's speech at Brown University at the end of this month. (A copy of Busby's letter making the request, and also of my response is attached.)

I discussed with Howard Simons his article condemning the use of the term "economic breakthrough" in nuclear power, to appear in the Washington Post tomorrow, and persuaded him to temper it a lot.

Wednesday, September 23, 1964 - D.C.

I appeared before the Joint Committee's Executive Session on Advanced Reactors during most of the day. I explained our choice of the Advanced Converters--High Temperature Gas Cooled Reactor (HTGC) and the Seed and Blanket Reactor in FY 1966 to be followed by an organic cooled heavy water reactor in FY 1967 and our decision to drop the Spectral Shift Reactor, Nevada.

Senator Alan Bible attended and he is very angry about our dropping the Spectral Shift Reactor. The hearing, however, went very well. I also explained our plans to use the Fermi Reactor for fuel irradiation. This also went well, although Senator Anderson handed me a letter asking that a public hearing be held at which Walker Cisler would testify; otherwise, Anderson seems satisfied now.

I wrote to Johannes S. Newton, President, Leif Erikson Foundation, to express delight and honor upon receipt of the Leif Erikson Award for 1964.

Also, I wrote to Peter to send him an article in the "American Association of University Professors Bulletin," which I think will interest him.

Thursday, September 24, 1964 - D.C.

At 10:35 a.m. I called Don Wilson (Deputy Director, United States Information Agency) to get his judgment on what kind of an organization the National Council for Civic Responsibility is. His only information on this is what he has read in the papers, and, of course, the fact that Arthur Larsen, Chairman of this Committee, had previously been Director of the USIA. Don suggested that I check it out with the White House, perhaps Ralph Dungan, Lee White or Mike Feldman.

At 10:55 a.m. I called Elmer Staats (Bureau of the Budget) to fill him in on what happened at the Midwest Universities Meeting in Chicago yesterday. The group pretty much accepted the plan I had discussed previously. In fact, there were 176

UNITED STATES GOVERNMENT

Memorandum

UNCL. BY DOE
NOV 86

TO : R. E. Hollingsworth, General Manager

DATE: September 22, 1964
Approved _____

FROM : W. B. McCool, Secretary

R.E.Hollingsworth
Date _____

SUBJECT: ACTION SUMMARY OF MEETING 2046, TUESDAY, SEPTEMBER 22, 1964,
11:05 A.M., ROOM 1113-B, D. C. OFFICE

SECY:AJ

Commission Business

1. AEC 842/27 - Administration of Elk River Reactor Project

Discussed.

2. AEC 132/67 - Reports of the Division of Inspection.

Discussed.

3. AEC 132/63 - Problems Relating to the Administration of
Reactor Projects Subject to 10 CFR 115

The Commission approved your revised recommendation and requested a report on the effectiveness of the suggested procedure be presented to the Commission in six months. (GM)

4. AEC 132/64 - AEC-Owned Reactor Safety Review System

The Commission approved your revised recommendation and requested a report on the effectiveness of the suggested procedure be presented to the Commission in six months. (Bloch)

5. AEC 1067/19 - AEC Safety Responsibility for DOD Reactors

The Commission approved exploratory discussions with the Departments of the Army and the Air Force at staff level. Following these discussions, the matter should be rescheduled for Commission consideration. (Doan)

Information Items

1. Accident at NTS

The Commission agreed you should send a senior representative from Headquarters to the site.

2. Chairman's Meeting with PSAC - September 22, 1964

cc:
Commissioners

DC FILE

W/K

CLASSIFICATION CANCELLED

BY A.A. Jersopp, OC, DOE
1/29/88
memo

September 22, 1964 326

U.S. ATOMIC ENERGY COMMISSION

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(2) Report to White House

PERSONAL AND

Dear Mr. President:

I have the pleasure of submitting to you the regular biweekly report on significant developments in the atomic energy program.

1. Third International Conference on the Peaceful Uses of Atomic Energy

The Third International Conference on the Peaceful Uses of Atomic Energy was held in Geneva from August 31 to September 9 and was attended by more than 3,000 nuclear scientists, engineers and administrators. The Conference was highly successful in presenting progress made in utilization of atomic energy since the last such meeting in 1958. A major conclusion of the Conference was that economical nuclear power had indeed come of age in many areas of the world.

The Conference emphasized the fact that the world will require huge increases in energy during the rest of the century, and that many nations are looking toward abundant economic nuclear power to fulfill their needs. It was shown that the present focus of competitive nuclear power is on large size water cooled and moderated reactors; i.e., 500 MWE and over. For ultimate future needs, there was almost general agreement on the need to develop fast breeder reactors, and studies were presented by several countries describing work which may lead to thermal breeder reactors, using the thorium and uranium-233 fuel cycle. For the intermediate period many countries were developing advanced converter reactors to meet their energy needs.

Progress was also reported to the Conference in many other areas of technology. In the field of direct thermoelectric conversion and space applications, great interest focused on the compact uranium-dicarbide fueled, fast reactor "Romashka" first disclosed by the U.S.S.R. at the Conference and the similar 500-watt electric U.S. SNAP 10A reactor.

"Romsashka" has not been developed to a point of being sufficiently light and compact for actual space flight whereas an orbital flight of the SNAP 10A is planned for 1965.

Dual purpose reactor plants for nuclear desalting of sea water and power production were the subject of reports by the U.S., the U.S.S.R. and France. It was predicted that one or more combination installations will be built and in operation within the next four to eight years.

In the summation speech for the Conference which I had the honor of giving on September 8, I reiterated the Conference's opinion that by the turn of the century more than half of the world's electricity will be generated by nuclear energy.

The AEC exhibit, which closed on September 10, was an outstanding success with an attendance of over 15,000. It was among the most popular exhibits at the Conference. It was opened auspiciously with a visit by Secretary General U Thant and the viewing of your filmed message to the Conference. Of particular interest to the foreign scientists were the exhibit on fast breeder reactors, the SNAP 7-F device (unmanned weather station), and the SNAP 8 and 10A (space vehicle power supply). The Technical Information Center included in the exhibit was well attended and received very favorable foreign reaction.

DOE ARCHIVES

2. FORATOM Speech and Meeting with EURATOM Commissioners

Following the Geneva Conference, I spoke on September 11 at a FORATOM Meeting in Brussels, Belgium, on the subject "Today and Tomorrow in Nuclear Power". FORATOM is an association of European national industrial groups in the nuclear field. The main topics of the speech were the U.S. enriched uranium fuel policy for reactors abroad and recent legislation passed by the Congress influencing this policy. The speech was well received and the general impression was gained that substantial sales abroad of U.S. reactors and enriched uranium fuel can be realized.

While I was in Brussels, I, together with Ambassador Tuthill, took the occasion to meet with the five EURATOM Commissioners to discuss matters of mutual interest. The meeting was extremely cordial and gave further evidence to the good relations which the United States enjoys with EURATOM. In these talks I stressed the importance which the United States places on allowing the individual bilateral agreements for cooperation with the member states of the community to terminate and then supplying the needs of these nations through the EURATOM channel. It is anticipated that most of the member nations will go along with this U.S. position although France can be expected to present particular difficulties.

3. General Conference of International Atomic Energy Agency

The Eighth General Conference of the IAEA convened on September 14 in Vienna and adjourned September 18. The announcement was made by the Director General of the IAEA at the opening meeting that "seventeen out of the thirty-eight countries of the world possessing reactors have already accepted international safeguards". The meeting followed the same optimistic pattern of the Third Geneva Conference regarding the outlook for economic nuclear power.

4. U.A.R. Interest in Desalting and Plowshare ()

During the Geneva Conference, representatives of the United Arab Republic raised with the U.S. delegation the question of U.S. cooperation in a dual-purpose nuclear desalting project and in a Plowshare application. U.S. representatives expressed a willingness to cooperate technically with all countries, preferably through the International Atomic Energy Agency, but pointed out that any detailed cooperation must be carefully considered by both Governments. A formal request is expected from the U.A.R. on this matter.

DOE ARCHIVES

5. Congressional Hearing

On September 23, the Commission will meet in Executive Session with the Joint Committee on Atomic Energy to discuss recent Commission decisions regarding our advanced converter reactor program. At this session, the proposed use by the AEC of the Power Reactor Development Company's Fermi Reactor at Lagoona Beach, Michigan, for irradiation testing of fast reactor program development fuels, will also be discussed.

6. Nuclear Rocket Development Test

The Nuclear Rocket Reactor KIVI-B4E, which underwent a power test for a duration in excess of 8 minutes on August 28, was restarted on September 10. In the September 10 test the reactor was brought to full power and run for more than 2 minutes, as planned. All observable test results were excellent. This was the first time a nuclear rocket reactor was taken through two power cycles. These tests are regarded as a major advance in rocket propulsion for space exploration.

Respectfully submitted,

(Signed) Glenn T. Seaborg

Glenn T. Seaborg

The President
The White House

Distribution: Orig & cc - Bill D. Moyers
cc - McGeorge Bundy
2 cc - DC File (1 green)
2 cc - GT File (1 green)

FRITSCH: lab

THE WHITE HOUSE

WASHINGTON

September 21, 1964

9375 9/22/64

Dear Dr. Seaborg:

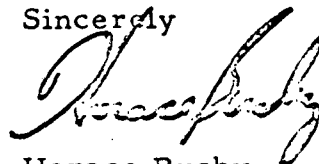
On Monday, September 28, the President speaks at Brown University's Bi-centennial Convocation. The theme of the Convocation and Symposium is "Higher Education in This Age of Expanding Knowledge."

The President's remarks will be devoted to higher education. Any suggestions you might have for the content of his address would be very much appreciated. Unfortunately, the deadline is short for completion of the final draft before the President departs on the weekend itinerary planned in advance of the New England visit on Monday.

If your own schedule permits, I would like very much to receive your thoughts and advice about this address. The message, of course, will be non-political and oriented nationally, rather than regionally.

Thank you for your assistance.

Sincerely



Horace Busby
Special Assistant to
The President

Dr. Glenn T. Seaborg
Chairman, Atomic Energy Commission

US DOE ARCHIVES

September 23, 1964

RG _____

Collection Energy History

Box _____

Folder _____

Dear Mr. Busby:

I appreciated your giving me the opportunity to have some input into the President's remarks on higher education at the Brown University Bicentennial Convocation. If it is not too late in that regard, I am attaching a possible outline for the President's speech. I am also enclosing excerpts from some of my past remarks on the subject of higher education. These are specifically from "Public Education and the National Good" delivered at the University of Massachusetts, April 29, 1963, and my statement at the hearings of the Senate Select Committee on Small Business, December 17, 1963.

In addition, I am enclosing a PSAC report entitled "Scientific Progress, the Universities, and the Federal Government." This panel report outlines quite well the role of the Universities, the role of the Government and their interactions. I would particularly call your attention to the recommendations section which is marked.

I am also enclosing a copy of the recent report by the Commission on the Humanities which recommended the establishment of a National Humanities Foundation similar to the National Science Foundation. I was a member of this Commission which was headed by Dr. Barnaby Keeney of Brown University and Presidential recognition of Dr. Keeney's efforts would be well received.

If I can be of any further assistance, kindly
let me know.

Sincerely,

Glenn T. Seaborg

Enclosures A/S

DOE ARCHIVES

Mr. Horace Bushby
Special Assistant to
The President
The White House

JN:hb

EDUCATION FOR THE GREAT SOCIETY

1. In America education has always been synonymous with opportunity.

A. The most fervent words of hope spoken by this nation's parents down through the years have been: "I want my child to have a good education. I want him to have a better chance than I had." **DOE ARCHIVES**

B. The growth of the American educational system has been our tremendous response to this challenge.

1. The solid basis of American education is our universal system of free public education.

2. Upon this foundation we have built, developed and cherished our colleges and universities, both public and privately endowed, until today American institutions of higher learning are second to none. Today these institutions offer their great opportunities not only to millions of American young people but to eager young men and women throughout the world.

II. We are nevertheless only at the beginning of what will prove to be the greatest era of American education - an era in which education will be a central force in the creation of the Great Society.

- A. We stand today at the threshold of a world in which science and technology provide us at the same time with immense opportunities and grave problems.
1. Nuclear energy will make it possible for us to harness almost unlimited power to make life more fruitful and productive. **DOE ARCHIVES**
 2. We are engaged in the adventure of exploring outer space and no one can say what potentialities this exploration will have for mankind.
 3. Through the sciences of chemistry and biochemistry we are unlocking secrets that will significantly alter man's capacity for health and happiness. At the same time the application of this new knowledge, as in the case of new drugs and pesticides, requires the careful study of our most gifted scientists and technicians.
 4. Progress in automation promises a new revolution, increasing our leisure and releasing our energy to many new creative purposes. At the same time, its rapid introduction continues to pose problems of economic adjustment as we move forward to new goals.
- B. If we are to achieve our fullest potential in the Great Society, we must also give thought to the quality of life we seek for ourselves and our children.

1. We must consider ways of making our cities and suburban centers of population worthy of a Great Society.
2. We must respond to and cherish our responsibility for preserving and enhancing the nation's natural resources in its wilderness areas, its great river systems, its ample agricultural regions, its forests and coastal areas.
3. We must consider the moral and spiritual quality of our society and seek to enhance these through pursuit of liberal education and the arts.
4. We must assure ourselves that our young people, whatever their economic conditions or natural endowments, are given the opportunity to develop these endowments to the fullest extent, that they are not turned out on the streets as the disinherited offspring of an affluent people.

DOE ARCHIVES

III. Where do we stand today in meeting the challenges offered to education by the needs of a Great Society?

A. We have made remarkable strides during recent years toward achieving the highest degree of excellence in science.

1. Our best schools have achieved world recognition in many fields, but we have still the need to build new centers of excellence in regions where

they will make important contributions to economic growth and development.

2. These efforts toward excellence in science in our institutions of higher learning have caught the public imagination and fired a new enthusiasm for such learning at all levels of the public schools.

DOE ARCHIVES

B. In meeting the educational needs of a scientific and technical age we have not been able to encourage the pursuit of the arts and humanities to the same degree.

1. Since excellence in these areas is essential to meeting the goals of a great society, we will seek seriously to enhance our efforts in this direction.
2. Only recently I was privileged to study the report of an outstanding group of scholars on the problems in this area and their proposals to improve matters, including the possibility of a National Foundation for the Humanities, will be considered by the next Congress.

C. Most urgently I feel that we must consider the educational needs of the large numbers of young men and women who are dropping out of school each year without completing even a high school education or who are leaving high school with no further preparation.

for the complex occupational requirements of our society.

1. On the one hand we have these young people in large numbers with nowhere to go and nothing to do because they are not fully educated; on the other hand we are told that in the future and already for that matter we are facing serious shortages in the trained people required as technicians and in the rapidly increasing number of service occupations.

DOE ARCHIVES

2. This is a major area of concern requiring attention on a national and local level.

a. The college and universities need to work on this problem with the secondary schools in all parts of the country.

b. As you know, we have an emergency program underway to alleviate the most pressing problems, but the future demands more. We cannot afford to neglect our human resources.

problems; the meeting went very well. I stressed the fact, however, that since the individuals involved would have to report back to their own people, we want to keep this on a confidential basis. In the meantime, the group is coming to see me; probably on Monday, and will give me a full report. It will be October 20th before we can expect any public announcement.

At 11:05 a.m. I called Congressman Melvin Price to let him know that the meeting in Chicago yesterday went very well and that some of the group will be coming on Monday to give me a full report. It will have to be ratified by the University of Chicago and MURA; so this information is on a confidential basis. Price inquired about Seitz's part in this smooth agreement. I told him I didn't know as yet because my report has only come from Spofford English, and I didn't want to mention this to him.

At 11:25 a.m. I received a telephone call from Admiral Rickover to give some more details on the President's possible visit to the nuclear ships task force when it returns October 3rd. However, this is still confidential. The details are as follows: Leave Washington at 12 noon and fly to the Naval Air Station at Norfolk. The return would be in time to be back in Washington by 6 p.m. A possible guest list might include, in addition to the President, McNamara, Nitze, Admiral McDonald, Senator Pastore, Congressman Holifield, and possibly Rickover. I indicated that my schedule was clear, and I would be free to go on that day and I would await further word.

At 11:50 a.m. I called Horace Busby (of the White House) to see how the President's Brown University speech is coming. He said it is coming along fine with the help of the outline I supplied. I also offered any more help that he needed, either in the form of some of my speeches or help in looking over any draft material. Busby said that in addition to me, he asked four other people for suggestions. They all came up with the same general theme--emphasis on humanities.

At 12:30 a.m. I had lunch with Professor Richard Neustadt at the Hay Adams House (16th and H Streets, N.W.). He wanted to discuss the organization of the AEC. I said that, although the Commission form of operation is working quite well, I still favor the Single Administrator concept for some time in the future. He asked whether it is time to dismember the AEC functions and give them to a number of other agencies, and I said I don't think so. He agreed with me.

Keeny came to see me to pass on Bundy's concern about the sale of plutonium to Euratom by the AEC. Bundy wants this delayed until after the election which, apparently, will be difficult to do without Euratom's making an issue of it.

At 2:55 p.m. I called Walker Cisler (of Detroit). I told him we have been talking about an arrangement for the use of the Fermi Reactor with the Joint Committee. It is going all right, and the staff will be in touch with him on details. The Joint Committee, however, as is usually the case on semi-major moves we make, is probably going to want to hold a hearing. Cisler indicated this would be perfectly all right with his people. Cisler also brought up another point with regard to his answering the British on a request of theirs. He didn't know how long he should wait and thought perhaps I had some conversations with Sir William Penney in Geneva. I told him that I had talked with Penney, but not on this particular matter.

Cisler asked for my approval to go ahead with discussions. I told him I didn't see how this would relate or tie in with our program. Cisler said he would not let it interfere, but it has been about six or eight months since they heard from the British, and he just thought perhaps he ought to be in touch with them so that they will know the delay is not from a lack of interest. Cisler then inquired how soon

he could expect to hear from the AEC Staff regarding arrangements with the Joint Committee. I told him it would be in the near future; so he will wait until then before discussing anything further with the British. He will also talk directly with me before going further with the British. I also told Cisler that if the Joint Committee decides to have a hearing, it will probably be some time after the first of the year when the Congress returns. Cisler also mentioned that he is sending a report to the Commission and the Joint Committee on the conference held last December on fast breeders, since he feels this was a very successful meeting, and also because of the international aspect.

Friday, September 25, 1964 - D.C.

At 10 a.m. I attended the Fourth Meeting of the Committee on Nuclear Weapon Capabilities held in the Department of State under the chairmanship of Llewellyn E. Thompson. Others present at the meeting included Raymond L. Garthoff, Vincent Baker, Wreatham E. Gathright, Robert Margrave, Leonard C. Meeker, Richard N. Gardner, Ronald I. Spiers, Carl Thomas (Department of State); Harold Cooper (CIA); Joseph O. Hanson (United States Information Agency); Allan M. Labowitz, Myron Kratzer (AEC); Jacob D. Beam, Herbert Scoville (ACDA); Spurgeon Keeny (White House); Arthur Barber, Colonel Jack Wagstaff, Garry L. Quinn (Department of State); Colonel Greenlee, Colonel Philip Sykes (Joint Chiefs of Staff).

We discussed the role of the International Atomic Energy Agency in the application of safeguards and inspection in connection with the peaceful nuclear activities of new nuclear countries. I spoke strongly for a significant role for the IAEA and described the problems of getting the USSR to go along. I said that much progress in this line has been made in the last year or so.

At 12:30 p.m. I had lunch with Howard Simons at the University Club.

At 6 p.m. Arnold Fritsch and I attended a stag party at the Cosmos Club for Edward Wenk, who is leaving the Office of Science and Technology to head a science branch in the Library of Congress.

Saturday, September 26, 1964 - Shenandoah Valley

All of the family (except Pete, who is at Harvard) drove to Skyland Lodge at Shenandoah National Park where we spent the night.

We hiked on Limberlost Trail and also to Betty's Rock.

We had a picnic lunch off Skyline Drive and dinner at Skyland.

Sunday, September 27, 1964 - Shenandoah Valley

We had breakfast at Skyland.

We hiked to Miller's Head (Lookout) and to the Swamp Trail at Big Meadows. We had lunch at Big Meadows Wayside.

We drove home in the late afternoon.

Monday, September 28, 1964 - D.C.

At 10:30 a.m. I presided over Information Meeting 412 (notes attached).

At 12:30 a.m. I had lunch with John Finney (New York Times) at the Federal City Club of the Carlton Hotel.



September 28, 1964
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NOV 86
JSH 9/28/64

INFORMATION MEETING 412

10:30 a. m., Monday, September 28, 1964 - Chairman's Conference Room, D. C.

1. Regulatory Agreement with the State of Kansas, November 5, Topeka, Kansas

Commissioner Palfrey will represent the Commission. (DR)

2. Proposed Department of Defense Nuclear Weapons Dispersal Plan - FY 1965 Stockpile (see Mr. Ink's September 23 memorandum)

Mr. Ink noted the paper contained some errors which will be corrected today. The Chairman requested future transmittals of this nature include two copies for the Chairman's office. (Crowson)

3. Commissioners' Meeting with the Hearing Examiners

To be scheduled later. (Secy)

4. Proposed Letter to Sir William Penney

The Chairman requested preparation of a revised letter. (Kratzer)

5. San Onofre Reactor Dedication Ceremony, October 9

Mr. Ramey will attend. Remarks are to be prepared for him and additionally, a statement for the Chairman to transmit. (Pittman-Fritsch)

6. Proposed Announcement re Hanford Chemical Processing Plants (see Mr. Clark's September 2 memorandum)

The Commissioners thought no announcement should be made at this time. The General Manager will proceed with discussions with General Electric and perhaps others with a concurrent study by AEC of the use of the facilities and the site. (Vinciguerra)

7. Proposed Study by George Washington University re Private Ownership of Diffusion Plants (see Mr. Vinciguerra's September 21 memorandum)

Mr. Hollingsworth discussed briefly the status of the AIF study and said he would recommend deferral of the University study at this time. The Commissioners agreed. (Vinciguerra)

8. Participation by Polish National on Unclassified AEC Research at Marquette University (see Mr. Kratzer's September 22 memorandum)

Approved. (Kratzer)

Mr. Ramey requested information on the possible U. S. study assignment of a U. S. S. R. national.

9. Execution Data for WHETSTONE II Series (see General Crowson's September 25 memorandum)

For consideration on Wednesday. (Secy)

10. Advisory Committee on Isotopes and Radiation Development (see General Manager's September 25 memorandum)

The Commissioners agreed membership could temporarily exceed the present number as described in the memorandum. (Fowler)

11. Joint Committee Hearing, September 24 on Advanced Converters

12. Pending Contractual Matters (September 18 Report)

Noted.

13. American Nuclear Corporation's Use of ORNL Burial Grounds (see the General Manager's September 25 memorandum)

Approved. (Bloch)

14. Anticipated Major Actions (see General Manager's September 24 memorandum)

The Commissioners agreed the proposed discussions should now be scheduled and requested circulation of discussion outlines where appropriate. (GM-Secy)

15. Sale of Plutonium to EURATOM

16. Salmon Event

The General Manager noted delay because of weather.

17. Auk Event, October 2, NTS

18. NRX Test

Mr. Hollingsworth noted the successful test last week and the Commissioners requested preparation of a joint AEC-NASA letter to the President. (Pittman)

19. Argonne Laboratory

The Commissioners discussed briefly the recent discussions regarding the contractual arrangement.

20. Meeting of the Special Committee, September 25

The Chairman reported briefly on his attendance at the meeting.

21. Updated Analysis of the Sulky Event

Mr. Hollingsworth noted the White House request and the Chairman said the report should be submitted at an early date. (Kelly)

22. Settlement of Suit at Los Alamos

The Commissioners accepted the recommendations of the General Manager and the General Counsel. (GM-GC)

PRESENT

Dr. Seaborg
Mr. Ramey
Dr. Tape

Mr. Hollingsworth
Mr. Ink
Mr. Vinciguerra
Mr. Hennessey
Mr. Fritsch
Mr. Quinn*

DISTRIBUTION

Commissioners
General Manager
General Counsel
Secretary

W. B. McCool
Secretary

*Attendance for Item 7

At 2:30 p.m. Commissioner Gerald Tape, Robert Hollingsworth, Spofford English, Paul McDaniel, and I met with President Elvis Stahr (of Indiana University), Albert Crewe (Argonne National Laboratory), Bernard Waldman (Mid-Western Universities Research Association, Madison, Wisconsin), and William B. Harrell (University of Chicago) to discuss the composition of the Corporation that will participate as a policy group in the Argonne Tripartite contract. I decided to set up criteria for participating universities requiring commitment to minimum participation by faculty and graduate students and adequate academic standing with respect to the strength of relevant Ph.D. programs.

I wrote to Peter to respond to questions in his letter of September 24th.

Tuesday, September 29, 1964 - Germantown - D.C.

At 12:30 p.m. I had lunch with Russ Poor to discuss his forthcoming visit at the University of Florida.

At 2:15 p.m. I presided over Commission Meeting 2047 (action summary attached). The Commission discussed the program to cut its FY 1966 budget request by some \$430 million in order to meet President Johnson's target. We are arranging the items to be cut in a priority order in three groups; it would be almost catastrophic if we are forced to make the entire cut.

At 4 p.m. I received a briefing by George Quinn on the implementation of the Private Ownership Legislation. There are many policy decisions to be made.

At 5 p.m. I received a telephone call from Secretary of State Dean Rusk. He called to inquire if I had notified the Joint Committee about the situation in regard to the statement he made today (Red China's exploding a nuclear device). I said I had not. He suggested I call Senator Pastore to inform the Joint Committee and he would inform the Foreign Relations Committee and Robert McNamara. I said I would do this.

At 5:30 p.m. I called Elmer Staats. I told him we had a meeting yesterday with Stahr, Waldman, Harrell and Crewe to go over the Argonne National Laboratory matter and I thought it went very well. I told him what they want to do is begin to establish the guidelines for the Corporation which will be part of the tripartite arrangement. I said we discussed various criteria we are thinking of in terms of a tripartite contract between a Corporation that sets the policy for the University of Chicago, which manages the Laboratory, as the choice of members of the Corporation will have to be on the basis of some criteria.

I said we are thinking in terms of some criteria like 1. financial involvement, 2. a commitment to have their staff spend a certain amount of time at Argonne, and 3. some general criteria as to the standing of the University. I said a committee has been formed of Stahr, representing MURA; Bryce Crawford, representing Mid-Western Universities; Beadle, representing the University of Chicago; and Tape, representing the AEC, to work out these criteria. I said this matter would be coming up before the Trustees of the Universities and various Boards, and by the 20th of October we will be able to make an announcement. I also told him that we have been talking about moving work from Stoughton, Wisconsin, to the University of Chicago, and talked in terms of the agreement last January to do this within 18 months. However, they felt the 18 months hasn't begun to count yet; some of the people haven't made plans yet, etc. I said what they would like is to have a part of the group that is working on a bubble chamber stay at Stoughton for about 18 months after this matter is settled, in the interest of efficiency, which would mean a few of them staying until the summer of 1966.

Memorandum

TO : R. E. Hollingsworth, General Manager

DATE September 30, 1964
Approved _____

FROM : W. B. McCool, Secretary

Data _____
R. E. HollingsworthSUBJECT: ACTION SUMMARY OF MEETING 2047, TUESDAY, SEPTEMBER 29, 1964,
2:15 P.M., ROOM A-410, GERMANTOWN, MARYLAND

SECY:ICB

Commission BusinessAEC 1151/13 - FY 1966 Budget Reductions and
AEC 1151/14 - Statistical Analysis of FY 1966 Budget Reductions

Discussed.

The Commission approved the following amendments to the AEC budget request of \$2.925 billion:

- a. The addition of a project for AE work on a D₂O organic-cooled reactor prototype for \$3.0 million;
- b. An increase in the estimated cost of land acquisition at BNL from \$2.5 million to \$2.750 million;
- c. An increase in the total estimated cost of the LASL Mason facility by \$1.014 million. The revised total estimated cost for this project is \$55.0 million; and
- d. A decrease in the estimated cost of the Particle Physics Laboratory at University of Pennsylvania from \$3.0 million to \$2.5 million.

The Commission requested that staff carefully review the language used in presenting the list of proposed FY 1966 Budget reductions to the BOB. (Abbadessa)

Information Items1. Special Briefing

Scheduled for Wednesday, September 30, 1964, 11:00 a.m.

2. SALMON Event

cc: Commissioners

Then, after they have finished the design work, they would move to ANL, which I think is reasonable enough. Staats asked if this would be just a part of the group and I told him that was right. I said we made it clear that nothing would be built there and they understand this. Staats asked if Williams and President Meredith Wilson of Minnesota were on board on this; I said Williams is, but I didn't see Wilson. I said we planned to go ahead and create a Corporation. Staats said he appreciated getting this information and it sounded all right to him.

I wrote to Peter to send him some prints of photos that he had requested.

Wednesday, September 30, 1964 - D.C.

I sent a letter (copy attached) to McGeorge Bundy explaining why the sale of 355 kilograms of plutonium to Euratom is a good policy, despite his fears and those of the President's Science Advisory Committee (PSAC).

At 9:55 a.m. I presided over Information Meeting 413 (notes attached).

At 11:40 a.m. I presided over Regulatory Meeting 204 (action summary attached).

At 12 noon I presided over Commission Meeting 2048 (action summary attached).

At 1 p.m. I attended a luncheon, in the Cabinet Room of the Mayflower Hotel, given by the Ambassador of Israel in honor of the Israel Desalting Team.

At 3:15 p.m. I presided over Commission Meeting 2049 (action summary attached). The Commission continued the difficult task of identifying items to be cut out of the FY 1966 budget on a priority basis.

September 30, 1964

UNCL. BY DOE
NOV 86

Dear Mac:

As you know, I have recently discussed with the President's Science Advisory Committee the pending sale to Euratom of 355 kilograms of plutonium for use in the fast reactor development program being undertaken by Euratom in association with its Member States. I should like to outline in this letter the present status of this arrangement and our proposed course of action. Some of the background of the arrangement and of our thinking is described in the attachment.

During 1963, the Presidential determination of the availability for distribution abroad of this quantity of plutonium was received. This year, negotiation of the information exchange agreement with Euratom on fast reactors was completed and the necessary Congressional authorization for supply of plutonium was received. Thus, the original conditions on which the supply of the material was made conditional have been satisfied and a Memorandum of Understanding has been executed, committing the United States to sell and Euratom to purchase 355 kilograms of plutonium. A definitive supply contract is now in the final stages of negotiation, although it appears that at least six weeks will still be required before the contract can be executed. The remaining issues in this negotiation are detailed ones involving primarily the specifications of the materials. Initial deliveries of the material are scheduled to take place in December, with deliveries continuing over approximately a year.

Under our arrangements for obtaining information on Euratom's safeguards system, we have ascertained that specific Euratom technical personnel located at both the French and German laboratories have been assigned responsibility for surveillance of the material along with their regular technical responsibilities. This arrangement is in addition to normal periodic inspections by Euratom headquarters personnel and constitutes, in effect, resident

inspection. Additionally, under our information exchange arrangements, the AEC will assign to both the French and German laboratories U. S. technical personnel who will serve as members of the technical staffs at these laboratories. These personnel will be instructed to be continuously aware of the use being made of the United States material. Through these arrangements I believe we have a high degree of assurance that any diversion of U.S.-supplied material by either France or Germany will be detected.

During discussion of this transaction with PSAC, I believe there was general agreement that a gross diversion of the material to weapons purposes was unlikely to occur and would surely be detected, if it did take place. Concern was expressed, however, that the material might be employed without removal from its prescribed location to provide the Germans with data and technology useful to the design of weapons. (This concern has no application to the French since they already have ample quantities of plutonium to serve these purposes.)

The use of this plutonium by the Germans in an entirely proper manner within their fast reactor program will give the Germans additional experience in plutonium handling and fabrication technology which would also have applicability to a weapons program. However, this technology, which has long been unclassified since it forms a legitimate part of the technology for the use of plutonium in power reactors, is already available to the Germans. The use of U.S.-supplied material by the Germans for experiments specifically designed to acquire weapons information seems most unlikely to me. The material to be employed in the Karlsruhe critical assemblies will be in the form of plutonium oxide and any conversion of this material to plutonium metal, which is the material of interest for weapons purposes, would be detected. Plutonium metal will be handled in the transuranium laboratory at Karlsruhe but this is a Euratom center staffed and managed by Euratom employees from all Member States.

In our recent discussions, suggestions have been made that more explicit safeguards provisions might be incorporated in the sales contract now under negotiation; specifically, provisions for the recall of material in the event of diversion and for specific rights of inspection by the United States.

It is our intention to seek in the remaining negotiations a provision which would give the United States the right to repurchase any plutonium no longer needed in the fast reactor program. Material

diverted to weapons uses would fall in this category and, therefore, would be subject to our right of recall. For the reasons outlined in the attachment, our basic agreement with Euratom, under which this present supply arrangement falls, does not provide for unilateral inspection rights on our part. Moreover, I believe that any step which would have the effect of identifying the AEC technical people who will be assigned to these laboratories as inspectors will adversely affect their status as members of the scientific staff. I believe also that the introduction of this issue into the negotiations at this late date would not be in keeping with good negotiating practices on which our ability to sell materials such as enriched uranium heavily depends. For these reasons I do not believe we should seek any explicit inspection rights in the sales contract.

Finally, I would like to call your attention to a related aspect of this matter. In addition to the plutonium, we have agreed to supply for Euratom's fast reactor program enriched uranium which would be used in the same reactors in France and Germany. This material is required since mixed loadings of uranium and plutonium are considerably more economical than plutonium alone. The specific quantities of uranium to be supplied under this arrangement are uncertain but may be several hundred kilograms over the next five years. The initial deliveries of this uranium are required urgently and we expect the supply contract to be executed in the next two or three weeks. The initial deliveries will involve mostly material of 20% enrichment and some 40 kilograms of highly enriched material. This is much less than the amounts of highly enriched uranium already delivered to France (257 kilograms) and Germany (73 kilograms) either bilaterally or through Euratom for use in a number of French and German research and test reactors.

I would appreciate being advised in case you have any objection to any of the actions outlined above. If you or your staff require any additional information on this subject, please let me know.

Sincerely,

(Signed) Glenn T. Seaborg

Glenn T. Seaborg

Honorable McGeorge Bundy
Special Assistant to the President
for National Security Affairs
The White House

Typed in Chairman's Office

ABT/smk

**BACKGROUND OF ARRANGEMENT FOR SUPPLY OF 355 KILOGRAMS
OF PLUTONIUM TO EURATOM**

The interest of Euratom and certain of its members, specifically, France and Germany, in acquiring sizeable amounts of plutonium for fast reactor development work is of long standing. The development of fast reactors has constituted an important part of the reactor development programs of the United States, the United Kingdom and the Soviet Union for a number of years and the interest of Western Europe in participating in this development is both natural and inevitable. The development of fast reactor technology has now reached the stage where further progress requires the construction of critical assemblies and experimental reactors fueled with plutonium.

Following numerous requests from Euratom and France to make available the necessary amounts of plutonium for their fast reactor program, the Atomic Energy Commission advised Euratom in December of 1962 that it was prepared to supply the material subject to the necessary Presidential and Congressional authorizations and on the further condition that a comprehensive arrangement for the exchange of information in the fast reactor field be developed between AEC and Euratom. The plutonium involved would be used principally at two reactor development centers - one in France (Cadarsache) and the other in Germany (Karlsruhe). The Euratom fast reactor program is of high quality and, with an expenditure over the period 1963-1967 of approximately \$200 million, it compares favorably in scope with the U.S. program. The opportunity to supplement the U.S. fast reactor program through cooperation with this Euratom effort has been the principal incentive behind the AEC interest in the supply of this plutonium from the outset. In addition, however, in light of the tight budgetary and balance of payments situations, the revenue of \$15 million from this sale has constituted a significant subsidiary incentive.

Throughout its consideration of this arrangement, the Commission has been sensitive to the national security aspects involved. These are of two kinds: first, the question of whether the supply of this material might contribute to the French weapons program by displacing a corresponding amount of plutonium which the French might otherwise devote to this civil use; and second, the problem of assuring that any material supplied by the U.S. was not itself diverted by the French or Germans to a weapons development program.

In connection with the first consideration, it has been the Commission's judgment that France would not have withdrawn the amount of plutonium required for this program from its plutonium resources available for weapons use. This conclusion is by its nature not subject to proof, but it is significant to note that it was not until

our own stocks of plutonium exceeded by many times those now available to France that the U.S. was prepared to allocate similarly large quantities of plutonium to civil uses.

In connection with the second aspect noted above, an important consideration was the fact that the basic safeguard arrangements applicable to the supply of material to Euratom were already prescribed by the Agreement for Cooperation between the United States and Euratom entered into in 1958. The safeguard provisions of this agreement, which are special in nature, were developed after intensive negotiation under the political guidance of the Department of State. Basically, these arrangements provide for the application of safeguards by Euratom with the United States having a right to audit Euratom's system to satisfy itself that the system is an effective one. Unlike the case of agreements with individual nations, the United States retained no unilateral rights to apply safeguards nor did it acquire the right to specify in detail the kind of safeguards to be applied by Euratom. This special status for Euratom is a reflection of United States' support for European integration. It also reflects the judgment that Euratom guarantees of peaceful uses were trustworthy and that the area of legitimate concern was that the Euratom system be sufficiently effective to assure compliance by its member states.

In addition to the specific considerations cited above with respect to this transaction, it is helpful to view this arrangement within the overall context of our program of international cooperation in civil uses of atomic energy. Some of the considerations which lend support to this and similar transactions are the following:

1. Since 1954, the U.S. has actively pursued a policy of encouragement of peaceful atomic energy activities, including the use of nuclear power, abroad. Under this policy, agreements have been entered into which will result in the production, through the use of U.S.-supplied materials, by Euratom, its members, and many other countries, of large amounts of plutonium which may be retained by the other countries for peaceful purposes under safeguards. The amount of plutonium involved in the present transaction is small compared to the amounts of plutonium which will be produced under these long-standing arrangements.

Further, the possible uses of the plutonium about which concern has been expressed can be accomplished with much smaller quantities - perhaps several kilograms - than those involved in this transaction. A total of about 15 kilograms of plutonium has already been transferred to Euratom and its members under arrangements of long-standing, of which about 2.5 kilograms are in Germany. Germany

should also soon discharge material from its small power reactor, containing at least 5 kgs. of Pu. This material will probably be separated by 1966, either in Europe, the United States or the United Kingdom. Finally, sizeable quantities of plutonium will become available in Euratom in about 3 years and we estimate that Euratom will have approximately 1600 kgs. of plutonium available by the end of 1969, not including the amount produced in French production reactors.

2. Our policy of encouragement of peaceful uses of atomic energy abroad has been re-affirmed by many recent actions, including the recent Geneva Conference and the President's statements at Holy Cross and the Geneva Conference. This policy has taken on added importance and concrete value to the United States through the development on the one hand of a chronic deficit of payments position for the U.S. and the prospect that the sale of enriched uranium for power reactors abroad can generate revenues of the order of hundreds of millions of dollars annually by the late 1970's. Secretary Dillon has written to urge that the Commission push its efforts to sell enriched uranium, and the Commission has taken action toward this end. For example, we have had recent meetings with the Euratom Commission in Brussels on this matter and presented our fuel supply policies in an address to the European atomic industry.
3. It would be difficult in light of our policy of partnership with Western Europe to refrain from cooperating with them in the development of fast breeder reactors which we have identified as crucial to meeting the world's long range energy requirements. The supply of plutonium covered by this transaction is an essential element in their being able to proceed with this development.
4. An important benefit of our international program has been that nuclear developments which might have taken place abroad outside of any control have, with U.S. assistance and cooperation, been channeled into projects subject to safeguards. In the present case, the plutonium to be supplied by the United States was also available from the United Kingdom. While the U.K. has cooperated with us in requiring safeguards covering material they supply, their safeguards arrangements would in practice probably be less effective than ours. Finally, by encouraging the development of fast reactors we encourage a potentially important means of absorbing the large quantities of plutonium which will be produced in Europe and elsewhere in thermal power reactors.



ATOMIC ENERGY COMN
WASHINGTON 25, D.C.

UNCL. BY DOE
NOV 86

COPY NO. 2
September 30, 1964

INFORMATION MEETING 413

9:55 a. m., Wednesday, September 30, Chairman's Conference Room, D. C. Office

1. Commissioners' Meeting with Maritime Administrator

In response to the Chairman's query, the General Manager said he thought it would be useful to go ahead. (GM-Secy)

2. Invitation to Visit the USS ENTERPRISE, Saturday, October 3

The Chairman has another engagement. Commissioners Ramey and Tape plan to attend.

3. November 5 Briefing on PLOWSHARE for Thursday Planning Group

Dr. Tape will present the briefing.

4. Division of Raw Materials September 25 Memorandum re Special Review Committee of Raw Materials Program

The Commissioners agreed the study should proceed on the general basis outlined in the memorandum. In response to Mr. Ramey's comment re the front range area, Mr. Hollingsworth said this will not be a matter for consideration by the Committee but will be discussed with the Commission separately. (Faulkner)

5. SALMON Event

The Chairman noted the postponement until tomprrow and Mr. Ink commented briefly on the possible desirability of holding until Monday.

6. Proposed Letters to Secretary Vance and Assistant to the Secretary of Defense Howard re Safety Rules (General Crowson's September 24 Memorandum

The Chairman will sign the letters subject to the Commissioners' review. (Fritsch)

7. Proposed Reply to Secretaries Hodges and Wirtz Regarding Initial Steps which they are Taking as Co-Chairmen of the Interagency Committee of the National Commission on Technology, Automation and Economic Progress (Mr. Bloch's September 29 Memorandum)

The Chairman requested review by the Commissioners and later discussion. (Fritsch-Secy)

8. Proposed Memorandum to Mr. Bundy, White House, re Sale of Plutonium to EURATOM

The Chairman requested the Commissioners review of the revised memorandum. Comments may be directed to his office. (Fritsch)

9. Anticipated Major Actions for Balance of Calendar Year (General Manager's September 24 Memorandum)

Mr. Ramey requested the addition of consideration of foreign atomic power programs. The Commissioners agreed the General Manager should schedule the listed items and other items as developed by the Commissioners and General Manager beginning next week. With respect to organization and management matters, Mr. Hollingsworth said he would be discussing developments in this area as well. (GM-Secy)

10. ✓ Managers Meeting, Chicago, November 6

The General Manager said he hoped the Commissioners could attend.

11. Letters to Mr. Webb and Secretary Zuckert re Aerospace Safety Meeting with NASA and the Air Force (General Manager's September 29 Memorandum)

The Chairman will sign the letters and suggested the Commissioners review the proposed talking paper.

12. Pending Contractual Matters (September 25 Report)

Noted.

13. Assignment of Space in Federal Office Building, Richland (Mr. Bloch's September 23 Memorandum)

Noted.

14. General Manager's Report on Los Alamos Telephone System

Mr. Hollingsworth reported briefly on the complaints by the Universal Telephone Company representatives, staff discussions with the Joint Committee and staff analysis and action on the questions raised by the Universal Telephone Company.

15. Application of IAEA Safeguards to EURATOM

In response to Mr. Hollingsworth's report, the Chairman requested preparation of a letter to Ambassador Smyth. (Kratzer)

16. Updated SULKY Report for the White House

Dr. Tape noted the report will be reviewed by him and transmitted to the White House at an early date.

17. Fermi Award

18. ✓ Briefing at du Pont, Wilmington, Delaware, Thursday, October 15

Dr. Tape and the General Manager invited others to attend with them.

PRESENT

Dr. Seaborg Mr. Hollingsworth
Mr. Ramey Mr. Vinciguerra
Dr. Tape Mr. Ink
Dr. Bunting Mr. Hennessey
 Dr. Fritsch
 Mr. McCool

DISTRIBUTION

Commissioners
General Manager
General Counsel
Secretary

W. B. McCool
Secretary

UNITED STATES GOVERNMENT

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NOV 86

Memorandum

TO : Harold L. Price, Director
of Regulation

DATE: September 30, 1964
Approved _____
H. L. Price

FROM : W. B. McCool, Secretary

Date _____

SUBJECT: ACTION SUMMARY OF REGULATORY MEETING 204, WEDNESDAY, SEPTEMBER 30,
1964, 11:40 A.M., RCOM 1113-B, D. C. OFFICE

SECY:AJ

Commission Business

1. Minutes of Regulatory Meetings 202 and 203

Approved.

2. AEC-R 8/19 - Proposed Amendment to 10 CFR Part 20 -
Radioactivity in Effluents to Unrestricted Areas

Approved. (Western)

3. AEC-R 30/50 - Amendments to 10 CFR 30, 40, 50 and 70 -
Exemptions From Licensing Requirements for Certain AEC
Contractors

Approved, as revised. (Hennessey)

The Commission requested the draft letter to the
JCAE be revised. (Hennessey)

cc:
Commissioners

UNITED STATES GOVERNMENT

Memorandum

UNCL. BY DUB
NOV 86

TO : R. E. Hollingsworth, General Manager

DATE: September 30, 1964

FROM : W. B. McCool, Secretary *Original signed
by W. B. McCool*

Approved: R.E. Hollingsworth

Date: _____

SUBJECT: ACTION SUMMARY OF MEETING 2048, WEDNESDAY, SEPTEMBER 30, 1964,
12:00 NOON, ROOM 1113-B, D. C. OFFICE

SECY:JCH

Commission Business

1. Authorization for WHETSONE II Events (See General Crowson's
September 24, 1964 Memorandum)

Approved, as revised. (Crowson)

The Commission noted Commissioner Palfrey would be given an appropriate briefing on this subject and that future summaries of proposed events would include certain additional information. (Crowson)

The Commission also noted a presentation would be prepared on the current geological picture at NTS. (Crowson)

2. AEC 25/310 - Proposed Air Force Safety Rules

Approved. (Crowson)

3. AEC 126/46 - Collective Bargaining Procedures

Approved, as revised. (Smith)

The Commission requested preparation of an appropriate response to the Ching Panel's April 16, 1964 letter. A meeting with the Panel after the Panel's report has been submitted should be scheduled. (Smith)

You said a memorandum on the NTS situation would be prepared for later discussion.

Information Item

Wiesner-York Article in Scientific American

cc:
Commissioners

UNITED STATES GOVERNMENT

Memorandum

UNCL. BY DOE
NOV 86

TO : R. E. Hollingsworth, General Manager DATE: October 1, 1964

FROM : W. B. McCool, Secretary Original signed by
F. T. Hobbs

SUBJECT: ACTION SUMMARY OF MEETING 2049, WEDNESDAY, SEPTEMBER 30, 1964,
3:15 P.M., RCOM 1113-B, D. C. OFFICE

SECT: ICB

Commission Business

1. AEC 1151/13 - FY 1966 Budget Reductions and
AEC 1151/14 - Statistical Analysis of FY 1966 Budget Reductions

Discussed.

The Commission requested staff develop material summarizing salient considerations relevant to funding decisions on the following programs and/or projects:

- a. 710 Program
- b. Desalination
- c. Elk River Reactor
- d. Tungsten Reactors (ANL)
- e. Nuclear Safety
- f. Bubble Chamber & Experimental Area (ANL)
- g. PRNC (operating level)
- h. Support for International Conferences
- i. Isotopes Development (POODLE & Operating Expenses Total)
- j. Merchant Ship Reactors

The material should include suggestions for alternate funding sources. (Abbadessa)

2. AEC 1151/15 - Special Nuclear Materials Production

Discussed.

The Commission requested the proposed statement re SNM production be revised in accordance with discussion at the Meeting. (Abbadessa/Quinn)

cc:
Commissioners

Thursday, October 1, 1964 - Washington, D.C. - New York, New York

At 7:30 a.m. Commissioner Ramey, Robert Hollingsworth, C. C. Ohlke (Director, Office of Economic Impact and Conversion), Washington Congresswoman Catherine May, others, and I left Washington, D.C. on Page Airways on a General Electric private plane and arrived at La Guardia Airport (Marine Terminal) in New York at 8:45 a.m. to attend Hanford Day at the New York World's Fair.

The program was held at the General Electric Pavilion and Bauser, May, Robert Phillip and I spoke. The program was pretty well attended by members of the press. We also visited the AEC's "Atomsville USA" Exhibit.

At 12 noon we had lunch in the Edison Electric Institute Pavilion, Tower of Light, at the Light and Key Club. After lunch, in the conference room of the General Electric Progressland Pavilion, I participated in a Hanford diversification progress review meeting, followed by a press conference. Speeches were given by Edward J. Bauser (for Senator Clinton Anderson), Representative Catherine May, Robert F. Philip, president of the Tri-City Nuclear Industrial Council, Wilfred E. Johnson, General Electric's manager at Hanford, and me. I spoke on "Contractor Replacement, Transfer Schedule and Contract Innovations." Charles K. Rieger, a G.E. Vice President, served as the news conference moderator.

Friday, October 2, 1964 - D.C.

At 11:30 a.m. I received a telephone call from John Baxter (University of Florida). He asked if, while I am in Gainesville next Saturday, I could take the time to meet for about ten minutes with a group of freshmen. He said he could get them together in the lecture hall of the Chemistry Building for an informal and impromptu talk just prior to the dedication ceremony. I told John I would be glad to do this and we set the time approximately 9:15 a.m.

At 12 noon I attended the Signing Ceremony, at the White House, in which President Johnson signed the Proclamation Affirming the Participation of the United States in International Cooperation. Over a hundred people, including agency heads and international type organizations, all over the country attended the ceremony. President Johnson and Dean Rusk spoke in a very inspiring manner.

At 1 p.m. I attended a luncheon, at the Department of State, given by Secretary of State Dean Rusk as a farewell to Howard Brown. I praised Brown for his great service as my assistant.

I sent a letter to Peter enclosing photographs from our summer vacation.

Saturday, October 3, 1964 - D.C.

At 9 a.m. I gave a talk on Transuranium Elements (illustrated by slides) before a science seminar sponsored jointly by the American Association of School Administrators and the American Association for the Advancement of Science (AAAS) Commission on Science Education at the Marriott Motor Hotel in Twin Bridges, Virginia. A number of leading school superintendents were in the audience.

I worked half the day at the "H" Street office.

I wrote to my mother to send her photos from our summer vacation and bring her up to date on the family.

I wrote a letter to Howard Brown upon his leaving the Chairman's office. He will be missed here but will be a great addition to the office of the General Manager. 209

Steve, Dave and I picked up a one and one-half year old female boxer at Noah's Ark in Bethesda, Maryland for a family pet. This is a very nice dog who answers to the name of "Suki."

Dave, Eric, Donald Schuirman and I played nine holes of golf at the Chevy Chase Club.

I worked on AEC papers during the remainder of the day.

Sunday, October 4, 1964 - Home

I worked on speeches, read journals and AEC papers during the day.

Monday, October 5, 1964 - Germantown

At 10 a.m. I presided over Information Meeting 414 (notes attached).

I wrote to McGeorge Bundy to bring him up to date on the U.K. request to purchase up to 10,000 kilograms of weapons grade uranium-235 (copy attached). I also sent Bundy a draft of a proposed response to a letter Senator Clinton Anderson sent on September 15, 1964 (copies attached) to the President expressing concern over the U.S. giving technical aid in the field of nuclear submarines to the Netherlands and other nations.

At 12:30 p.m. I had lunch with Frank Baranowski, and Arnold Fritsch in the Germantown Cafeteria. We discussed the irradiation program at Savannah River to produce 3 kilograms of curium-244. If the Advisory Committee on Reactor Safeguards (ACRS) approves, a modified program to increase the neutron flux to $5 \cdot 10^{15}$ will allow curium-244 to be produced, with an intervening interval for use to irradiate and produce numerous heavy isotopes.

At 2:30 p.m. Commissioners James Ramey, Gerald Tape, John Palfrey, Mary Bunting, members of the staff, and I met with Harold Price, Clifford Beck, and Richard Doan to discuss the Bodega Head power reactor. The earthquake problem here raises very serious questions as to whether the AEC should give a construction permit for this reactor. The report of the ACRS on this during the meeting this week will be of critical importance although the AEC might deny the permit even if the ACRS recommends its issuance.

At 3:30 p.m. I had an appointment meeting with Robert Gerdes (President of Pacific Gas and Electric). Commissioners James Ramey, Gerald Tape, and Mary Bunting were also present at the meeting. After recognizing mutual problems at the Stanford Linear Accelerator and Bodega Head, these questions were not discussed further. We discussed with him the importance of cooperation so as to avoid a public vs. private utility fight for the project which we are undertaking with the State of California on the seed and blanket reactor. He agreed that cooperative arrangements could be worked out here between the State of California and such utilities as PG&E. We also discussed similar arrangements with respect to the Metropolitan Water District possible dual purpose reactor and he agreed that cooperative arrangements involving Southern California Edison Company probably could be worked out here.

The President approved WHETSTONE II, the underground testing program.

Tuesday, October 6, 1964 - D.C.

At 9 a.m. Commissioner Tape and I had an appointment meeting with Ed McMillan. McMillan said that he was in town to meet with 37 scientists and engineers--a 210



INFORMATION MEETING 414

10:00 a. m., Monday, October 5, Chairman's Conference Room, Germantown

✓ 1. Proposed Response to Senator Anderson's September 15 Letter re
Technical Aid to The Netherlands

The Commissioners requested discussion of revised language with White House staff and additionally notice to them of the previous transmittal to the Joint Committee. (Ink)

✓ 2. Comments to Mr. Bundy, White House staff, re U. K. Request for
SNM

The Chairman requested comments on his proposed memorandum to Mr. Bundy. The Commissioners requested a re-examination of the U. S. position regarding transfer of SNM under an agreement. A report on the U. S. position on the draft nuclear non-proliferation agreement was also requested. (Labowitz)

3. Commissioners' Meeting with Regulatory Staff, 2:30 p. m., Today

4. Chairman's Speech at the Southwestern Governors Meeting, San
Antonio, Texas, October 12

The Chairman said his speech will be circulated for the Commissioners' review. (Fritsch)

5. Union Carbide Study of Industrial Potential of Technology (General
Manager's September 29 Memorandum)

Approved. The Commissioners requested an invitation to the Southern Interstate Nuclear Board to participate in the study. (English)

6. Commissioners' Meeting with Maritime Administrator, 9:30 a. m.,
Tuesday, October 6, D. C. Office

7. Status of SALMON Event

8. Chairman's Discussion with Dr. Hornig re FY 66 Budget
9. Chairman's Report on Hanford Day at the New York World's Fair, Thursday, October 1
10. U. S. Industrial Participation in French D₂O Plant (General Manager's October 2 Memorandum)

Approved. Joint Committee staff is to be informed. (Kratzer)

11. Informal Discussion of Major Issues and Problem Areas in the Field of International Affairs (Mr. Kratzer's October 2 Memorandum)

The Commissioners noted the value of the informal discussions proposed by the General Manager commenting that they would be successful only if used as forums for quick review of the problem areas and guidance to the staff.

A. Transfer Agreement with the French

The Commissioners agreed the White House should be informed of the intended course of action; the Joint Committee is also to be informed.

B. MLF Legislation

The status of the legislation is to be discussed with Mr. Palfrey upon his return. Mr. Ramey noted the importance of the preparation of well planned security arrangements for presentation to the Joint Committee. Presentations on the organizational arrangements, chain of command, etc., should also be well prepared.

C. International Nuclear Power Programs

Referring to issues 6, 8 and 9, Mr. Ramey raised the question of how these matters should be discussed with representatives of the Department of State and AID. The Chairman noted the question raised by item 5 and the Commissioners said some advantage might be gained by submitting requests for authorization as part of other general legislation.

D. AEC Policy on Foreign Information Exchanges

The Commissioners agreed the proposed joint construction of an organic reactor prototype is unrealistic. With respect to the system of foreign information exchanges, the Commissioners agreed a reasonable spectrum between alternatives 1 and 2 should be the objective.

E. Bilateral Agreements with EURATOM Member States

In discussing the proposed cable to U. S. Embassies in Europe, and in relation to the bilaterals with EURATOM Member States, the Commissioners requested discussion of a position advancing IAEA safeguards in relationship to the supply function.

F. Exchange of Information on Merchant Marine Reactors

Mr. Kratzer discussed briefly the two problems raised here, i. e. (1) relationship to the Naval Nuclear Reactor Program and (2) position of the Maritime Administration regarding the use of this information to advance the U. S. Merchant Marine. (Kratzer)

PRESENT

Dr. Seaborg	Mr. Hollingsworth
Mr. Ramey	Mr. Ink
Dr. Tape	Mr. Vinciguerra
Dr. Bunting	Mr. Hennessey
	Mr. Kratzer*
	Dr. Fritsch
	Mr. McCool

DISTRIBUTION

Commissioners
General Manager
General Counsel
Secretary

W. B. McCool
Secretary

*Attendance for Items 10 and 11



UNIT
ATOMIC ENERGY 903733
WASHINGTON, D.C.

OFFICE DIARY
GLENN T. SEABORG
Chf USAEC, 1961-72
FOLDER-PAGE 46015

OCT 5 1964

UNCL. BY DOE
NOV 88

APPROVED _____ Sept 30 1964
U. S. _____
BY: D.H. Rowan / J.A. [unclear]
DOCUMENT NO. 6946-24

Dear Mac:

I thought you would like to be brought up to date on my recent discussions in Geneva and Vienna with Sir William Penney and our continued staff study of his formal request for an option to purchase up to 10,000 kilograms of weapons grade uranium-235 on short notice any time prior to December 31, 1969. In our conversation, he mentioned that this additional material would be required for four to five Polaris submarines which they now have planned. He further indicated that these plans were well-known to the United States.

Prior to the receipt of Sir William Penney's letter of August 6, 1964, the AEC had already undertaken a detailed consideration of the effect of the disarmament proposal relating to fissile material production cutoffs and transfer of weapons grade uranium-235 to peaceful purposes. A brief staff study directed toward the AEC's capability to meet its future weapons production commitments under a production cutoff and transfer to peaceful uses agreement is enclosed. This study also considers the question of the UK's requests for U-235. A more detailed analysis will be available in several weeks.

The staff study shows that the US does not now have available enough weapons grade U-235 to meet its presently planned military requirements and also transfer U-235 to peaceful uses under a disarmament proposal, meet remaining deliveries of U-235 to the UK under the existing Barter Agreement, and provide for the option agreement requested by Sir William Penney. Of course, the possible impact of the disarmament proposals on our ability to meet planned military requirements is far greater than the effect of Sir William Penney's request for additional U-235. The staff study also shows that if a cutoff of plutonium production were to occur at any time prior to Fiscal Year 1967, a serious deficit of that material would result. Tritium would always have to be produced in stockpile replacement quantities.

CLASSIFICATION CANCELLED
WITH DELETIONS
BY AUTHORITY OF DOE/OC

REVIEWED BY [Signature] DATE 7/1/86
[Signature] 7/1/86

The underlying reason for our present posture is that the current uranium-235 production plan for the period through Fiscal Year 1965 would stockpile excess uranium-235 production only as slightly enriched uranium for direct use in future civilian programs. Supplies of weapons grade uranium-235 could be increased if the AEC production plants were to be operated to maximize production of weapons grade material for use in weapons which would involve some additional cost. If this were done and if the transfer under a disarmament proposal were not to take place, then the weapons grade uranium-235 might later have to be blended down to slightly enriched uranium for use in future civilian programs. This would, of course, negate some of the separation work put into the material.

After completion of our more detailed analysis of this problem, we will discuss it with the Department of Defense and your office.

Cordially,

(Signed) Glenn T. Seaborg

Chairman

Honorable McGeorge Bundy
Special Assistant to the President
for National Security Affairs
The White House

Distribution:

- 1A: Addressee
- 2A & 3A: Chairman
- 4A: Comm. Bunting
- 5A: Comm. Palfrey
- 6A: Comm. Ramey
- 7A: Comm. Tape
- 8A: General Manager
- 9A&10A: Secretariat
- 11A: Frank Parks, OGC
- 12A: Quinn, AGMP&P
- 13A: DMA File
- 14A: Dir. Ref.
- 15A: Dir. Office
- 16A: Dir. Office
- 17A: Mr. keto

Enclosure:
Preliminary AEC Staff Analysis

Concurrences:

OGC _____
AGMP&P _____

MA MA AGM DGM GM OCM
Keto/Fritsch/jel Crowson

9/30/64

OFFICE DIARY
GLENN T. SEABORG
Chf USAEC, 1961-72
FOLDER-PAGE 46017

PRELIMINARY AEC STAFF ANALYSIS OF THE UNITED KINGDOM'S
REQUEST FOR AN OPTION TO OBTAIN 10,000 KGS
OF WEAPONS GRADE U-235

The purpose of this report is to discuss the effect on United States materials availability of the option quantity of U-235 requested in Sir William Penney's letter of August 6, 1964. That letter discussed the way in which the possible changes in the United Kingdom's fissile material requirements could be satisfied in the event of a disarmament agreement to cut off production of fissile material for military purposes.

Sir William Penney indicated that possible changes in the UK's U-235 requirements could be met if the US would agree to give the UK an option to purchase up to 10 tonnes (one tonne equals 1,000 kgs) of military grade U-235 on short notice at any time prior to December 31, 1969. He further indicated that their military grade plutonium requirements could be met by accelerating their own production, but that this would require three or more years.

DELETED

The following is the staff's preliminary evaluation of the UK's request for additional U-235:

1. The feature of the current disarmament proposals providing for transfer of weapons grade U-235 to peaceful uses (up to 100,000 kgs) obviously has a greater impact on our weapons production capability than the UK request for additional U-235 under an option agreement.
2. No further production of highly enriched U-235 for use in weapons is scheduled through Fiscal Year 1965. The UK's U-235 requests, the disarmament proposals involving transfer up to [REDACTED] ^{DELETED} and planned weapon requirements can be satisfied only if it were decided to resume US production of highly enriched U-235 for weapons uses. U-235 now available to the US would permit: (a) meeting the UK requests; (b) transferring [REDACTED] as part of a disarmament agreement; and (c) meeting the U-235 requirements for the Presidentially

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GLENN T. SEABORG
Chr USAEC, 1961-72
FOLDER PAGE 46018

approved weapons stockpiles only through Fiscal Year 1966. (We have set forth the U-235 situation in chart form.) Any increase of plutonium production prior to the end of Fiscal Year 1967 would result in a US production deficit. A tritium cutoff would have to provide for replenishment of tritium in the weapons throughout their stockpile life.

3. An amendment of the existing Agreement for Cooperation with the UK would be required.

To increase U-235 supplies the AEC production plants could be operated to maximize production of weapons grade material for use in weapons, as well as continuing to meet the requirements for non-weapons uses. The preliminary analysis indicates that, with no change in presently planned power levels and no major adjustments such as placing feed plants back into operation, the AEC could increase the available supply of weapons grade U-235 by [REDACTED] by the end of Fiscal Year 1967. These gains could be achieved at an increased out-of-pocket cost of \$2.2 million. To increase the available supply any further would require start up of some plants and facilities now shut down. If the production of weapons grade U-235 were so increased and the contingent requirements represented by the disarmament offer and the UK option request failed to materialize, it might then be necessary to blend the material back to permit its use for civilian programs.

Thus, assuming that the AEC were to change the present mode of operation of the gaseous diffusion plants, it appears that the AEC could by the end of Fiscal Year 1966 meet the U-235 requirements for the Presidentially authorized stockpile projections through Fiscal Year 1966 and (1) transfer up to 100,000 kgs of weapons grade uranium for disarmament purposes, (2) deliver [REDACTED] to the UK under the Barter Agreement, (3) provide the additional 10,000 kgs optional requirement by the UK, and (4) provide [REDACTED] to help alleviate any possible weapons materials imbalance which might be caused by a production cutoff of fissile materials. Further, by the end of Fiscal Year 1967, the AEC could have enough U-235 available to meet the Secretary of Defense's August 1963 projected requirements for U-235 through Fiscal Year 1972 if the transfer under a disarmament agreement were restricted to the lower level [REDACTED]

DELETED

DELETED

OFFICE DIARY GLENN T. SEABORG Chr USAEC, 1961-72 FOLDER-PAGE 46019
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If the 10,000 kgs were sold to the UK at the current price, the revenue to the US would be over \$100 million.

The UK proposal would require a change in the US Agreement for Cooperation with the UK--specifically the Technical Annex, the existence of which is classified. This would require following the statutory procedures applicable to a new military agreement for cooperation; i.e., negotiation, approval by the President, submission to the Congress (not the Joint Committee on Atomic Energy) and referral to the Joint Committee on Atomic Energy for a period of 60 days while Congress is in session. This 60-day period cannot be waived unless the waiver is by an Act of Congress approved by the President.

The staff has had underway a detailed analysis directed at up dating the information of the effect on the AEC capability to meet its future weapons production commitments of a production cutoff of fissile materials and a transfer to peaceful uses of weapons grade U-235. This analysis will be completed within the next few weeks, and presented to the Commission for its consideration.

To now entertain the thought of making it possible for other nations to possess nuclear submarine propulsion is in direct contradiction to this philosophy and to what I understand to be the Administration's policy--that of preventing the further development of independent national nuclear forces.

The Atomic Energy Act of 1954 provides that the Congress must review military agreements for cooperation with foreign governments in the field of nuclear energy. Since 1957 there have been repeated attempts to pressure Congress into agreeing to provide technical assistance to foreign nations in the field of naval nuclear propulsion. In 1960, the Joint Committee on Atomic Energy held hearings on certain proposals to give submarine nuclear propulsion information to the Netherlands, France, Italy and West Germany. At that time serious objections were raised by members of our Committee to the effect that it would be contrary to the best interests of the United States to provide such aid. Again in 1962, the State Department and the Department of Defense proposed giving the French technical information on our nuclear submarines which of course the French desire to assist them in obtaining their independent national nuclear Polaris weapon system. I agree with the views of Congressman Chet Holifield, who as Chairman of the Joint Committee, on January 11, 1963 wrote to President Kennedy and expressed his grave concern that by providing such aid we would risk improving the Soviet's submarine capability, thus nullifying any defensive advantage we presently have in our attack type nuclear submarines. In his letter he pointed out that while the U.S.S.R. had recently developed a nuclear submarine capability, Soviet nuclear submarines to date do not match those of the United States in reliability or speed. Chairman Holifield also expressed his concern as to the effect such action taken with the French might have on our future cooperation with our other allies and on our basic policies in NATO. The reasons for his concern are equally valid today regardless of the nation concerned.

I favor equipping our allies with the most modern weapons available provided the weapons are of a type our potential enemies already have and provided we have a defense against these weapons. In the case of the nuclear submarine, all the intelligence information that has been made available to me indicates the Soviets do not have nuclear propulsion techniques equal to ours, nor do we have an adequate defense against them.

The United States with its densely populated seacoasts is probably the most vulnerable nation in the world to submarine launched missile attack. Further, experience in the last two world wars has demonstrated the great vulnerability of our overseas transport to submarine attack.

The situation we face today relative to giving away our nuclear propulsion information is analogous to the situation we faced in 1946 relative to giving away our atomic bomb information. The Secretary of War was in favor of giving the atomic bomb to our wartime ally, Russia. I was one member of the Cabinet along with Secretary Vinson, Secretary Forrestal, and Attorney General Tom Clark who opposed this. Ultimately the majority of the Cabinet came around to our view.

From hindsight it is obvious that those who recommended giving away the atomic bomb information would have committed a grievous error. Similarly, had Congress acquiesced in 1960 to the desires of the State and Defense Departments to give naval nuclear propulsion information away our lead over the Soviets in the field of nuclear submarines would be nonexistent today.

In past instances the Congress and the Administration have been placed in embarrassing positions by having such questions brought before Congress after commitments had already been made to other nations during preliminary negotiations by representatives of our government.

I am convinced that some of our representatives abroad go so far as to encourage foreign officials to ask for nuclear warship technical assistance. I would like to see such procedures stopped. Consequently, I strongly urge you to issue a directive to the State Department, the Department of Defense, and the Atomic Energy Commission setting forth the Administration's policy against giving away our nuclear warship technology. Such a directive would preclude a politically embarrassing situation here and abroad. It would also prevent action which would adversely affect our national security. If you request, I would be glad to submit a suggested text for a directive.

Respectfully yours,



Clinton P. Anderson
Chairman
Subcommittee on Security

The President
The White House

903734

OFFICE DIARY
GLENN T. SEABORG
Chr USAEC, 1961-72
FOLDER-PAGE 46021

Dear Senator Anderson:

The President has asked me to reply to your 15 September letter which raised the question of the U.S. providing technical aid to the Netherlands and possibly to other Allies for the production of nuclear submarines.

As regards the Netherlands, the situation is as follows: The Netherlands Defense Minister announced to Parliament on 24 June 1964 that its future defense plans included the construction of nuclear ASW submarines. Following this announcement, informal Dutch queries about U.S. willingness to lend assistance were answered in the negative through diplomatic and military channels. The subject of Dutch nuclear submarines was again brought to public attention at the Hague in September when the defense budget for 1965 was submitted to Parliament. A newspaper report at that time erroneously stated that the Defense Minister's transmittal note to Parliament indicated that two nuclear submarines were to be constructed with U.S. help. As I say, the press story was mistaken. The United States was not specifically linked with the Dutch nuclear submarine program in either of the two official communications to the Dutch Parliament.

The matter was not formally raised by the Netherlands Government with the United States prior to the 24 June announcement, and I can assure you that no representative of the Department of State or the

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R. C. [Signature] 6/17/86
REVIEWED BY [Signature] DATE 7/1/86

Department of Defense has encouraged the Netherlands Government to include nuclear submarines in its recently presented defense budget or to seek assistance from the United States.

As regards other Allies, I am not aware of any comparable specific interest in nuclear submarine propulsion. The same general considerations applicable to assistance to the Netherlands in this field would also be applicable to other Allies, and I reiterate that U.S. representatives are not encouraging requests for any technical aid in the field of nuclear submarines.

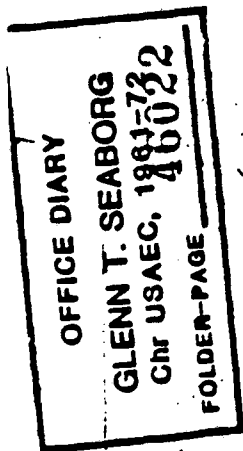
This does not mean, however, that we can avoid related defense responsibilities of equal seriousness. Effective national security planning requires that the strategic capabilities of the United States and its Western Allies be analyzed on a continuing basis. No reasonable hypothesis drawn from these forces, either now available or projected in the future, can be exempted from analysis. When the Netherlands Defense Minister announced that plans included the construction of nuclear ASW submarines, it became clear that the advantages and disadvantages of U.S. assistance to the Dutch should be examined.

I can assure you that current studies on possible U.S. assistance are carried out strictly within a contingency planning framework with no prejudice to a decision for or against assisting a foreign nation.

Sincerely,

(To be signed by McGeorge Bundy)

Coordination: AEC; ATSD(AE); Navy; State; OSD. (LA)



of political action group which will meet with President Johnson at 11:30 a.m. this morning. He told us about the movement being started at Associated Universities Incorporated (AUI) for the formation of a national policy group and of Bacher's efforts to establish a high energy physics policy group.

I raised the question of the Alvarez-Silver proposal for a balloon-based cosmic ray effort centered at the Space Sciences Laboratory at Berkeley. McMillan said that this project, of which about \$2 million worth of effort would be in the Radiation Laboratory and only about 10% as much at the Space Sciences Laboratory, places a great strain on the Radiation Laboratory; and he is not in favor of it with this kind of distribution of effort; nevertheless, the Administration and the Regents have approved of this particular proposal. McMillan has met with Luis Alvarez and Sam Silver and told them he would favor an effort in which the major part was centered at the Space Sciences Laboratory, and he reiterated to us that he has no objection to such an effort. I told him that Silver is coming to see me this week and that his (McMillan's) observations would be helpful. I said that I see no reason why we shouldn't support an effort in the Space Sciences Laboratory but that we should have a recommendation from Chancellor Edward Strong which represents a consensus of the University.

At 9:30 a.m. Commissioners James Ramey, Gerald Tape, John Palfrey, members of the staff, and I met with Maritime Administrator Nicholas Johnson to discuss the policy plans concerning nuclear propulsion for the merchant marine. He (Johnson) will write a letter expressing his interest in nuclear propulsion, which we can use at the Bureau of the Budget, to be followed by a more definitive plan in December for BOB use. An issue raised is whether we should build a land-based prototype or put the plant directly in a ship.

At 12:30 p.m. I had lunch with John Napier, at the Metropolitan Club, to discuss speeches.

At 2 p.m. I had an appointment meeting with Chauncey Starr. He felt that the Commission made a mistake in choosing the HTGR over the SGR. He said that Atomics International is now faced with the decision of whether to push the SGR with the hope of getting a modified third round proposal underway with some utility or of dropping this concept as a thermal reactor and going on to the development of the coupled core reactor. Atomics International would like the Commission's comment on this and some indication of Commission support for either course. I told him that I thought the Commission would support a SGR project with the utility and a modified third round arrangement to the extent of \$12 to \$15 million for design and engineering assistance, plus a waiver of fuel cost but it couldn't go further than this as a practical matter. Thus, if Atomics International couldn't make an arrangement like this, I would suggest they go ahead with the second alternative, namely, pushing the coupled core.

Starr emphasized that he thought the key to the Metropolitan Water District - Southern California Edison project is the power reactor itself and the Southern California Edison Company. He asked how far we would be willing to go in encouraging Southern California Edison to go ahead. I said I thought we would be willing to suggest the \$12 to \$15 million support level, plus the fuel waiver. He said that Holyoke is going ahead with various plans, including investigating the possibility of a combination of utilities to build the SGR or the coupled core reactor, and Starr feels that we should give them some guidance and not let them go off again in the direction of a project which will again be a dead end.

At 2:30 p.m. the Commissioners, and I heard a briefing, given by Reichardt, on the Soviet and French weapon program. The Soviets, apparently, are continuing to increase the production of uranium-235 and plutonium-239!

At 4:30 p.m. I had a meeting by appointment with James R. Killian (Massachusetts Institute of Technology). 1. He brought up the problem of financial support for the research reactor at MIT. He thinks that the support of such research reactors, of which there are about 13 in U.S. universities, is a policy question that needs resolution. They require about \$300,000 a year. I told him that this is something we are trying to arrange in our budget, with some difficulty, and that he should send the proposal to the AEC, probably through Dr. Russell Poor. I said that there may be some difficulty in taking care of it in FY 1966. 2. He also gave me a report on the status of Educational Services, Incorporated (ESI), saying the budget amounts to some \$7 million a year now. 3. I autographed a copy of Education and the Atom for him.

Wednesday, October 7, 1964 - Germantown

At 10:45 a.m. I presided over Commission Meeting 2050 (action summary attached).

At 12:40 p.m. I had lunch with Spofford English, Paul McDaniel, Dan Miller, Nat Stetson and Arnold Fritsch. We discussed Savannah River's plan to run a reactor at $5 \cdot 10^{15}$ to produce heavy isotopes and to do heavy isotope irradiation experiments.

At 2:10 p.m. I had an appointment meeting with Rubin R. Mettler (President, Space Technological Laboratory, Redondo Beach, California), and Michael Komich (TRW-STL, Washington, D.C.). They described the POODLE concept to me, and I recalled that we had a briefing on it last March and that I met some of their key people. I told them that the key to funding for its development is pressure from the users.

At 3 p.m. I presided over Commission Meeting 2051 (action summary attached). The Commission discussed further the FY 1966 budget and made final decisions as to the possible items to be cut, which are to be placed in categories A (the highest priority items to be kept in the budget), B, and C.

Thursday, October 8, 1964 - Germantown

At 9:50 a.m. I presided over Information Meeting 415 (notes attached).

Klystron procurement for the SLAC is still in trouble--a consequence of refraining from purchasing them from Varian to avoid a conflict of interest. I'm afraid that this is too big a price to pay to accommodate Commissioner Ramey and the Joint Committee on Atomic Energy.

At 11:40 a.m. Arnold Fritsch and I heard a briefing, given by Nat Stetson, J. W. Croach, Jr., Lombard Squires, and George Kavanagh concerning Savannah River's plans to run a reactor at $5 \cdot 10^{15}$ flux for heavy isotope experiments and production. A big question is whether the ACRS will approve the safety aspects of this; Du Pont feels it is very safe.

At 12:30 p.m. I had lunch with Edward Brunenkant, and Arnold Fritsch in the cafeteria.

At 2:25 p.m. I was interviewed by Sven Ahman (a New York correspondent for Dagens Nyheter) for their 100th Anniversary issue.

At 2:55 p.m. Commissioner Tape and Bunting, Robert Hollingsworth, Spofford English, Liverman, and I met with James Shannon and Kenneth Endicott of the National Institutes of Health (NIH) to discuss the problems they are having with expanding NIH support of biological work at the Oak Ridge National Laboratory. I said that I favor such expansion and increased cooperation with the University of Tennessee.

Memorandum

UNCL. BY DOE
NOV 86

TO : R. E. Hollingsworth, General Manager

DATE: October 7, 1964

FROM : W. B. McCool, Secretary

Approved _____

R. E. Hollingsworth

Date _____

*Original signed
W. B. McCool*

SUBJECT: ACTION SUMMARY OF MEETING 2050, WEDNESDAY, OCTOBER 7, 1964,
10:45 A.M., ROOM A-410, GERMANTOWN, MARYLAND

SECY:ICB

Commission Business

1. Minutes of Meetings 2029, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044 and 146th AEC-MLC Conference

Approved, as revised, subject to comments by Commissioners Palfrey and Ramey on Meetings 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043 and 2044.

2. AEC 1151/16 - Special Analysis of FY 1966 Budget Reductions

Discussed.

The Commission tentatively approved the proposed budget reductions contained in Table I of AEC 1151/16. (Abbadessa)

The Commission requested staff revise the list of budget reductions necessary to meet the BOB planning total in accordance with discussion at the Meeting. (Abbadessa)

The Commission requested staff undertake appropriate discussions with the Maritime Administration re the Merchant Ship Reactor prototype. (English)

Commissioner Ramey requested the National Laboratories undertake a study of POODLE. (English)

The Commission requested an appropriate study be made of the 710 program. (English)

cc:
Commissioners

UNITED STATES GOVERNMENT

Memorandum

UNCL. BY DOE
NOV 86

TO : R. E. Hollingsworth, General Manager DATE: October 8, 1964

FROM : W. B. McCool, Secretary *Original signed
W. B. McCool* Approved R.E. Hollingsworth
Date _____

SUBJECT: ACTION SUMMARY OF MEETING 2051, WEDNESDAY, OCTOBER 7, 1964,
3:00 P.M., ROOM A-457, GERMANTOWN, MARYLAND

SECY:WBMc

Commission Business

1. AEC 1151/13 - FY 1966 Budget Reductions

Approved, as revised. (Abbadessa)

The Commission approved the proposed reductions listed in the Annex to the Appendix of AEC 1151/13 with the following changes:

(In Thousands)

<u>Program or Project</u>	<u>Priority A</u>	<u>Priority B</u>	<u>Priority C</u>	<u>G.M. Target</u>
Proposed Reductions*	\$176,247	\$136,280	\$126,324	\$2,490,000
<u>Changes Approved by the Commission</u>				
FRNC		-150		150
Assistance for Inter. Conferences		- 50		50
Isotopes Develop. (Oper. Exp.)		-1,300		1,300
Change in GSO		-500		500
Construction Planning & Design			2,000	-2,000
Desalination R&D		-1,300		1,300
Second Flight Test for SNAP 10A		-7,000		7,000
Elk River Reactor			-1,275	1,275
Rover Tungsten work at ANL			-3,700	3,700
NOVAWOOD Pilot Plant		-1,000		1,000
Proj. 66-5-b bubble chamber and Experimental area - ANL (AE)	2,000	-2,000		
POODLE	6,800			-6,800
Fast Gas Development			1,000	-1,000
TARGET Program			1,000	-1,000
Gas Cooled base program - ORNL			1,000	-1,000
Fast reactor - general R&D			1,000	-1,000

* As shown in the Annex and adjusted to reflect the revisions, approved at Meeting 2047 on September 29, 1964, to the original budget submission.

October 8, 1964

	<u>Priority A</u>	<u>Priority B</u>	<u>Priority C</u>	<u>G.M. Target</u>
<u>Changes - continued</u>				
Man rated Kilowatt generator (SNAP)			1,200	-1,200
Gen. Nuclear Technology (DRD)		1,100		-1,100
Changes in Selected Resources	1,200	-2,800	2,775	-1,175
Plutonium Engineering facility, LRL	-5,000	5,000		
Warehouse, NTS	-510		510	
Commercial Processing of Uranium Scrap (SNM)	-1,210	1,210		
Process Development (SNM)	-3,000			3,000
Nuclear Materials Management and Safety (SNM)	-200			200
Slippage in Chem. Proc. by NFS(SNM)		3,200		-3,200
 Adjusted Totals	 \$176,327	 \$ 130,690	 \$131,834	 \$2,490,000

2. AEC 1151/15 - Special Nuclear Materials Production

Approved, as revised. (Quinn)

3. AEC 141/60 - Extension of Contract with Holmes & Narver, Inc.

Approved. (Hart)

4. AEC 181/115 - Cost Principles for Independent Research and Development

Discussed. To be rescheduled for additional consideration. (Secy)

5. Information Item (Primary)

Score of ball game as of adjournment of Meeting.

Cardinals - 6 -- Yankees - 4

Final Score

Cardinals - 9 -- Yankees - 5

cc: Commissioners



UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON, D.C. 20545

COPY NO. 2
October 8, 1964
UNCL. BY DOE
NOV 86

INFORMATION MEETING 415

9:50 a.m., Thursday, October 8, 1964 - Chairman's Conference Room A-457, Germant

1. Chairman's 3:00 p.m. Meeting Today with NIH Representatives

The General Manager will check the Oak Ridge matter prior to the meeting.

2. Commissioners' Luncheon Meeting with Hearing Examiners, Thursday, October 22, Germantown

To be scheduled. (Fritsch-Secy)

3. Commissioners' Luncheon Meeting with NASA Officials

To be scheduled in early November. (Fritsch-Secy)

4. Commissioners' Luncheon Meeting with Department of Defense Officials

Mr. Palfrey will explore the possibility of a November meeting.

5. Chairman's Discussion with Chauncey Starr, Atomics International

The Chairman said Mr. Starr had discussed the decision now facing AI as to whether to proceed on a thermal SGR or coupled core project. Possible AEC assistance was discussed briefly and the Commissioners discussed the possibility of moving ahead with the SGR in conjunction with Southern California Edison. Mr. Starr mentioned Holyoke Water Power Company's current discussions with other companies and the effect on Holyoke if the discussions advance too far without development of an acceptable proposal. Mr. Hollingsworth said staff would be alert to this during the study contract arrangements with Holyoke. (Pittman)

6. Letter to NUCLEONICS re Recent Quotation regarding Holyoke and Sierra Pacific Proposals

Mr. Pittman is to sign the letter and the Chairman requested a ~~telephone call to Mr. Luntz.~~ (Pittman)

7. Combustion Engineering-Atomics International Joint Heavy Water Organic-Cooled Program

Staff will discuss with Mr. Ramey on Monday. (Vinciguerra)

8. Policy on Research Reactors for Universities

The Chairman mentioned his conversation with Dr. Killian, MIT. He requested a report on present AEC policy. (English)

9. Draft Reply to Senator Anderson's Letter re Exchange of Technical Information with the Netherlands

A revised letter is to be sent today. Mr. Palfrey will discuss the matter with Charles Johnson, White House Staff. (Fritsch)

10. Thyroid Disease in Rongelap Islanders (Dr. Dunham's October 2 Memorandum)

The Chairman noted staff should be alert to possible repercussions.

11. Office of Emergency Planning Memorandum of October 2 Regarding Regional Preparedness Committees

The Chairman requested appropriate action. (Bloch)

12. Klystron Procurement for the Stanford Accelerator (Mr. Vinciguerra's October 5 Memorandum)

Staff will discuss with Mr. Ramey. (Vinciguerra)

13. President's October 1 Memorandum re International Cooperation Year

Mr. Palfrey will be the AEC representative with assistance from Mr. John Hall. (Hall)

14. Division of Inspection September 30 Report re Gas. Hills Uranium Company

Dr. Hornig will be informed of the substance of the report. (Fritsch)

Called to see the report.

15. Export of SNAP 7-D Unmanned Weather Station (GM-DR's October 6 Memorandum)

The Commissioners said to proceed on a case-by-case basis, with assurance of appropriate safety measures. (GM-DR)

16. Export of Zirconium Oxide to France (Mr. Kratzer's October 7 Memorandum)

Approved. (Kratzer)

17. Pending Contractual Matters (October 2 Report)

Mr. Ramey requested preparation of a discussion paper on the establishment of a reprocessing plant on the West Coast in relationship to Richland. (Bloch)

18. Large Heavy Liquid Bubble Chamber and Related Equipment for the Zero Gradient Synchrotron at ANL (Mr. Vinciguerra's October 7 Memorandum)

Approved. (McDaniel)

19. Agenda for the Week of October 12, 1964

Approved. (Secy)

20. General Manager's September 29, 1964 Memorandum on Appraisal of Field Operations

In response to Mr. Ramey's query, the General Manager said security appraisals will continue.

21. Fermi Award

Dr. Tape discussed briefly the proposed language which will be reviewed for later discussion.

22. Major Programmatic Items (AGM for Plans and Production)

- a. Wahlake Slope Control Zoned Land. Mr. Ramey noted the desirability of consideration of the holding of land for siting of new facilities.
- b. Scope of New Studies on Future Operation of Production Reactors. Mr. Quinn discussed briefly the forthcoming report on production capability for plutonium 238 and other non-weapons materials. The Commissioners discussed briefly the status of the study on the use of a Savannah reactor for power purposed.
- c. Reactor Products Production Studies.
- d. Future Operating Level of Diffusion Plants. Mr. Quinn noted a staff paper will be circulated shortly.
- e. Operation of Heavy Water Plant at Savannah River. In response to Mr. Ramey's query, the General Manager reported a staff paper will be circulated shortly dealing with the possibility of Commercial operation.
- f. Use of Savannah River Land and Facilities for Private Purposes. The Commissioners encouraged staff to develop additional information and recommendations on how this can be accomplished.
- g. Carryall Project. The Commissioners suggested staff proceed optimistically but with caution.
- h. International Cooperation in Nuclear Excavation. The Chairman suggested that Mr. Palfrey follow this matter.
- i. Controls on Privately Developed Restricted Data. Mr. Quinn discussed briefly the meeting with AIF and said a staff paper will be submitted to the Commission shortly. Mr. Ramey suggested a technical representative discuss this program with The Netherlands, West Germany, and others. (Quinn-Kratzer)

23. Executive Session Items

For additional consideration at 9:00 a.m., Tuesday, October 13.

PRESENT

Dr. Seaborg
Mr. Palfrey
Mr. Ramey
Dr. Tape
Dr. Bunting

Mr. Hollingsworth
Mr. Hennessey
Mr. Ink
Mr. Vinciguerra
Mr. Fritsch
Mr. Quinn*
Mr. McCool

DISTRIBUTION

Commissioners
General Manager
General Counsel
Secretary

W. B. McCool
Secretary

*Attendance for Item 22



Members of the U.S. Atomic Energy Commission, Chairman's office, Germantown, Md., October 1964
Commissioners Tape, Palfrey, Ramey, Bunting and Seaborg

Friday, October 9, 1964 - Germantown, Maryland; D.C., Gainesville, Florida

At 10:05 a.m. I met with Gus A. Linenberger (Vice President), Raymond W. Durante (Manager of Sales), and John Meyer (Washington Representative) of Aerojet General. They described their interest in the contract to operate Hanford reactors and fuel services. This is going to be a very interesting and competitive situation; the types of proposals for bringing in additional industrial activity to Hanford will be very intriguing.

At 12:30 p.m. I had lunch in the cafeteria with Arnold Fritsch, John Napier, and Jim Hill.

I finished editing my interviews for the Kennedy Library. I have the impression that this is very interesting material with good possibilities for further uses, including, perhaps, a book.

I finished inscribing copies of my book, Education and the Atom, which were sent to various recipients. I have inscribed some 75 copies during the last few days.

I wrote to Peter to tell him of our activities and that Lynne will be going to Cambridge on Thursday, October 22nd, to visit the Radcliffe campus.

At 6:45 p.m. John Napier, Russell Poor, and I left Washington, D.C., on Eastern Airlines Flight No. 843 and arrived in Jacksonville, Florida, at 8:05 p.m. We left Jacksonville, Florida, at 8:25 p.m. on Eastern Airlines Flight No. 689 and arrived in Gainesville, Florida, at 9:10 p.m. We were met by George K. Davis (Director, Nuclear Sciences) in Gainesville.

We stayed overnight at the Students' Service Center at the University of Florida.

Saturday, October 10, 1964 - Gainesville, Florida; D.C.

We toured the new Nuclear Sciences Building which is to be dedicated today. I saw an old friend, Dr. Luis Muga, who is doing work on ternary fission.

At 9:15 a.m. I spoke, informally, for about 15 minutes, to John Baxter's elementary chemistry class on Transuranium Elements.

At 10 a.m., in the Bless Auditorium of the Physics Building, I attended the dedication ceremony of the Nuclear Sciences Building. J. Wayne Reitz (President, University of Florida) introduced me for my talk on "The Binding Force of the Atom." Richard Carrigan (National Science Foundation), Francis L. Schmehl (National Institutes of Health), Baya Harrison (Chairman, Board of Control), and George K. Davis (Director, Nuclear Sciences) also participated in the program.

Robert Uhrig (Chairman, Department of Nuclear Engineering) drove us to Jacksonville, Florida. We left Jacksonville at 2 p.m. on National Airlines Flight No. 292, and arrived in Washington, D.C. at 5:40 p.m.

Sunday, October 11, 1964 - Home

I recorded a television show (28 minutes on WTTG Channel 5, Wisconsin Avenue at Harrison Street), for use by the Democratic National Committee, entitled, "Science and the Great Society," with Hubert Humphrey and four Nobel Prize winners--Dr. William Shockley, Dr. Edward C. Kendall, Dr. James D. Watson, and Albert von Szent-Gyorgyi.

Monday, October 12, 1964 - D.C. - San Antonio, Texas

At 8:30 a.m. Arnold Fritsch, John Napier, and I left Washington, D.C., on a MATS Jetstar, and arrived in San Antonio, Texas, at 10 a.m. We were met by Jim Maxfield (of the Maxfield Clinic-Hospital in Dallas), who provided us with transportation to the St. Anthony Hotel.

At 11:30 a.m. I delivered a speech, "The States and the AEC--A Growing Partnership," at the Thirtieth Annual Meeting of the Southern Governors' Conference, held in San Antonio, Texas. The talk seemed to be well-received, and was followed by questions and answers. Governor Barron and Dean Quarles (University of Virginia, Chairman of the Southern Interstate Nuclear Board) also spoke. During my talk there were approximately 12 governors present and I talked, individually, to most of them following the program.

Among the governors who attended the Conference were Albertis S. Harrison, Jr. (Virginia), Orval E. Faubus (Arkansas), William W. Barron (West Virginia), Farris Bryant (Florida), Edward T. Breathitt (Kentucky), Paul B. Johnson (Mississippi), George C. Wallace (Alabama), John B. Connally (Texas), Terry Sanford (North Carolina), J. Millard Tawes (Maryland).

At 2 p.m. we left San Antonio, Texas, on the MATS Jetstar and arrived in Washington, D.C., at 6:45 p.m. (We were delayed because of a flat tire.)

Tuesday, October 13, 1964 - D.C.

At 10 a.m. the Commissioners met with the General Advisory Committee and told them of our plans for two \$25,000 Fermi Awards this year and asked them for suggestions for three candidates which is a procedure to which some of them may object.

I sent a letter (copy attached) to President Johnson asking his approval for SULKY (Plowshare 100 ton cratering shot) on the basis that his advisory committee now approves it in spite of test ban implications (i.e., very slight possibility of violating the treaty). I received an immediate reply (copy attached) giving us Presidential approval to conduct the SULKY experiment in December.

At 10:50 a.m. I received a telephone call from William Webster. Bill said that the Davison Chemical Company and its President, William E. McGuirk, Jr., are on the verge of spending substantial money on the centrifuge process for the separation of isotopes. He feels that we should talk to them in order to avert some waste motion in this connection.

At 11:10 a.m. I had a meeting with William Webster. Bill said that he has been thinking of replacing two of the 76 fuel elements in the Yankee reactor at the time of the next refueling (next June) with zircalloy clad elements. He has investigated this possibility with Westinghouse, in view of their role with the Yankee reactor, but he finds them rather uncooperative. They cite the cost as \$550,000, which Yankee would have to pay in its entirety, and this does not include certain auxiliary costs involving hot laboratory work, etc. On the other hand, Babcock and Wilcox would do the entire job for about \$400,000, and although B&W feel that they couldn't have them ready before September, it is probable that they could shorten this time schedule to a sufficient degree. Webster indicated he needs an answer on this within a couple days because of the tight time schedule. He indicated that the third refueling this last summer took only four weeks, as compared with 17 weeks for the first and ten and one-half weeks for the second.

October 13, 1964

UNCL. BY DOE
NOV 86

Dear Mr. President:

The purpose of this letter is to report that the comments and queries represented on your Review Committee on Underground Nuclear Tests have reviewed our report and analysis of the proposed SUNNY experiment and have informed me that they no longer have any objections from the standpoint of predicted fallout or desirability to the conduct of this test as proposed.

Accordingly, I now recommend that you approve our going ahead with Project SUNNY in December as planned.

Respectfully,

(Signed) Glenn T. Seaborg
Glenn T. Seaborg

The President
The White House

FMRSCH:lab

USE

UNCL. BY DOE
NOV 86

October 13, 1964

MEMORANDUM FOR THE CHAIRMAN,
U. S. ATOMIC ENERGY COMMISSION

The President has noted the recommendation contained in your letter of October 13, 1964, on behalf of the Atomic Energy Commission that he approve the conduct of Project SULKY early in December, and your report that the members of the Review Committee on Underground Nuclear Tests have no objection from the standpoint of predicted fallout or detectability to conducting the test at this time. Accordingly the President has removed his reservation on Project SULKY contained in his authorization for WHETSTONE II of September 25, 1964, and Project SULKY may proceed in December as planned.

In view of the unusual public information aspects involved in this particular test, any public announcements of this test should be cleared with this office prior to release.

McGeorge Bundy
McGeorge Bundy

At 11:25 a.m. I presided over Regulatory Meeting 205 (action summary attached).

At 11:30 a.m. I presided over Commission Meeting 2052 (action summary attached).

At 12:30 p.m. I had lunch with Tape, Hafstad, and Lawroski at the Metropolitan Club.

At 2 p.m. I called Duncan Clark regarding his memorandum on the NETRC film on the Commission and told him it would be convenient for me to view the film on Friday afternoon, October 23rd at 2 p.m. at the Byron Studios. I asked him to call the Commissioners and the General Manager.

I sent my biweekly letter to President Johnson (copy attached).

I have been asked to join the American Nobel Prize winners in a press statement endorsing Johnson and Humphrey for re-election which I will probably do.

I spoke with Herbert Kouts (of the Advisory Committee on Reactor Safeguards) regarding the problem of their approving the high flux reactor operation at the Savannah River Plant.

I visited Murch School, parents' night, and saw Mrs. McCafferty's room (Dianne's teacher), and Mrs. Rich's room (Eric's teacher). They explained how they conduct class.

I sent a letter in reply to Ron Warren's letter to suggest the citation for Stanley Thompson's Nuclear Applications ACS Award and to express pleasure over the Award.

Wednesday, October 14, 1964 - D.C.

At 9:50 a.m. I presided over Information Meeting 416 (notes attached). I proposed that we somehow must find the means to support the Savannah River Laboratory to the extent necessary to prevent the loss of key people; the cutbacks pose this threat.

At 11:30 a.m. the Commission met with the General Advisory Committee to receive its verbal report. I was surprised to learn that they are recommending Rickover and Groves to receive the two (\$25,000 each) 1964 Fermi Awards. Their third candidate, per our request that they nominate three, is the Hahn-Meitner-Strassmann combination.

At 12:30 p.m. I had lunch with Commissioner Tape, Hafstad, and Williams at the Roger Smith Hotel.

At 3 p.m. I participated, in my office, in the signing of the Joint Israeli-U.S. Memorandum of Understanding regarding Desalting with General Zvi Zur (Prime Minister of Israel's Coordinator of Water Desalting Project), Ambassador Avraham Harman, Milton A. Chase (Staff Assistant to Assistant Interior Secretary Kenneth Holum), Charles W. Thomas (State Department), William Williams (Reactor Development), Mordechai Gazit, and Dan Pater. This agreement is to conduct a joint engineering study on a cost sharing basis of the Israeli dual purpose plant. President Johnson may announce consummation of this agreement within a few days.

I wrote to Peter to send him some photographs and speeches and to tell him of Polly Bunting's possible plans for Lynne's visit which include him.

UNITED STATES GOVERNMENT

Memorandum

OFFICE DIARY	
GLENN T. SEABORG	
Chr USAEC, 1981-72	
FOLDER-PAGE	46066

TO : Harold L. Price, Director DATE: October 13, 1964

FROM : W. B. McCool, Secretary

*Original signed
W. B. McCool*

SUBJECT: ACTION SUMMARY OF REGULATORY MEETING 205, TUESDAY, OCTOBER 13, 1964, 11:25 A.M., ROOM 1113-B, D. C. OFFICE

SECY:AJ

Commission Business

1. AEC-R 4/29 - Amendment to 10 CFR Part 2, "Rules of Practice"
Approved. (Lowenstein/Hennessey)
2. AEC-R 8/20 - Amendment to 10 CFR Part 20, "Labeling of Containers"
Approved. (Western)
3. AEC-R 113/1 - Agreement with the State of Kansas
Approved. (E. Price)

cc:
Commissioners

CONFIRMED TO BE UNCLASSIFIED
BY AUTHORITY OF DOE/OC

R. E. Rubin 6/23/86
REVIEWED BY DATE
Carroll 7/1/86

UNITED STATES GOVERNMENT

Memorandum

TO : Eber R. Price, Director
Division of State & License Relations

DATE: October 14, 1964

FROM : W. B. McCool, Secretary

Original signed
W. B. McCool

SUBJECT: AEC-R 113/1 - AGREEMENT WITH THE STATE OF KANSAS

SECY:AJ

1. At Regulatory Meeting 205 on October 13, 1964, the Commission:

a. Found that the proposed Kansas program for the control of radiation hazards with respect to byproduct material, source material and special nuclear materials in quantities not sufficient to form a critical mass is compatible with the Commission's program for the regulation of such materials;

b. Found that the proposed Kansas program is adequate to protect the public health and safety with respect to the materials covered by the proposed agreement;

c. Approved, pursuant to Section 274 of the Atomic Energy Act, the proposed agreement between the State of Kansas and the Commission, attached as Appendix "A" to AEC-R 113/1;

d. Noted that the Joint Committee on Atomic Energy will be furnished a copy of the proposed agreement by a letter such as Appendix "C" to AEC-R 113/1;

e. Noted that a public announcement such as Appendix "D" to AEC-R 113/1 will be issued;

f. Noted that Governor Anderson will be advised of the action of the Commission on the proposed Kansas agreement by a letter such as Appendix "E" to AEC-R 113/1;

g. Noted that the Director of Regulation will arrange with Commissioner Palfrey and the State of Kansas for the signing of the agreement;

Eber R. Price
AEC-R 113/1

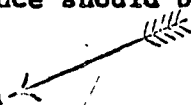
-2-

October 14, 1964

h. Noted that the agreement will be published in the Federal Register within thirty days after signature by the Commission and the Governor, as required by Section 274 of the Atomic Energy Act; and

i. Noted that AEC-R 113/1 is unclassified.

2. The Director of Regulation has directed you to take the action required by the above decision. It is our understanding that your office will prepare the correspondence to the JCAE and Governor Anderson. Copies of these letters together with other pertinent correspondence should be provided the Office of the Secretary.

cc: Chairman 
Commissioner Palfrey
Director of Regulation
Deputy Director of Regulation
Asst. Director of Regulation
Asst. Dir. of Reg. for Admin.
Asst. Dir. of Reg. for Nuclear Safety
General Manager
General Counsel
Director, Compliance
Director, Safety Standards
Director, Materials Licensing
Director, Public Information
Director, Congressional Relations

October 13, 1964

PERSONAL AND CONFIDENTIAL

U.S. COMMISSION ON ATOMIC ENERGY
COMMISSION

177

Suborg (326744)

Report To White House

Dear Mr. President:

I have the pleasure of submitting to you the regular biweekly report on significant developments in the atomic energy program.

1. Agreement between France and Spain

Agreement has been announced between France and Spain on the joint construction of a 500 MWE natural uranium, graphite moderated, gas-cooled reactor in Catalonia, Spain. According to the agreement, financing of the plant will be drawn from a \$150 million long-term credit recently made available to Spain by France. Initially France will buy back approximately 60% of the power output of the plant. No information is available concerning the safeguards provisions of the agreement covering the reactor or the plutonium produced therein; however, such information has been requested. This power plant is not a part of Spain's basic nuclear power program, which consists of three reactors of 250-300 MWE each to be built in various parts of Spain. Spain's first nuclear power plant, which is being built outside Madrid by the Union Electrica Madrileña (UEM), will have a 153 MWE pressurized water reactor to be built by Westinghouse.

2. French Nuclear Submarines

The French government recently announced that the land-based prototype of the nuclear plant designed to power France's atomic submarines has been working satisfactorily under test for three weeks. Testing will continue for several months. The reactor is fueled with B-235 furnished by the U.S. under a 1959 agreement which limits its use to land-based prototypes. The reactor first began operation on August 14 at the Center for Nuclear Studies at Cadarache in southern France and went on full power ten days later. (France expects the first nuclear submarine to begin tests in 1968 and to go into service by 1970 along with two planned sister ships.)

3. Reentry Flight Demonstration-2 RFD-2

As part of the program of investigation of the safety aspects of the use of nuclear energy in space, the AEC conducted, on October 9, a second reentry flight test from the NASA Wallops Island Station. The current test involved an inert (non-radioactive) isotopic electrical generator launched on a Scout vehicle in a sub-orbital trajectory to an impact point southeast of Bermuda. Preliminary reports indicate that the experiment was successful.

4. Thyroid Disease in Rongelap Islanders (OUC)

During the February 1964 annual medical survey of the Marshallese exposed to fallout from the March 1, 1954, shot over Bikini, three teenagers, 13-14 years old, were found to have nodules in their thyroid glands. Two thyroidectomies have been performed at the Naval Hospital on Guam. The AEC has been advised informally but reliably that pathological diagnoses revealed malignant tumors of the thyroids. The third child will be operated on as soon as possible.

DOE ARCHIVES

It is planned that a ten year summary of the health status of the exposed Marshallese, including the foregoing development, will be prepared for publication in a prominent journal such as the Journal of the American Medical Association.

Since the spontaneous occurrence of two, and possibly three, cases of thyroid neoplasm among the small number of exposed Marshallese children is most unlikely, these observations will probably give rise to comment.

5. Southern Governors' Conference

Yesterday, I had the honor and the pleasure to address the 17 member Southern Governors' Conference in San Antonio, Texas. In my remarks, "The States and the AEC - A Growing Partnership," I referred to the South's continuing contributions to atomic energy developments, and discussed briefly

the peaceful uses of nuclear energy, Federal-State relations, and the Administration's efforts to lessen the impact of changing Federal programs such as the production cutback.

Your personal message referring to the cutback in the production of nuclear materials and cooperation with the Southern Interstate Nuclear Board in meeting these problems of common concern was received with interest.

DOE ARCHIVES.

Respectfully submitted,

(Signed) Glenn T. Seaborg

Glenn T. Seaborg

The President
The White House



ATOMIC ENERGY COMMISSION
WASHINGTON, D.C. 20545

157 UNCL. BY DOE
NOV 88

COPY NO. 2
October 14, 1964

INFORMATION MEETING 416

9:50 a.m., Wednesday, October 14, Chairman's Conference Room, D. C. Office

1. GOP Committee Report on Weapons

Mr. Palfrey reported briefly on his conversations with Secretary of Defense McNamara Monday regarding the statements in the Committee report.

2. Support Level for Savannah River Laboratory

In response to the Chairman's query, Mr. Hollingsworth discussed briefly the information which he has developed and said he would report further on the matter after additional consideration.

3. Proposed Appointment to the ACRS

The Chairman said Dr. Kouts called on him yesterday to discuss possible nominees. The subject will be taken up at a later meeting. (Fritsch-Secy)

4. Chairman's Conversation with Mr. William Webster

5. Chairman's Conversation with Mr. George White, GE

The Chairman noted Mr. White will be in the city next Tuesday.

6. General Counsel's October 6 Memorandum re Awards Authority

To be discussed with Mr. Ramey. (GC)

7. Mr. John Conway's, JCAE, October 10 Letter re Proposed Issuance of a License for the Export of a TRIGA Mark II Research Reactor for Yugoslavia

The Chairman noted the need to be alert to the question raised in Mr. Conway's letter. (Kratzer)

8. Dr. Hornig's October 6 Letter re U. S. Desalting Team to Visit Russia

The Chairman requested preparation of a response stating the availability of Commissioner Ramey and Messrs. Williams and Hammond. (Vinciguerra)

9. U. S. -Israel Cooperation on Desalting (Mr. Klug's October 14 Memorandum)

Mr. Palfrey noted the proposed memorandum of understanding has been reviewed with Mr. Ramey and with Interior officials. The Chairman, Mr. Holum, Interior, and General Zur will sign the memorandum this afternoon in the Chairman's office. (Fritsch)

10. John Conway's, JCAE, October 9 Letter Requesting Comments on the Wiesner-York Article in the Scientific American

Commissioners Palfrey and Tape will review with staff. (Crowson)

11. Press Invitation to PLOWSHARE Events

Mr. Palfrey suggested this matter be kept under active consideration. (Kelly-Clark)

12. Pending Contractual Matters (October 9 Report)
analysis

The proposed feasibility/for the NOVAWOOD project is to be discussed with Mr. Ramey. The Chairman requested a report on the contract for Vanadium Alloy Development and Testing Program. (Vinciguerra)

13. Proposed Agenda for Commissioners' Luncheon Meeting with AIF, October 20

Approved. The Chairman requested circulation of background material. (Tremmel)

14. General Manager's October 13 Memorandum re Proposed Reply to the JCAE re Status of AEC Study on Maritime Reactor Program

The Commissioners requested revision of the proposed letter. (Vinciguerra)

15. Commissioners' Planning Calendar

The Commissioners agreed the calendar can now be eliminated in view of the General Manager's regular issuance of memoranda describing major or complex issues for informal discussion with the Commission. I will arrange for the schedule of events information in the calendar to be picked up in the Weekly Activity Digest. (Secy-Slaton)

16. Pending Problems (Assistant General Manager for Operations' Memorandum of October 9)

Mr. Bloch discussed briefly the information in his memorandum relating to the possible extension, replacement, or segmentation of Phillips Petroleum Company for operation of NRTS. The Commissioners requested submission of a staff paper discussing the pros and cons and including other possible contractors. Mr. Bloch then discussed briefly the matter of one feed-site contractor for the Fernald and Weldon Springs feed plants and the Commissioners requested submission of a staff paper on this problem as well. (Bloch)

17. Executive Session Item

PRESENT

Dr. Seaborg
Mr. Palfrey
Dr. Tape
Dr. Bunting
Mr. Hollingsworth
Mr. Ink
Mr. Vinciguerra
Mr. Hennessey
Dr. Fritsch
Mr. Bloch*
Mr. McCool

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Secretary

W. B. McCool
Secretary

*Attendance for Item 16.



Signing of Memorandum of Understanding with Israel on Desalting, October 14, 1964

Seated, L to R: Seaborg, Kenneth Holum (Acting Secretary of Interior), General Zvi Zur (Prime Minister of Israel's Coordinator of Water Desalting Project), Israeli Ambassador Avraham Harman

Standing, L to R: Charles W. Thomas (Officer in Charge of Atomic Energy, Office of International Scientific Affairs, U.S. Department of State), Milton Chase (Staff Assistant to Secretary Holum), William Williams (Reactor Development Division, AEC), Mordechai Gazit (Israeli Embassy), Dan Pater (Israeli Embassy)

Also, I sent a letter to my mother including photos and telling her of my trip to Los Angeles in October.

Thursday, October 15, 1964 - Germantown

At 10 a.m. I received a telephone call from Sam Silver (Director, Space Sciences Laboratory, University of California, Berkeley). He called me from a downtown Washington hotel, saying he wasn't feeling too well and would like to talk with me on the telephone about the laboratory. He said he was well pleased with what is happening between them and the Radiation Laboratory; Ed McMillan has been encouraging people in space physics to work closer with them and put their programs in the Space Science Laboratory. Sam said this, of course, means they will join forces; but he gathers there is a policy problem regarding the use of Radiation Laboratory space and equipment.

I told Sam that Ed was in the office a short time ago, and we talked about this. I said that Ed is bothered about having that big an effort (as proposed by the Space Laboratory) in his Laboratory, since it would require a great deal of space and would prevent his getting more space. Sam said he didn't think they would be using as much space as the proposal indicated. I told Sam he should talk with Ed again about space and he (Sam) should get a unified campus position on the matter through Chancellor Strong which would take care of it. He said he would talk with McMillan and maybe Strong.

At 12:20 p.m. I called Hayes Redman (in the absence of Bill Moyers) at the White House to bring them up to date on Walter Jenkins's clearance. On February 20, 1958, he was granted a "Q" clearance (this was before his 1959 arrest). I told Redman, confidentially, that there is no derogatory information in our file. It is a good file up to the date of the clearance, including a laudatory letter from then-Senator Lyndon Johnson. I explained that we do not reinvestigate a person when he goes to the White House; we would do that only on request, and we have had no such request. Redman asked whether we have had any calls on this matter, and I said that we did. I said that one or two of the callers knew about the "Q" clearance history. The Time man knew that Jenkins had a "Q" clearance; however, we don't know how he learned that. I said our Public Relations people tried to head him down the road of not assuming there was anything derogatory in the file; so he wouldn't jump to conclusions. Redman said he would try to get back to me later. (An FBI Agent, Fitzgerald, also came by to discuss my connections with Jenkins and my appraisal of his security reliability; however, my connections with him have been too slight to enable me to furnish any useful information.)

At 12:30 p.m. I had lunch in the cafeteria with Arnold Fritsch and John Napier.

This has been a big day: 1. the rumors first and then the announcement that Khrushchev has been replaced by Brezhnev and Kosygin; 2. the furor over the arrest of Walter Jenkins on October 7th on a morals charge and the revelation that he had been similarly arrested in January 1959--the Republicans are certainly going to make as much as they can out of this in the election; 3. The election in the United Kingdom in which preliminary returns seem to indicate that Hume as Prime Minister will be displaced and Harold Wilson and Labour have won; 4. St. Louis won the seventh and deciding game of the World Series from the New York Yankees, 7-5.

Friday, October 16, 1964 - Germantown

At 9:55 a.m. I presided over Information Meeting 417 (notes attached).

OFFICE DIARY
GLENN T. SEABORG
Chf USAEC, 1961-72
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NOV 86

OPY NO. 2
October 16, 1964

INFORMATION MEETING 417

9:55 a.m. Friday, October 16, Room A-457, Germantown

1. AGM for R&D's October 14 Memorandum re Technical Appraisal of 710 Program

The Chairman commented the memorandum mentioned the concern he had expressed regarding the evaluation of one laboratory's work by another laboratory.

2. Invitation to Dedication of Reactor in Brazil, January 1965

The Chairman noted receipt of the cable invitation. The Commissioners will consider the matter further. (Fritsch)

3. Telegram from AMU Endorsing the Williams Report

Dr. Tape said plans are now for an announcement on the 21st with advance notice to the Joint Committee, BOB and Argonne staff. (Vinciguerra-Clark)

4. 

Noted.

5. Policy on Research Reactors for Universities (Mr. Courtney's, NET, October 15 Memorandum)

The Chairman noted receipt of the informational memorandum and Mr. Hollingsworth said recommendations will be submitted to the Commission shortly. (Poor)

6. Thompson Committee Report

Mr. Palfrey mentioned the special report.

7. Inquiry from Senator Cannon's Office (CM's October 14 Memorandum)

Mr. Hollingsworth discussed briefly his memorandum explaining AEC's position.

CLASSIFICATION CANCELLED
WITH DELETIONS
BY AUTHORITY OF DOE/OC

REVIEWED BY R.E. O'Brien DATE 11/30/86
Carver 11/1/86

8. Disposal of Surplus Mercury (Congressman Aspinall's October 12 Letter)

Mr. Ink noted GSA is in touch with Mr. Aspinall's staff to discuss the development of a sales plan. The Chairman requested dispatch of an early response to Mr. Aspinall's letter. (Vinciguerra)

9. Agenda for Week of October 19

Approved. (Secy)

BOB review of the Reactor Development program is scheduled in Germantown on Thursday, October 22.

10. Photograph of the Commission

12:00 noon, Thursday, October 22, Chairman's Office.

11. Security Procedures

Mr. Brown discussed briefly the existing procedures and the Commissioners requested preparation of a memorandum and consideration of revisions in Forms AEC 1 and 25. (Brown)

12. Report on U. S. S. R.

13. Contract Agreement with Chemical Workers at Oak Ridge and Paducah

The General Manager reported agreement has been reached at Oak Ridge and that Paducah is expected to ratify a contract agreement also.

14. Staff Meetings with Joint Committee in Preparation for Congressional Hearings

Mr. Hollingsworth reported meetings are now scheduled for next week to discuss the SNAP-50 and 10A programs. Joint Committee staff has indicated they wish to discuss also, advanced converters, Maritime program, accelerator program and the weapons program. The Chairman said the Commissioners should be kept informed. (Vinciguerra-Erlewine)

15. AEC Policy on Meson Factories (GM's October 16 Memorandum)

Noting the General Manager's October 16 Memorandum to the Commissioners regarding the proposed public announcement as previously approved by the Commission, Mr. Hollingsworth recommended there be no press release at this time and the Commissioners agreed. (Clark)

16. Discussion of Major Program Problems (AGMR&D's October 13 Memorandum)

a. Low Energy Physics

Dr. English described briefly the basis by which a decision had been reached. The Commissioners noted staff will proceed as described in the memorandum.

b. Aerojet-General - Westinghouse Contract for NERVA

Dr. English discussed briefly staff plans to meet with the contractors next week for selection of items which can be subject to an incentive fee contract arrangement, i.e., turbopumps and nozzle work. The Chairman requested the Commissioners be kept informed of the discussions.

c. Continued Operation of HWCTR

The Commissioners noted staff will have early recommendations on this program.

d. Fast Flux Test Reactor

Dr. English spoke briefly to staff plans to proceed as outlined in the memorandum noting the desirability of retaining flexibility with respect to location of the facility.

e. Site for POODLE Thruster Test Facility

The Commissioners noted staff recommendations will be forthcoming shortly and requested inclusion of consideration of siting at Savannah River in addition to the three sites mentioned in the memorandum.

f. Nuclear Power for the Merchant Marine

Dr. English reported that DRD evaluation of the UNC and B&W proposals will be discussed with the Commission in early November as will the staff evaluation of the 630-A project. Staff evaluation of the overall nuclear maritime program should be available in early December.

Dr. English reported briefly on a recent meeting of the American Export-Isbrandtsen Lines at which Company officials discussed the possibility of a proposal to the Maritime Administration for their participation in a cooperative program to the extent of subscribing 50% of the cost of a fleet of four nuclear merchant ships. (English)

17. U. S. S. R. Nuclear Propulsion Program

The Chairman requested a report. (Pittman)

PRESENT

Dr. Seaborg Mr. Hollingsworth
Mr. Palfrey Mr. Ink
Dr. Tape Mr. Vinciguerra
Dr. Bunting Mr. Abbadessa
 Dr. Fritsch
 Mr. Schur*
 Dr. English**
 Mr. Brown***
 Mr. McCool

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General Manager
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Secretary

W. B. McCool
Secretary

* Partial Attendance

** Attendance for Item 16

*** Attendance for Items 11 and 12

The big news today is that the Red Chinese exploded an atomic bomb (in the atmosphere). Our electromagnetic and acoustic detection devices picked it up and the Chinese announced it. President Johnson made the U.S. announcement of the test (after the Chinese announcement). The yield appears to be in the range of tens of Kilotons (as expected). Intelligence sources had picked up indications that this test would come soon.

At 12:30 p.m. Arnold Fritsch and I had lunch with Paul McDaniel and Pief Panofsky at which we discussed High Energy Physics.

I received calls from reporters (e.g., Newsweek) asking for my impressions of Brezhnev on the basis of my first conference with him in Moscow in May 1963. Apparently, I am one of very few Americans who have talked to him for any length of time.

At 4 p.m. I called Father Paul Reinert (president of St. Louis University) to discuss the presentation to me of the Spirit of St. Louis Award on October 26th. I told him I have received his letter of October 12th, that I have real problems flying late at night and would rather leave St. Louis earlier than the midnight flight for Los Angeles. He didn't seem to think that the 9:40 p.m. flight would give them time to seat the great number of people, have his short speech, present the award, and then have my acceptance speech. Father Reinert said he would give my travel more thought and let me hear from him.

The announcement of the new Tripartite Contract for operation of Argonne National Laboratory is being prepared and will probably be made on October 20th.

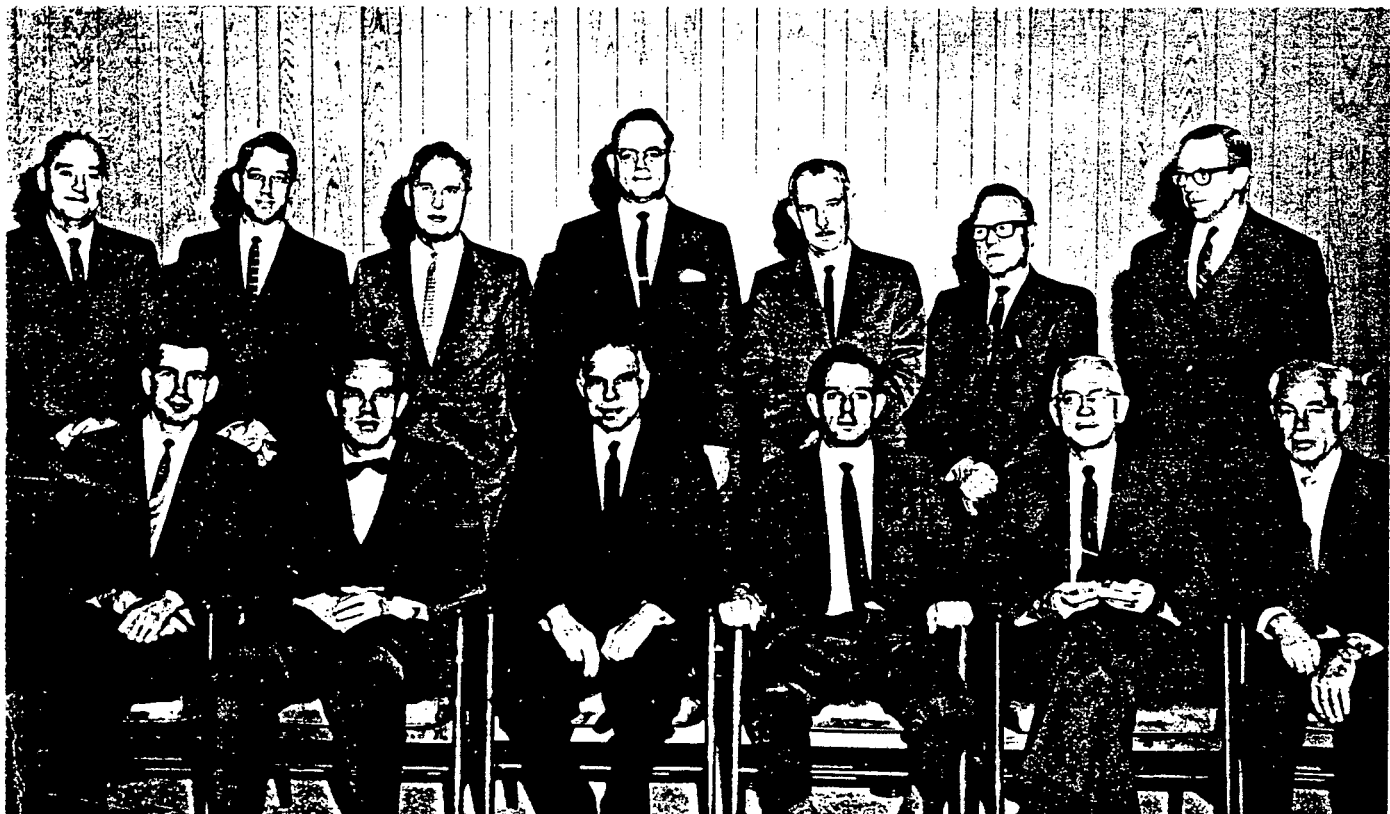
I wrote a reply to Professor Harvey Diehl to tell him I could not consider the presidency at Iowa State University.

Saturday, October 17, 1964 - D.C.

At 9:30 a.m. I presided over the annual meeting of the Chemical Education Material Study Steering Committee at the AEC's "H" Street office.

At noon I attended the National Security Council meeting held in the Cabinet Room of the White House. Others present at the meeting included President Johnson, McNamara, Rusk, Vance, LeMay, Bromley Smith, Bundy, McCone, McDermott, Llewelyn Thompson, Rowan, Ball, Cater, Hornig, McNaughton and Clifton. The first topic was the Chinese atomic bomb test yesterday. McCone described the 10 megawatt research reactor in China, which is based upon a similar Russian reactor which both McCone and I had seen in Moscow; a possible gas-cooled production reactor of some 30 megawatt capable of producing plutonium; a gaseous diffusion plant under construction, which apparently won't be operable for two or three years; and he mentioned a possible water-cooled production reactor of about 100 megawatts capacity, and, therefore, a production capacity for plutonium. He said that the device exploded yesterday probably had plutonium, and, hence, the Chinese might be capable of producing many weapons per year. McCone said that he had briefed the heads of eight European countries during his recent trip to Europe, saying that a Chinese atomic bomb explosion might take place within 30-60 days, which was a good prediction, considering that the first briefing was just 31 days ago.

One potential area of China has not been covered by photographic reconnaissance, and, therefore, could have an additional reactor (or reactors), and McCone said he



The Chemical Education Material Study Steering Committee and Staff

Washington, D.C., October 17, 1964

- Top Row L to R: Robert Rice, Robert Silber, Rolland J. Gladieux,
Roy L. Whistler, J. Cecil Parker, Grant Vest,
Cleveland Lane
- Bottom Row L to R: Richard J. Merrill, J. Arthur Campbell, Seaborg,
George C. Pimentel, Harvey E. White, David M. Ridgway

wouldn't be surprised if there were a plant in this area. McCone also indicated that the evidence this morning indicates that the Chinese may conduct another test almost immediately. All of the usual signs with respect to transportation, weather reports, etc.--as occurred the day before yesterday--are occurring now; so, there may be another event today or tomorrow. The Chinese have 290 IR-28 subsonic short-range jet aircraft, with a range radius of 600 miles, which could deliver crude bombs. It will be necessary to have air samples before we can determine whether the device detonated yesterday could fit into the IR-28.

McCone went on to discuss the Soviet situation, saying that Khrushchev had been removed due to discontent over the conduct of his office--a general discontent and no one source of trouble. Khrushchev had made a strong demand in September for greater emphasis on consumer goods, rather than on heavy military products, which may have contributed to his downfall. Some changes of policy are expected. The relationship of Brezhnev and Kosygin is not yet clear, although no upheaval is expected; either Brezhnev or Kosygin, or a third party, may move in a little later to take over the leadership in a single job as Khrushchev had it. The President asked whether the CIA had any forewarning that there would be a change in leadership or of whom it would be. McCone said there was no indication of an immediately impending change, although there was some indication of dissension. He went on to say that Brezhnev and Kosygin are not imaginative and won't play the world role that Khrushchev has. President Johnson recalled that Harriman had told him that Khrushchev said that when a change came it would be Brezhnev and Kosygin. The President asked "Tommy" whether he had any ideas on the situation. Thompson said he thought the first changes would be within the Soviet bloc, and then there might be changes in their relationships with the outside.

President Johnson asked whether there had been any indications of unrest or seething within the Soviet Union or was the only indication that Khrushchev had said he would retire soon and had indicated the two men who would succeed him. Thompson said that the presidium had suggested to Khrushchev that he might take a holiday. He said that in the last seven years Khrushchev had spent two and a quarter years outside Moscow, and one and a quarter years outside the country, indicating that others ran the country a good deal of the time, and this was Kosygin. Rusk recalled that Khrushchev had told him in August 1963 when he was in the USSR to sign the test ban treaty, that he was going to cut the defense budget; he said that Malinovsky did not agree, so he would have to be sent on a vacation. Khrushchev said this to Rusk in the presence of many others who could hear.

Rusk then turned to discuss the British election. The President inquired as to the exact margin of the Labor victory, and Rusk indicated that it was four or five seats. President Johnson indicated he thought this would mean that it wouldn't be very much of a government--and not for very long. Rusk said that our Embassy in London estimates that the government will last ten months to a year. The President inquired whether the polls in Great Britain had forecast the results, and Bundy said that two polls forecast the results within 1 to 2 percent. Rusk, in describing the significance of the election, said that Britain usually doesn't make great changes in direction when a new party comes in. He indicated that the new leadership is relatively inexperienced since only two have had previous ministerial experience, but he said they are a young, alert group.

Rusk indicated that the new Russian government said they would continue the principles enunciated in the 20th, 21st and 22nd Congress. He said there are some indications that Gromyko will be replaced. He said that an Associated Press tape from Moscow, which he had in his hand, directed a new blast against Red China, indicating not much change in attitude in that area. With respect to the Chinese test explosion, Rusk said we should be careful not to downgrade their capabilities.

too much. He said that the President's decision to announce in September that the Chinese were ready to conduct a test was a good thing because it prepared many countries for the event. He said that in the long run this will add to the prestige of the Chinese government. He said that the U.S. will be in touch with the Japanese and the Indian governments to try to mitigate the effects on these countries.

Rusk said he thought there would be some advantage for the President to make a television statement on the Chinese situation, the Russian situation, the British election, etc. McNamara also urged the President to consider a report to the American people on these matters. President Johnson questioned the value of this, asking what he might be able to add to what he had already said. Bundy said that it might be too soon to say in detail what he might say, but we will know in two or three days; he could certainly give a number of facts and could reassure the American people that the United Kingdom Labor government is not communistic. Rusk also gave a number of arguments why the President should give such a television talk. The President then asked that he be given quickly some ideas upon which to base such a talk, and Rusk indicated he would have a draft for him this afternoon.

The President then turned to Carl Rowan and asked what people around the world are saying. Rowan replied that they are saying a lot. The Japanese and the Yugoslavians have let out a blast against the Chinese. Sweden and other Scandinavian countries have said that the Chinese should now be admitted to the U.N. He also thought that there would be some pro-Chinese effects in Africa. He felt that the U.S. will need to use every persuasive effort in its power to counteract some of these pro-Chinese effects.

President Johnson indicated it is important to remain calm, that is, avoid a panic attitude, but also to make it clear to the American people that we are alert to the situation. The President said that we should give serious consideration to having the top people of the Congressional Foreign Relations and Armed Services Committees in for a briefing, and he mentioned such congressional leaders as Russell, Fulbright, McCormack, and Mansfield, and that perhaps the meeting should be held on Monday, October 19th. He said that Rusk, McNamara and I should be among those to give them an outline of the situation. He indicated that Bundy might tell the press that we are having periodic meetings with the congressional leadership, and that a bipartisan group was going to be brought in for such a meeting. He asked whether Rusk and McNamara see any hazards in this course of action. Rusk felt that such a course of action would be O.K. if the congressional leaders were given a few days' notice. He said that maybe there should be a meeting with the Cabinet on Monday for a preview of the meeting with congressional leaders on Tuesday.

The President then went quickly around the table and asked a number of us, including me, whether we agreed with this plan. I indicated that I did. He reiterated that Bundy might tell the press that we are having such a meeting, and that it would be here, rather than sending men all over the country to brief these leaders. Bundy mentioned the advantages of having the congressional leadership meeting on Monday and the Cabinet meeting on Tuesday. Rusk indicated that he preferred it the other way around. The President indicated that this should be thought about carefully before a decision is made, and McNamara agreed.

Bundy asked whether I had anything to add with respect to the Chinese bomb test situation, and I said that I feel we should be very careful not to underestimate or downgrade Chinese capabilities or future course of action. I said that they may have deliberately planned to set off two or more weapons in quick succession. This seemed to impress President Johnson, and he said that McNamara, LeMay, and I

might get together in order to be ready to participate in the briefings that had previously been discussed. The President then asked McCone whether there is anything else of an alarming nature that is coming up, and McCone didn't indicate anything in particular.

The President then went on to discuss the Jenkins case. The President indicated that he had Jenkins in his office about ten days ago and told him to issue an order to all department and agency heads admonishing them on the importance of proper security measures and security clearances. He said he wanted to admonish us again as to the need for precautionary steps, and he emphasized that this applied to every one of us. He said that when he came into the presidency, he had asked for an FBI check on everybody in the White House. He said that the FBI and the Secret Service filed the information on Jenkins's 1959 arrest so that he (President Johnson) didn't know about it, and that the first he learned of it was last Wednesday (October 14th) at about 5 or 6 p.m. when he was with Mrs. Kennedy in New York and somebody told him about it. He asked Bundy to get together with Bill Moyers to be sure that everyone is security checked, beginning first in the White House and then outside.

The President said that the people who are exploiting the Jenkins case are more expert on McCarthyism than McCarthy himself. He said that they are using improved methods. He indicated that since September one of the biggest corporations in the country has been paying \$1,000 a week, plus \$600 a week for expenses, to investigators to work to get derogatory information on him and Mrs. Johnson. He thus admonished us to take every precaution and again indicated that Bundy and Dillon and others should make complete checks of the security system. Hornig said he thought a great deal could be done by automating the records of the FBI. President Johnson asked Hornig to get a plan for this, and Hornig said he would do so. The President went on to ask whether the FBI had interviewed a number of us, and McNamara and Rusk indicated that they had, but that they had told the FBI that they had no contacts with Jenkins on security sensitive issues.

The President went on to say that he had never used Jenkins on security sensitive issues. The President recalled that Jenkins was secretary to the dean of the faculty at the University when he first employed him, which was about the same time that he employed Connally. He recalled that, after that, Jenkins went into the Army on his own initiative, and that when he came back he called Johnson to politely inquire whether Johnson needed him back on the job. As an indication of Jenkins's character, the President related that Goldwater's aide had come to discuss his impending resignation with Jenkins and that Jenkins talked him out of it on the basis that Goldwater needed him. (This was the aide who later resigned anyway.) At the conclusion of these remarks, the President arose to leave the room and the meeting was adjourned.

At 1:30 p.m. I had lunch at the Golden Ox (1615 "L" Street, N.W.) with members of the Chemical Education Material Study Steering Committee.

Sunday, October 18, 1964 - D.C. - Philadelphia, Pennsylvania

I read AEC papers, after which I took Dianne and Abbe to Rock Creek Nature Center where we hiked the two nature trails and took a 45-minute nature walk with the ranger-naturalist.

At 7:30 p.m. John Napier and I left Washington D.C. by train and arrived in Philadelphia, Pennsylvania, at 9:45 p.m. We stayed overnight at the Bellevue-Stratford Hotel.

Monday, October 19, 1964 - Philadelphia, Pennsylvania - D.C.

At 7:30 a.m. I had breakfast with Merrill A. Scheil (President, American Society for Metals), John A. Fellows (Vice President), Steward G. Fletcher (Secretary), Robert J. Raudebaugh (Past President), and John B. Giacobbe (Convention Chairman).

At 9 a.m. I attended the opening of the 1964 Metals/Materials Congress and Exposition, held in the Grand Ballroom of the Bellevue Stratford Hotel. I sat on the stage with Merrill Scheil, John A. Fellows, Allan Ray Putnam and others. I gave a speech, shortened version (30 minutes), entitled, "Our Heritage of the Elements."

After my talk I held a short press conference at which I was questioned about the Chinese atomic bomb test of last Friday, and I ventured the opinion that it was a plutonium bomb.

At 11:30 a.m. John Napier and I left Philadelphia on Allegheny Flight No. 903, and arrived in Washington at 11:40 a.m.

At 1:30 p.m. I attended the President's meeting with Congressional Leaders in the Cabinet Room of the White House. Those present included President Johnson, McNamara, Rusk, McCone, Ball, Reedy and Valenti (part of the time), Bundy, Llewelyn Thompson; Senators William Fulbright, Carl Hayden, Hubert Humphrey, Bourke Hickenlooper, George Aiken, Everett Dirksen, Thomas Kuchel, Eugene McCarthy, Mike Mansfield, Leverett Saltonstall; Congressmen Hale Boggs, Mike McCormack, Charles Halleck, Frances Bolton, Carl Albert, Leslie Arends, and Thomas Morgan. McCone, Thompson, McNamara, Rusk and I gave presentations covering the Chinese bomb test, the Russian change in leadership, and the significance of the United Kingdom election.

I tried to indicate the type of device the Chinese might have tested by comparing it with the U.S., USSR, United Kingdom, and French programs, thus implying that it might be a simple plutonium device. I stated that these four countries took a five-to seven-year period to go from fission to fusion devices but the Chinese might make some kind of crude fusion device tests sooner. President Johnson gave an account of the Jenkins case, including his observation that he had not known about either of the arrests before last Wednesday night. Photographers took pictures at the end of the meeting and President Johnson read a prepared statement.

Tuesday, October 20, 1964 - D.C.

At 11 a.m. Commissioners Gerald Tape, John Palfrey, Mary Bunting, members of the staff, and I attended the meeting of the Board of Directors of the Atomic Industrial Forum (James F. Young, Kenneth D. Nichols, Louis H. Roddis, Jr., W. Kenneth Davis, Sherman R. Knapp, Richard S. Newlin, Chauncey Starr, Malcolm Tait, Oscar M. Ruebhausen and others) in the Red Room of the Army-Navy Town Club. I heard and commented upon reports by Young (advocating the renewal of the Price-Anderson Act), Nichols ("Implementation of Private Ownership and Toll Enriching"), Kenneth Davis (on production and use of plutonium and uranium-233), Mowton Waring ("Finding of 'Practical Value'"), and Ruebhausen (control of private restricted data--they oppose the AEC proposal).

At 12:30 p.m. I had lunch in the office with Arnold Fritsch.

At 1:10 p.m. I attended the Cabinet Meeting held in the Cabinet Room of the White House. Others present at the meeting included President Johnson, Rusk, Dillon 259



Cabinet Meeting at the White House, October 20, 1964

L to R: John Gronouski (The Postmaster General), Adlai Stevenson (U.S. Representative to the United Nations), Seaborg, Robert McNamara (Secretary of Defense), Orville Freeman (Secretary of Agriculture), Willard Wirtz (Secretary of Labor), Donald Hornig (Director of Office of Science and Technology), Walter Heller (Chairman Council of Economic Advisers), Luther Hodges (Secretary of Commerce), Dean Rusk (Secretary of State), Lyndon Johnson (President of the United States), Douglas Dillon (Secretary of the Treasury), Kermit Gordon (Director of Bureau of the Budget), James E. Webb (Administrator of National Aeronautics and Space Administration), Sargent Shriver (Director, Peace Corps)

McNamara, Gronouski, Wirtz, Freeman, Celebrezze, Adlai Stevenson, Hodges, Gordon, Moyers, Bundy, Reedy, Webb, Shriver, Cater, Hornig, Heller, and Valenti (part of the time). Again the Russian changeover, the Chinese test and the United Kingdom election were discussed as well as individual reports by Cabinet members, discussion of the economic and political situation and the Jenkins situation. I gave a report on the Chinese test saying that analyses of air debris now indicate, to our surprise, that the device apparently contained uranium-235. I explained the Chinese production capability and use of plutonium and uranium-235 to make fission and thermonuclear weapons. I admonished them to be very conservative in estimating Chinese weapons capabilities at this time.

At 5 p.m. I received a telephone call from William Webster. He said that the Edison Electric Institute has their annual meeting next year in Miami, and they are anxious to have me speak at their major meeting on "Atomic Power," and how it has turned the corner. Their meeting opens on Monday, May 3rd, with their major meeting being held the morning of May 4th at 9 or 9:30 a.m. They would hope that my speech would take about 40 minutes. He said, in a pinch, I could switch to either Monday, May 3rd, or Wednesday May 5th, but they would prefer Tuesday, May 4th. Bill said that this is a big meeting with 4,000 or 5,000 people attending and he thinks it would be worthwhile for me to consider speaking to them. Because of the large number of people attending, he feels that a question and answer period following my speech would not be too helpful. I told Bill I would give this some thought and let him know my decision.

At 5:40 p.m. I received a telephone call from John Finney (New York Times). Finney asked whether we had reached at least a tentative conclusion on the nature of the Chinese device which was detonated last week. I said that such information could compromise our detection capability. Finney urged that we consider putting out a statement that the device was triggered by plutonium or enriched uranium-235. I suggested we get together for lunch. Finney said he was leaving on October 25th to 26th to cover Congressman William Miller's campaigning, and would not be back until about election day (November 3rd). It was left that he would be in touch with me upon his return.

Helen and I visited a number of David's and Lynne's classes at Wilson High School at parents' night and, hence, met a number of their teachers such as Truesdell (Lynne--English), Carter (Lynne--French), Breitler (Lynne--Physics), Strosnider (Dave--Biology), Ashby (Dave--History), and Irwin (Dave--English).

Wednesday, October 21, 1964 - D.C.

AT 11 a.m. I presided over Information Meeting 418 (notes attached).

At 11 a.m. I called John McCone. I told him it looked clear to us that the Chinese bomb which was detonated was a uranium-235 device, and I thought we should get word to the Joint Committee. McCone said that he would do this. McCone said he would explore further the source of the uranium-235 which they used; it may be the material which Khrushchev said he gave the Chinese, or it may have come out of Lanchow. McCone said they were having a USIB (U.S. Intelligence Board) meeting this afternoon at 3 p.m. and would like to have me attend if I wish. I told him I couldn't make it this afternoon, but I would like to sit in on some of these meetings. He will call or have someone call me about future meetings. I told him it was inevitable that the news media would want to know whether the device used by the Chinese was a plutonium or uranium-235 one; in fact, we have already begun to get calls. He said he was at the White House with McNamara and Bundy, and he would get a response on this.



COPY NO. 2
October 21, 1964

INFORMATION MEETING 418

11:00 a.m., Wednesday, October 21, Chairman's Conference Room, D.C. Office

1. Executive Session (Personnel and Organizational Matters)

- a. Approved. (Tackman)
- b. Discussed.

2. Dr. Tape's October 17 Memorandum re High Energy Physics Study

The Chairman noted the question of how to proceed and Dr. Tape discussed the status of the study.

3. Commissioners' Meeting with Secretary of Defense

Mr. Palfrey will arrange an early meeting as suggested by the Chairman.

4. Film on "Basic Underground Diagnostics"

Scheduled for 11:00 a.m., Thursday, Germantown. (Secy)

5. Showing of National Educational Television Film on the Commission

Now scheduled for 4:30 p.m., Friday, October 23, at Bryon Studios, 1226 Wisconsin Avenue.

6. Letter From Dr. L. R. Hafstad, Chairman, GAC, to Mr. Wm. J. Howard, MLC, re Nuclear Submarine Information

For circulation. (Secy)

7. Proposed Letter to the President re Nuclear Tests

The Chairman requested revision and said he would sign the revised version. (Fritsch)

8. Proposed Letter to Sir William Penney re Exchange of Information

The Chairman requested preparation of a revised letter. (Kratzer)

9. October 16 Executive Order re Federal Policies and Programs on Education

Dr. Bunting will represent the Commission on the Federal Inter-agency Committee on Education with assistance from Dr. Poor. (Poor)

10. Proposed Letters to Mr. Bundy, White House, and Secretary of Defense McNamara re SNM Requirements (See General Crowson's October 16 Memorandum with attachments)

The Chairman requested discussion tomorrow. (Secy-Crowson)

11. NOVAWOOD Project (Mr. Fowler's October 15 Memorandum)

The Commissioners discussed briefly the basis for development of bids for a conceptual plant design. In response to Mr. Ramey's query, Mr. Fowler said he did not think selection of the Vitro Engineering Company would result in a substantial advantage to them re a contract for plant construction, noting that the results of the conceptual study would be generally available. The Commissioners suggested the proposed contract be reviewed with Mr. Tremmel. (Fowler)

12. Negotiations with ALCOA (General Manager's October 20 Memorandum)

The Commissioners approved the General Manager's recommended course of action. (Vinciguerra)

13. Pending Contractual Matters (October 16 Report)

Noted.

14. Principles for Avoiding Organizational Conflicts of Interest
(Mr. Hennessey's October 19 Memorandum)

Mr. Hennessey discussed briefly the status of the study in development of staff recommendations to the Commission. The Commissioners requested that the paper include consideration of the possible effect of the proposed principles on a selected group of present AEC contractors. (Hennessey)

15. Interpretation of Patent Policies

Mr. Hennessey noted this matter is on the agenda for the Federal Council meeting next Tuesday. The Chairman suggested Messrs. Ramey and Palfrey review the proposed position. (GC)

16. Mr. Ramey's Meeting with Mr. William E. Warne, State of California Department of Water Resources

Mr. Ramey reported briefly on the discussions he and Mr. Holifield had held with Mr. Warne regarding the LTPHR project with the State of California. Mr. Holifield suggested and Mr. Warne agreed that a meeting of all interested parties should be held; it is now scheduled for November 11 in California.

17. Chairman's Speech at Town Hall Meeting, Los Angeles, Tuesday, October 27

The Chairman said he would circulate the speech and would appreciate any comments the Commissioners might have.

18. Major Programmatic Problems (DMA)

a. Supplemental Test Site Investigation

General Crowson described briefly, with the aid of charts, the status of DMA's study and their preliminary conclusions regarding selection of a supplemental site. He recommended and the Commissioners agreed staff may proceed to discussions with appropriate representatives in the four geographical areas concerned to develop the necessary additional information. The Department of State, ACDA, the Joint Committee, Congressional Delegations and Senator Anderson are to be advised.

b. Reactor Products Study

General Crowson noted that the only information in addition to that contained in his memorandum which would be of interest to the Commission at this point is Secretary McNamara's present thinking with regard to reactor production and U-235 production. (Crowson)

19. SALMON Event (General Crowson's October 20 and Mr. Clark's October 20 Memoranda)

The Chairman noted staff plans to proceed as outlined in General Crowson's memorandum. (Crowson-Clark)

20. Draft Press Release re Chinese Nuclear Test

21. John Finney's Inquiry re Argonne Contract

Mr. Vinciguerra reported briefly on Mr. Finney's query to him regarding the tripartite contractor.

PRESENT

Dr. Seaborg
Mr. Ramey
Mr. Palfrey
Dr. Tape
Mrs. Bunting
Mr. Hollingsworth
Mr. Hennessey*
Mr. Vinciguerra*
Mr. Fowler**
General Crowson***
Mr. Reichardt****
Dr. Fritsch
Mr. McCool

DISTRIBUTION

Commissioners
General Manager
General Counsel
Secretary

W. B. McCool
Secretary

*Partial Attendance

**Attendance for Item 11

*** Attendance for Items 18 and 19

**** Attendance for Item 20

At 11:20 a.m. McCone called back and said, in talking to McNamara and Bundy about releasing our knowledge of the content of the Chinese bomb, they felt we should do nothing for at least 24 hours; that we could say this was a matter which has not been fully determined. McCone said he would like me to investigate this matter, through the JAEG, as to what the implications are from the standpoint of weapon capability; if the source comes from their own products it would mean larger production; also there is the question of implosion. I said we are already thinking about this, and I have asked George Kavanagh to work on this from an overall point of view. McCone advised that he is taking care of the Joint Committee by having an interim oral statement made to John Conway or George Murphy.

The Commission decided to offer Ed Bloch the position of Deputy General Manager and John Swartout the position of Director of the Reactor Division (or Assistant General Manager for Reactors).

Helen hosted a meeting of the International Neighbors Club at the "H" Street Office. Polly Bunting and I spoke on AEC programs, the Geneva Conference, etc. Movies of the "International Atom," the Sedan shot and the Rover test were shown, followed by refreshments. The meeting seemed to go very well.

The problem of the Bodega reactor is coming to a head--the Advisory Committee on Reactor Safeguards is for it and the staff is against it!

The AEC made an announcement today that the Chinese device used was uranium-235, which, of course, caught the news media by surprise. There is great speculation in and out of government about what this means as to Chinese nuclear weapon's capability. The other four nuclear powers all exploded a plutonium bomb first.

The Commission announced today the new plan for management of Argonne National Laboratory (press release attached).

Thursday, October 22, 1964 - Germantown

The Commission discussed the General Advisory Committee's recommendation that the Fermi Award be given to Rickover and Groves. Commissioner Ramey is unwilling to include Groves; so consideration is deferred until next week. The Commission discussed a report of the Advisory Committee on Reactor Safeguards (ACRS) favoring the issuance of a construction permit to Pacific Gas and Electric (PG&E) for the Bodega Reactor and the staff is opposing this action. We approved the idea of making these reports public early next week. This is going to be a very difficult decision for the Commissioners.

The SALMON shot (5 kilotons) in the Dribble series went off successfully in Mississippi today without venting. The Commissioners were present in the communications room when the shot was fired at 12 noon and heard it over the communications system.

At 12:30 p.m. the Commissioners and I had lunch in the Commissioners executive dining room with Hearing Examiners Samuel Jensch, Bond, and McConnell.

At 2:45 p.m. I presided over Information Meeting 419 (notes attached).

Lynne flew to Boston today to visit Radcliffe and Pete.

Friday, October 23, 1964 - Germantown

At 10:35 a.m. I called William Webster and told him that I would speak at the



UNITED STATES GOVERNMENT
ATOMIC ENERGY COMMISSION
WASHINGTON, D. C. 20545

UNCL. BY DOE
NOV. 88

No. G-243
Tel. 973-3335 or
973-3446

FOR IMMEDIATE RELEASE
(Wednesday, October 21, 1964)

ATOMIC ENERGY COMMISSION APPROVES IN PRINCIPLE NEW PLAN FOR MANAGEMENT OF ARGONNE NATIONAL LABORATORY

The Atomic Energy Commission announced today approval in principle of a proposal that the prime contract for the operation and management of the Argonne National Laboratory be changed to a tripartite agreement, the parties to be the Atomic Energy Commission, a not-for-profit corporation to be organized by a group of midwestern universities and the University of Chicago.

The new plan is intended to stimulate scientific growth in the Midwest by fostering closer cooperation among the area's universities and the Laboratory on research and development programs. Under the proposed tripartite contract, the new corporation will formulate the Laboratory's policies and programs.

The University of Chicago, which has operated Argonne from its inception in 1946, will continue to operate the Laboratory responsive to the policies of the corporation within the terms of the contract.

The Argonne National Laboratory will continue to be operated in accordance with the policies and requirements of the Atomic Energy Commission.

A board of directors to be composed of representatives of midwestern universities, the scientific community and the industrial community will head the corporation.

The new plan was proposed unanimously by a seven-man ad hoc committee made up of representatives of the Midwestern Universities Research Association (MURA), the Associated Midwest Universities (AMU), the University of Chicago and the Laboratory itself.

(more)

The AEC today approved the seven-man committee's recommendations - which had been approved earlier this month by AMU, MURA and the University of Chicago. The committee's recommendations follow:

" 1) The committee recommends that the prime contract for the operation and management of the Argonne National Laboratory for the Atomic Energy Commission be changed to a tripartite agreement, the parties to be the AEC, a not-for-profit corporation to be organized by a group of midwestern universities and the University of Chicago. The activities of the parties pursuant to this plan shall at all times be subject to the provisions of the tripartite contract.

" 2) The function of the new not-for-profit corporation of midwestern universities shall be to formulate, approve and review Laboratory policies and programs.

" 3) The function of the University of Chicago shall be to operate the Argonne National Laboratory in a manner responsive to the policies established and approved by the new corporation.

" 4) The terms and conditions of the new tripartite contract shall be such as to assure the new not-for-profit corporation of midwestern universities that their decisions shall be carried out, and that policies approved by the corporation shall be put into effect.

" 5) The terms and conditions of the new tripartite contract shall be such as to assure the University of Chicago that it will be able to effectively operate the Laboratory in a manner responsive to the policies established by the new corporation.

" 6) The committee recommends further that the parties recognize (a) that they share a mutual responsibility for promoting the maximum scientific progress and engineering development made possible by the funds and facilities provided by the Government, (b) that they must cooperate in order to stimulate scientific and technological advancement in the midwest community and the nation, and

(more)

(c) that these purposes can be attained only by continued emphasis on recruiting and retaining on the staff of the Laboratory the most competent and creative scientists and engineers available and by affording them full support."

Glenn T. Seaborg, Chairman of the U. S. Atomic Energy Commission, commenting upon the AEC approval of the plan, said:

"The AEC is pleased to accept the principle proposed by the AMU-Argonne-Chicago-MURA Ad Hoc Committee for the tripartite arrangement for the management and operation of the Argonne National Laboratory. The AEC believes that this arrangement will promote the increased participation of the academic institutions of the Midwest in the work of the Argonne National Laboratory. It is another important event in the life of an outstanding laboratory whose significant research and development accomplishments are recognized around the world. The Argonne National Laboratory will continue to play a vital role in the engineering and developmental aspects of the reactor development program as well as continuing to conduct important research in the basic physical and life sciences. The morale and excellence of Argonne's staff, under the able direction of Albert Crewe, are a cause for pride among all of us. We know that the future will bring even greater service from them to science and to the nation.

"This new plan will help to stimulate continued growth of Argonne's programs and facilities. It will enable the many important institutions in the Middle West to develop their own programs more efficiently through direct familiarity with proposals for new programs and facilities at Argonne. At the same time, the plan proposes to retain the competent and experienced management provided for so long at Argonne by the University of Chicago.

"The Committee's plan is unique and creative. It offers promise of meeting two important AEC objectives in the administration of our national laboratories. The first objective is to foster strong, unified management of the total research and development program assigned to each

(more)

national laboratory. The second objective is to permit major universities in each region to take part in planning the scientific program and facilities. We are confident that the tripartite concept will permit the accomplishment of both objectives at Argonne."

Elvis J. Stahr, President of Indiana University, also is President of Midwestern Universities Research Association (MURA). MURA is a non-profit organization, incorporated in September, 1954, with facilities at Stoughton, Wisconsin. Fifteen major academic institutions are Principal Members. President Stahr said:

"This new agreement arrived at through several months of hard work by the ad hoc committee heralds important new progress for science in the Midwest.

"In this era in which science requires tremendous sums for the development, construction and operation of modern research tools, it no longer is possible for each institution to acquire all the equipment needed by the scientists on its campus. Regional research centers such as Argonne are essential. There, scientists from many different universities and research institutions can have access to the machines they need to perform their investigations.

"The new plan clearly recognizes that the universities of the region have substantial interests, actual and potential, in the programs and facilities of the great Argonne Center, and therefore should participate directly in the formulation and review of the center's policies and programs. I am confident that midwest universities will now make increasingly significant contributions to the growth of Argonne's program and facilities.

"For a number of years, MURA has particularly stressed the importance of an expansion of the facilities for high energy physics in this region. We are optimistic that additional facilities can now be designed and constructed at Argonne to enable more experiments to be conducted simultaneously with the existing Zero Gradient Synchrotron.

(more)

In addition, the scientists and engineers at MURA and in the great universities of the area, by joining forces with those at Argonne, can provide important talent and impetus to the planning of the next generation of high energy physics machines. And finally, the programs in a number of other sciences for which Argonne has excellent facilities also can be strengthened and augmented with the assistance and increased participation of the scientific faculties of midwest colleges and universities.

"I feel confident that this dramatic unification of our effort with that of Argonne will enable the Middle West to offer a strong and diversified set of challenges to creative and productive scientists and engineers."

George W. Beadle, President of the University of Chicago, which is a member of both MURA and AMU, said:

"The University of Chicago welcomes the AEC's approval of this promising plan for administering one of our nation's great resources, the Argonne National Laboratory. Traditionally and consistently, this University has encouraged, developed and taken part in extension of the concept that academic institutions must cooperate in their endeavors for mankind's advancement. Through the years, Chicago's faculty has joined scholars elsewhere to seek new understanding in such diverse disciplines as physics, meteorology, astronomy, mathematics, the biological and social sciences and the humanities. The University of Chicago is a member of many regional and national organizations interested in advancing science and scholarship.

"Academic institutions have a great deal to contribute, as well as a great responsibility in the growth of the Argonne. Many prominent scientists are engaged in research on their middlewestern campuses that is relevant to work at Argonne. In recent years, the University has sought diligently to open wider the doors of Argonne Laboratory.

"It has cooperated with AMU, the Associated Colleges of the Midwest, and other groups, to bring together both

faculty and students on research projects of common interest. The completion last year of the Zero Gradient Synchrotron (ZGS) opened a new and extensive area for Argonne-university cooperation. Nine universities are represented in the first two series of experiments using this high energy physics research tool. Also, the construction of a new high flux reactor, The Argonne Advanced Research Reactor, has been authorized. This will provide another highly important research facility when completed.

"It is both appropriate and necessary for our sister institutions to join in making the fundamental decisions regarding the new directions that Argonne should take in furthering the best interests of science and the peacetime technology of the atom.

"Under this new plan, the University of Chicago looks forward confidently to an inspiring era of cooperation, intelligent expansion of Argonne's facilities and the stimulation of ideas in the scientific community of the Middle West. It is our hope - indeed, our goal - that Argonne will provide the stimulus to a new status for science and technology in the Middle West."

Bryce L. Crawford, Jr., professor of chemistry and Dean of the Graduate School, the University of Minnesota, is President of Associated Midwest Universities (AMU). With headquarters at Argonne, AMU is an inter-university corporation composed of 33 academic and research institutions. Professor Crawford said:

"Our organization views the new plan for Argonne's operation as one which will encourage and greatly stimulate the maximum use of an excellent off-campus facility by the faculty and students in our expanding colleges and universities. In recent years, Argonne's facilities have been made increasingly available to our members. The new plan obviously meshes well with one of the main purposes of AMU, and we anticipate that a larger teaching program as well as research program can be offered at Argonne through these expanded opportunities."

The Argonne National Laboratory was established

(more)

July 1, 1946. It is located on a 3,700-acre site, 27 miles southwest of Chicago. Argonne's Idaho Division is located at the AEC's National Reactor Testing Station near Idaho Falls, Idaho. Argonne has some 5,000 employees, including some 1,200 scientists and engineers. Argonne represents a capital investment of more than \$325,000,000 and presently has an annual operating budget exceeding \$66,000,000. Albert V. Crewe, who was awarded a doctorate in physics by the University of Liverpool, England, in 1951, is director of the Argonne National Laboratory.

#

(NOTE TO EDITORS AND CORRESPONDENTS: This information is being released simultaneously at Chicago by Argonne National Laboratory; at Minneapolis by AMU; and at Bloomington by MURA.)

Att. # 1 - G-243

The Midwestern Universities Research Association

The Midwestern Universities Research Association is a not-for-profit corporation incorporated under the laws of the State of Illinois in September, 1954. Its scientific laboratories and staff offices are at Stoughton, Wisconsin.

Fifteen institutions of higher learning in the Middle West make up the principal membership of MURA. They are:

1. University of Chicago
2. University of Illinois
3. Indiana University
4. Iowa State University
5. University of Iowa
6. University of Kansas
7. University of Michigan
8. Michigan State University
9. University of Minnesota
10. Northwestern University
11. University of Notre Dame
12. The Ohio State University
13. Purdue University
14. Washington University of St. Louis
15. University of Wisconsin

Ad Hoc Committee Membership

The tripartite concept for the administration of the Argonne National Laboratory was proposed unanimously by a seven-man committee made up of representatives of the Midwestern Universities Research Association (MURA), the Associated Midwest Universities (AMU) and the University of Chicago. The committee, appointed January 16, 1964, held its first meeting January 24, 1964. John H. Williams, professor of physics, the University of Minnesota, representing AMU, was chairman.

Members of the Ad Hoc Committee:

1. Selected by Midwestern Universities Research Association:

- F. H. Hovde, President, Purdue University
- E. J. Stahr, Jr., President, Indiana University
(Alternate for President Hovde)
- A. W. Peterson, Vice President, University of Wisconsin
- B. Waldman, Laboratory Director, MURA

2. Selected by Associated Midwest Universities:

- E. L. Goldwasser, Professor of Physics, University of Illinois
- J. H. Williams, Professor of Physics, University of Minnesota

3. Selected by the University of Chicago:

- A. V. Crewe, Director, Argonne National Laboratory
- W. C. Johnson, Vice President, the University of Chicago

Frederick Seitz, professor of physics, the University of Illinois, served as a consultant at the committee's invitation. He is president of the National Academy of Sciences.



ATOMIC ENERGY COMMISSION

WASHINGTON, D.C. 20545

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NOV 86

COPY NO. 2
October 22, 1964

INFORMATION MEETING 419

2:45 p. m. . Thursday, October 22, Room A-457, Germantown

1. Letter to the BOB re Independent Research and Development

Signed. (Fritsch)

2. October 16 Letter From the Chairman, GAC, to Mr. Jack Howard, MLC

The Commissioners agreed a copy of the letter may be sent to the Joint Committee with an appropriate correction by the memorandum of transmittal. (Vinciguerra)

3. Conversion of AEC Facilities (Oliver Townsend's October 19 Letter)

The Chairman requested preparation of an appropriate reply. (Bloch)

✓ 4. October 21 Letter From the Maritime Administration re the Nuclear Merchant Marine (not used)

The Commissioners requested a report following the discussions with Maritime Administration officials next Tuesday. (Vinciguerra)

5. D. C. Office Space

The Chairman will call GSA. (Fritsch)

6. Invitation to Attend November 6 Dinner

The Chairman noted the invitation from Mr. Carl Stover, National Institute of Public Affairs, and suggested declination since the Commissioners and General Manager will be out of the city on that day. Mr. Ink will attend. (Fritsch)

✓ 7. Proposed Letter to Secretary of Defense McNamara re Cooperation with the U. K. (Chairman's October 22 Letter)

Signed. (Fritsch)

8. GA-RG&E Project Negotiating Positions (General Manager's October 20 Memorandum)

The Commissioners approved a revised negotiating position. Pre-contract costs payment as described in paragraph 4, page 3, is to be reviewed further by staff and discussed with Joint Committee staff. (Abbadessa-Vinciguerra)

9. Proposed Letters to Secretary of Defense McNamara and Mr. Bundy. White House staff, re Nuclear Materials Production (General Crowson's October 16 Memorandum)

For later consideration. (Secy) (Only Gen. Crowson's October 16 Memo used - placed in the Secret File for the day of October 22, 1964)

10. WHETSTONE Test Bulletin No. 13

Noted.

11. SALMON Event. Project DRIBBLE

12. Commercial Publication of AEC Journals (General Manager's October 20 Memorandum)

Mr. Hollingsworth suggested the desirability of further staff review and later discussion with the Commission. (Brown)

13. Contractor Entertainment of Government Employees

Mr. Abbadessa discussed briefly the current GAO audit and AEC policy. The Commissioners requested a memorandum on the subject. (Abbadessa)

14. Agenda for Week of October 26

Approved. (Secy)

15. AEC 1151/20 - FY 1966 Budget Preview

Approved. (Abbadessa)

16. Press Release on Desalting

17. Architect-Engineer Study of Special Reactor

Mr. Hollingsworth will discuss the Argonne proposal with Mr. Williams, Reactor Development.

18. AEC Staff Meeting with Joint Committee Staff to Discuss SNAP-10A and 50 Programs

Mr. Ink reported briefly that

- a. SNAP 10A - Joint Committee view that it would be unwise to cut ground testing, etc., to meet an arbitrary test date.
- b. SNAP 50 - this program will receive close scrutiny. They have no problem on re-programming of operating funds at \$2.7 million but request deferral of the boiler test facility pending discussion with the Joint Committee. The Commissioners agreed a confirming letter on the latter point may be transmitted. (Ink-Erlewine)

PRESENT

Dr. Seaborg Mr. Hollingsworth
Mr. Ramey Mr. Ink
Dr. Tape Mr. Abbadessa
Dr. Bunting* Mr. Vinciguerra
 Mr. Hennessey
 Dr. Fritsch
 Mr. McCool

DISTRIBUTION

Commissioners
General Manager
General Counsel
Secretary

W. B. McCool
Secretary

*Partial Attendance

Edison Electric Institute annual meeting in Miami on Tuesday, May 4th.

At 11:20 a.m. I received a telephone call from Ben G. Oman (Executive Secretary of Town Hall, Los Angeles). He called regarding my appearance at the Town Hall luncheon on Tuesday, October 27th at the Biltmore Hotel in Los Angeles. He wanted to know if someone could meet me and provide transportation or in any way help me, and I told him this was all taken care of. He asked if I could be in their office at the Biltmore Hotel, 515 South Olive Street, at 11:45 a.m. The luncheon will start at 12 noon with the talk from 1 to 1:30 p.m. and with a question and answer period until 1:45 p.m. I told him I will be there. Oman said there will be about 3,500 people at the luncheon; members of Town Hall who are leaders in business, education and professions in the Los Angeles area. Oman said he had a call yesterday from the publishers of the Los Angeles Times, who want to know if there is a possibility of having a reception for me on Tuesday afternoon to introduce their senior editorial people. I said this is possible; I had planned to leave by 2 p.m., but I could stretch this a little; so if they have the reception it should be directly after the luncheon, but he shouldn't press it.

At 11:30 a.m. I called Bernard Boutin (of General Services Administration). I told him that we have been trying to get a little more space for the AEC for our downtown office, and it seemed to me from every point of view, including spending less money, that more space at 1717 H Street would be the solution. I said we have learned that three floors are being vacated by the CIA; that we need one whole floor, but if that is impossible, even one-half floor would be helpful. Boutin said he knew about the space, but he was not familiar with the details. He said he would check into this and call me.

I did a lot of work on my speech, "The International Atom," to be given at the Town Hall in Los Angeles next Tuesday, October 27th.

At 12 noon I had lunch with Harold Bengelsdorf, Arnold Fritsch, and John Napier. We discussed my Los Angeles speech.

At 4:30 p.m. I had a preview of the hour-long National Educational Television (NET) film on the AEC, in which there are action scenes of a Commission meeting. It seems to be a pretty good film.

I talked by phone to Paul Fields (Argonne National Laboratory), Richard Hoff (Lawrence Radiation Laboratory, Livermore), and yesterday, to George Cowan (Los Alamos Scientific Laboratory), and Isadore Perlman (Lawrence Radiation Laboratory) regarding the results of the analyses of products from the recent Los Alamos (Barbel) and Livermore (Par) shots to produce heavy isotopes. The experiments are apparently very successful with yields of heavy isotopes up to Fm^{255} and in amounts relatively greater than from the 1952 Mike shot.

Saturday, October 24, 1964 - D.C.

I worked at the "H" Street office during most of the day, and I spent much of the time on my Town Hall speech.

At 11 a.m. I met with Victor Schmidt who has just returned from an extended trip to Europe with Nadine. He said they may stay on in Washington and do part-time work with the AEC's Director of Regulation.

At 1 p.m. I had lunch with Hornig and Commissioner Tape to discuss the plans for coming up with the required "blueprint" (requested by the Joint Committee on Atomic Energy) for high energy nuclear physics, and the problems with keeping our

FY 1966 budget way down as the Bureau of the Budget seems to be suggesting.

At 2:15 p.m. I had an appointment with Alvin Weinberg in my office. We discussed a number of items: 1. He said that some of the people at Oak Ridge National Laboratory (ORNL) are restive in view of what they consider a possibility of a contractor change. They are influenced by the recent announcement of a change of contractor for Argonne National Laboratory. Someone in the Biology Division even went so far as to invite the president and the administrative officers of Duke University to look into the possibility of taking over the contract. This, of course, was a mistake, and Weinberg made that clear to the President of Duke. It would be good, however, if the AEC could announce a settlement of the contract for the next three-year period. ORNL had wanted to change its name to Southern Universities, Inc., with the view to taking over the contract; however, the Southern Land Grant Colleges objected to this and a name change is not presently contemplated. 2. He said that he thought that their present effort in desalting at a rate of \$250,000 per year is too small, and they are spending at a higher rate at the present time. 3. He inquired if I had read their Molten Salt Report. I said I had and found it very interesting. He said, if the experiment is successful, they may request a full scale 100 megawatt thermal breeder about one year from now. 4. He said that Eugene Wigner, with his 12 people, is getting along fine, although Wigner is somewhat discouraged by the lack of interest in fallout shelters throughout the country and in government circles. 5. He said that in connection with his membership on Kistiakowsky's National Academy of Sciences Committee to advise California Congressman George Miller on the support of sciences, he is becoming concerned as to whether the DOD, NASA, and the AEC will be able to continue to support basic science and, if not, whether the NSF will be in a position to take over the whole load. I told him I didn't particularly share this concern. 6. He described the reorganization at Union Carbide wherein Bob Charpie is taking over a sort of Vice President position under which Clarence Larson reports to him (Charpie). He said that he has spoken to Charpie about Union Carbide's also exercising proper concern about the future health of the laboratory. 7. He asked about our interest in John Swartout to head up Reactor Development, and I said we were interviewing him and regard him as a very serious prospect. He said that the loss of Swartout would be quite a blow to ORNL, and that if he left he probably would be replaced as Deputy Director by H. G. McPherson. 8. As a result of his inquiry, I told him about our meeting with Shannon and Endicott of NIH on October 8th, and Shannon's doubts about increasing NIH's support to Oak Ridge and my encouragement to Shannon that he should do so.

I wrote a letter of general and family information to Peter.

Sunday, October 25, 1964 - Home

I worked on my Town Hall speech entitled, "The International Atom," to be given in Los Angeles on October 27th and my speech in St. Louis for the Spirit of St. Louis Award to be given on October 26th.

I went to Rock Creek Park and took hikes on nature trails with Dianne and her friends, Brendan Canary and Abbe Kaufman.

Lynne returned from Cambridge, Massachusetts, today where she went for a Radcliffe admissions interview and also a visit with Pete. She stayed at Polly Bunting's home.

Monday, October 26, 1964 - D.C. - St. Louis, Missouri - Los Angeles, California

The Commissioners and I attended a briefing with Foster, Fisher, Scoville, and others of the Arms Control and Disarmament Agency (ACDA), given by Delmar Crowson and other AEC people, on problems of verifying the destruction of nuclear weapons in a disarmament situation.

At 10:30 a.m. I called Harlan Cleveland to tell him that I will be giving a Town Hall speech in Los Angeles tomorrow on "The International Atom." The theme is the importance of safeguards in our international atomic energy program and the importance of preventing proliferation. There will be a Question and Answer session, and it is possible someone will ask: what are we going to do about Red China? Cleveland said that, first, U Thant did not suggest a conference, as is widely believed, but a "dialogue" in 1965. The channels for such dialogue are open: The French, British and Soviets are represented in Peking, and we have periodic talks with the Chinese through our Ambassador in Warsaw. If the Chinese have something to say, there are plenty of channels available to them; but they haven't said anything. All that they have done is to undertake testing in the atmosphere in the face of 107 countries advocating cessation of atmospheric testing.

It is important not to say it in such a way that the U.S. rejects the conference idea. We would be delighted to talk with them; in fact, we talk to them right along, but the problem is that they don't say anything. All they do is explode the bomb. He said that, if pressed, I can say that ultimate disarmament agreements do have to include all the major countries, powers and regimes in the world; but we shouldn't start with this statement.

Cleveland said I might also be asked whether the bomb will help the Chinese get into the United Nations. He said that Secretary Rusk produced a wonderful phrase in Atlanta this week in answer to the question, "Wouldn't it tame the Chinese to bring them into the U.N.?" He said that the U.N. is not a reform school. What is keeping China out of the rest of the world community is her own behavior. Until there is some change in that behavior, all other questions are academic. China is at war with the U.N. in Korea; she is still shelling Quemoy and Matsu; she is supporting North Vietnam against the south; she is stirring up the Pathet Lao in Laos; she is mobilized on the border of India. He suggested that the question be turned around as a short essay on Chinese behavior.

At 12 noon John Napier and I left Washington, D.C., on Trans World Airlines Flight No. 107 and arrived in St. Louis, Missouri, at 12:50 p.m. I was interviewed at the airport for two radio stations and Television Channels 2, 4 and 5 (all separately) on the Chinese test, nuclear power, etc.

I visited Professor Arthur C. Wahl (who obtained his Ph.D. with me at Berkeley in 1942) in his Radiochemistry Laboratory at Washington University.

I attended the Founders Week Civic Dinner at St. Louis University, in the Khorassan Room of the Chase-Park Plaza Hotel. I received the first "Spirit of St. Louis Award," presented to me by General Lucius D. Clay (Chairman of the Award Committee) before some 1,600 people. I gave a three-minute response. Among those present at the dinner were Father Paul C. Reinert (President, St. Louis University), William A. McDonnell (Chairman of the Board (St. Louis - San Francisco Railway Company), Mr. and Mrs. Herb Shriner and Dr. Carroll Hochwalt.

I was driven to the airport under a police escort and at 10:30 p.m. we left St. Louis on a Monsanto plane and arrived in Kansas City at 11:20 p.m. At 11:20 p.m.

we left Kansas City on Trans World Airlines Flight No. 85 (held for us) and arrived in Los Angeles, California, at 12:40 a.m.

We stayed overnight in the Biltmore Hotel.

Tuesday, October 27, 1964 - Los Angeles - Berkeley, California

I was interviewed by Jim Green of Radio Station KHJ and TV Channel 2 at 11:55 a.m. and by Carl George of KABC-TV news (Channel 7) at 12 noon at the Biltmore Hotel. I gave a talk entitled, "The International Atom," at the Town Hall luncheon meeting held in the Rendezvous Room of the Biltmore Hotel. The talk was followed by questions on the Chinese test, nuclear power, reactor siting problems, etc. The talk seemed to be very well received. I was introduced by UCLA Chancellor Frank Murphy, and I sat next to USC President Norman Topping and Frank Murphy during the luncheon. Murphy told me that Ed Strong is not doing so well as Chancellor at Berkeley and he was critical of the performance of President Clark Kerr as well. They are having trouble handling student unrest.

After the luncheon, I met with the Los Angeles Times editorial staff--Otis Chandler (Publisher), Nick Williams (Editor), James Bassett (Editorial Pages Director), Robert Gibson (Foreign Editor), Robert Nichols (Business and Financial Editor), Irving Bengelsdorf (Science Editor), Harry Nelson (Medical Editor), Marvin Miles (Space-Aviation Writer), and Marvin Seid (Editorial Writer).

I went to South Gate and had dinner with my mother and Jeanette and visited from about 4 p.m. to 7:30 p.m.

Napier and I left for San Francisco on Trans World Airlines Flight No. 31 at 8:35 p.m. and arrived in Berkeley, California, at 9:40 p.m.

We stayed overnight in the Durant Hotel.

Wednesday, October 28, 1964 - Berkeley, California - Washington, D.C.

I visited our Lafayette home and met the tenants, Dr. and Mrs. Bengt Pernow, who are here on a sabbatical from Sweden.

I visited with (including lunch) the Radiation Laboratory Chemistry group (Perlman, Ghiorso, Asaro, Hyde, Hoff, Hulet, Thompson, Street, McMillan, Hollander, etc.) to discuss the results of the Livermore and Los Alamos underground shots to produce heavy isotopes. These shots have been quite successful and this approach looks better and better. Ghiorso described his idea for his "Omnitron," which would accelerate heavy ions as heavy as uranium up to high energy at a total cost of \$10-\$12 million.

Napier and I left Berkeley at 2:05 p.m. on United Airlines Flight No. 176 and arrived in Washington, D.C. at 11 p.m.

Thursday, October 29, 1964 - Germantown

At 10 a.m. I received a telephone call from James Cobble (Purdue University). He said that Lee White (U.S. Rubber Company) probably had already called me indicating that U.S. Rubber and Martin Company are going to make a bid to build the isotopes and fabrication plant at Hanford. Cobble wanted to talk with me on two points: 1. he asked if I had any ideas on whether this is a good thing (unofficial), and 2. he reported that they have been greatly disturbed about a report published at Hanford that Dow is going to get the contract.

He said that about \$5 million each would have to be put up for the job. I told Cobble that the Commission has followed this project pretty closely and I think probably it is worth doing and certainly an interesting job. Cobble asked if the AEC has had much dealings with Martin, and I told him we have and I think they are all right. He asked if I have any ideas where the report on Dow might have come from, and I said I do not, but that I will check on this. He then asked if Dow runs our Rocky Flats activity and I said they do. I pointed out to Cobble that the AEC uses a rating system for the qualifications of each company. He said I should keep in mind that the American Physical Society meets next year in September in Honolulu, and he hopes I can make it.

I sent a telegram to Charlie Townes to congratulate him on his well-deserved Nobel Prize.

At 10:30 a.m. I presided over Information Meeting 420 (notes attached).

At 11:45 a.m. I presided over Regulatory Meeting 206 (action summary attached).

At 11:50 a.m. I presided over Commission Meeting 2053 (action summary attached). The Commission discussed the problems with the implementation of the Multi Lateral Force (MLF) concept--security of information, safety, AEC role, etc.

At 12:50 p.m. I had lunch in the cafeteria with Ed Bloch (recently appointed to the position of Deputy General Manager) and Arnold Fritsch.

The Commissioners interviewed John Swartout for the position of Assistant General Manager for Reactor Development; and Allen Vander Wyden for Deputy Assistant General Manager for Reactor Development. This complicated situation is shaping up pretty well, following Frank Pittman's resignation.

At 2 p.m. I received a telephone call from Jerry Wiesner (now at the Massachusetts Institute of Technology). Jerry said there is great uneasiness at MIT about the prospects of the linear accelerator, and he wondered if there is anything I can tell him. Also, he wanted to tell me about the probable consequences if they failed to get the accelerator this year. I told Jerry that this is not in the budget. I said the President is going to try to stay below \$100 billion and he has given us target figures which are fantastic, which means we probably will have to drop things like Snap-50, etc. Jerry said that this is the fourth year that this project has fallen out and that he, himself, had not fought for it because he didn't think it mattered, but now it is at the stage in its history where it might mean the wrecking of one of their very strong groups if it doesn't come through. I told Jerry that I would look at this and keep it in front of BOB Director Kermit Gordon when we go over the budget. I did say that I think all we're going to have is \$3 million or so for all of the low energy field.

He asked if the decision was an internal one on the part of the AEC or if we had BOB pressure. I said that within the ceiling it is internal except there isn't enough to put anything in; on the other hand, if the President begins to decide the \$100 billion figure isn't realistic, there is a chance. I told him that Hornig is aware of this and it might not hurt if he (Wiesner) called him. Wiesner said he might do this and suggested that I might tell the President about the general problem if I have a chance.

At 3:05 p.m. I received a telephone call from House Speaker John McCormack. He wanted my approval for F. L. Brannigan of the AEC's Division of Operational Safety to address the Holy Name Society at St. Theresa's Church in Boston on December 13th. I told him it would be all right with the AEC and I would call Brannigan this afternoon and clear it for him.



COPY NO. 2
October 29, 1964

INFORMATION MEETING 420

10:30 a.m., Thursday, October 29, 1964, Room A-457, Germantown

1. Chairman's Telephone Call to Mr. Bernard L. Boutin, GSA, re Space

The Chairman said Mr. Boutin will review the matter and telephone him.

2. Invitation to Attend Inauguration of Brazilian Reactor (Mr. Kratzer's October 28 Memorandum)

Mr. Palfrey will represent the Commission. January 2, 1965 is the proposed date. (Kratzer)

3. Chairman's Speeches at the American Power Conference on April 29, 1965, in Chicago and at the EEI Meeting in May in Florida

4. Chairman's Meeting with Dr. Alvin Weinberg, Saturday, October 24

The Chairman said he had discussed with Dr. Weinberg

- a. Contractor for ORNL
- b. Desalting Program
- c. Molten Salt Reactor
- d. Dr. Wigner's Civil Defense program, and
- e. Chairman's meeting with NIH officials.

✓ 5. Letters to the Secretary of Defense and Mr. Bundy, White House staff, re Production and Requirements for SNM (DMA's October 16 Memorandum with attachments)

Mr. Palfrey discussed proposed revised language and the Commissioners requested additional revision to the letters and preparation for early transmittal. (Fritsch)

(Only General Crowson's October 16 Memo used - placed in the Secret File for the day of October 22, 1964)

6. Proposal From American Export-Isbrandtsen Lines, Inc.(John M. Will's October 30, 1964 Letter)

The Commissioners discussed briefly the proposal and Mr. Ink reported on current discussions with Commerce officials. A cost analysis of the proposal is in preparation.

7. AEC 1161/1 - Arrangements with California for Thorium Seed-Blanket Reactor

Scheduled for consideration next Wednesday.

8. President's October 24 Memorandum re Water Resources Research

Noted.

9. Proposed U.S. Offer to Host IAEA Symposium on Exchange Reactions, May 31 - June 4, 1965, at Brookhaven National Laboratory (GM's October 22 Memorandum)

The Commissioners accepted the General Manager's recommendation. (Kratzer)

10. Japanese Request to Lease Special Nuclear Material for Marine Reactor Experiment (GM's October 26 Memorandum)

The Commissioners accepted the General Manager's recommendation. (Kratzer)

11. Saturday Evening Post Request to Accompany Whole Body Counter Team to Alaska (GM's October 23 Memorandum)

The Commissioners accepted the General Manager's recommendation. (Clark)

12. Report on Argonne Security and Inspection Procedures

Mr. Ink reported briefly on the status of the matter and said a study is underway by the Controller, Inspection and Security.

13. Pending Contractual Matters (October 23 Report)

Mr. Ramey requested a report on the proposed APDA contract extension. (Scammahorn-Pittman)

14. Agenda for the Week of November 2

Approved. (Secy)

15. Report on Claims Following SALMON Event

16. Possible Strike by Radiation Monitors at NTS

17. Implementation of Title VI of the Civil Rights Act (Mr. Ferguson's October 27 Memorandum)

Mr. Ferguson will coordinate the matter with Mr. Palfrey.

PRESENT

Dr. Seaborg
Mr. Palfrey
Mr. Ramey
Dr. Tape
Dr. Bunting
Mr. Hollingsworth
Mr. Bloch
Mr. Abbadessa
Mr. Hennessey
Mr. Ink
Mr. Ferguson*
Dr. Fritsch
Mr. McCool

DISTRIBUTION

Commissioners
General Manager
General Counsel
Secretary

W. B. McCool
Secretary

*Attendance for Item 17

UNITED STATES GOVERNMENT

Memorandum

TO : Harold L. Price, Director
of Regulation

DATE: October 29, 1964

FROM : W. B. McCool, Secretary

SUBJECT: ACTION SUMMARY OF REGULATORY MEETING 206, THURSDAY, OCTOBER 29, 1964, 11:45 A.M., ROOM A-410, GERMANTOWN, MARYLAND

Original signed
W. B. McCool

SECY:AJ

Commission Business

AEC-R 18/22 - Amendment to 10 CFR 40 - Licensing of Source Material -
Exemption of Glass Enamel and Glass Enamel Frit Containing Source
Material

Approved. (Western)

cc:
Commissioners

UNITED STATES GOVERNMENT

Memorandum

TO : R. E. Hollingsworth, General Manager

DATE: October 29, 1964

Approved

FROM : W. B. McCool, Secretary

R.E. Hollingsworth

Date

SUBJECT: ACTION SUMMARY OF MEETING 2053, THURSDAY, OCTOBER 29, 1964,
11:50 A.M., ROOM A-410, GERMANTOWN, MARYLAND

SECY:AJ

Commission Business

1. Minutes of Meetings 2047, 2048 and 2049

Approved, as revised, subject to comments by Commissioner Ramey.

2. AEC 319/12 - Extension of Contract with National Academy of Sciences

Approved. (Scammahorn)

3. AEC 106/9 - Transfer of Salton Sea Test Base

Approved. (Derry)

4. AEC 1163 - AEC Role in Formation of MLF

Discussed.

The Commission agreed staff should proceed as discussed, re subordinate documents and the security annex. (Kratzer)

The Commission will discuss with the DOD tomorrow AEC participation in the command and control study.

I will reschedule AEC 1163 for further consideration on Wednesday, November 4.

5. AEC 132/72 - Report of the Division of Inspection

Discussed.

cc:
Commissioners

Friday, October 30, 1964 - D.C.

The Commissioners are in doubt about the recipients of the Fermi Award and asked me to investigate the possibility with the Joint Committee on Atomic Energy of having one award of \$50,000 instead of two awards at \$25,000 each as we had discussed with the JCAE last summer. Using this plan, we would give one award to Rickover rather than one each to Hyman Rickover and General Leslie Groves as recommended by the General Advisory Committee.

At 12:30 p.m. the Commissioners, Robert Hollingsworth, and I had lunch at the Pentagon with McNamara, Vance, Jack Howard and Harold Brown to discuss, chiefly, the production level of fissionable materials. McNamara agrees with the fact that we shouldn't shut down more reactors in FY 1966, but questions whether we should plan to further reduce (below the present planned ultimate level of 2970 megawatts) power to gaseous diffusion plants. We told McNamara that we feel it would be unwise to make a further reduction in view of the impending increase of civilian power requirements for nuclear fuel. The military requirements for uranium-235 could be met almost without any further production (i.e., with shutdown of all three plants). We will study this further and try to come up with an agreed upon McNamara-Seaborg memorandum to the President making a recommendation.

At 2:45 p.m. I called Robert Gerdes (President, Pacific Gas and Electric, San Francisco). I returned his call and he said he had called a little earlier in the day before they made their announcement of withdrawing their Bodega Head application. I told him I hoped that this didn't indicate any loss of interest in nuclear power. He said, no, it did not, but they felt they couldn't go ahead with this since eminent men had indicated there could be a threat to public safety.

I asked him if they had an escape clause in their contract with General Electric and he said they had some kind of an escape clause, but they couldn't let money govern a thing like this. I told Gerdes that they might be able to turn this to their advantage in getting a better plant. He said, as a matter of fact, they haven't exactly decided, but they have considered amending this application for a 600 megawatt unit. I said in the long run that it might even save them money even though they have invested as much as they have. I asked if they have another site which doesn't have the shortcomings of Bodega Head, and he said they have two which are on the Ocean, and one on the Bay, but there is still the problem of engineering to allow for 50 foot tidal waves. He said he realized the Commission hasn't made any decision on this as yet. He said they were disappointed; that it has been a very painful proceeding and a very expensive one, but on the other hand they can't do anything without spending money. I told him that he would have admirers as a result of this action, as well as detractors.

At 5:20 p.m. I called Haworth. 1. I told Lee that I had heard from Harvey White, who is very interested in the potentials of science exhibits in the motivation of young people. I said I understand there will be a meeting on this subject sometime soon at NSF as to whether NSF should support this sort of project. I said it appears to me that, if it is at all possible, this is an area that would be worth supporting. Lee said he agrees with me, but the problem is that there are so many worthy projects and funds are woefully inadequate. 2. Lee said that he had been contacted by the book publishing division of Time, Inc. (Norman Ross, head of the department). They are interested in seeing what they can do in the business of science education--both popular and formal education. Lee feels it would be worthwhile to give it some thought; they are a powerhouse, equipped with people, the publishing apparatus, books, photographs, research staff, etc., and they are really anxious to do something, if we could just steer them in the right direction. Lee said he would like to talk to me about this sometime.

Saturday, October 31, 1964 - D.C.

I worked at the "H" Street Office during the morning.

At 12:45 p.m. I had a luncheon appointment at the Metropolitan Club with John Conway (of the Joint Committee on Atomic Energy). We discussed a number of topics: 1. I mentioned the Commission's desire to award one Fermi Award of \$50,000 this year to a candidate that I thought would be very acceptable to the JCAE because he was chosen on a broadened basis of qualifications. Then we would announce, at the same time as the announcement of this person's selection, that in following years the award would be on a broader basis--and to two candidates, of \$25,000 each. Conway said he would check this with Holifield and Pastore over the weekend and would let me know their reaction on Monday, and we would then decide whom to contact next. 2. I mentioned the Commission's progress with respect to the report on high energy physics that the JCAE has requested. 3. I described the new Savannah River program for operating a reactor at very high flux for the first six months of 1965 to produce milligrams of californium, while testing the process for the possible faster and cheaper production of curium-244 later on. 4. I mentioned the problems we are having gaining support for the seed and blanket reactor. 5. I told him about the undercover attacks that some of the NASA staff are making on the SNAP-50 program and suggested that he should be careful not to be misled by this and go too far in requiring missions for this reactor. 6. We also discussed the MLF time table, and he said that Holifield has written the President asking him not to proceed with any definite commitments on this before next January.

I sent a letter to Ron Warren giving him information relating to the Parsons Award that he had requested.

I went to the St. Johns-Baltimore City College High School football game at Wilson High field (St. Johns 14, City 6) with Dianne and her friend Laura Dodd.

I went "trick or treating" with Dianne, Laura Dodd, Ivanka Popovic and her mother. We also visited Murch School.

Sunday, November 1, 1964 - Home

I proofread the annual report entitled, "Fundamental Nuclear Energy Research." I read journals and books during the remainder of the day.

Monday, November 2, 1964 - D.C.

At 10 a.m. I presided over Regulatory Information Meeting 129 (notes attached).

At 10:35 a.m. I presided over Information Meeting 421 (notes attached).

The White House announced over the weekend the creation of a Test Force to study the problem of proliferation of nuclear weapons to be headed by Roswell Gilpatric. I sent Gilpatric, Foster, Fisher, Thompson, and others (who head an interagency group on this same problem) copies of my speech, "The International Atom." I also sent copies of this speech to many faculty members at the University of California, Berkeley.

At 12:45 p.m. I had lunch with Commissioner James Ramey at the Roger Smith Hotel.

Acting Maritime Administrator J. W. Gulick sent us a letter backing nuclear power for merchant ships, which will be useful with the Bureau of the Budget (copy attached).

All indications are that the election tomorrow will result in a landslide victory for Johnson and Humphrey.

The family had a birthday dinner, including a birthday cake, for Dianne.

Tuesday, November 3, 1964 - Germantown

The Commission was briefed by members of the staff on project development and control procedures.

At 12:30 p.m. I had lunch with John Abbadessa, Robert Hollingsworth, Frank Pittman, and Arnold Fritsch; we discussed this afternoon's meeting with the Bureau of the Budget people concerning advanced converters.

At 4:30 p.m. the Commissioners, in Room 459 of the Executive Office Building, members of the staff and I attended a meeting with representatives of the Bureau of the Budget--Gordon, Staats, Schuldt, Hornig, and others. We heard their (BOB's) arguments against building High Temperature Gas-Cooled (GA-Rochester Electric), Seed-Blanket (State of California) and, next year, Heavy-Water Organic-Cooled converter prototypes. We seemed to be fairly successful, but Gordon asked us not to sign a letter of intent with the California Water Resources Department (Bill Warne) until we get a presidential decision. It was decided to present this issue (of whether to enter these cooperative arrangements to build these prototypes) to President Johnson for an early decision before our main FY 1966 budget questions.

President Johnson was re-elected by a large majority today, getting some 61% of the popular votes. Many members of the Senate and House, Democrats, were swept into office with him.

Robert Kennedy won the Senatorial race in New York; Pierre Salinger lost in California. Helen and I went to the White House Mess party and then on to the White House office of Bill Moyers to listen to the election returns. 291

During the afternoon Dianne had her fifth birthday party with 20 guests.



UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON, D.C. 20545

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NOV 86

COPY NO. 2
November 2, 1964

REGULATORY INFORMATION MEETING 119

10:00 a. m., Monday, November 2, Chairman's Conference Room, D. C. Office

1. Improving the Regulatory Process (Mr. Ramey's October 29 Memorandum)

Mr. Price and staff discussed briefly with the Commissioners the GE October 12 letter, status of the Panel consideration of technical specifications, amount of information required at the construction permit stage, etc. The Commissioners requested consideration of the establishment of a review panel to consider reactor licensing and radioisotopes licensing procedures. (DR)

2. Briefing on Nilductility Temperature Problems

10:30 a. m., tomorrow, Room A-457, Germantown.

3. Personnel Item

4. Bodega Bay Reactor

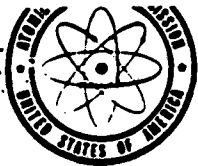
PRESENT

Dr. Seaborg
Mr. Palfrey
Mr. Ramey
Dr. Tape
Dr. Bunting

Mr. Price
Dr. Beck
Mr. Doan
Dr. Fritsch
Mr. McCool

DISTRIBUTION

Commissioners
Director of Regulation
General Counsel
Secretary



INFORMATION MEETING 421

10:35 a. m. , Monday, November 2, Chairman's Conference Room, D. C. Office

1. Commissioners' Luncheon Meeting with Chamber of Commerce, December 10, 1964

2. Commissioners' Meeting with National Association of Manufacturers

To be checked.

3. Production of SNM

The Commissioners discussed briefly the meeting with Secretary of Defense McNamara and DOD officials last Friday. The Commissioners requested

a. An analysis of the AEC October 15 letter to the BOB.

b. Information on DOD and AEC requirements statement to the BOB last year.

c. Extent of AEC-DOD coordination of the October 15 letter.
(Ink-Crowson-Quinn)

4. Maritime Administration October 28 Letter re Nuclear Merchant Marine

5. Task Force on Nonproliferation

The Chairman said he would send Mr. Gilpatric a copy of his Town Hall speech.

6. Project Handcar, November 5, 1964

Noted.

7. Proposed Letters to GSA and DOD re Disposition of Camp Parks, California (GM's October 30 Memorandum)

The Chairman will sign the letters.

8. Savannah River Laboratory (GM's October 29 Memorandum)

The Commissioners discussed briefly the General Manager's proposed course of action and agreed to consider the matter further after discussion of AEC 1087/4 - Radioisotope Availability for NASA Program next Wednesday.

9. Personnel Award

The Commissioners accepted the General Manager's recommendation. (Tackman)

10. Commissioners' Luncheon Meeting with NASA Officials, November 9, 1964, Germantown

The Commissioners suggested preparation of informational material on

- a. National Laboratories and contractors
- b. Requirements for radioisotopes for space
- c. GAC visit to Lewis Laboratory
- d. Letter to the President re ROVER. (Ink)

11. Commissioners' Meeting with Director of BOB Gordon, 4:30 p.m., Tomorrow, to Discuss the Advanced Converter Program

PRESENT

Dr. Seaborg
Mr. Ramey
Mr. Palfrey
Dr. Tape
Dr. Bunting

Mr. Hollingsworth
Mr. Bloch
Mr. Ink
Mr. Hennessey
Mr. Quinn*
Dr. Fritsch
Mr. McCool

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Commissioners
General Manager
General Counsel
Secretary

W. B. McCool
Secretary

*Attendance for Item 8

DEPARTMENT OF COMMERCE
MARITIME ADMINISTRATION
WASHINGTON 25, D.C.

970

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NOV 86

IN REPLY REFER TO:

970/10742

OFFICE OF THE ADMINISTRATOR

OCT 28 1964

Honorable Glenn T. Seaborg
Chairman, U. S. Atomic Energy Commission
Washington, D. C. 20545

Dear Mr. Chairman:

The Maritime Administration letters to you of October 12, 1962, December 26, 1962, and September 13, 1963, present a description of the potential importance of nuclear power to the merchant marine. On October 4, 1963, Secretary Hodges advised you of his views stating in part:

"The Department of Commerce and the Maritime Administration have a vital interest in the advancement of nuclear propulsion for merchant ships. Our studies of the role of nuclear power in merchant shipping which include the economics, the national defense benefits, the prospects of industry support and the status of foreign activity leads me to an important and firm conclusion regarding the work being carried out by your agency in this field. This is that the Department of Commerce is in full accord with the plans and programs of the Atomic Energy Commission for the development of nuclear reactors applicable to the United States merchant marine."

He also indicated his plan to continue the economic studies and his intent to press forward with shipboard applications as rapidly as social and engineering developments permit. An updated summary of Marad's position is enclosed for your convenience. The economic analyses of commercial ship systems have been continued and key results scheduled for December, 1964 should tell us whether economically competitive merchant marine applications will be possible with the new types of maritime reactors which you offer. The results at this time are incomplete but indicate that we should continue to proceed toward early shipboard application.

On the basis that traffic predictions and potential service economics are shown to be sufficiently attractive, it is expected that certain of our shipowners will be prepared to make corporate investments in privately-owned ships in which the Government would

participate. We are prepared to support such a program and to move forward rapidly as soon as a determination is made that economically competitive route services appear to exist. Our staff is continuing to collaborate with your staff in studies essential to the development of an effective program.

We look forward to working with you in the next few weeks in making the final essential decisions necessary to the crystallization of a specific program for the application of maritime reactors.

Sincerely yours,



J. W. Gulick
Acting Maritime Administrator

Enclosure

IMPORTANCE OF NUCLEAR POWER TO THE MERCHANT MARINE

I. Effects of Utilizing Maritime Nuclear Power

A. Pertinent Characteristics

1. Volume or weight of effectively unlimited nuclear fuel supply is relatively trivial compared to that of oil fired plants, while the weight and volume of the proposed new reactor is approximately the same as for the ships boilers.

2. Fuel costs of nuclear plants are significantly lower, thus reducing the costs for higher speeds, and permitting different hull forms.

B. These two considerations allow combinations of the following improvements in merchant ship functional characteristics relative to oil fired ships.

1. Decreased draft - greater operational flexibility to enter undeveloped ports and the capability to carry a larger weight of cargo out of port under the draft limitations at any given time.

2. Decreased light ship weight - decreased capital costs, smaller ship for desired deadweight.

3. Increased power - lower capital cost and lower fuel cost for desired deadweight and speed.

4. No penalty fuel weight and effects on light ship weight and power requirements for high speed, long range systems.

II. Economics

There is now little question that maritime nuclear reactors with the prospective characteristics of those under development by the U. S. Atomic Energy Commission can be employed as part of economically competitive ship systems in the American Merchant Marine. Examples are:

A. a trans-oceanic high-speed freight service utilizing ships embodying quick turn-around features.

B. an intercoastal container ship.

III. Government commercial benefits from the development of maritime nuclear power ~~shall~~ accrue from the following sources in the merchant marine:

A. Reduced subsidy costs for a given seafair capability.

B. Financially stronger merchant marine from increased operation profit from the carriage of more cargo with higher freight rates, or from carriage of the same cargo at lower rates.

C. Increased tax revenues and/or subsidy rebates from the improved operators' profits.

D. Improvement in the balance of payments in the transportation services sector and greater cargo participation.

IV. National Defense Benefits

Nuclear powered ships in the United States merchant marine would constitute a substantial national defense asset. Speed, range, large onboard fuel reserves, and lighter draft are important capabilities of these ships for their emergency military support role. Both the Defense Department and the Navy Department have stated their strong support of Maritime Administration plans to introduce nuclear propulsion in the United States merchant marine. These defense benefits have been considered premiums and have not been given a dollar value in the economic analysis of merchant marine applications.

V. Position of the Department of Commerce

On October 4, 1963, Secretary Luther H. Hodges established the following position:

"The Department of Commerce strongly supports the development of improved maritime nuclear reactors for the United States merchant marine because of the important economic and military support benefits which they promise. Maritime reactors, with the prospective characteristics of those under development by the U. S. Atomic Energy Commission, are suitable for employment in certain U. S. merchant vessels and the Commerce Department will support fully the reactor development and will promote the utilization of the reactors in selected new ships as rapidly as progress in social and engineering development permits."

VI. Scheduling Considerations

The American operators are growing into specialized cargo segments now as a result of the increasing speed of our new replacement ships. Early development of a maritime reactor is desirable to allow the American operators to carry out such aggressive application efforts. A specific example of this would be high-speed nuclear transportation systems similar to those described in the Sharp Report. These ships would be intended to carry the high value or other speed-sensitive cargo segment of the total volume of cargo on the route.

Failure to enter and exploit the high-speed cargo market segment in a decisive manner will allow foreign development in this area. This will result in future competitive problems when entry is attempted against these foreign high-speed ships.

VII. Foreign Activity

The fact that other governments are making or planning sizable investments in this area indicates that they, too, see promise. The Germans have launched an experimental nuclear-powered bulk carrier, the OTTO HAHN, and are powering it with a PWR similar to our compact PWRs. The Japanese are currently designing an experimental nuclear oceanographic vessel which will be to sea about 1968. The Russians are planning two more nuclear icebreakers as a result of their experience with the LENINGRAD to open arctic sea lanes to commercial operations. The British are currently considering two proposals, the first for an experimental PWR powered bulk carrier and the second for an experimental gas-cooled reactor powered 25-knot, 10,000 dwt. cargo ship.

Wednesday, November 4, 1964 - Germantown

At 9:25 a.m. I received a telephone call from Lou Roddis. He said that at its meeting next spring (April) the Forum is planning to have an open session on merchant ship nuclear propulsion and asked if I thought I would have any problems with this. He said the meeting would be similar to the one held in Philadelphia about four years ago when they discussed the world position of merchant ship propulsion. I told him I thought this would be all right. He said the meeting would be held either in Washington or New York with New York being first choice if the time coincided with the SAVANNAH being in port.

At 9:45 a.m. I met with George Cowan and Carson Mark, of Los Alamos, to discuss the program for the production of heavy isotopes by underground nuclear explosions.

At 12:30 p.m. Arnold Fritsch and I had lunch with George Cowan and Carson Mark in the Germantown cafeteria.

At 2:10 p.m. I presided over Information Meeting 422 (notes attached).

We discussed letters to Wilhelm Billig, Minister for Nuclear Energy, Poland (draft copy attached), and to Horia Hulubei, Nuclear Energy Committee, Rumania, inviting them to visit the United States.

John Finney, of the New York Times, wrote to President Johnson on October 5th (copy attached), suggesting that one of our gaseous diffusion plants be placed under private international ownership; the President's reply (copy attached) of October 26th suggests this merits serious consideration.

At 3:50 p.m. I presided over Commission Meeting 2054 (action summary attached). Baranowski briefed the Commission on a program to operate a Savannah River reactor at $2-5 \cdot 10^{15}$ flux to produce californium and other heavy isotopes. The Commission approved the policy report of the Division of Research concerning high energy nuclear physics, which will now be discussed by the Office of Science and Technology (OST), and the President's Science Advisory Committee (PSAC) preparatory to hopefully getting presidential approval.

In his capacity as a Trustee of the George Washington University Lewis Strauss called today to ask if I would be interested in the presidency of the University. I told him I doubted that I would, but we are going to talk about it again on Saturday, November 7th.

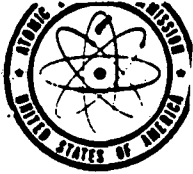
Thursday, November 5, 1964 - D.C. - Chicago, Illinois

At 9:30 a.m. Phil Jacques and I met with Serge Berg (Senior Editor, French Press Agency) to discuss nuclear power, transuranium elements, future of U.S. Euratom bilaterals (to have fuel supply function transferred to Euratom), etc.

At 12 noon I had lunch with Arnold Fritsch and John Napier at the Roger Smith Hotel.

I responded to the proposal from Admiral John M. Will (President of American-Isbrandtsen Lines) in which he stated that they would like to participate with the AEC in building four nuclear merchant ships. I expressed interest in exploring the possibility of the proposal. (Copy of the proposal and my response attached.)

At 4 p.m. Arnold Fritsch and I left Washington, D.C., on American Airlines Flight No. 495 and arrived in Chicago, Illinois, at 5:30 p.m., to attend the 1964 National



UNITED STATES
ENERGY COMMISSION
WASHINGTON, D.C. 20545

UNCL. BY DOE COPY NO. 2
NOV 86 November 4, 1964

INFORMATION MEETING 422

2:10 p.m., Wednesday, November 4, Chairman's Conference Room, Germantown

1. November 3 Meeting with the BOB re Advanced Converter Reactors
Mr. Ramey and the Commissioners agreed a letter to the President should be prepared. (Pittman)
2. President's November 2 Memorandum re State of the Union Message
Mr. Ramey and Mrs. Bunting will review with staff. (Ink)
3. Mr. Wm. E. Morgan's, ARMU, November 2 Letter re Use of NRTS Facilities
The Chairman and the Commissioners will meet with Mr. Morgan at 10:00 a.m., November 10, D. C. Office.
4. WHETSTONE Test Bulletin No. 15, Handcar Event, November 5
Noted.
5. Draft Letter to Oliver Townsend re Diversification Program
The Commissioners requested revisions in the letter. (Ohlke)
6. Chairman's Speech at AIF, San Francisco
The Chairman said he would welcome ideas from the Commissioners and staff.
7. Commissioners' Meeting with NASA Officials, Monday, November 9
The Commissioners discussed briefly with the General Manager plans for the luncheon and the agenda.
8. Desalting Team Visit to USSR
Mr. Ramey said the visit has now been scheduled for November 16.

9. Seminar on Workmen's Compensation, January 25-26, 1965

Mr. Ramey noted the AEC Labor Management Advisory Committee has now made preparations for a seminar to be held jointly by AEC and the Department of Labor.

10. Commissioners' Schedules During the AIF Meeting in December, San Francisco

11. Agenda for the Week of November 9

Approved. (Secy)

✓ 12. John Finney's October 5 Letter to the President re Private International Ownership of Production Facilities

The Chairman requested early staff review. (Kratzer-Baranowski-Tremmel)

✓ 13. Letters of Invitation to Polish and Rumanian Atomic Energy Officials (Mr. Hall's November 3 Memorandum)

The Chairman will sign the letters.

14. Sulphuric Acid Procurement (GM's November 3 Memorandum)

The Commissioners accepted the General Manager's recommendation. Action will be held for a matter of 2 weeks or so. (Vinciguerra)

15. Pending Contractual Matters (Report Number 74)

The General Manager said he will hold action on the W. H. Johnston Laboratories, Inc. contract extension pending further review. (Scammahorn)

16. Fire: Aquatics Biology Laboratory Building, Hanford (Mr. Woodruff's November 4, 1964, Memorandum)

Mr. Bloch reported briefly on the fire that occurred yesterday and said a more detailed report will be forthcoming.

17. Strike of NTS Radiation Monitors

18. Commissioners' Luncheon with the Chamber of Commerce

Now scheduled for December 16. (Tremmel)

19. Commissioners' Meeting with National Association of Manufacturers

The General Manager suggested, and the Commissioners agreed, it may be scheduled for next Spring. (Tremmel)

✓ 20. October 15 Letter to the BOB re SNM Requirements

Mr. Hollingsworth discussed briefly the coordination with the DOD and the Commissioners urged continued coordination with the view to an appropriate AEC-DOD letter to the President. (Crowson)
(Copy placed in the 1964 Secret File for the day of November 4, 1964)

21. Formal Recognition of the American Federation of Government Employees

22. Special Briefing

PRESENT

Dr. Seaborg	Mr. Hollingsworth
Mr. Ramey	Mr. Bloch
Mr. Palfrey	Mr. Ink
Dr. Tape	Mr. Abbadessa
Dr. Bunting	Mr. Hennessey
	General Crowson*
	Dr. Fritsch
	Mr. McCool

DISTRIBUTION

Commissioners
General Manager
General Counsel
Secretary

W. B. McCool
Secretary

*Attendance for Item 20.



UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON, D.C. 20545

903858

NOV 4 1964

OFFICE DIARY
GLENN T. SEABORG
Chr USAEC, 1961-72
47033
FOLDER-PAGE

Dear Dr. Billig:

During our recent discussions in Geneva and Vienna, I had the opportunity to invite you to come to the United States at a time convenient to you. It gives me great pleasure to confirm and extend formally this invitation.

While the precise dates can be worked out later, I believe that you will find this coming spring a good time for the visit. You may wish to have one or two of your colleagues accompany you and I am pleased to extend an invitation to them as well. I am certain an interesting and informative visit to our installations devoted to the peaceful uses of atomic energy can be arranged; however, if there are any special points of interest which you would like to see, we would endeavor to include them in your itinerary.

While you are in the United States, I would hope that we could discuss the details of an arrangement which would provide a basis for cooperation in the nuclear energy field. I would also hope that arrangements for the AEC's Atoms-at-Work exhibit to be shown in Poland are well advanced by the time you come to the United States. I know you appreciate the need for advance planning for such an undertaking and therefore will do whatever possible to expedite your Government's approval for this exhibit to be shown.

CONFIRMED TO BE UNCLASSIFIED
AUTHORITY: DOE/DFC
BY E.G. BOGER DATE: 04/1/80
J Diaz 7/1/84

Sincerely,

(Signed) Glenn T. Seaborg

Chairman

Commissioner
Secretariat (2)
GM AGM-77
AGM State (4)
AGMIA Director
AGMRD
AGMA Intellig

Dr. Wilhelm Billig
Government Minister Plenipotentiary
for Nuclear Energy
Palace of Culture and Science
Warsaw, Poland

bcc: Chairman Seaborg (2) AGMO Spec
Commissioner Bunting Pro
Commissioner Paisley
Commissioner Ramey

UNCL. BY DOE
NOV 86

The New York Times
WASHINGTON BUREAU
1701 K STREET, N.W.
WASHINGTON, D. C. 20008

October 5, 1964

The Hon. Lyndon B. Johnson
President of the United States
The White House
Washington, D. C.

Dear Mr. President:

Permit me to offer a suggestion as to a move that I feel we could profitably and constructively make in promoting international cooperation in the peaceful development of the atom. The suggestion is this:

Place one of our gaseous diffusion plants under private, international ownership. A pattern for such an arrangement can be drawn from our experience in the communications satellite field. Thus, the plant could be operated by a privately owned American corporation in which there would be Presidential representation. Ownership would be shared by an international consortium, with the foreign owners represented on a policy-making committee in much the same manner they are now represented on the interim communications satellite committee.

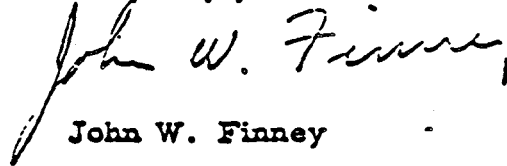
In my opinion such a step would have the following advantages:

1. Remove the last vestige of government control over atomic fuels and place the reactor industry completely on private footing.
2. Provide a future use for one of our expensive gaseous diffusion plants.
3. Promote international cooperation in an important technological field which is finally promising to provide a new source of energy for the world.
4. Promote European-American cooperation, since European countries could be expected to be the principal foreign owners.
5. Promote European union since much of the European participation could be expected to be channeled through Euratom.

6. Indirectly inhibit the proliferation of atomic weapons, since foreign countries would be under no pressure to build or operate diffusion plants of their own.

7. Promote a market for American type reactors since foreign countries would have assurance of a source of supply of enriched uranium fuel. In this connection, the ComSat pattern once again could be followed, with all nations assured of utilization of the plant even though they may not share in the direct ownership.

Sincerely yours,

A handwritten signature in cursive script that reads "John W. Finney". The signature is written in dark ink and is positioned above the typed name.

John W. Finney

October 26, 1964

Dear Mr. Finney:

Thank you for your thoughtful letter of October 5, in which you suggest that a gaseous diffusion plant be placed in "private international ownership." You have outlined some interesting arguments in support of the proposal.

It would seem that you are, in effect, suggesting international ownership and private U. S. management.

I will have this idea given the careful study it merits.

Sincerely,

J. EDGAR HOOVER

Mr. John W. Finney
The New York Times
1701 K Street, N. W.
Washington, D. C.

LBJ:E. C. WELSH:BM:ajm:rah

UNITED STATES GOVERNMENT

Memorandum

UNCL. BY DOE
NOV 86

TO : R. E. Hollingsworth, General Manager DATE: November 5, 1964
FROM : W. B. McCool, Secretary Approved R.E. Hollingsworth
SUBJECT: ACTION SUMMARY OF MEETING 2054, WEDNESDAY, NOVEMBER 4, 1964, 3:50 P.M., ROOM A-410, GERMANTOWN, MARYLAND Date _____
SECY:GF Revised

Original signed by P. F. Hobbs for

Commission Business

1. Minutes of Meetings 2050, 2051, and 2052

The Minutes of Meetings 2050, 2051 and 2052 were approved subject to comments by Commissioner Ramey, and by Commissioner Tape on 2052.

2. AEC 25/311 - Proposed Air Force Safety Rules

Approved. (Crowson)

3. AEC 1161/1 - Arrangements with California for Thorium Seed-Blanket Reactor

Approved, in principle.

The Commission requested the letter to the JCAE include mention of the reactor's breeding qualities and its costs.

The Memorandum of Understanding will not be signed pending discussions with the BOB and the JCAE.

(Pittman)

4. Briefing on LPR Plant 1000 MWe Study

5. AEC 1163 - AEC Role in Formation of MLP

The Commission noted that staff would develop additional safety and security information and review with Commissioners Ramey and Palfrey next week. (Ink)

6. AEC 1169 - Legislative Program for CY 1965

Discussed.

November 5, 1964

The Commission requested rescheduling next week and noted that the Draft Report on Extension of Price-Anderson Indemnity Act would be considered on November 9 prior to discussion with JCAE on November 10. (OGC/Secy)

7. AEC 1087/4 - Radioisotope Availability for NASA Program

Discussed.

The Commission approved the letter to NASA for immediate transmittal with special notification of its relevance to the luncheon meeting November 9. (Baranowski)

8. Savannah River Laboratory (General Manager's October 29, 1964 Memorandum)

The Commission approved the General Manager's recommendation for a minimum viable operating level at SRL. (Quinn)

The Commission also approved transmittal of appropriate letters to SRO and the DOD. (Quinn)

The Commission requested preparation of an appropriate letter to the ACRS for Commission review at Monday's Information Meeting. (Quinn)

Mr. Quinn noted a letter notifying the JCAE would be circulated for Commission review. (Quinn)

9. "Policy for National Action in the Field of High Energy Physics"

Discussed.


The Commission approved the document as a working paper for use in discussions with PSAC. (McDaniel)

The Commission noted, in view of Mr. John Conway's interest, JCAE staff would be given an appropriate briefing at an early date. (McDaniel)

The Commission agreed the portion of the document on specific plans for the 200 Bev accelerator should be revised to recommend authorization for design in FY 1967, and for construction in FY 1968. (McDaniel)

cc:
Commissioners

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NOV 86



AMERICAN EXPORT
ISBRANDTSEN LINES
I N C.

26 BROADWAY, NEW YORK, N.Y. 10004

CABLE "EXPOSHIP" • TELEPHONE 797-3000

October 30, 1964

JOHN M. WILL

CHAIRMAN OF BOARD AND PRESIDENT

Dr. Glenn T. Seaborg, Chairman
United States Atomic Energy Commission
Washington 25, D.C.

Mr. Nicholas Johnson, Maritime Administrator
Federal Maritime Administration
Washington 25, D.C.

Gentlemen:

American Export Isbrandtsen Lines, Inc. wishes to inform you of its active interest in cooperating with the Commission and other Governmental bodies to design, construct and commercially operate a group of nuclear propelled vessels for the offshore trades of the United States at the nearest possible date. We are therefore eager to discuss this proposal with you at your earliest convenience.

We recognize that such a program of Government/Operator cooperation would and should be implemented through both the Atomic Energy Commission and the Federal Maritime Administration so we have taken the liberty of sending this proposal to you jointly. Because of their sincere interest in the development of our Merchant Marine and of atomic energy matters, we are by copy of this letter advising Senator John Pastore, Chairman, Joint Committee on Atomic Energy, Senator Warren Magnuson, Chairman, Committee on Commerce and Congressman Herbert Bonner, Chairman of the

House Merchant Marine and Fisheries Committee.

As you may be aware, American Export Isbrandtsen Lines, Inc. and its predecessors have had a continued interest in the commercial seagoing application of nuclear energy. In 1959 the Isbrandtsen Company, Inc., in conjunction with a reactor and shipbuilding contractors, participated in an investigation of the feasibility of applying nuclear propulsion to a 33,000 ton tanker under a Maritime Administration sponsored study (Contract No. M. A. -1893.) Today, in addition to operating the major passenger liners S. S. Independence, S. S. Constitution, and S. S. Atlantic as well as 42 cargo ships, our Company is the General Agent of the United States Department of Commerce, Maritime Administration, for the operation of the Nuclear Ship Savannah. Finally, in conjunction with our Company's proposal to commence a bi-weekly freighter service between the United States Atlantic Coast and the Far East on Essential Foreign Trade Route No. 12, we have undertaken with our naval architect John J. McMullen Associates, Inc., to make a Maritime Administration financed study of the application of nuclear power to this Trade Route.

Our experience with the Savannah and the existence of an expanding pool of increasingly qualified talent in our seagoing and shoreside organization associated with the Savannah, has generated in us a knowledgeable, practical and enthusiastic attitude toward nuclear propulsion. An advanced concept nuclear reactor with the ability to provide sustained large horsepower outputs at relatively economic costs, will enable us to institute a high speed vessel operation which will not suffer the heavy penalties in fuel cost, fuel weight and volume ordinarily associated with oil fired plants. We believe that Trade Route 12 has the ideal combination of balanced, heavy volume traffic and long sea

distances coupled with the need for increased United States flag participation to justify the establishment of a nuclear powered vessel service of advanced type and superior speed.

Our hope is that the completed route study of Trade Route 12 will verify our preliminary appraisal that a four vessel nuclear powered fleet of 30 knot sustained speed can perform the service every two weeks on the Far East route, which service would require six ships of a conventional 18-1/2 - 20 knot speed. The use of advanced container shipping techniques would seem a natural adjunct of a high speed, limited port service, thus keeping port time for the new vessels to a feasible minimum. The containerized, nuclear powered ship for Far East operation could be supplemented by our own existing Round-the-World (Eastbound) Service which ranges through the area, with Round-the-World vessels being both feeder and distributor to lesser ports in the Far East. Such ports could not be served economically by the large, fast nuclear ships. We trust the details of the final operation will merit Government support as an economically feasible means of capturing cargoes from foreign flag carriers who now preponderate on this critical trade route.

With the United States offsetting the higher capital and operating cost associated with this pioneering endeavor in commercial nuclear marine applications, we are willing to commit ourselves to an immediate program of nuclear vessel construction for service on Trade Route 12 using a pressurized water reactor.

American Export Isbrandtsen Lines, Inc. would expect to bear its fair share of the cost of the vessels and would contribute an amount towards the nuclear ships which would equal the expected cost of ships of conventional speed, type and

design. Because of the financial expense which might result from a nuclear incident, however unlikely in anticipation, it would naturally be necessary for us to receive nuclear indemnity insurance protection of the type provided by the Atomic Energy Act, which indemnity has been extended to us in our capacity as General Agent for the Nuclear Ship Savannah.

We would expect to have full responsibility for the design and construction of the nuclear powered ships under circumstances where we would cooperate with the Maritime Administration in the development and building of the ships exactly as we and other operators have done in the fulfilling of our vessel replacement obligations to date. The nuclear aspects of the vessels would be determined in complete liaison with the Atomic Energy Commission. It should be understood that our Company would expect to be fully licensed to operate the reactors and that the overall program of nuclear ship operation would be evolved in a context of minimum regulation consistent with both public safety and with our own mutual desire to foster the expansion of nuclear vessel application in our merchant service. The physical arrangement of the vessels and their reactors, and manning and regulatory practices with reference thereto, should emphasize mechanization and maximum economy in operating cost.

We are cognizant of advanced gas cooled reactor designs and associated programs for prototype testing of various reactors. However, after deliberation, we do not feel that a commercial vessel application need be delayed until such a prototype program has been completed, since it appears that pressurized water reactors are available which meet proven design criteria. We understand that the vendors of such reactors are prepared to offer guarantees as to cost, weight and delivery, as well as the assurances on fuel cost, maintenance and availability

of service. These are critical to our position as the eventual owner and operator of the ships. Although we would welcome the firm answers, which might result from a comprehensive prototype test, we think it more desirable to advance the nuclear progress of the United States and the Atomic Energy Commission by a commercial, economically feasible application at this time under circumstances in which the vessels can be adequately tested during and after construction but before delivery to the operator.

Since this direct application may require extensive testing or otherwise experience construction delays due to the uniqueness of the reactor or the propulsion system, we believe it prudent to have the ships constructed for the Government's account initially in a manner comparable to vessel construction under Section 502 of the Merchant Marine Act. We would purchase the ships upon completion of such trials as appear warranted to permit their licensed operation by us. We do not consider it prudent to advance our funds to a shipyard for construction progress payments because of this hazard of potential delay, but we would be willing to escrow or otherwise segregate monies in our reserve funds for use on the nuclear vessel purchase. Indeed, we would be willing to execute a contract with the United States prior to commencing actual vessel construction which incorporated this or a comparable financial arrangement and such other terms and conditions for transfer of title that may be mutually agreed upon.

As a related consideration, we wish you to be informed that our Company is prepared to undertake discussions promptly with the Maritime Administration to assign the N. S. Savannah with a suitably reduced manning scale as part of an interim Trade Route 12 commercial operation. We would operate the Savannah v814

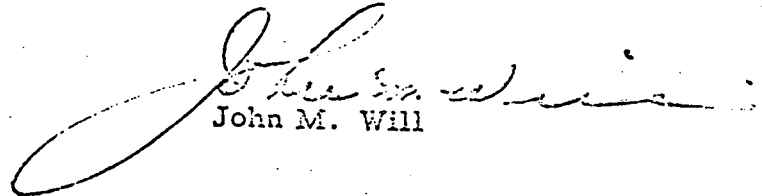
of our new 18-1/2 knot engines aft freighters. With the cooperation of the Government and other interested parties, we hope to achieve economies which may permit substantially reduced Government expenditures for the continued active demonstration of this present effort in Merchant Marine nuclear application. The interim operation which we envision will have the advantage of insuring the acceptability of nuclear powered surface craft in the major ports on Trade Route 12 through repeated visits and exposure by the Savannah. Most important, the transition will permit us to develop traffic levels, both inward and outward, which will make it possible to sustain and support the expensive nuclear powered fleet which our proposal anticipates. We do not believe that it would be prudent for either the United States or American Export Isbrandtsen Lines to make the large investment in money and effort which this proposal anticipates unless there is some kind of orderly preparation on Trade Route 12 for the nuclear and commercial level of traffic activity which will eventually result.

In conclusion, gentlemen, we must cite the impressive advances in nuclear application which are now a matter of history as demonstrated by your own commercial central station program and the Navy's submarine and surface craft operations. We jointly share the pride of the Atomic Energy Commission and the Department of Commerce in the successful, albeit delayed voyages of the N.S. Savannah. We sincerely believe that now, rather than in 1970 after the development of prototypes, is the time for Government and our private marine industry to cooperate in the next logical step in the pilot program begun by the Savannah. American Export Isbrandtsen Lines is willing to proceed now with all proper speed to risk its resources on the flight of vessels which is the subject

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of this proposal

Sincerely yours,



John M. Will

cc: Senator John Pastore
Senator Warren Magnuson
Congressman Herbert Bonner

NOV 5 1964

Dear Admiral Will:

Thank you for your letter of October 30, 1964 to the Maritime Administration and to us expressing your interest in a specific nuclear maritime program. I congratulate you on the initiative you have taken in coming forward with this proposal.

It is obvious that you have given much thought to the myriad problems which would be involved in implementing any decision to initiate this new form of maritime service. I believe that staff discussions to exchange thoughts regarding the developmental aspects of bringing this about would be highly desirable.

I have asked Dr. Frank E. Pittman, Director, Division of Nuclear Development, to make arrangements for such discussions at an early date.

Sincerely yours,

Chairman

Admiral John M. Will, President
American Export Steamship Lines, Inc.
25 Broadway, New York, N. Y. 10004

cc: Senator John Pastore
Senator Warren Magnuson
Congressman Herbert Brown

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11/5/64

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Youth Conference on the Atom. Transportation was provided to the Sheraton-Chicago Hotel by the AEC.

I had a press conference at 7:15 p.m. which included an interview on the CBS-TV channel.

I gave the dinner speech entitled, "Transuranium Elements," at 7:45 p.m., in the Grand Ballroom of the Sheraton-Chicago Hotel, to the attendees of the National Youth Conference on the Atom, which consisted of 400 specially picked high school students and 200 teachers from all over the U.S. The speech was extremely well received and many students and teachers wanted my autograph and pictures taken with me. A question and answer period followed my speech. I was introduced by Thomas J. Galligan, Jr., Executive Vice President, Boston Edison Company and General Conference Chairman.

We stayed overnight in the Sheraton-Chicago Hotel.

Friday, November 6, 1964 - Chicago, Illinois, Washington, D.C.

At 8:30 a.m. Commissioners Gerald Tape, James Ramey, John Palfrey, Mary Bunting, members of the staff, and I attended the Field Managers' meeting held at the Argonne National Laboratory. Among those present were L. P. Gise (Albuquerque Operations Office), E. L. Van Horn (Brookhaven Office), A. E. Jones (Grand Junction Office), W. L. Ginkel (Idaho Operations Office), J. E. Reeves (Nevada Operations Office), W. M. Johnson (New York Operations Office), J. E. Trevis (Richland Operations Office), E. C. Shute (San Francisco Operations Office), R. C. Blair (Savannah River Operations Office), S. W. Nitzman (Schenectady Naval Reactors Office), Lawton D. Geiger (Pittsburgh Naval Reactors Office), and K. A. Dunbar (Chicago Operations Office). S. R. Sapirie (Oak Ridge Operations Office) missed the meeting due to an automobile accident, which was not serious but substantial. I gave a short introductory talk on various national and international AEC affairs. I mentioned that Bob Hollingsworth is the new General Manager of the Commission. Relations with field offices were discussed and mutual criticisms were given.

I had lunch with the above group. After lunch I visited the ANL Chemistry group--Winston Manning, Paul Fields, Victor Viola, Darrell Osborne, Joseph Katz, Mark Fred, Oliver Simpson, Arnold Friedman, Richard Diamond, Donald Stewart, and others. I talked especially to Fields and Friedman about their results on observations of heavy isotopes produced in recent Livermore (Par) and Los Alamos (Barbel) explosions. The results are very encouraging.

At 4:35 p.m. Commissioner John Palfrey, Arnold Fritsch and I left Chicago, Illinois, on American Airlines Flight No. 492 and arrived in Washington, D.C. at 7:45 p.m. One engine went out en route.

Saturday, November 7, 1964 - D.C.

I worked at the H Street office until after lunch.

At 10:30 a.m. I called Laura Fermi (of Chicago, Illinois). I reached Laura at the University of Chicago hospital, where she is a patient with pneumonia. I told her that the NS Savannah will be in Naples, Italy, on December 2nd, which is the anniversary of Enrico's successful experiment and that we invite her to be there for a small ceremony. I said there would be two ways of getting there, i.e., go by ship from New York on November 16th, or fly to Barcelona and board the Savannah there on November 30th. Laura said she would very much like to do this and appreciated our thoughtfulness, but unless the situation changes she is afraid she

will be unable to. However, she will check with her doctor and let us know.

Lewis Strauss called again concerning my possible interest in the presidency of George Washington University; we will discuss this at lunch next week.

At 1:35 p.m. I had lunch with Commissioner Gerald Tape at the Roger Smith Hotel.

I talked with Jim Hill about his future plans. He plans to retire from the Air Force early next year and will stay on as my assistant until March. During this time he will be looking for another position in industry or government. I offered him the opportunity to stay on as my assistant beyond March if he should want to do so.

I read journals and papers during the remainder of the afternoon at home.

Sunday, November 8, 1964 - Home

I read journals and AEC papers during the day.

Albert Ghiorso had dinner with us. He said that he will be glad to collaborate with me in research in the transuranium field if I should decide to come back to it at Berkeley after my tour of duty with the AEC is completed.

Monday, November 9, 1964 - Germantown

At 10 a.m. I met with members of the Transplutonium Program Committee (Bob Penneman, Al Ghiorso, Dick Hoff, Dick Dodson, Alfred Chetham-Strode, Don Ferguson, Clark Ice and Paul Fields) and gave the introductory remarks. One issue that came up during the meeting is the division of plutonium-242 between the HFIR and the new Savannah River high flux programs for neutron irradiation to produce large quantities of heavier isotopes.

At 12:45 p.m. I hosted our periodic AEC/NASA luncheon in the Executive Dining Room. Those who attended included Commissioners James Ramey, John Palfrey, Gerald Tape, Mary Bunting; Arnold Fritsch, Robert Hollingsworth, Edward J. Bloch, George Quinn, S. G. English, E. E. Fowler, F. P. Baranowski, A. J. Vander Weyden (AEC); James E. Webb, Hugh L. Dryden, Robert C. Seamans, Admiral W. F. Boone, R. L. Bisplinghoff, George L. Simpson, Jr. (NASA); and Harold B. Finger (AEC/NASA). James Webb talked to about 50 senior staff members in the Commission Meeting after the luncheon. We then discussed, in smaller groups, our capability to produce strontium-90, polonium-210, plutonium-238, and curium-244 for NASA space power needs and emphasized the need for long-range planning.

Colin MacLeod called me to say that it has been decided that Hornig will sign the U.S.-USSR Desalting Agreement during his present trip to the Soviet Union. I objected saying that I thought the operating agencies should do the signing. I called Bromley Smith, in Bundy's office, but they will not change the plan.

At 4:20 p.m. I presided over Information Meeting 423 (notes attached).

At 5:30 p.m. the Commission met with John Landis (of Babcock and Wilcox) who proposed a plan to convert the Yankee Reactor to Spectral Shift operation by 1970 for about \$6 million.

I wrote to my mother sending her photographs of our European trip. I also sent a letter to Peter relating our various activities.



UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON, D.C. 20545

COPY NO. 2
November 10, 1964

INFORMATION MEETING 423

UNCL. BY DOE
NOV 86

4:20 p. m., Monday, November 9, Room A-410, Germantown

1. Personnel Appointment

The Joint Committee is to be informed. (Erlewine)

2. JCAE Request for ORNL and GAC Advanced Converter Studies

The Commissioners noted that these studies, together with information on the revised analyses and the LPR Plant 1000 MWE Study, would be provided the JCAE. (Erlewine)

3. Invitation to Visit N. S. SAVANNAH, December 2

The Chairman reported he had invited Laura Fermi to meet the N. S. SAVANNAH in Naples on December 2.

4. AIF Subcommittee Meeting on Nuclear Merchant Ship Propulsion in Spring, 1965

Noted.

5. Cable from Amembassy, Luxembourg, re JCAE Staff Participation in Security Survey

Noted.

6. Dr. Libby's November 5 Letter re Desalination Program.

Noted.

7. Troop Participation at the SULKY Event (General Crowson's November 4 Memorandum)

The Commissioners accepted the General Manager's recommendation. (Crowson)

8. Public Information Plan for Launching of SNAP-10A (Mr. Brown's November 4 Memorandum)

The Commissioners accepted the General Manager's recommendation and requested continued close review of the program schedule. (Clark-Pittman)

9. Colin MacLeod's, OST, Call re Signing of the U. S. -USSR Desalination Agreement

The Chairman said he was now informed Mr. Hornig would sign the agreement during his visit to the USSR. The Commissioners discussed the desirability of signing the agreement later in the month. The Chairman will consider calling Mr. Bundy.

10. Export of Computers to France (General Manager's November 6 Memorandum)

The Commissioners requested preparation of an appropriate memorandum to Mr. Bundy. (Kratzer-Crowson)

11. AEC 811/122 - PLOWSHARE Scientific Program

The Chairman suggested review in light of proposed FY 1966 Funding. (Kelly- Abbadessa)

12. Mr. Louis H. Roddis' November 5 Letter re Implementation of Private Ownership Legislation

The Commissioners noted appropriate staff action will proceed. (Tremmel)

13. Commissioner Ramey's Discussion with Mr. Charnoff, AIF, re AEC Regulations

Mr. Ramey reported on his meeting with Mr. Charnoff and Mr. Bloch said staff is preparing recommendations for Commission consideration. (Quinn)

14. PWR Maritime Program (Dr. Pittman's November 9 Memorandum)

Mr. Ink reviewed the proposed alternatives and the Commissioners agreed that staff in its meeting with JCAE staff on November 10 could point out that the Commission is considering these various alternatives. The Commissioners agreed the evaluation board should continue to withhold recommendations on the UNC and B&W proposals until the maritime reactors program has been discussed further with the Commission. (Pittman)

15. Higher Isotope Program (General Manager's November 2 Memorandum)

The Commissioners requested revision of the letter to the JCAE. The Chairman requested that the Commissioners be informed individually of the staff discussions with the ACRS following the forthcoming meeting. (Baranowski)

16. NOVAWOOD Program (General Manager's November 6 Memorandum)

The Commissioners accepted the General Manager's recommendation. (Fowler)

17. Price-Anderson Indemnity (GM-DR November 4 Memorandum)

The matter is to be re-scheduled for Commission consideration following review with JCAE staff. (GC)

PRESENT

Dr. Seaborg
Mr. Palfrey
Mr. Ramey
Dr. Tape
Dr. Bunting

Mr. Price***
Dr. Beck***
Mr. Lowenstein*
Mr. Spingarn***
Mr. Shapar***

Mr. Bloch
Mr. Ink
Mr. Vinciguerra
Mr. Schur
General Crowson*
Mr. Fowler**
Col. Hill
Dr. Fritsch
Mr. McCool
Mr. Hoyle

DISTRIBUTION

Commissioners
General Manager
General Counsel
Secretary

W. B. McCool
Secretary

*Attendance for Item 10
** Attendance for Item 16
*** Attendance for Item 17

Tuesday, November 10, 1964 - D.C.

AT 10 a.m. Commissioners Gerald Tape, John Palfrey, Mary Bunting and I met with representatives of the Associated Rocky Mountain Universities--President William E. Morgan (Colorado State University, Chairman of ARMU Executive Committee), President Joseph R. Smiley (University of Colorado), President A. R. Olpin (University of Utah), and Adrian R. Chamberlain (Colorado State University). We discussed increased ARMU involvement in the National Reactor Testing Station (NRTS). I said they couldn't take over running reactors like the Materials Testing Reactor, which they would like, due to financial problems, but the AEC welcomes increased participation at the NRTS and LASL.

At 12:45 p.m. I hosted a luncheon, in the Cabinet Room of the Mayflower Hotel, in honor of Francis Perrin (High Commissioner, French AEC). Present were Perrin, Bruno de Leusse (Minister), Jacques Morizet (First Counselor), Pierre Flaquet (Atomic Energy Attache). From the AEC were: Palfrey, Ramey, Tape, Bunting, John Hall, Spofford English, Myron Kratzer, Frank Pittman, Paul McDaniel, William Voight, Harold Bengelsdorf, James Ammons, Edward Ferguson and Arnold Fritsch. Charles Thomas from the Department of State, John Conway (JCAE) and Robert Barlow from the White House also attended.

Dr. Perrin sat between Commissioner Palfrey and me and across the table from Commissioner Tape. During the course of the luncheon, conversation which often included the four of us discussed the following: Perrin told us that the French are going to continue the underground testing of nuclear weapons at their test site in Algeria until 1966, under an agreement with Algeria which expires at that time. This agreement will apparently allow the French to continue testing until 1966, provided there is no great leakage of radioactivity that might disturb the Algerians. They plan to test weapons of yields as large as 100 to 200 KT, which, of course, would have thermonuclear components. They test in tunnels, which go some 400 to 500 meters into a granite mountain which is 800 meters high. The testing is done at the end of horizontal shafts, with turns in them, in such a manner that the explosion cuts off the shaft so that radioactivity cannot leak out. Nevertheless, on one occasion they had a test which leaked 1 to 2 percent of the fission activity, and on occasion they observed the leakage of gaseous products through various parts of the mountain.

Perrin said that they expect to begin testing in the atmosphere in the Pacific in 1966. These will be weapons in the megaton range, and this will be done before they have weapons grade U-235 from Pierrelatte. He said he doubted that de Gaulle would sign any test ban treaty for at least five years, that is, until they have had a chance to test a number of megaton weapons. He said that Pierrelatte is starting up without trouble and they should begin having some 2% product within a month or two. A second stage enriches product to about 5%, a third stage to about 20%, and a fourth and final stage to weapons grade. (These are approximate figures from memory of the conversation.) He said that there were some small problems connected with handling of materials, the connections of one part of the plant to another, and the final stage, but that these should be rather readily solved.

We also discussed the matter of reactor safeguards. He said that France is in favor of safeguards for the prevention of proliferation of nuclear weapons. He said that they are not planning to apply safeguards to the nuclear power plant which they may build in Spain near the French border, in cooperation with Spain, using natural uranium from Spain. The arrangements for this project have not yet been completed. He feels that, since the natural uranium comes from Spain, they don't have much of a basis on which to insist on safeguards. They would, however,

apply safeguards to any chemical processing plant that might be built in Spain with their assistance. I asked whether France would be willing to accept IAEA safeguards on a plant like SENA, as a substitute for Euratom safeguards. He said that they prefer U.S. safeguards first, and then Euratom safeguards as second choice, and IAEA safeguards would be their last choice. (He said to me in a meeting before lunch that France objects to the transfer of the supply of fissionable materials function from the present bilateral arrangement to Euratom.)

He said that the chief reason why France objects to IAEA safeguards is the possibility of the inspectors coming from a country like Russia, to which they feel that they could not openly object. He said that they feel that a country like Israel could easily require that the safeguards inspectors not be Arabs, but it would not be that simple for the French to object to Russians. He said that France feels they should be treated just like England on the safeguards question because they are a nuclear power just like England. Thus, they won't buy natural uranium from Canada because Canada insists on safeguards for France, but doesn't require safeguards for England.

He said that he thinks the Chinese could not have produced the weapons grade U-235 for their weapon and that they probably used some of the low enrichment (2%?) U-235 furnished for their 1957 Peking research reactor by Russia as a starting point. He feels that they may have used either the electromagnetic method or the gaseous centrifuge method for the enrichment of this material to weapons grade level. He said that the Russians furnished about 360 KG of low enrichment uranium for the first reactor core, and may have furnished a replacement core or two, which could have been diverted for this purpose. He told us that the French had not demanded safeguards on the uranium which they furnished for the DIMONA reactor but that they had an agreement with Israel that it would be used only for peaceful purposes.

We also discussed the MLF, and Perrin explained some of the French objections. He felt that the best solution would be a joint British and French nuclear alliance. When we pointed out that this would not really take care of the Germans and the Italians, he said he felt that the Germans should simply be made to adhere to their treaty obligations not to produce nuclear weapons, and he felt the Russians would insist on this to the extent that it would be impossible for the Germans to make nuclear weapons. (In a conversation just before lunch, Commissioner Tape asked Pierre Falquet, French Scientific Attache, whether the press had queried him about the source of U-235 for the Chinese bomb. Falquet replied that the Embassy had received inquiries; however, he added that Valentin A. Revin, USSR Scientific Attache, had told him that the Russians did not supply the U-235 for the Chinese test.)

I decided to have Dwight Ink go with the Desalting team to USSR, leaving this Saturday, because Commissioner Ramey has decided not to go.

I sent my biweekly letter to the President (copy attached).

Wednesday, November 11, 1964 - D.C.

Although today is a holiday, I worked at the "H" Street office until lunch time.

At 1:30 p.m. I had lunch with Lewis Strauss at the Metropolitan Club. We discussed my possible interest in the presidency of the George Washington University. The position would pay \$40,000, with house furnished plus entertainment allowance and servants. A program to build up the university, with the help of a financial campaign, would be undertaken. I told him that I am probably not interested in accepting such an appointment, but I will call within a week or two to let him know.

November 10, 1964

PERSONAL AND CONFIDENTIAL

Dear Mr. President:

I have the pleasure of submitting to you the regular biweekly report on significant developments in the atomic energy program.

1. Interest in Nuclear Merchant Ships

American Export Isbrandtsen Lines (AEIL), general agent for operation of the Nuclear Ship Savannah, recently submitted a letter to Maritime Administrator Nicholas Johnson and me expressing interest in a joint venture for the construction of a fleet of four nuclear powered merchant vessels to be used on the trade route from New York to the Far East.

AEIL believes that a four vessel nuclear powered fleet of 30 knot sustained speed can perform the service every two weeks on the Far East route, a service which would require six ships of conventional 18-20 knot speed. The use of advanced container shipping techniques would keep port time for the new vessels to a minimum, and it is expected that such a fleet would offer an economically feasible means of capturing cargoes from foreign flag carriers who now preponderate on this critical trade route.

By a letter dated November 6, the Commission informed AEIL of its readiness to discuss the proposal in more detail, and is making arrangements to do so in the immediate future. The Maritime Administration also has expressed its interest in the proposal, but has pointed out to AEIL that it is currently in the process of conducting a series of trade route studies and, until such studies are completed, would not be able to speak definitively to the proposal. We understand that the Maritime studies should be completed by mid-December.

2. Withdrawal of Application to Construct a Nuclear Power Plant at Bodega Head, California

The President of Pacific Gas and Electric Company (PG&E) announced on October 30 that PG&E would withdraw its application to construct a 325 MWE nuclear power plant at Bodega Head, approximately 50 miles north of San Francisco. The decision to withdraw was taken in light of the report issued on October 27 by AEC's Director of Regulation, whose staff concluded that "Bodega Head is not a suitable location for the proposed nuclear power plant at the present state of our knowledge." On the same day, the AEC also issued the report from its Advisory Committee on Reactor Safeguards (ACRS) which concluded that there is reasonable assurance the proposed reactor could be constructed and operated at the Bodega Head site without undue hazard to the health and safety of the public.

In an editorial "Bodega Decision May be a Boon" in its November 5 issue, NUCLEONICS WEEK noted: "The decision by AEC's regulatory staff on the Bodega plant may prove to be a boon to the nuclear power industry despite the temporary setback that it represents. ...The decision on Bodega, although it is only one decision, should give a substantial boost to AEC's stock in the public mind. It should be clear that AEC can make a decision that is unpopular in many segments of the industry. Because one of the obstacles that the industry has to overcome is gaining public acceptance for reactor siting, this should help the cause of nuclear power in the long run."

3. Strike of Radiation Monitors at the Nevada Test Site (NTS)

The Radiation Monitors, members of the International Brotherhood of Electrical Workers, have been on strike at the NTS since November 3. The weapons test program has thus far not been affected by the strike although the two events scheduled for November 12 and 13 probably will be delayed for the duration of the strike. The strike has not affected operations in the nuclear rocket propulsion program. My staff is maintaining close contact with Mr. Bundy's staff to keep them currently informed of developments. (CONFIDENTIAL R/D)

4. Labor Negotiations in Nevada

Continuing efforts are being made to stabilize the labor situation at the Nevada Test Site, including the Nuclear Rocket Development Station (NRDS).

These efforts involve principally:

- a. The negotiating of a construction project labor agreement to which the AEC contractors, Reynolds Electrical & Engineering Company (REECO) and Catalytic Construction Company (CATCO), would be parties and which would establish conditions for all on-site construction.
- b. The negotiation by REECO of an agreement applicable to operations and maintenance work performed by REECO personnel. This will require definition of such operations and maintenance work, its separation from construction work, and establishment of non-construction conditions of employment for operations and maintenance employees.

In the proposed construction project agreement, the contractor negotiating committee is seeking agreement on certain uniform conditions of employment for all crafts, on effective procedures for resolution of jurisdictional and other disputes without resort to strikes, and on other stabilizing features. It is proposed that the agreement be effective July 1, 1965, to coincide with the anniversary dates of many of the existing local agreements.

Negotiation of the agreement for REECO operations and maintenance has not yet begun but the objectives have been discussed with labor representatives and the matter will be pursued at an appropriate time in relation to the other negotiations.

It is anticipated that the labor negotiations will probably be both difficult and protracted. During this period it is important that the contractors should have latitude to resist demands and pressures, including strike threats and strikes for adjustments or grievances and other conditions of employment at the site.

5. Project Handcar

Project Handcar was executed successfully on November 5 at the AEC's Nevada Test Site. This experiment for the Plowshare Program was conducted for the purpose of studying the effects of a deeply buried nuclear explosion (1,320 feet) in carbonate rock.

Preliminary data indicate that the expected yield of approximately 10 KT was probably achieved. No venting of radioactivity to the atmosphere was detected following the detonation. Information from this experiment should be of value in designing future nuclear explosive experiments and applications in carbonate rock, such as petroleum, natural gas and mineral recover, and excavation. The Handcar event was witnessed by approximately 35 mining and gas industry representatives under an AEC official observer program.

6. Proposed Reactor in United Arab Republic

The President of the United Arab Republic's Atomic Energy Commission recently announced that tenders would be invited for a 150 MWE reactor also capable of desalting 20,000 cubic meters of sea water per day, to be located at Borg El Arab, 30 km west of Alexandria. He added that the Government of the U.A.R. had already "reserved" approximately \$7 million for the construction of the project.

Respectfully submitted,

Glenn T. Seaborg

The President
The White House

I took Dianne and her two friends, Abbe Kaufmann and Priscilla Cobb, along with Dave, to the zoo.

Thursday, November 12, 1964 - Germantown

I received a letter from Stephen F. Dunn (President, National Coal Association) asking to see the pre-publication report of staff recommendations concerning the renewal of the Price-Anderson Act to which I agreed.

At 9:55 a.m. I presided over Regulatory Information Meeting 130 (notes attached).

At 11:35 a.m. I presided over Commission Meeting 2055 (action summary attached).

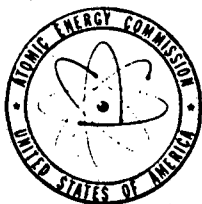
At 12:30 p.m. Howard Brown and I had lunch with John McCone at the CIA office building. I decided that Brown would represent the AEC at the U.S. Intelligence Board meeting during the next few weeks, replacing Traynor, at which time we will decide on a permanent representative. We told McCone we feel that the AEC should continue to have full representation on the USIB. The question of what to do about Charles Reichardt is difficult since he is not carrying out his function very well in the view of McCone and others, including the Commissioners.

John Finney's article, "Is the AEC Obsolete," appeared in Reporter today. It is full of inaccuracies, but probably not as bad as it might have been.

At 4 p.m. I received a telephone call from Dean H. Benedict Gotaas (Dean, Technical Institute, Northwestern University, Evanston, Illinois), and Frank Scott. Ben Gotaas introduced Frank Scott. Scott said he is chairman of the Washington Award Commission and that I was named the recipient of the 1965 award. This commission was established in about 1919, sponsored by the Western Society of Engineers, having representatives from the major national engineering societies. Annually the commission elects a recipient of this award in the field of engineering and science. The award is named after George Washington. The first recipient was Herbert Hoover; others were Philip Sporn (1963), John Slasick (1964), James Killian (1959), Arthur Compton and Vannevar Bush. He said they hoped I would agree to accept the award, and I said it would be an honor to do so.

They wish to present the award during the week of Washington's Birthday, which coincides with National Engineers' Week. Washington is the patron saint of engineers. They would like to have me be present to accept the award and then give an address. This event will take place at the Furniture Club in Chicago, and they would prefer the dates of Wednesday, February 24th, or Tuesday, February 23rd. This will be an evening dinner event, attended by some 500 to 800 people, many of them from the various national engineering societies. I agreed to the date of February 24th, unless I let them know within the next few days that I would prefer the 23rd.

Mr. Scott said they would like to know the topic of my talk as soon as I can give it to them. He suggested some possible topics: Energy Conversion, Energy and (or, in) Society, Science in (or, and) Engineering. He said that any message that I would select would be acceptable. He did mention that the talks tended in the past to relate science and engineering to society. Mr. Scott would like a confirmation of the date and the title of my talk, within two weeks, or sooner. Then they will send out about 20,000 announcements. I said I would appreciate having some advance notice on the announcement. He said he would confirm this to me in a letter immediately, with background information. He also mentioned that ladies will be present at the award ceremony and said Mrs. Seaborg is invited. I said it is ^{3:30} not likely she will attend. He also said they will arrange to meet my plane upon arrival in Chicago.



UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON, D.C. 20545

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NOV 86

Copy No. 2
November 12, 1964

REGULATORY INFORMATION MEETING 130
9:55 a.m., Thursday, November 12, 1964 - Chairman's Conference Room, A-457

1. Report on the BONUS Reactor Fuel Element Rupture
2. National Bureau of Standards Case

Mr. Price discussed briefly the status of the case and the Commissioners agreed to meet with the NBS and AEC staff. (DR)

3. Negotiations with the State of New York re Article VII of the AEC-New York Agreement (Mr. Price's October 27 Memorandum)

The Commissioners accepted the Director of Regulations' s recommendation. (DR)

PRESENT

Dr. Seaborg Mr. Price
Mr. Palfrey Mr. Doan
Mr. Ramey Mr. Hennessey
Dr. Tape Dr. Fritsch
Dr. Bunting Mr. McCool

DISTRIBUTION

Commissioners
Director of Regulation
General Counsel
Secretary

W. B. McCool
Secretary

UNITED STATES GOVERNMENT

Memorandum

TO : R. E. Hollingsworth, General Manager
DATE: November 12, 1964
Approved: R.E.Hollingsworth

FROM : W. B. McCool, Secretary
Date: _____
*Original signed
W. B. McCool*

SUBJECT: ACTION SUMMARY OF MEETING 2055, THURSDAY, NOVEMBER 12, 1964,
11:35 A.M., ROOM A-410, GERMANTOWN, MARYLAND

SECY:AJ

Commission Business

1. AEC 152/175 - Costs for Civilian Power Reactor Program

Discussed.

I will reschedule AEC 152/175 for Tuesday, November 17, 1964.

2. Commercial Chemical Processing and FPCE-200 Area Proposals for Hanford (See Mr. Bloch's November 10, 1964 Memorandum)

The Commission had no objection to your recommendation.
(Bloch)

3. AEC 881/68 - Competition in Commercial Chemical Processing

Discussed.

The Commission accepted your recommendation that staff postpone its meeting with General Electric Corporation. (Bloch)

I will reschedule AEC 881/68 for an early Commission meeting.

4. AEC 1169 - Legislative Program for FY 1965

The Commission requested further consideration of the precise language, but agreed the General Counsel should identify for the BOB the subject matter of AEC's legislative program for 1965.
(Hennessey)

Commissioner Palfrey requested a brief status report on the reaction of other agencies to possible changes re the RD category for use in review of this matter with staff. (Hennessey/Marshall)

5. AEC 751/340 - Expiration of Agreements for Cooperation with EURATOM Member States

Deferred.

I will reschedule AEC 751/340 for an early Commission meeting.

cc:
Commissioners

I presided over Information Meeting 424 (notes attached). A copy of a proposed letter to Bundy regarding the Nevada Test Site Labor situation which we discussed and which was subsequently sent, is attached.

Friday, November 13, 1964 - Washington, D.C. - Houston, Texas

At 9:45 a.m. I presided over Information Meeting 425 (notes attached).

At 10:30 a.m. the Commission was briefed by Robert Frosch of the Advanced Research Projects Agency (ARPA), DOD, concerning limits of and proposed improvements in seismic detection that might be used with a Comprehensive Test Ban; an array being built in Montana will serve as a prototype for many such arrays in a possible sensitive system around the world.

At 12:30 p.m. I had lunch with Dick Hewlett and John Napier, at the Roger Smith Hotel, to discuss conditions and terms for giving my interview and other material to the Kennedy Library. Much of it will be in a secret category and will be made available to users only with my permission.

I was photographed for Business Week and if they choose to use the photograph it will possibly appear on the cover of next month's issue .

At 2:30 p.m. the Commissioners and I met with the Advisory Committee on Reactor Safeguards (ACRS) to discuss their impending report on the use of the Savannah River reactor for high flux operations on a demonstration basis and to make californium-252. The ACRS is reluctant to approve this because they say it must be a military necessity. I asked that they give the problem back to the AEC and write their report in such a way that the AEC will be free to make a determination on the basis of the national interest, which they agreed to do.

At 5 p.m. I left Washington, D.C., on Delta Airlines Flight No. 975 and arrived in Houston, Texas, at 8 p.m.

I stayed overnight at the Rice Hotel.

Saturday, November 14, 1964 - Houston, Texas

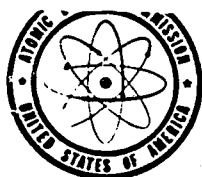
I attended the meeting of the Welch Scientific Advisory Board all day and a dinner and evening meeting with the Trustees and Board. There was full membership in each case. I still tried to convince the Trustees to approve the building and support of a Research Institute. Bullard still opposes, but he may agree to an independent evaluation by the National Academy of Sciences.

At home, Eric had his 10th birthday party today, attended by about 15 of his friends. Helen took a picture of the group in our front yard.

Sunday, November 15, 1964 - Houston, Texas

At 8:20 a.m. I left Houston, Texas, on Eastern Airlines Flight No. 514 and arrived in Washington, D.C. at 12:50 p.m.

I read AEC papers, worked on my Atomic Industrial Forum speech, my forthcoming "Science in Action" film script, and a letter to the New York Times commenting on their editorial of last week which suggested that another organization than the IAEA should administer safeguards. I am disagreeing with this, but complimenting them on the other aspects of their editorial.



ATOMIC E
WAS

Copy No. 2
November 12, 1964

UNCL. BY DOE
NOV 86

INFORMATION MEETING 424

10:10 a.m., Thursday, November 12, 1964 - Chairman's Conference Room, A-457

1. Interdepartmental Energy Study (November 6 Draft Report)

The Chairman noted his comments will be sent to the Commissioners and the General Manager. Mr. Ramey requested staff review.
(English)

2. AEC Annual Report (Mr. Quinn's November 9 Memorandum)

The Chairman noted he is reviewing the draft and suggested the Commissioners review the report with particular attention to the listed portions:

- a. Safeguards -- Mr. Palfrey
- b. Weapons -- Dr. Tape
- c. Advanced Converters -- Mr. Ramey
- d. Regulatory Program -- Messrs. Ramey and Palfrey
- e. Educational Programs -- Pages 69-87, Part IV -- Dr. Bunting

(Slaton)

3. Letter of November 9 from Stephen Dunn, National Coal Association

The Chairman requested recommendations. (GC)

✓ 4. Proposed Letter to Mr. Bill Moyers, White House Staff, re International Operation of Gaseous Diffusion Plants

The Chairman requested review by Commissioners Bunting and Palfrey and further discussion on Monday. (Secy)

5. Schedule of NTS Events

6. NASA Prospectus

The Chairman noted receipt of the prospectus from Mr. Seamans and said it will be circulated to the Commissioners. (Fritsch)

7. U. S. - U. S. S. R. Desalting Agreement (Mr. Kratzer's November 10 Memorandum)

The Commissioners discussed briefly the desirability of retaining the "whereas" clause and adding language to paragraph VI, providing for participation of the IAEA in exchange visits. The Chairman telephoned Colin McLeod, OS&T, to inform him of the Commission's thinking in this regard and requested appropriate follow-up with Mr. Llewellyn Thompson. (Kratzer)

8. GA-RG&E Negotiations (General Manager's November 9 Memorandum)

Staff may proceed subject to clarification of paragraph 2, page 2, and clearance of the language with Mr. Ramey. (Bloch)

✓ 9. Proposed Letter to the President re Advanced Converters

The General Manager will circulate the proposed letter for review. (Vinciguerra)

10. Proposed Visit by the French on Orientation of SNAP Technology (General Manager's November 9 Memorandum)

The Commissioners accepted the General Manager's recommendation. (Kratzer)

11. Procurements by SLAC from Varian Associates (General Manager's November 10 Memorandum)

The Commissioners accepted the General Manager's recommendation and requested review of the SAN-Palo Alto relationships. (Bloch)

12. Contract with W. H. Johnston Laboratories, Inc. (General Manager's November 10 Memorandum)

The Commissioners requested recommendations on an extension of the program for one year and information on the relationship of this program to similar programs at the national laboratories. (Bloch)

13. Pending Contractual Matters (Report 75)

Noted.

14. Proposed Letter to Mr. Bundy, White House, re NTS Labor Situation

For circulation and review with the individual commissioners. (Bloch)

15. Agenda for the Week of November 16

Approved. (Secy)

16. Briefing on 710 Project

To be scheduled next week. (Secy)

17. Discussion of the Maritime Program, 9:30 a. m., Friday, November 13, Room 1113-B, D. C. Office

18. Visit by John Foster, LRL

Dr. Tape suggested, and the Commissioners agreed, Dr. Foster should be invited to visit Headquarters for discussion of several matters of current interest to him. (Fritsch)

19. Proposed Letter to the DoD re U-235 Production

The Commissioners approved the revised letter. (Bloch)

20. APDA Paste Blanket R&D Program (Dr. Pittman's November 10 Memorandum)

The Commissioners approved the General Manager's recommendation with the understanding that there is no commitment on in-pile tests. (Vinciguerra)

21. Conflict of Interest Exemption

The Commission granted to Dr. John Swartout an exemption from the restrictions of section 208(a) of the conflict-of-interest statute (Public Law 87-849) with respect to Dr. Swartout's holdings of stock and continuing participation in the employee benefit plans of Union Carbide Corporation and Dr. Swartout's arrangement for leave of absence from Union Carbide with the attendant possibility of reemployment with that corporation. The Commission determined that these interests, as set forth in Dr. Swartout's letter of November 3, 1964, are not so substantial as to be deemed likely to affect the integrity of the services which the Government may expect of Dr. Swartout.

The Commission further expressed its belief that, if Dr. Swartout should resume employment with Union Carbide at the Oak Ridge National Laboratory after termination of his employment with AEC, there would be an appropriate basis for the granting of an exemption from the restrictions of section 207 of the conflict-of-interest laws, upon a certification by the Commission at that time that the national interest would be served by such action. (GC-Secy)

PRESENT

Dr. Seaborg
Mr. Palfrey
Mr. Ramey
Dr. Tape
Dr. Bunting

Mr. Hollingsworth
Mr. Bloch
Mr. Ink
Mr. Abbadessa
Mr. Hennessey
Dr. Fritsch
Mr. Kratzer*
Mr. McCool

DISTRIBUTION

Commissioners
General Manager
General Counsel
Secretary

W. B. McCool
Secretary

*Attendance for Item 7.



ATOMIC ENERGY COMMISSION

WASHINGTON 25, D.C.

UNCL. BY DOE
NOV 86

NOV 16 1964

Dear Mac:

On November 6 we advised Mr. Charles Johnson that a strike of Radiation Monitors at the Atomic Energy Commission's Nevada Test Site had resulted in a site-wide shutdown and that the events scheduled for November 12 and 13 would be delayed on a day to day basis, depending on the duration of the strike. As of this time, this strike is still in progress and we are unable to predict when a settlement will be reached.

This strike, one of several at the Nevada Test Site over the last few years, occurs at a time when we are endeavoring to negotiate new labor agreements to eliminate uneconomical labor practices at the Nevada Test Site and the Nuclear Rocket Development Station. We believe that these new agreements will conform more equitably to the steady, year-round operations prevailing in Nevada since September 1961. Injudicious settlement of the current Monitors' strike might jeopardize our general negotiating objectives.

The immediate underground nuclear test programs at the Nevada Test Site which include preparation for SULKY, a PNE cratering shot, several advanced weapon development experiments, and preparation for several Department of Defense experiments will be delayed by the strike on a day for day basis. These important programs cannot be delayed indefinitely. However, on balance we do not consider it necessary to settle this particular strike immediately to insure that particular test events are executed on the previously set schedule. Rather, we believe that in the long run, the interests of the nation's nuclear test program will be better served by adhering consistently to the sounder labor policy now being implemented and

contemplated for completion in mid-1965. If the strike continues for an appreciable time, we will re-evaluate our position and possible courses of action.

If you wish to discuss this matter in greater detail or if we can provide any additional information, please let us know.

Sincerely yours,

(Signature) *John J. Seabury*

Chairman

Honorable McGeorge Bundy
Special Assistant to the President
for National Security Affairs
The White House

- so&cc - Addressee
2cc - Chairman
cc - Commissioner Bunting
cc - Commissioner Palfrey
cc - Commissioner Ramey
cc - Commissioner Tape
cc - General Manager
2cc - Secretariat
cc - General Counsel
cc - Labor Relations
cc - Manager, NV



ATOMI

UNCL. BY DOL
NOV 86

Copy No. 2
November 13, 1964

INFORMATION MEETING 425

9:45 a. m. , Friday, November 13, 1964 - Room 1113-B, D. C. Office

1. Letter to Mr. Bundy, White House Staff, re NTS Strike

Approved, as revised. (Crowson)

2. Proposed Letter to the President on Advanced Converters

The Commissioners discussed with the General Manager and staff several suggested revisions and will review the letter further for discussion early next week. (Secy)

3. John Finney Article in THE REPORTER (November 19, 1964 Issue)

Mr. Hollingsworth reported a response to the AP query is in preparation. The Commissioners requested preparation of additional material on the discrepancies in the article. Staff will review the material with Mr. Palfrey today. (Brown-Ink-Secy)

4. Personnel Item

The Commissioners agreed the General Manager should discuss his proposal with NASA.

PRESENT

Dr. Seaborg
Mr. Palfrey
Dr. Tape
Dr. Bunting

Mr. Hollingsworth
Mr. Bloch
Mr. Ink
Dr. Fritsch
Col. Hill
Cmdr. Muller
Mr. Klug
General Crowson*
Dr. Pittman**
Mr. McCool

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General Manager
General Counsel
Secretary

W. B. McCool
Secretary

*Attendance for Item 1

**Attendance for Item 2

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NOV 86

CROSS REFERENCE SHEET Document # 903970

TITLE OF DOCUMENT 11/14/62. 2 pages

Memo For Sec. State & Sec. Def.
"The Future OF The Nuclear . . ."

This document requires further classification review and has been removed from this folder.

Jeffrey B. Bahn
Name

August 26, 1986
Date



Eric's tenth birthday party, November 15, 1964

Front: L to R: Samaya El Shakaa

Middle: L to R: Joe Canary, (), (), Jonathan Plotsky,
Bill Ting, Davis, Bruce Howe, ()

Back: L to R: Hosaam El Shakaa, Eric Seaborg, Scott Luria,
Jimmy Cobb, Quentin Yerva, Kenny Lowill,
Neil Armine

Monday, November 16, 1964 - D.C.

At 10:05 a.m. I presided over Information Meeting 426 (notes attached).

At 11 a.m. I called Frank Carey of the Associated Press. I said that I understood he is interested in the Finney article. He said that he is and that he has talked to Fenimore in our Public Information Office. Since he is under a deadline to give something to a paper in Louisville, he will use the information which he has and attribute it to a "spokesman." Frank said, when he gets squared away on some other things, he will call me when he can get back to this story.

I mailed a letter to the editor of the New York Times commenting on their editorial of November 10th (copy attached).

At 11:15 a.m. I received a telephone call from Perry Barber (Assistant to Jack Valenti). In connection with the report to the President which we submit biweekly, he asked that the following be done: 1. From now on the report should be sent to Jack Valenti rather than Bill Moyers. 2. Name a person with whom Valenti can talk regarding the report, rather than call me. I told him this person would be Arnold Fritsch, my assistant. 3. If there is something especially newsworthy in between reports, or something which is about to break, Fritsch should call Valenti to determine whether it is something that should be covered by the White House or should go the normal channels. 4. Flag the newsworthy items in the regular report. I told Barber that we would be glad to do this.

At 12:15 p.m. Commissioner Ramey and I had lunch with Congressman Chet Holifield, John Conway, and Ed Bauser at the University Club. We discussed the rationale and arguments for a proposed AEC advanced converter program.

Commissioner Tape, Paul McDaniel, William Wallenmeyer and I presented the AEC report on the high energy physics program (requested last spring by the Joint Committee on Atomic Energy) to the President's Science Advisory Committee (PSAC). The PSAC may endorse the program as the best at that particular level, but they won't compare it in priority with programs in other scientific areas (such as chemistry, low energy physics, etc.).

At 5:15 p.m. I met with Joseph Califano (McNamara's assistant) and Harold Brown to discuss the time schedule for nuclear power in connection with McNamara's committee to consider the Appalachian problem.

Tuesday, November 17, 1964 - D.C.

At 9:05 a.m. I called Paul Fine. I told him that Secretary McNamara has an assignment to look into the Appalachian coal situation as it relates to nuclear power, including future prospects for use of coal, etc., and that Harold Brown and Joe Califano (McNamara's assistant) were in to see me about this yesterday. They asked particularly about the amount of nuclear power we project for the year 2000, etc., and where in the country it would begin to come in. I told Paul that I had asked them to call him for detailed information.

At 10:15 a.m. I presided over Commission Meeting 2056 (action summary attached).

I sent a letter to President Johnson requesting his approval for the giving of the 1964 Fermi Award to Admiral Rickover at a level of \$25,000. This level, and one award, is the outcome of the discussions with the Joint Committee on Atomic energy carried on last summer and more recently this month (copy attached).

November 16, 1964
UNCL. BY DOE
NOV 86INFORMATION MEETING 42610:05 a. m. , Monday, November 16, 1964 - Chairman's Conference Room, D. C. Office1. Executive Session Item

Approved. (Secy)

2. President's State of the Union Message

The Chairman said he would welcome suggestions from the Commissioners and the General Manager noted draft material is in circulation. (Brown)

3. U. S. S. R. Test

The White House has requested an AEC release. (Clark-Reichardt)

4. Proposed Letter to the NEW YORK TIMES re Recent TIMES Editorial

Approved, as revised. (Fritsch-Kratzer)

5. John Finney REPORTER Magazine Article of November 19

Mr. Palfrey will draft a note to THE REPORTER Magazine.

6. Meeting to Discuss Independent R&D, 7:00 p. m. , Tuesday, November 24

The Chairman and the General Manager will attend the meeting.

7. Reply to John Finney Letter re Private International Ownership of Gaseous Diffusion Plants

Under review by Commissioners Bunting and Palfrey.

8. Chairman's Meeting 5:00 p.m. Today with Harold Brown to Discuss Appalachia

9. Luncheon Meeting with Chet Holifield, JCAE.

The Chairman noted he and Commissioner Ramey will have luncheon today with Congressman Holifield.

10. Proposed Letter to the President on Advanced Converters

The Chairman suggested comments be directed to Mr. Bloch. (Bloch)

11. Report to PSAC on High Energy Physics, 2:30 p.m. Today

12. Waste Disposal Team Visit to U. S. S. R.

13. Possible BUSINESS WEEK Article

14. Atoms-for-Peace Policy (Mr. Kratzer's November 13 Memorandum)

The Chairman requested elaboration of material in the memorandum for possible use by him at a meeting next week. Mr. Palfrey will try to arrange a luncheon meeting with Mr. Gilpatrick. (Kratzer)

15. Congressman Robert E. Jones' November 10 Letter re Water Pollution at Hanford

Mr. Bloch reported briefly on the study which had been transmitted to the Subcommittee and said Dr. Terry had agreed an independent study should now be made. Staff is considering this matter and will discuss it with Commissioner Bunting. (Bloch)

16. Settlement with Basic Science Foundation

The Commissioners requested Joint Committee staff be informed and a report be made to the Commission. (GC)

17. Organization and Procedures of the Patent Compensation Board

The Commissioners requested recommendations. (GC)

18. Plant Research Program and Laboratory at Michigan State University
(General Manager's November 13 Memorandum)

The Commissioners accepted the General Manager's recommendation.
Joint Committee staff is to be informed. (Vinciguerra)

19. Chairman's AIF Speech

To be circulated. (Fritsch)

20. December 14 Dinner to Celebrate National Power Survey Report

21. Taxpayers' Suit re Washington State Lease of Land at Hanford

PRESENT

Dr. Seaborg
Mr. Ramey
Mr. Palfrey
Dr. Tape
Dr. Bunting

Mr. Hollingsworth
Mr. Bloch
Mr. Hennessey
Mr. Vinciguerra
Dr. Fritsch
Mr. McCool

DISTRIBUTION

Commissioners
General Manager
General Counsel
Secretary

W. B. McCool
Secretary

Retyped copy of letter written November 16, 1964

Dear Sir:

I was gratified by the appearance in your edition of November 10 of an editorial entitled "Halting Nuclear Spread." The application of effective controls to peaceful uses of atomic energy is a subject which we in the Atomic Energy Commission have long considered to be of major importance to our national security and to world peace but which, to date, has received surprisingly little attention here and abroad. It was for this reason that I made the subject of safeguards the major theme of an address on the International Atom which I delivered at Town Hall in Los Angeles on October 27. While welcoming your recognition of the importance of the subject matter and agreeing with much of the content in your editorial, I should like to comment on several specific opinions which you expressed.

Much of the world is familiar with the Limited Test Ban Treaty and the continuing negotiations in Geneva seeking agreement on disarmament, but comparatively few people know that functioning control systems, including actual on-site inspection, are already in widespread use for the peaceful applications of atomic energy. These bilateral and multilateral control systems, and the basic agreements under which they are applied, represent an unprecedented development in the willingness of sovereign nations to submit their activities to outside control. Thus, aside from the specific and concrete role which these control systems are playing in deterring the spread of nuclear weapons, their importance in developing, demonstrating, and securing acceptance of the principles and techniques of international control can hardly be overestimated.

Clearly, international controls can make the greatest contribution to preventing the proliferation of nuclear weapons, since they provide a single consistent system, whose results will be credible to all countries. Because of these and other advantages, we have strongly favored the adoption by all countries

OFFICE DIARY
GLENN T. SEABORG
Chr USAEC, 1961-72
FOLDER-PAGE <u>47140</u>

CONFIRMED TO BE UNCLASSIFIED
AUTHORITY: DOE-DPC
BY R.G. BOGER DATED

J Diaz 7/1/86

of the controls of the International Atomic Energy Agency. However, in the necessarily lengthy period required for the development and acceptance of an international system, bilateral and multilateral controls have been widely employed and have made an important contribution to assuring that nuclear assistance made available for peaceful purposes has not been diverted to military purposes.

You commented in your editorial and later in the article by Mr. John Finney in the November 15 edition on the practices of other Western reactor suppliers in requiring safeguards on their own foreign sales. It is correct that there is a difference in emphasis between ourselves and our British and Canadian colleagues in the degree to which we insist on administration of safeguards by the International Atomic Energy Agency. Britain and Canada, while strongly favoring IAEA safeguards as do we, have so far followed a more permissive approach on this question than have we in the last year and a half. We hope that they will strengthen their policies favoring IAEA safeguards in the months ahead. However, it would be unfair not to acknowledge that Britain and Canada have been stalwart in requiring effective bilateral safeguards in all recent significant cases of supply of nuclear equipment abroad. The arrangement covering the Canadian-Indian test reactor, to which you referred, was developed before the importance of safeguards in such arrangements was generally recognized and, in all subsequent arrangements, Canada has insisted upon adequate controls. Further, both Canada and Britain (as well as the Soviet Union in recent times) have given us close and effective support in the development of a satisfactory system of IAEA safeguards without which our reliance upon the International Agency would not be possible.

Your statement that the Indian chemical separation plant is subject to no external inspection and thus enables India to extract weapons grade plutonium from the fuel elements in its reactors is somewhat misleading. Under the arrangements made by the United States and other Western suppliers and those of the IAEA, plutonium produced in a safeguarded reactor remains subject to controls wherever it is taken or processed.

Finally, and most importantly, I should like to comment on your suggestion that consideration should be given to the assignment of inspection responsibility to an arms control agency other than the IAEA. The present encouraging stature of the IAEA in the field of international inspection is the product

of more than seven years of patient effort in the establishment of the Agency itself, the adoption of its charter which contains an unprecedented set of inspection and control rights, the development of a practical system implementing these rights and, most recently, the actual acceptance of the system by more than 17 countries. The fact that the International Atomic Energy Agency has, in addition to its safeguards responsibilities, an important role in encouraging the use of atomic energy for peaceful purposes has been an indispensable ingredient in securing for the Agency an effective staff of technically competent persons and in securing acceptance by so many nations of the Agency safeguards system.

I can think of few steps that would risk a more serious setback for the objective of continuing growing acceptance of international control of peaceful uses of atomic energy than an attempt to create and substitute a new and untested agency for one which is gradually acquiring technical competence and, along with it, the respect of its members - both supplier and recipient of nuclear assistance alike. Moreover, I wish to make it clear that the system adopted by the International Atomic Energy Agency is an effective one and is not diluted in its application by the Agency's responsibilities for encouraging the peaceful uses of atomic energy.

We believe that the United States public can take some pride in its Government's early recognition of and effective action to counter the problem of nuclear proliferation arising from the peaceful uses of atomic energy. The Atomic Energy Commission will certainly continue to do all it can in furthering the development and operation of the controls of the International Atomic Energy Agency.

Sincerely yours,

(Signed) Glenn T. Seaborg

Glenn T. Seaborg

The Editor
The New York Times
New York, New York

cc: John Finney

ICR/trtcr/AEE/ant

UNITED STATES GOVERNMENT

UNCL. BY DOE
NOV 86

Memorandum

TO : R. E. Hollingsworth, General Manager
DATE: November 17, 1964
Approved _____
R. E. Hollingsworth

FROM : ^{Signed W. B. McCool} W. B. McCool, Secretary
Date _____

SUBJECT: ACTION SUMMARY OF MEETING 2056, TUESDAY, NOVEMBER 17, 1964,
10:15 A.M., ROOM 1113-B, D. C. OFFICE

SECY:GF

Commission Business

1. Executive Session

a. Chairman's November 16 Letter to the NEW YORK TIMES

Mr. Palfrey will telephone the TIMES.

b. Electrical World Editorial

The Chairman will discuss with Mr. Hal Price a possible letter. (Fritsch)

c. Commissioners' Visit with PG&E Officials

To be arranged during the Atomic Industrial Forum meetings in San Francisco. (Secy)

d. AEC Liaison with American Export Isbrandtsen Lines Officials

The Chairman suggested Mrs. Bunting and Dr. Vander Weyden.
(Vander Weyden)

e. Personnel Items

Approved. (Secy/Tackman)

2. AEC 751/340 - Expiration of Agreements for Cooperation with EURATOM Member States, and AEC 751/341 - Addendum to AEC 751/340

Discussed.

The Chairman requested preparation of a talking paper for his discussion with White House and State Department officials Monday, November 23.

The Commission requested exploration with the Department of State of the possibility of the development of a position for the transfer of bilateral reactor safeguards on selected facilities to the IAEA, and the continuation of the position on the bilateral agreement with Belgium, with a view toward the transferral of its supply functions to EURATOM.

The Commission also requested the discussions with the Department of State include the possibility of incorporating the question of the transfer of safeguards to IAEA within the broader framework of the non-proliferation matter.

The Chairman suggested the matter of Pu sales to EURATOM be checked with Mr. Charles Johnson, White House staff.
(Kratzer)

3. AEC 881/68 - Competition in Commercial Chemical Processing, and
AEC 881/69 - Addendum to AEC 881/68

Discussed.

The Commission requested that, during the forthcoming discussions with General Electric, staff encourage the company to consider construction of a chemical processing plant at Hanford. (Quinn)

The Commission noted staff would be prepared to answer the questions raised by Mr. Quinn in accordance with the guidance given at the Meeting. (Quinn)

Mr. Bloch noted staff evaluations of proposals for FPCB and 200 Area operations would be forthcoming in several weeks. (Bloch)

4. AEC 152/175 - Costs for Civilian Power Reactor Program

Deferred.

cc:
Commissioners



UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON, D.C. 20545

UNCL. BY DOE
NOV 86

NOV 17 1964

Dear Mr. President:

I am pleased to inform you that after review of the recommendations of the General Advisory Committee the Atomic Energy Commission wishes to grant the Enrico Fermi Award for 1964 to Vice Admiral Herman G. Rickover. This award would be in recognition of Vice Admiral Rickover's outstanding leadership in the development and application of nuclear power; for his contributions to nuclear engineering, particularly for his development of high reliability and safety standards for both civilian and military power reactors. It was largely as a result of his efforts that the United States produced the world's first nuclear powered ships and today has a strategic deterrent force of more than 50 nuclear submarines and fighting ships. Moreover, Admiral Rickover has made significant contributions to the peaceful uses of atomic energy by his leadership in the development of the water moderated and water cooled reactors now on the threshold of economic use in many parts of our country and the world.

The Enrico Fermi Award is granted under the authorization of the Atomic Energy Act of 1954, Section 157 b(3) and is based on an award to the Enrico Fermi on November 16, 1954 in recognition of his "contributions to the basic neutron physics and the achievement of the controlled nuclear reaction". The Fermi Award was officially established on April 18, 1956 when the Commission determined that this award would be made:

- a. For outstanding scientific or technical achievements related to the development, use, or control of nuclear energy;
- b. On an international basis;
- c. To an individual, or to several individuals, for separate or cooperative achievements.

Since establishment of the award in 1956, it has been granted to the late Dr. John von Neumann in 1956, to the late Dr. E. O. Lawrence in 1957, to Dr. Eugens P. Wigner in 1958, to Dr. Glenn T. Seaborg in 1959, to Dr. Hans A. Bethe in 1961, to Dr. Edward Teller in 1962, and to Dr. J. Robert Oppenheimer in 1963. No award was granted in 1960. With the exception of Dr. Fermi, all of the recipients have received the award in the amount of \$50,000. After a review of the award history the Commission believes it would be appropriate to the intent of the award if the monetary amount were returned to the level of \$25,000 as awarded to Dr. Fermi in 1954.

Accordingly, the Commission recommends that you approve granting the Enrico Fermi Award to Vice Admiral Rickover, in the amount of \$25,000, with the presentation to be made at a ceremony in December, 1964.

Biographical data on Vice Admiral Rickover are enclosed.

Respectfully yours,

(Signed) Glenn T. Seaborg

Glenn T. Seaborg
Chairman

Enclosure

The President
The White House

The President

Approved

Date:

Office of the Secretary
November 17, 1964HYMAN G. RICKOVERBIOGRAPHICAL SKETCH

Vice Admiral Hyman G. Rickover was born in Warsaw, Poland, in 1900 and came to the United States with his parents, Abraham and Rose Rickover, at the age of four. He graduated from the U.S. Naval Academy in 1922, was commissioned as Ensign. He later attended the Columbia University School of Engineering and the U.S. Naval Post-graduate School. He became a qualified submariner in 1930.

In 1946, he was assigned to the Atomic Submarine Project, then under the Manhattan Engineer District, as Assistant Director of Operations. Since 1957 he has worked in a dual capacity as Manager Naval Reactors, U.S. Atomic Energy Commission and as Assistant Chief for Nuclear Propulsion, Bureau of Ships, Department of the Navy.

Admiral Rickover's major contributions in the field of naval nuclear propulsion are well known. A team of outstanding scientists and engineers was assembled by Argonne National Laboratory to compile basic data on the nuclear properties of reactor materials and to develop conceptual design systems for nuclear propulsion of ships. Admiral Rickover also brought industry into an active role, and at Bettis near Pittsburgh, Knolls Laboratory near Schenectady, and at the National Reactor Testing Station in Idaho the development of naval nuclear propulsion systems was carried out. A landmark in this effort was the initial operation on March 31, 1953, of the Submarine Thermal Reactor, Mark I, the land-based prototype of the first nuclear submarine propulsion plant. On June 14, 1958, the keel of the Nautilus, the world's first nuclear submarine, was laid at Groton, Connecticut. The event marked the beginning of a revolution in the concepts of naval propulsion. In February 1957, the Nautilus completed operation on its first core, having traveled 62,500 nautical miles in more than two years. For the first time a true submarine had become possible. Nuclear submarines such as the Nautilus and the Skate voyaged under the North Pole Ice Cap, demonstrating that the polar regions were no longer inaccessible to ships. The Triumph became the first submarine to circumnavigate the world completely independent of the earth's atmosphere. A graphic demonstration of the scope of Admiral Rickover's efforts and the value of nuclear propulsion to the surface fleet was recently provided when the aircraft carrier Intrepid, the guided missile cruiser Long Beach and the destroyer Hambridge cruised around the world without refueling. From operating experience at sea, and from land prototypes, the effort to further develop nuclear propulsion has continued with great success.

Comparably important, but not so well known, is his direction and leadership of the Shippingport Pressurized Water Reactor (PWR) project near Pittsburgh, Pennsylvania, from which came not only most of the basic technology for submarine and surface ship reactors but also a large part of the reactor technology used in our present day water-cooled and water moderated nuclear power plants.

The Shippingport Project was established in 1953 as an important national goal. It was the first large-scale central station atomic power plant in the world and has served as the technical foundation for other reactor plants both private and government-owned. This plant has supplied more than 1.7 billion kilowatt hours of electricity to users in the Pittsburgh area since its initial start-up in late 1957 and has clearly demonstrated that nuclear fission can reliably and safely supply electricity to a utility network on a useful scale.

Notwithstanding its success in the production of electricity, the primary goal of the Shippingport project, under Admiral Rickover's direction, was advancement of the basic technology of water reactors. Some of the specific gains in reactor technology resulting from the Shippingport operation are in the fields of fuel and nuclear poison technology; reactor physics, reactor control; reactor thermal, hydraulic, and mechanical design; basic heat transfer studies; fuel element failure detection systems; refueling procedures; primary coolant water radio-chemistry; and disposal of radioactive wastes.

Two of the most important contributions resulting from Admiral Rickover's direction of the Shippingport (PWR) project have been in the fields of reactor physics and reactor fuel technology. The PWR, with its "seed and blanket" design, demonstrated that it is feasible to obtain large amounts of power from a "blanket" of natural uranium surrounding a "seed" of highly enriched uranium which serves as the driving element in a reactor which is cooled and moderated with ordinary water. While producing power the seed-and-blanket design has the additional advantage of making possible the breeding of fissionable material from the very abundant element thorium in the blanket. As a result of Admiral Rickover's achievements in this program, the State of California has submitted a proposal for cooperative construction of a large thorium seed-blanket reactor which the Commission now has under consideration.

In the field of fuel metallurgy the Shippingport PWR project team, led by Admiral Rickover, has been responsible for the development of uranium oxide as a fuel material for large power reactors. Engineering studies of the PWR also produced many design improvements which have extended the life of reactor fuel elements and thus have contributed to the reduction in nuclear power costs. The first PWR core, placed in the reactor in late 1957, operated until February, 1964, more than three times its original design life.

For his many achievements, Admiral Rickover has been awarded the Navy's Legion of Merit and Commendation Ribbon with Oak Leaf cluster, the Cross of the British Empire (Military Division), the Egleston medal of Columbia University's Engineering alumni associations, and the Army and Navy Union's Medal of Honor. In 1959 the Congress of the United States presented him with a special Congressional gold medal in recognition of his achievements. He was the third U.S. Navy Admiral ever to be so honored.

Admiral Rickover is married to the former Ruth D. Masters and they have one son, Robert. The Rickovers reside at 4801 Connecticut Avenue, N.W., Washington, D. C.

I prepared a letter, for dispatch tomorrow, to the President making a case for the Seed and Blanket and the High Temperature Gas-Cooled prototypes in the FY 1966 budget and the organic-cooled, heavy-water moderated prototype in the FY 1967 budget (with advance money in the FY 1966 budget) and asking to see him to discuss this question (copy attached).

At 1 p.m. I had lunch with Victor Schmidt at the Roger Smith Hotel. He may start work as a consultant with the AEC Division of Regulation.

At 2:30 p.m. Arnold Fritsch and I met with Robert Cunningham and Philip C. Ritterbush of the Smithsonian Institution, to discuss their plans for a Bicentennial planned for next September.

The Commission met with John Foster to hear his views on a Comprehensive Test Ban. (He is against it because he maintains that it is inconsistent with maintenance of deterrence by the U.S.) The Commission also discussed new weapons development, new successes with astronomy, need for funds for Plowshare to carry on heavy element work, etc.

The family, plus Dave Lee, had a tenth birthday dinner for Eric.

Wednesday, November 18, 1964 - Germantown

At 9:10 a.m. I received a telephone call from Colin MacLeod. He said he has received our letter to the President on the recommendation for the Fermi Award, with the message that I would be calling him on it. I said we would like a time set aside on the President's calendar for his presentation of the Award. I told him the time that suits the Commission best is 4:30 p.m. on December 8th but we are flexible for any date after the 8th. He asked if there is any reason for this particular date, and I told him the 8th is the nearest date to December 2nd (which is the anniversary of Fermi's achievement) that suits the Commission, as we will be out of town on the 2nd. MacLeod said he will talk with Jack Valenti and let us know.

At 9:40 a.m. I called Roswell Gilpatric. I suggested to him that Bill Webster might make a good member of his committee; which is to study the problem of non-proliferation of nuclear weapons. He has placed his Yankee nuclear power plant under IAEA safeguard provisions and he is very knowledgeable. Ros said he would be delighted to have him, but he doesn't know exactly where the composition of the group stands. He said that Bundy was to take the names (nine people on the list) that Gilpatrick had gone over with me, Rusk and McNamara, to Texas last week for the President to see. He said he understood the President signed the letters but didn't want them to be transmitted until the people had been contacted and agreed to serve. Ros suggested that I might want to call Bundy. Ros said that he thought he would be in Washington on Friday, November 27th, and would like to have lunch with me if it could be worked out. I told him I was free, and would like to do this. His secretary will call to confirm.

At 10:05 a.m. I presided over Regulatory Information Meeting 131 (notes attached).

At 10:20 a.m. I presided over Information Meeting 427 (notes attached). Among the items we discussed was Ambassador Foy Kohler's Cable to the Department of State

Dear Mr. President:

I would like to personally discuss with you, prior to any final decision on the FY 1986 budget, the Commission's reactor development program and specifically three proposals to which we attach very high priority.

As you know, development of light water reactors has reached the stage where we can rely on industry to proceed with their construction with a minimum of government support.

Unfortunately, these reactors do not use uranium efficiently, and if we were to depend entirely on these reactors, all our presently estimated low cost uranium reserves would be committed in the not too distant future and there would be significant future increases in the cost of nuclear power.

To prevent this, we have basic programs aimed at the development of (1) economically competitive high-gain breeders* which can efficiently utilize our very abundant high cost reserves under conditions where our expanding power needs can be met; and (2) economically competitive near-breeders (advanced converters) or low-gain breeders which can efficiently utilize our fairly abundant intermediate cost uranium ores and thorium ores, but which cannot, by themselves, meet our growing power needs.

Both approaches were indicated in our Civilian Nuclear Power Report to the President in 1962 and both are still necessary. The technical problems of developing economic high-gain breeders are significant.

* "High-gain breeders" produce appreciably more fissile material than they consume; "low-gain breeders" produce slightly more than they consume; and "near-breeders" produce almost as much as they consume.

Our national program should not be based solely on the assumption that these systems will be developed and introduced into the commercial market in time and on a scale sufficient to our long range needs. We must place a reasonable emphasis on the simpler and more easily exploitable technology of the near-breeders and low-gain breeders in order to buy the time which we need for the development of the high-gain systems of the future.

The 1962 report envisioned the construction of 7-8 prototype reactors, about half of which would be advanced converters and half breeders. This report recognized the need for several approaches in developing a new technology in order to insure success. Taking into account both technological and budgetary considerations, we have now concluded that our objectives can be met by placing our near term confidence in two rather than four advanced converters (near-breeder systems) and one low-gain breeder.

One of our near-breeders is to be a high temperature, gas-cooled reactor to be constructed as a FY 1966 project. However, to fund this project we are cancelling other projects of equal dollar value which have already been funded. Further, this project will be built under a cooperative arrangement whereby a utility company will fund a major portion of the construction and operating cost of the reactor.

The second near-breeder is a heavy water moderated, organic-cooled reactor for which we plan to seek authorization and funding in the FY 1967 budget, hopefully under cooperative arrangements favorable to the government.

The low-gain breeder is a seed and blanket concept developed by Admiral Rickover as an outgrowth of the Nation's first central station nuclear power plant located at Shippingport, Pennsylvania. This is the only one of the three reactors for which we are seeking additional funding in FY 1966. Here again a major portion of the funding for construction and operation will be borne by the contractor, in this case, the State of California.

Each of the reactors we propose for our near term program offers unique technical and promising economic advantages. The two systems being pursued as near-breeders, the thorium fueled high temperature gas-cooled reactor and the organic-cooled heavy water moderated reactor, both offer the potential of low cost power, not only at

present uranium prices but also at ore prices several fold higher. Both also offer the potential of becoming low-gain breeders as their technology develops and as more is learned about their operation. In addition, the gas-cooled system, because of its high operating temperature, has a high thermal efficiency and lends itself to use with the best modern turbine technology. The heavy water moderated system has the important advantage of fuel flexibility since it can be fueled with natural uranium, slightly enriched uranium or thorium. Further, it also offers fairly easy extrapolation to the very large sizes required for desalting purposes.

By constructing the seed and blanket prototype, we will demonstrate the potentiality of the well proven light water technology for use in low-gain breeder reactors. Thus, we would expect to further exploit the same basic technology which has already led us to the economic breakthrough you announced at your Holy Cross speech last Spring.

We feel that nuclear power has made impressive strides. We can now foresee with confidence the advent of competitive nuclear plants over an important portion of the nation.

It is generally agreed that nuclear energy is a necessary complement to our fossil fuels to assure availability of economic power to meet our nation's expanding future energy needs. In addition, the potential use of nuclear plants for large-scale desalting has broad and far-reaching implications.

To assure the long-run economic benefits of nuclear power to the people of the United States and the rest of the world, it will be necessary to push forward with the development of reactors that can make efficient use of the abundant reserves of thorium and low grade uranium ores before the high grade uranium ores are exhausted.

We strongly believe the program outlined above represents a well-balanced, minimum-cost nuclear effort toward this vital objective. These projects represent the highest priority of any non-military items in our FY 1966 budget.

Respectfully yours,

(Signed) Glenn T. Seaborg

Glenn T. Seaborg

The President
The White House



UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON, D.C. 20545

COPY NO. 2

November 18, 1964

REGULATORY INFORMATION MEETING 131

10:05 a.m., Wednesday, November 18, 1964, Chairman's Conference Room A-457

1. ELECTRICAL WORLD Editorial re Bodega Head

Mr. Price said he is preparing a letter.

2. ACRS Review of Hanford-Savannah River Operations

Mr. Price said he and the General Manager will submit joint recommendations on a general policy of operation. (DR-GM)

3. ACRS Discussions of Radiation Damage to Pressure Vessels

Mr. Price discussed briefly the preliminary ACRS position on the problem. Mr. Hollingsworth added that Admiral Rickover will be in direct consultation with the Advisory Committee.

4. Review Committee Report on United Nuclear Accident

Mr. Price said technical staff is reviewing United Nuclear's operations in light of the Committee report prior to return of the plant to operation. The Chairman noted receipt of the report by the Commissioners and suggested in the absence of any comments from the Commissioners staff should proceed. (DR)

5. Niagara-Mohawk Hearing, December 15, 1964

6. Safety Review of DoD Reactors

Mr. Price said in discussions with Colonel Burlin it had been suggested staff should now discuss the matter with Jack Howard, MLC. The Commissioners agreed staff should proceed. (DR)

PRESENT

Dr. Seaborg Mr. Price
Mr. Palfrey Mr. Henderson
Mr. Ramey Dr. Fritsch
Dr. Tape Mr. Hollingsworth*

DISTRIBUTION

Commissioners
Director of Regulation
General Counsel
Secretary

W. B. McCool, Secretary

*Partial Attendance



ATOMIC ENERGY
WASHINGTON.

Y NO. 2

November 18, 1964

INFORMATION MEETING 427

UNCL. BY DO
NOV 86

10:20 a.m., Wednesday, November 18, 1964, Chairman's Conference Room A-457

1. Chairman's Conversation with Roswell Gilpatric

The Chairman said he had suggested to Mr. Gilpatric a member for the Special Committee and Mr. Gilpatric thought the matter should now be checked with White House staff. A briefing for the Committee will be arranged shortly and Mr. Gilpatric plans to have luncheon with the Chairman on Friday, November 27. (Secy)

X *awake from*
2. Draft Letter to Bill Moyers, White House Staff, re John Finney Letter on Private International Ownership and Operation of a Gaseous Diffusion Plant

Approved, as revised. (Secy)

3. D. C. Office Space

The Chairman requested early action. (Secy)

√ 4. Ambassador Foy Kohler's Cable to the Department of State re Bilateral Cooperation with the USSR on PLOWSHARE

The Chairman noted the cable report that the Soviets will consider possible cooperation in this field. (DIA)

5. Moscow Ceremony Today for Signing of the US-USSR Desalination Program Agreement

Noted.

6. Cable Report of Mr. Jose Otero's Declination of Invitation to Visit the N. S. SAVANNAH

The Chairman requested preparation of a reply which would salve the "wounded Spanish pride". (DIA)

7. Visit of UKAEA Representatives to Spain

8. Mr. Ohlke's November 16 Memorandum re National Commission on Technology on Automation and Economic Progress

The Chairman suggested coordination with Commissioner Ramey if representation at the Commission level is required. (OEIC)

✓9. Joseph E. Moody's November 16 Letter from the National Coal Policy Conference, Inc. re a Finding of Practical Value

The Commissioners requested preparation of early responses to the several letters which have been received on this subject. Additionally, up-dated material on environmental sanitation, etc., is to be prepared. (DR-DIP-GC-DBM)

✓10. Senator Morse's November 16 Letter re SNAP Abort

The Commissioners requested preparation of an early response. (DOS)

11. Pending Contractual Matters - Report 76

The General Manager noted a report on Contract AT(30-1)-2901 is forthcoming. (DID-DPR)

12. General Manager's November 16 Memorandum re Tentative Schedule for N. S. SAVANNAH for Calendar Year 1965

The General Manager commented on the need to keep the schedule flexible pending his report on installation of the Maryel-Schebler control rod drives and discussion with the Commission. (DRD)

13. General Manager's November 16 Memorandum re Exchange of US-USSR Specialists

The Commissioners accepted the General Manager's recommendation. (DIA)

14. John Kelly's November 16 Memorandum re Execution Data for Project SULKY

Approved. (DPNE)

15. Senator Hayden's November 6 Letter re Use of Hanford Reactors

Mr. Bloch reported a response is in preparation. (DGM)

16. Proposed Contract for Power Supply at Hanford

Mr. Bloch discussed briefly the proposed contract. The Commissioners requested circulation of a memorandum and reconsideration on Friday, November 20. (P-Secy)

17. Project ORION

Dr. Tape reported he will attend a meeting with DoD representatives tomorrow to discuss this project.

In response to Dr. Tape's query, the Chairman thought it would be desirable to indicate that the AEC requires further time for review of costs and other considerations.

PRESENT

Dr. Seaborg
Mr. Palfrey
Mr. Ramey
Dr. Tape

Mr. Hollingsworth
Mr. Bloch
Mr. Vinciguerra
Dr. Fritsch
Mr. Hennessey*
Mr. McCool

DISTRIBUTION

Commissioners
General Manager
General Counsel
Secretary

W. B. McCool
Secretary

*Partial Attendance

regarding Bilateral Cooperation with the USSR on Plowshare, Joseph E. Moody's November 16th letter (attached) from the National Coal Policy Conference, Inc., about a Finding of Practical Value, and Senator Morse's November 16th letter regarding his constituents' dissatisfaction with our response on the SNAP abort (attached).

At 11:05 a.m. I presided over Commission Meeting 2057 (action summary attached).

At 11:30 a.m. Gilpatric's secretary called to say that the luncheon on Friday, November 27th, is O.K. with Gilpatric. She asked where we would meet.

I sent a letter to Bill Moyers, at his request, commenting on the letter to the President from Finney (of the New York Times) suggesting that one of the U.S. gaseous diffusion plants be placed under "private, international ownership," to produce uranium-235 for civilian power. I agreed that it is worth investigating, pointing out security problems, etc. (copies of correspondence attached).

The requests from Joseph Moody (National Coal Policy Association) and Steve Dunn (National Coal Association) pressing us to get on with finding of Practical Value are getting more and more insistent.

I sent a letter to President Johnson making a case for advanced converters for the FY 1966 budget. I asked to see him to discuss this matter (copy attached to November 17th Journal).

I sent a letter (copy attached) to Governor Johnson, of Mississippi, thanking him for his cooperation in the SALMON shot.

At 12:30 p.m. Arnold Fritsch, John Napier and I had lunch in the Germantown Cafeteria with John Swartout. Swartout has accepted the appointment as our new Assistant General Manager for Reactors.

At 2:30 p.m. Earl Herald and I filmed a program on "Nuclear Science" for "Science in Action" in my Germantown office under the direction of David Parker.

I gave a Distinguished Service Award to Frank Pittman in the presence of his mother, senior staff members and Commissioners.

At 6:30 p.m. I attended an AEC farewell party given in honor of Frank Pittman, in the Officers Club of the Bethesda Naval Hospital.

Thursday, November 19, 1964 - Germantown

At 11:05 a.m. I called Jack Valenti. I asked Valenti whether he has seen the letter regarding the Fermi Award. He said he has it in his possession and will show it to President Johnson at his Texas ranch. (The President leaves for Texas at 2 p.m. today.) I said we would like to get the President's approval for this year's award as fast as possible because we're afraid the news may leak at any time. Also, I said we would like to have the President make the presentation; I suggested the week of December 7th, preferably the 8th, about 4:30 p.m. Valenti said he will check and let us know; however, he thought it might be better to have the ceremony about 11:30 a.m. or 12:30 p.m. in order to get good television news coverage, which is usually scheduled for broadcast at 5:30 p.m. or 6:30 p.m.

I called Lewis Strauss to tell him that I have decided not to be considered for the presidency of George Washington University. My desire to return to California is the determining factor here. I advised him to seek a person with academic background and warned him against seeking a person with administrative ability and experience but with no academic background. 365

NCPC

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NOV 88

NATIONAL COAL POLICY CONFERENCE, INC.

1000 SIXTEENTH STREET, N. W. WASHINGTON, D. C. 20036

G. A. SHOEMAKER, CHAIRMAN
JOSEPH E. MOODY, PRESIDENT

November 16, 1964

VICE CHAIRMEN
W. A. BOYLE
JAMES A. DRAIN
F. STILLMAN ELFRID
STUART T. SAUNDERS
PHILIP SPORN

Dr. Glenn Seaborg, Chairman
Atomic Energy Commission
Washington, D. C.

Dear Dr. Seaborg:

The Commission has announced initial plans for the development of advanced thermal converter reactors. These plans include, under a cooperative program, negotiation of a proposal from the California Department of Water Resources to construct and operate a 525 MWe nuclear power plant based upon the "seed and blanket" concept.

The National Coal Policy Conference, the United Mine Workers and the National Coal Association presented to the Commission on May 14, 1964 a petition for a finding of practical value of light water cooled and moderated pressurized and boiling reactors. On October 8, 1964 the same petitioners responded to the Commission's invitation dated July 10 for comments on matters relating to whether or not the Commission should make a finding of practical value at this time and what considerations should be taken into account. In this response, it was clearly spelled out that the seed and blanket concept, in its present form, was considered as a mere refinement of already highly developed technology, the refinement essentially consisting of nuclear fuel and fertile material-arrangement in the core. Recognition of this fact was clearly stated last summer in testimony by William E. Warne, Director, California Department of Water Resources, to a State assembly committee:

"The seed-and-blanket reactor is of the well known pressurized water type. More operating experience has been accumulated with the pressurized water reactor than with any other type of reactors. One other seed-and-blanket plant in existence today, the Shippingport station in Pennsylvania, has been operating successfully since it was completed in 1957. Certain design advances are incorporated in the reactor we are presently considering but their validity has been demonstrated by extensive testing at various AEC Laboratories."

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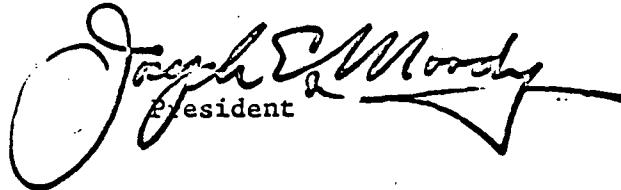
NATIONAL COAL POLICY CONFERENCE, INC.

Dr. Glenn Seaborg
November 16, 1964

Page Two

Since the AEC has now received all comments in response to the notice in Federal Register, we have requested you by letter dated October 30, 1964 that proceedings on the matter of finding of practical value should be scheduled and a public hearing held at the earliest opportunity. We have not as yet received a reply from the Commission with regard to this request. However, in view of the fact that the Commission is proceeding with negotiations with the California Department of Water Resources, it is difficult to avoid the conclusion that the Commission has prejudged the outcome of our Petition yet to be scheduled for hearing. We again request an early consideration for scheduling the public hearing and, in the meantime, that further negotiations with the California Department of Water Resources with regard to the seed and blanket reactor be held in abeyance.

Sincerely yours,


President

cc: Honorable John O. Pastore
Honorable Chet Holifield
Honorable Richard B. Russell
Honorable Clinton P. Anderson
Honorable Albert Gore
Honorable Henry M. Jackson
Honorable Bourke B. Hickenlooper
Honorable George D. Aiken
Honorable Wallace F. Bennett
Honorable Carl T. Curtis
Honorable Melvin Price
Honorable Wayne N. Aspinall
Honorable Albert Thomas
Honorable Thomas G. Morris
Honorable Craig Hosmer
Honorable William H. Bates
Honorable John B. Anderson

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NOV 88

United States Senate

COMMITTEE ON FOREIGN RELATIONS

November 16, 1964

9575 11/17/64

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 KARL E. MUNDT, S. DAK.

CARL MARCY, CHIEF OF STAFF
DARRELL ST. CLAIRE, CLERK

Dr. Glenn T. Seaborg, Chairman
Atomic Energy Commission
Washington, D. C.

Dear Dr. Seaborg:

This will acknowledge, with thanks, your report of October 28, in response to a communication I received from my constituent, Mr. Charles O. Porter of Eugene, Oregon.

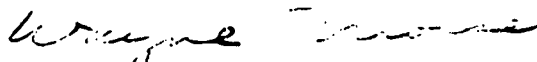
Mr. Porter reviewed your report with an acquaintance who claims to have expert knowledge of the subject discussed in your report, and upon the basis of this review, I received the following comments:

"I was not satisfied with the completeness of the AEC's reply. The Chairman says, for example, that certain fates have been specified by the ultimate disposition of a SNAP power unit. Other fates are possible--for example--atmospheric burnup in the post reentry phase. Or surface impact with the device in a reentry-weakened condition and subject to dispersal.

"We would like very much to have the details of how AEC experts 'thoroughly weighed' safety considerations for Pu-power sources. Apparently it is the practice of the AEC to publish evaluation of safety precautions and hazards studies of surface-based nuclear power plants. Thus, there is precedent for publication of evaluations of health hazards associated with SNAP type devices. Because of the international aspects of the latter, it would seem that public display of the pertinent data would be in the interests of the nation."

If you can supply information of the type requested in the above-quoted paragraphs, it will be appreciated. If, however, the information requested is within the limits of classified information for national defense purposes, I would appreciate your so indicating.

Sincerely yours,



Wayne Morse

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WM:so

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NOV 66

UNITED STATES GOVERNMENT

Memorandum

TO : R. E. Hollingsworth, General Manager

DATE: November 18, 1964

FROM : W. B. McCool, Secretary

Approved R. E. Hollingsworth

Date _____

SUBJECT: ACTION SUMMARY OF MEETING 2057, WEDNESDAY, NOVEMBER 18, 1964,
11:05 A.M., ROOM A-410, GERMANTOWN, MARYLAND

Original signed
W. B. McCool

SECY:ICB

Commission Business

1. Presentation of Distinguished Service Award to Dr. Frank K. Pittman

2. Letter to President re Advanced Converters

Approved, as revised. (Fritsch)

3. AEC 935/14 - Heavy Water Components Test Reactor

Approved. (Vander Weyden)

The Commission had no objection to your suggestion concerning the public announcement.

4. Negotiations with AI on Heavy Water-Organic Cooled Reactor

The status of negotiations was noted.

5. AEC 1151/21 - Proposed Authorization Bill - FY 1966

Approved, as revised. (Abbadessa)

The Commission requested you inform Mr. Schuldt of its schedule.

The draft authorization bill is to be revised in accordance with the discussion at the Meeting. (Abbadessa)

The Commission noted a staff paper was being prepared on the Cooperative Program for Merchant Marine Application. (Abbadessa)

November 18, 1964

6. Executive Session

a. Press Release on Reorganization

Approved with revisions. (Clark)

b. Effect of Reorganization on Grade Structure

The General Manager suggested the Chairman discuss this with Mr. Gordon, BOB, when convenient.

cc:
Commissioners

November 18, 1964

Dear Bill:

I have read with interest the letter of October 5 to the President from Mr. Finney of the New York Times suggesting that one of the U. S. gaseous diffusion plants be placed under "private, international ownership." This question of international control of the diffusion plants, of course, has a long history dating back to the Baruch Plan.

As you may be aware, the Commission is now in the initial stages of a study of the long-range future operation and ownership of the gaseous diffusion plants. This is a complex subject requiring the consideration of such factors as whether it would be desirable and timely for the U. S. to dispose of one or more of the diffusion plants, what the terms of such a transfer might be, what the implications are from the standpoint of national security, and how this would affect our present leadership in the development of peaceful nuclear use throughout the free world. In accordance with the President's response of October 26 to Mr. Finney, it is our intention to factor the alternative of international ownership or control into this basic study on the matter.

The Atomic Energy Commission has always recognized the importance of minimizing national pressures to build enrichment facilities. These national pressures have been countered in large measure by our policy of assuring countries of the long-term availability of enriched uranium on attractive terms. We frankly believe, however, that this desire for enrichment facilities on the part of some countries may never be entirely eliminated so long as the enrichment facility, regardless of its ownership, is outside their own territory. However, we believe that Mr. Finney's proposal has an important appeal in that for many countries it may mitigate these national desires. For this reason, and for some of the reasons cited in Mr. Finney's letter of October 5, we believe the concept of international ownership or control of one of our gaseous diffusion plants merits serious examination.

There are, of course, a number of difficult problems which would have to be resolved in implementing any proposal for private, international ownership. Perhaps the most important of these problems relates to the fact that we have always felt it to be essential from the standpoint of national security and the nonproliferation of nuclear weapons, to accord the highest security classification to information about our gaseous diffusion process. We have refrained from providing classified information on our gaseous diffusion process to other countries, including our closest allies. Under a scheme of international ownership, the sponsors of the operation are likely to require, as part of their overall managerial responsibilities, access to at least some information which is now classified. Another problem that may arise is the possibility that the U. S. might have to repossess a private gaseous diffusion plant in case of a severe military emergency.

A further concern raised by international ownership and management of these diffusion plants is that the U. S. Government, in the past, has been able to determine, on a case-by-case basis, those countries that should be authorized to receive U. S. produced special nuclear materials, even for peaceful purposes. Even with the adoption of private ownership of special nuclear materials, we have felt it important to reserve to the Government the ability to control the foreign distribution of such materials.

I thought you would be interested in some of our preliminary thinking on this subject, and some of the problems which we foresee. We shall, of course, consider these and all other relevant factors carefully in our review, and will inform the President of our conclusions when the study is completed.

Sincerely,

Glenn T. Seaborg

Glenn T. Seaborg

Honorable Bill D. Moyers
Special Assistant to the President
The White House

ARFritsch:msr

THE WHITE HOUSE
WASHINGTON

855 11/23/64

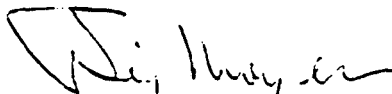
November 21, 1964

Dear Glenn:

Many thanks for your letter of
November 18 and the comments about
Mr. Finney's letter to the President.
We look forward to the completion of
the study.

Best regards,

Sincerely,



Bill Moyers
Special Assistant
To The President

Honorable Glenn T. Seaborg
Chairman
Atomic Energy Commission
Washington, D. C.



UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON, D.C. 20545

UNCL. BY DOE
NOV 86

NOV 18 1964

Dear Governor Johnson:

Please accept the appreciation of the U. S. Atomic Energy Commission for the cooperation and assistance afforded by the State of Mississippi during the execution of the Salmon detonation of Project Dribble at the Tatum Salt Dome.

As you know, the Commission faced some unprecedented problems in the detonation program, particularly those related to clearing close-in areas of people and establishing road blocks to make sure of the safety of all persons in the vicinity. The Mississippi State Highway Patrol helped make the program possible by its unstinting willingness to make patrolmen available at any hour necessary to meet the needs of the control effort. Commission officials at the scene were particularly impressed with the efficiency and good humor of Inspector Ernest F. Ray while directing the difficult tasks taken on by the Highway Patrol.

Dr. Robert Dye and his staff in the Mississippi Research and Development Center were helpful in a variety of ways, also. In fact, the Atomic Energy Commission and related agencies found all State of Mississippi officials cooperative at any time help was needed. We have appreciated the receptive attitude of the entire population of your State toward a program that could have been made more difficult by a different attitude.

I would appreciate your relaying to the proper officials of the State this expression of our gratitude.

Sincerely,

(Signed) Elean T. Seaberg

Chairman

The Honorable Paul B. Johnson, Jr.
Governor of Mississippi
Jackson, Mississippi

- sebcc - Addressee
- 2cc - Chairman
- cc - Com. Bunting
- cc - Com. Palfrey
- cc - Com. Ramey
- cc - Com. Tape
- 2cc - Secretariat
- cc - General Manager
- cc - Manager, NVO
- 3cc - Std DMA

MA

AGM

DCM

CM

Reeves/Crowson/cm

11/17/64



Presentation of Distinguished Service Award by Seaborg to Dr. Frank Pittman. Dr. Pittman's mother at left, November 18, 1964

At 12:30 p.m. I had lunch with John Abbadessa, Arnold Fritsch, and Commissioner Gerald Tape in the cafeteria.

At 2 p.m. Dave Hall briefed the Commission on his evaluation committee's report of their study of the G.E. Evandale 710 Maritime Reactor project. They concluded that it is a good project but shouldn't be carried out on a crash basis.

At 5:30 p.m. I called Glenn Smoak (a student at Yorktown High School), in response to his letter of November 15th, inviting me to speak at the annual Christmas Convention of the Washington Junior Academy of Sciences, to be held in the Washington area during the Christmas holidays. He said that they have a mailing list of about 850, and they usually have 300 to 400 students attend the Convention, although he is hopeful of having more this year. Their membership starts with eighth graders but it will be mostly high school juniors and seniors, plus some college students home for the holidays, who will attend the convention.

Last year the luncheon was held at the George Washington University cafeteria, and the speaker was from the Goddard Space Flight Center. It is planned to hold the luncheon at the Georgetown University cafeteria this year, starting about 12 or 12:30 p.m. He said I could speak immediately after the lunch. It was decided that a good date would be Tuesday, December 29th. I said I would address the group and asked whether a talk on the transuranium elements would be appropriate, and he said that would be fine. I said I would need a slide projector, and he said they could arrange to have one available. He said he would send me a copy of the agenda as well as the material that will be mailed to their membership. I asked Glenn about himself, and he told me he is a senior at Yorktown High School. He said he is interested in heat transfer physics, and hopes to go to Haverford College next fall.

Attached is a copy of the statement on the Great Society that the President made at a cabinet meeting today.

I wrote to Robert Rice of the Lawrence Hall of Science in Berkeley in answer to his letter about the Periodic Table planned for the Hall.

I sent a note to Peter to suggest he might want to get a reservation for his Thanksgiving trip since shuttle flights will be crowded. I sent him the schedules.

Friday, November 20, 1964 - D.C.

I wrote letter to the Editor of Electrical World in reply to his ill-considered editorial on the Bodega Bay withdrawal of Pacific Gas and Electric, explaining the AEC's Regulatory Role (copy attached).

I received White House NSAM 318 admonishing all to speak on MLF Concept only after clearing the text with the White House so that the executive department and the government will speak with one voice.

At 10:10 a.m. I presided over Regulatory Information Meeting 132 (notes attached).

At 10:30 a.m. I presided over Information Meeting 428 (notes attached). Among the items discussed were my November 16th letter to Bundy regarding the NTS strike (copy attached) and my letter regarding the visit of the Polish Nuclear Energy representative Wilhelm Billig (copy attached).

At 2:40 p.m. I attended the Minnesota Mining and Manufacturing meeting held in James Webb's office at NASA. Others present at the meeting included Webb, Raymond Bisplinghoff, Walter Sohler (General Counsel, NASA), Breene Kerr (NASA), Reynolds Marchant, William Abbott (General Counsel), John P. Ryan, Frank A. Steldt, Joseph

OFFICE OF THE WHITE HOUSE PRESS SECRETARY

THE WHITE HOUSE

STATEMENT OF THE PRESIDENT AT THE
CABINET MEETING -- NOVEMBER 19, 1964

The Great Society

1. Building the Great Society will require a major effort on the part of every Federal agency in two directions:

- First, formulating imaginative new ideas and programs;
and
- Second, carrying out hard-hitting, tough-minded reforms in existing programs.

2. All of you, I am sure, are convinced of the need of new ideas. I have been impressed with the imagination and vision you have shown in this area. But I want to impress on you the equally essential need to be bold in reforming existing programs.

3. The Great Society will require a substantial investment. This means:

- That as a nation we cannot afford to waste a single dollar of our resources on outmoded programs, which once may have been essential, but which time and events have overtaken.
- That as a Government we must get the most out of every dollar of scarce budget resources, reforming old programs and using the savings for the new programs of the Great Society. The Congress and the American people will provide the budgetary means to build the Great Society only if we take positive steps to show that we are spending only where we legitimately need to spend. Only if we are imaginative in reform will be allowed to be imaginative in new programs.

4. Reform comes in two packages:

First, we simply cannot afford to keep on doing the same thing year after year merely because that's the way we did it in the past. In particular, we cannot afford to spend scarce budget dollars

- to meet needs that no longer exist;
- to alleviate hardships that have long since been overcome; or
- to subsidize services that can be provided adequately at full cost.

Second, in what we do undertake, we must get the maximum value per dollar spent. I will continue to insist, as I have in the past, on increased productivity and greater efficiency.

(OVER)

5. Each of you must take a cold, hard look at your existing programs. I expect each of you to be as bold and as imaginative in reforming ongoing programs as in proposing new ones.

6. I think there are many cases where boldness in reform will pay off.

To be sure, every program needing reform has a pressure group which will fight reform. But I want to make the decisions as to those fights which it will be worthwhile to take on and those which it won't. I want you to give me plenty of such decisions to make.

If we are going to make an impact -- and history will find no excuse for us if we don't -- there will be no better time than this coming session of Congress.

7. I need your help in this. I depend upon your sharpness of vision, and your knowledge of the programs in your Department to identify the reforms needed.

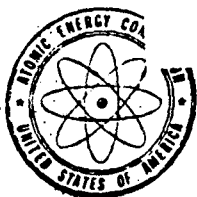
The speed with which we can move ahead to the Great Society will depend upon how well you do this job

-- now
-- in this budget, and
-- in this legislative program.

I think it is also very important that each of you get to know personally the new members of Congress, Republicans as well as Democrats.

We are planning a reception here from six to eight p.m., on December 9, for the new Democratic members of the House and Senate, and I want each of you to attend. This will not suffice, of course, for personal efforts on your part to get to know these men and women. In the long and short runs, I believe this personal relationship between senior members of the Administration and new members of Congress will return handsome dividends.

#



UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON 25, D.C.

UNCL. BY DOE
NOV 88

NOV 21 1964

Dear Sir:

The Commission has read your editorial in *ELECTRICAL WORLD*, November 9, 1964, under the title of "Post Mortem on Bodega Bay." We feel that you may have some misunderstanding of the regulatory function of the Atomic Energy Commission as laid down by the Congress.

Under the law and Commission regulations, every application for a power reactor construction permit is subjected to three separate and independent safety reviews before a decision can be made by the Commission on whether or not to grant the permit. The application must be reviewed by the Commission's Regulatory Staff, by the statutory Advisory Committee on Reactor Safeguards, and by the statutory Atomic Safety and Licensing Board at a public hearing.

In each of these groups there are qualified experts in the field of reactor technology with many years of experience. Under this system of separate, independent review by three different groups, and finally by the Commission itself, the Commission does not attempt to dictate the opinions of the responsible review bodies, nor to decide the merits of a case prior to the time that it reaches the Commission for final decision. To do so would prejudge the merits of the case without waiting for the record of the public hearing on which the Commission decision must be based.

Although the Commission staff and the ACRS, working closely together as they do, will not often be in disagreement, it is inherent in the system of separate and independent review that this may, on occasion, happen as in the Bodega Bay case. Some technical safety problems involve complex matters of judgment that cannot be reduced to "a clear-cut unequivocal

decision." Technical experts can reasonably disagree in their judgment on such matters.

The Advisory Committee on Reactor Safeguards is held in high esteem within the Commission, as is also the capability of our Regulatory Staff. We do not feel that the difference in the judgment arrived at by the ACRS and the Regulatory Staff "impugns the judgment" of either group. Nor does it cast doubt on the Committee's competence to judge future cases.

We take the view that public confidence in the AEC regulatory function is enhanced by public disclosure of the recommendations of the responsible review bodies, even though they may be in disagreement. This is a strength rather than a weakness in the system of nuclear safety review.

Sincerely yours,

(Signed) Glenn T. Seaborg

Chairman

The Editor
ELECTRICAL WORLD
McGraw-Hill Building
330 West 42nd Street
New York, New York 10036

bcc: Chairman ✓
Cmr. Palfrey
Cmr. Ramey
Cmr. Tape
Cmr. Bunting
Secretariat (2)
Dir of Regn
General Counsel
General Manager

Post Mortem on Bodega Bay

The Bodega Bay controversy has ended in a vacuum without the benefit of a clear cut decision on the important issues. The end came when Pacific Gas & Electric Co quite understandably withdrew its application to build the plant after a wrangle broke out within the Atomic Energy Commission over safety of the design.

The affair has terminated in a manner that reflects scant credit on the licensing processes of the Commission and that reveals weakness where strength should prevail. In an unprecedented move the staff of the Division of Reactor Licensing took exception to the report of Commission's tough, blue-ribbon Advisory Committee on Reactor Safeguards. They concluded that the 325-Mw atomic plant couldn't be built safely at Bodega Head because of danger of ground movement from earthquakes.

Thus the industry and the public are treated to the spectacle of a staff division of the AEC impugning the Commission's own committee of experts. Such a situation immensely prejudiced the process of resolving the touchy technical question of whether, in point of fact, the Bodega Bay reactor design could withstand earthquake shock and ground movement and led to PG&E withdrawal.

The areas of difference were these:

- The Division of Reactor Licensing has said that the plant is safe in all respects except its novel method of situating the reactor on a bed or cushion of sand as a guard against shear ground movement from a severe quake. This method, it said, hasn't been and cannot be tested adequately.

- On the other hand the Commission's independent Advisory Committee on Reactor Safeguards drawn from among the nation's leading experts on nuclear safety, claim in their report that "there is reasonable assurance that the proposed reactor can be constructed and operated at the Bodega Head site without undue hazard to the health and safety of the public." The report also said "The Committee believes that the engineering principles and general design are sound. These considerations afford that degree of assurance required for protection of the reactor in the unlikely event of the predicted maximum earthquake."

Under the rules, licensing of Pacific Gas & Electric Co to proceed with construction couldn't be decided until a public hearing had been held by an Atomic Safety & Licensing Board appointed by AEC. The initial finding of this board can be protested to the full Commission by the company, the public, or other interested parties before final action.

As we see it, the issue of whether the Bodega Bay design was safe is a technical one and couldn't be resolved by making it a public issue and the subject of a public hearing. This is a highly technical question calling for the judgment of the industry's best experts. The public and the industry is entitled to a clear-cut unequivocal decision on the technical adequacy of any proposed design from the agency established to render that kind of decision. Moreover, the public is entitled to assurance that its safety and welfare have been protected adequately.

In airing an internal difference of opinion on an issue as technical as this, the AEC has certainly damaged public confidence in its competence. Beyond that, it has permitted its staff to publicly impugn the judgment of its own Advisory Committee and so cast doubt on the Committee's competence to judge future cases.

And last but not least, the airing of this technical wrangle has immeasurably delayed and jeopardized prompt and definitive revision of siting criteria for nuclear plants.

The AEC will be a long time erasing the effects of this sorry affair.



ATOMIC ENERGY COMMISSION
WASHINGTON, D.C. 20545

UNCL. BY DOE
NOV 86

COPY NO. 2

November 20, 1964

REGULATORY INFORMATION MEETING 132

10 a. m., Friday, November 20, 1964 - Chairman's Conference Room, D. C. Office

1. Proposed Letter to the Editor, ELECTRICAL WORLD, re Article on Bodega Bay

Revised and approved. (Secy)

2. Transmittal of the Draft Report on Price-Anderson Indemnity to Stephen Dunn, National Coal Association

Approved. (DR)

3. Finding of Practical Value

Mr. Price said a staff paper containing a summary of public comments, recommendations regarding a conference and hearing, and proposed responsive letters to the Coal Association and others would be issued shortly for discussion on Wednesday, November 25. (Secy)

PRESENT

Dr. Seaborg
Mr. Ramey*
Mr. Palfrey
Dr. Tape
Dr. Bunting
Mr. Price
Mr. Lowenstein
Mr. Hennessey
Dr. Fritsch
Mr. Hollingsworth**
Mr. Bloch**
Mr. Vinciguerra**

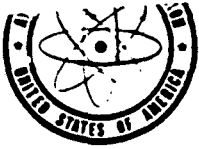
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Director of Regulation
General Counsel
Secretary

*Partial Attendance

**Attendance for the Last Item

W. B. McCool
Secretary



ATOMIC
WA

COPY NO. 2

November 20, 1964

UNCL. BY DOE
NOV 86

INFORMATION MEETING 428

10:30 a. m. , Friday, November 20, 1964 - Chairman's Conference Room, D. C. Office

1. November 18 Memorandum from Mr. Kratzer re UK Use of Enriched Uranium

The Commissioners said staff should proceed, pointing out in the discussions with the UK the extent of the US contributions. (DIA)

2. Chauncey Starr's November 17 Letter re the Spanish DON Program

A response reaffirming the Commission's position regarding R&D support is to be prepared. The Chairman said the letter could appropriately include an additional paragraph. (DIA-RD)

3. Draft Circular 60-2 (General Manager's November 19 Memorandum with Attachments)

For discussion on Monday. (Secy)

4. Press Release

Approved with revisions and to be discussed with additional people, if possible. The Chairman will consider telephoning re an appropriate date. (Secy)

5. NSAM 318

Noted.

6. Wire from Senator Cannon re NTS Strike

Noted. Mr. Bloch made a short report on the status.

✓7. November 16 Letter to Mr. Bundy, White House, re NTS Strike

The Chairman reported Mr. Bundy's favorable reaction to the letter and his request to be kept informed. (DGM)

✓8. October 5 and 30 Letters to Mr. Bundy, White House, re U-235 Production (Not used in the diary)

The Chairman said Mr. Bundy was deferring any action on these letters pending results of the AEC-DoD study.

✓9. Letter re Visit of Polish Representative, Mr. Billig

The Chairman requested an appropriate revision. (Fritsch)

10. Discussions of the ORION Program by DoD, AEC, NASA, and Air Force Representatives Yesterday

Dr. Tape made a brief report on the discussions which he attended yesterday.

11. Report on the Meeting of Isotopes and Radiation (Mr. Currie's November 16 Letter)

The Commissioners requested preparation of a response indicating that they would be pleased to see Mr. Currie prior to the next meeting of the Committee. (DID)

12. Novawood Program

Appropriate press announcements are to be made as contracts are developed for additional phases of the program. (DID; DPI)

13. Nuclear Materials Production (See OA-LXI-6958)

The Commissioners requested revision and further consideration. (DMA)

14. Forthcoming Staff Papers (General Manager's November 17 Memorandum)

Noted. Mr. Ramey requested information on the status of the paper on international power programs. (DLA)

15. Electric Power Supply - Hanford Works (General Manager's November 18 Memorandum)

Approved. (DGM)

16. Cooperation with India (General Manager's November 18 Memorandum)

The Chairman requested the BoB be informed of this program in light of the FY 1966 budget. The letter to Ambassador Thompson was approved. (DLA-Controller)

17. Status of Letter re Advanced Converters

18. Agenda for the Week of November 23

Approved. (Secy)

19. State of the Union Message (Mr. Brown's November 18 Memorandum)

The Commissioners suggested revision and discussion with Commissioner Bunting. Additional comments from the Commissioners are welcome. (AGMA)

The Chairman will consider calling Mr. Bill Moyers, White House Staff, re the status of the message.

20. AP Reporter Queries re John Finney's November 19 Article

The Commissioners discussed with Mr. Brown briefly the responses to Mr. Carey's queries. A copy of Mr. Palfrey's November 17 letter is to be sent to the Joint Committee. (AGMA-OCR)

21. General Manager's Report on Discussions with Mr. Seamans, NASA

22. Letter to DoD re Forecast of Radioisotope Availability

The Commissioners accepted Mr. Bloch's recommendation. (DGM)

23. Queries re Award

The Commissioners discussed briefly with Mr. Brown responses to the possible queries. (AGMA)

24. Legislative Amendment

The General Counsel will review the language with Commissioner Ramey. (GC)

PRESENT

Dr. Seaborg
Mr. Ramey
Mr. Palfrey
Dr. Tape
Dr. Bunting

Mr. Hollingsworth
Mr. Bloch
Mr. Vinciguerra
Dr. Fritsch
Mr. Hennessey
General Crowson*
Mr. Brown**

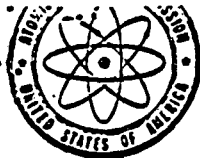
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Secretary

W. B. McCool
Secretary

*Attendance for Item 13

**Partial Attendance



ATOMIC ENERGY COMMISSION

WASHINGTON 25, D.C.

**INCL. BY DDF
NOV 86**

NOV 16 1964

Dear Mac:

On November 6 we advised Mr. Charles Johnson that a strike of Radiation Monitors at the Atomic Energy Commission's Nevada Test Site had resulted in a site-wide shutdown and that the events scheduled for November 12 and 13 would be delayed on a day to day basis, depending on the duration of the strike. As of this time, this strike is still in progress and we are unable to predict when a settlement will be reached.

This strike, one of several at the Nevada Test Site over the last few years, occurs at a time when we are endeavoring to negotiate new labor agreements to eliminate uneconomical labor practices at the Nevada Test Site and the Nuclear Rocket Development Station. We believe that these new agreements will conform more equitably to the steady, year-round operations prevailing in Nevada since September 1961. Injudicious settlement of the current Monitors' strike might jeopardize our general negotiating objectives.

The immediate underground nuclear test programs at the Nevada Test Site which include preparation for SULKY, a PNE cratering shot, several advanced weapon development experiments, and preparation for several Department of Defense experiments will be delayed by the strike on a day for day basis. These important programs cannot be delayed indefinitely. However, on balance we do not consider it necessary to settle this particular strike immediately to insure that particular test events are executed on the previously set schedule. Rather, we believe that in the long run, the interests of the nation's nuclear test program will be better served by adhering consistently to the sounder labor policy now being implemented and

contemplated for completion in mid-1965. If the strike continues for an appreciable time, we will re-evaluate our position and possible courses of action.

If you wish to discuss this matter in greater detail or if we can provide any additional information, please let us know.

Sincerely yours,

(Signed) Glenn J. Seaborg

Chairman

Honorable McGeorge Bundy
Special Assistant to the President
for National Security Affairs
The White House

so&cc - Addressee
→ 2cc - Chairman
cc - Commissioner Bunting
cc - Commissioner Palfrey
cc - Commissioner Ramey
cc - Commissioner Tape
cc - General Manager
2cc - Secretariat
cc - General Counsel
cc - Labor Relations
cc - Manager, NV

November 20, 1964

Dear Dr. Billig:

During our recent discussions in Geneva and Vienna, I had the opportunity to invite you to come to the United States at a time convenient to you. It gives me great pleasure to confirm and extend formally this invitation.

While the precise dates can be worked out later, I believe that you will find this coming spring a good time for the visit. You may wish to have one or two of your colleagues accompany you and I am pleased to extend an invitation to them as well. I am certain an interesting and informative visit to our installations devoted to the peaceful uses of atomic energy can be arranged; however, if there are any special points of interest which you would like to see, we would endeavor to include them in your itinerary.

While you are in the United States, I would hope that we could discuss the details of an arrangement which would provide a basis for cooperation in the nuclear energy field.

Sincerely,

(Signature) Glenn T. Seaborg

Glenn T. Seaborg

Dr. Wilhelm Billig
Government Minister Plenipotentiary
for Nuclear Energy
Palace of Culture and Science
Warsaw, Poland

Selden, and Tonant (Assistant to Minnesota Congressman Joseph Karth of Minnesota Mining and Manufacturing). The problem that the representatives of Minnesota Mining and Manufacturing wanted to discuss had to do with their patent for coated particle nuclear fuel. Other companies who are infringing their patents, they say, have obtained contracts with SNPO through low bids. The only recourse is that MMM patents are not valid.

After the meeting, Webb talked to me and asked me to join NASA in a high, prestigious position, defined according to my own choosing. I said that I could not since I intend to return to California when my present assignment is completed. Webb then offered me a part-time (say 25%) position when I do leave the AEC and I said I would consider his offer.

At 2:50 p.m. I called John Conway. I told him I had seen Frank Carey of Associated Press and we talked about the Finney article on AEC, printed in the Reporter. Carey had written individual Commissioners about this article. I said I told Carey that I was sort of speaking for them all, as they didn't want to answer individually to his query, and he seemed moderately satisfied with that. I told Carey that things seemed to be going all right now and that nobody is particularly pressing toward a change for a single administrator. Carey wanted some quotation and I gave him the following.

"It is true that a single administrator could make decisions faster, but it is the feeling of the present Commission that the five-member committee type of operation is working so satisfactorily that such a change is not necessary."

I said I asked Carey to check with me further if he planned to say more. I further pointed out to him that Finney's statement about the Commission agenda was inaccurate. I asked John if he thought it would be necessary for each of the Joint Committee members to answer the charges, or if he thought it could be handled in the way the Commission is handling it.

He said he wasn't sure, some members of the Committee like to make statements of their own. Holifield has some strong statements to make; Pastore has indicated his intention to say something about it if it comes up at the Forum meeting. With further reference to the Commission agenda, or lack of it, I explained to Carey that we do have agenda planning sessions; we do record votes, etc., and Finney was wrong in his statement that the scientific members vote against the lawyers. John said he had seen Palfrey's letter to the editor of the Reporter. I said that Carey also asked me about the sentences referring to the Joint Committee running things, and I told him this was not true; that we have a good relationship, and the statement that other government agencies are afraid to tell us things because we make end runs to the JCAE is not true. I told Carey that the other Agencies are responsible to Committees, and good relationships contribute to good operations, budgets, etc. John said if the JCAE or any members made a statement, he would let me know.

I called Valenti at President Johnson's ranch in Texas and learned that the President had approved Rickover for the Fermi Award. I called Rickover to inform him of this and he was very pleased.

I met with Associated Press writer Frank Carey to discuss Finney's Reporter article, "Is the AEC Obsolete?" Carey is writing an article commenting on it.

Saturday, November 21, 1964 - Swarthmore, Pennsylvania

I drove Lynne to Swarthmore for her interview by Dean Hobbs of the Admissions Office. After this a student, Elena Williams, from Panama, took us to lunch and then on a tour of the campus. Lynne and I drove up to Bryn Mawr to look over the campus. We arrived home about 6:30 p.m.

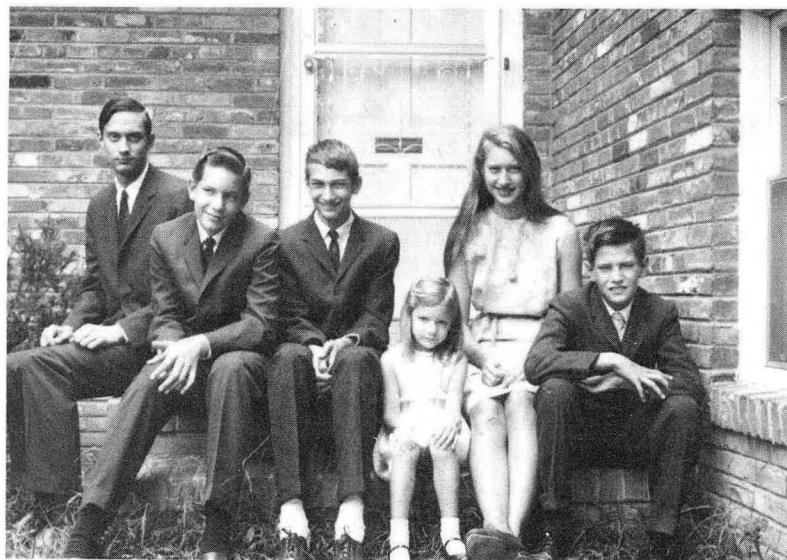
Allyne Snyder had dinner with the family.

Sunday, November 22, 1964 - Home

I attended the memorial service for the late President Kennedy at St. Matthew's Cathedral.

I read AEC papers, and worked on my AIF speech, "Nuclear Energy in the Next Decades," during the remainder of the afternoon.

Below is the picture for our Christmas cards this year.



Monday, November 23, 1964 - D.C.

At 10 a.m. I presided over Information Meeting 429 (notes attached). Among the items discussed was a letter from Palfrey to Ambassador Lewellyn Thompson on the impact of Plowshare on Non-Proliferation (attached, dispatched on November 25th).

I talked with Nat Welch, who reported on the progress of the Southern Interstate Nuclear Board (SINB).

INFORMATION MEETING 42910:00 a. m., Monday, November 23, Chairman's Conference Room, D. C. Office1. Establishment of Special DOD Joint Task Force

The Chairman said Mr. Harold Brown, DOD, had informed him of establishment of the Task Force and forthcoming request for AEC assistance.

2. Proposed Letter to Mr. Bundy, White House Staff, re Cooperation with France

The Commissioners discussed briefly with Mr. Kratzer revisions which are to be incorporated in the letter for its transmittal to the White House. (Fritsch-DIA)

3. President's State of the Union Message

The Chairman suggested additional comments may be given to Dr. Fritsch.

4. Telegram from Representative Chet Holifield, JCAE, re Use of ATLAS Facilities in SNAP-10A Program

The Chairman requested preparation of an early response and the General Manager reported staff is proceeding with the investigation. (Congressional Relations-DRD)

5. Discussion with Minnesota Mining and Manufacturing Company Representatives re Possible Patent Infringements

The Chairman reported briefly on his meeting last Friday with NASA officials and representatives of the Minnesota Mining and Manufacturing Co. The question of possible patent infringements on the Company's nuclear coated particle nuclear fuels development is to be reviewed and a report made to the Commission. (GC)

6. "Letter from Arthur Kranish, Washington Science Trends, re Publication of Technical Journals"

The Chairman requested preparation of an early response and information on the status of the report on AEC publication of technical journals. (AGMA)

7. Possible Letter to Frank Carey re John Finney REPORTER Magazine Article of November 19, 1964

The Commissioners requested circulation of alternative versions of the proposed letter. (AGMA)

8. John Finney's Query, Saturday, November 21, re AEC Release on Fermi Award

- ✓ 9. Proposed Letter to Ambassador Thompson re PLOWSHARE and Proliferation

The Commissioners discussed briefly revisions to the proposed letter which will now be transmitted by Mr. Palfrey.

10. Chairman's Possible Meeting with the President to Discuss Advanced Converter Program

11. BOB Bulletin 60-2 (Draft Circular No. A - See General Manager's November 19 Memorandum)

The Commissioners discussed briefly with the General Manager and Mr. Tremmel proposed AEC comments on the BOB Draft Circular. The Chairman requested further staff review with Commissioners Ramey, Bunting and Tape. (GM)

12. Restrictions on University Grants Under Civil Rights Act

Mr. Ferguson is to discuss this matter with Commissioner Bunting. (GC)

13. Special Nuclear Materials Production

The General Manager reported the Secretary of Defense has signed the letter to the AEC. The Chairman requested early circulation and discussion on Wednesday, November 25. (DMA-Secy)

14. Commissioners' Meeting with Representatives of the National Bureau of Standards, 2:00 p.m., Room 1113-B, Today

Commissioner Ramey will preside.

PRESENT

Dr. Seaborg	Mr. Hollingsworth
Mr. Palirey	Mr. Bloch
Mr. Ramey	Mr. Vinciguerra
Dr. Tape	Mr. Abbadessa
Dr. Bunting	Mr. Hennessey
	Mr. Kratzer*
	Mr. Brown**
	Mr. Tremmel***
	Mr. McCool

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Secretary

*Attendance for Item 2

** Attendance for Items 7 and 8

*** Attendance for Item 11

NOV 25 1964

Dear Tommy:

At the November 5, 1964 meeting of the Department of State Thursday Planning Group, Walt Rostow suggested that the AEC put in writing its views concerning the question as to whether the promotion of the Flowshare program may be in conflict with the U. S. policy on non-proliferation.

The attached paper presents our analysis of the argument.

Sincerely,



John G. Palfrey
Commissioner

Ambassador Llewellyn E. Thompson
Acting Deputy Under Secretary of State
Department of State
Washington, D. C.

Attachment:

Statement on Flowshare and Non-Dissemination

cc: W. W. Rostow
Counselor and Chairman of
Policy Planning Council
Department of State

Office of International
Scientific Affairs
Department of State
Attn: C. W. Thomas

It has been suggested that the promotion of the U. S. Flowshare program to develop peaceful applications for nuclear explosives, is inconsistent with efforts to prevent proliferation of nuclear weapons capabilities. The arguments in support of this position have been stated as:

- A. Dissemination of Flowshare technology to Nth countries will assist them in development of nuclear weapons capabilities, and
- B. The concept that nuclear explosives can be used for peaceful as well as military purposes may be used in justification for a decision by some countries to undertake nuclear weapons programs under a cloak of respectability.

The foregoing arguments may be rebutted as follows:

- a. The Flowshare program, as contemplated by the USAEC, would not contribute to any other country any materials or technology which could be used in the design, development or production of nuclear explosives. There is no intention by the USAEC, nor does the law permit, making available to other countries information concerning Flowshare device design or manufacture. Such information is classified Restricted Data under the Atomic Energy Act. The information which has been and will continue to be made available concerns only the utilization of such devices in the various peaceful applications such as excavation, mining, oil and gas production, and research purposes. By making available to cooperating countries all information related to utilization of the devices, and by expressing a willingness to provide the explosives and related services under appropriate conditions, the U. S. should greatly reduce rather than accelerate the necessity or justification for other countries to undertake an independent Flowshare device development program. It should be borne in mind that it is visualized that the USAEC would provide the services of supplying, emplacing and firing the devices, and that these devices remain under U. S. control at all times.

While the U. S. would fabricate and supply the devices to be utilized in another country, arrangements could be devised whereby plutonium produced in reactors in the other country would be accepted, at an attractive value, in payment for the services provided by the U. S. If such a policy were adopted, successful general application of nuclear explosives to peaceful uses would be likely to result in significant decreases in the quantities of plutonium available to other countries for other purposes. In that event, the Flowshare program would be an effective agent in restraining proliferation. It is of interest that the Committee on Nuclear Weapons Capabilities has included Flowshare applications among the possible means for diverting India from pursuing development of nuclear weapons, and that such applications are being studied.

- b. A statement of intention by an Nth country to undertake development of nuclear explosives for peaceful purposes should not and would not be credible if the U. S. would adopt and announce a policy of making such devices available at reasonable cost. Moreover, the simple economics of such an undertaking in an Nth country as compared with using U. S. devices would be patently unupportable. Flowshare device development was feasible by the U. S. only on the basis of the investment of many billions of dollars expended for weapons development over almost 20 years.

The technical requirements for Flowshare devices are such that fission devices, even of the most sophisticated type, are not generally suitable. Fission devices require large quantities of fissionable materials which are (1) too expensive to offer economic advantage over chemical explosives and (2) introduce unacceptable amounts of radioactivity. Thus, thermonuclear devices employing advanced technology are essential for a justifiable program.

The progress of the French weapons development program toward development of a thermonuclear device provides a measure of the time and effort required, even given the determination and resources applied in that case, for such an achievement.

One also must measure the effort required to develop thermonuclear devices against the potential market. The costs quoted for Flowshare services by the U. S., which has the advantage of an extensive weapons development program and a large and efficient industrial base provided for weapons production, are not likely to permit an Nth country to compete effectively in the world market for supplying nuclear explosives. (The statements attributed to Dr. Bhabha, in which he used the published U. S. charges for nuclear explosives to show that nuclear weapons are not really so expensive, cannot be taken seriously. It should be apparent that the published costs are only valid if, as in the U. S., the advantages of experience, time, and investment for weapons purposes are present.) Therefore, the basis for economic justification of independent development of explosives would be limited to potential domestic applications. The availability of U. S. devices at reasonable costs for those applications, as well, would make such justification implausible.

The foregoing analysis leads to the conclusion that there is not reasonable justification for the undertaking by an Nth country of the development of nuclear explosives and that a

statement of such an intention would be a transparent effort to mask an intention to develop nuclear weapons. It would be well to make this view clear, in order to foreclose use of the Plowshare argument in any internal debate.

In summary, the U. S. Plowshare Program is consistent with efforts to prevent proliferation, in that it will not provide assistance or justification for weapons development by other countries. Moreover, it appears quite probable that it will make a real contribution to the well-being of the world and that it will focus attention on the peaceful rather than the military aspects of the atom and will divert significant resources to peaceful rather than military pursuits.

The course which the U. S. should follow is to continue its developmental efforts and to make a serious effort to maintain international interest in the application of nuclear explosives for peaceful uses. It would be tragic if the potential benefits were foregone on the basis of unsupported or speculative concerns that the program would contribute to proliferation.

I wrote McGeorge Bundy regarding the question of furnishing computers and more uranium-235 to the French for their land-based submarine prototypes (copy attached). The question of support of this type to France, which can help their nuclear capability, is paramount today.

At 10 a.m. I received a telephone call from Harold Brown. He said there is a new Joint Task Force 2 being set up to look at air to surface offense with low altitude aircraft. It will be headquartered in Albuquerque, New Mexico, and will be a \$5 to \$10 million a year operation. The Commander of the Task Force is George Brown, who will be writing to General Delmar Crowson to ask if Sandia can provide them with technical assistance. They will require about 80 people at the start and about 150 in later years. Their budget will also go up about \$4 or \$5 million in later years. Harold said he thought the Sandia people are anxious to do this because their workload with AEC is going down. He said it could be handled by transfer of funds from the AEC Division of Military Application (DMA) to DOD. He asked my reaction to this. I told Harold that, offhand, it looked all right, but we would want to know more about it. I told him we would have a look at his letter describing this, and let him know.

At 11:45 a.m. I received a telephone call from Robert Ginna (Rochester Gas and Electric), in Washington, D.C., who called regarding the HTGR to be built in Rochester. They are very disappointed because weeks go by and nothing happens. He feels that the AEC staff is wasting too much time. He said, "If you want to do this job, let's get on with it, instead of all this nit-picking." He said that last week he sent two men down here and they accomplished nothing. He said that we agreed on the principles in Geneva and he doesn't see why we should be constantly renegotiating the agreement. He said that what makes it all the more important to get started is that the coal people are seriously fighting this. I said I would inquire into the issue.

At 12:50 p.m. I had lunch with Commissioner John Palfrey and Labowitz at the Roger Smith Hotel.

I received a letter from Secretary of Defense Robert McNamara saying he will back the AEC in building a merchant ship prototype. This is a change in his view on this (copy attached). My reply went back on a subsequent date, December 7th (copy attached).

At 2:35 p.m. I had an appointment meeting with Harry Smyth and John Hall. 1. We discussed the Director Generalship of the IAEA. Smyth feels that he should write Emeylanov mentioning Eklund, and the possibility of other candidates, in order to determine the official Russian position. I mentioned that I talked to Eklund in Europe last September and indicated my support for him so that I didn't feel I could support someone else unless substantial opposition from Russia developed. Smyth mentioned the possibility of Randers and seemed to think Emeylanov would favor him as a possibility. 2. Smyth asked about the prospects of an accelerator to go to Princeton in the following year now that the choice for the FY 1965 accelerator has gone to the University of Maryland. I said that the choice was between Maryland, Princeton and Duke, and that although I couldn't make a promise, it seemed to me that Duke and Princeton would receive the next two low energy accelerators in the next two years, although I didn't know in what order.

At 4:30 p.m. I attended the Meeting of the Principals held in the Conference Room of the Secretary of State. Among those present were Rusk, Foster, McNamara, Commissioner Palfrey, Walter Sohler (NASA), Thompson, Fisher, McNaughton, Wheeler, Scoville, Carter, Hornig, Keeny, Bundy, Wilson, Labowitz, Cleveland. Rusk opened

CROSS REFERENCE SHEET

Document #
903989

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NOV 86

TITLE OF DOCUMENT Letter Serberg to Bundy. 11/23/64. 2 pages

This document requires further classification review and has been removed from this folder.

Jeffrey B. Isahn
Name

August 26, 1986
Date

47244-47245

WASHINGTON

20 NOV 1964

UNCL. BY DOE
NOV 86

Honorable Glenn T. Seaborg
Chairman
U. S. Atomic Energy Commission
Washington, D. C. 20545


175 11/23/64

Dear Glenn:

As I have stated to you previously, the Department of Defense does not have a need for nuclear powered merchant ships. In fact, for the contingencies we consider most reasonable to prepare for, the present "merchant ship reserve" may be more than we need. We are, however, interested in reducing our overall sealift cost. We are interested in the development of an economical nuclear power plant of the type which would be suitable for installation in merchant ships. In some military situations the high speed, endurance, and logistic freedom of nuclear powered merchant ships would be beneficial. An economical plant developed for merchant marine applications might also have the potential for application in certain naval non-combatant ships and auxiliaries (e.g., replenishment ships), but the cost differential between nuclear and conventional ships would have to be reduced substantially before this became the case.

If your evaluation indicates that such a nuclear power plant can be provided on a timely basis, I would endorse a program for a reactor prototype.

Sincerely,



CC:

Hon. Nicholas Johnson
(MarAd)

DEC 7 1964

Dear Bob:

Thank you for your November 20 letter outlining the interests of the Department of Defense in the economic application of nuclear power in the merchant marine. I also share your view that nuclear power must result in an overall reduction in the cost of transporting cargo if it is to have an impact on our merchant marine problems.

Results of careful study made over the past few years have convinced me that nuclear powered merchant ships have a near term potential of providing competitive sealift costs for an express cargo type of maritime service. This service, which would otherwise be an economic impossibility, will utilize high-speed cargo ships of the latest automated design serving specific trade routes. Studies of specific trade routes are now being carried out by Maritime Commission contractors and are expected to further confirm this conclusion and identify the most attractive routes for initial application. One of the most important conclusions of the early studies was that express service will, of itself, generate substantial additional cargo. Interest in the commercial potential of this express service has been shown by a major east coast shipping company to the extent that the company is willing to enter into a contract with the Maritime Administration to purchase and operate a flight of express nuclear ships.

You have indicated in your letter that a reduction in overall sealift cost is of prime interest to the Department of Defense and that in some situations high speed, endurance, and logistic freedom would be beneficial. It is my belief that these aims will all be achieved through vigorous pursuit of the service described above.

A number of nuclear power plant designs have been examined in detail by my staff over the past year. Since early operation of this express service is desired, only those plant designs based on firm technical foundations were considered. This

approach has led us to selection of a compact pressurized water plant. Through significant improvements in mechanical design and the use of slightly enriched nuclear fuel it appears that a compact plant can be built that will produce propulsion energy at a nuclear fuel-cycle cost of about 2.3 mils per shaft-horsepower-hour.

You have mentioned the potential application of these plants to certain non-combatant and auxiliary naval vessels. The cost of the unit referred to above is about 6 million dollars and produces 70,000 shaft horsepower. A smaller unit producing 20,000 shp would cost about 4 million dollars. The larger size results in the most favorable savings and it is this power level toward which our program is aimed.

I am hopeful that a positive program for moving ahead with a land-based prototype can be included in our 1966 fiscal year budget. If we are able to accomplish this, the prototype can be placed in operation in early 1969 to support construction of a flight of nuclear ships which could be in full commercial operation in 1971. The expected widespread use of maritime nuclear power by the mid-1970s will result in the usual benefits of high production and lead to significant cost reductions.

My staff members are keeping various members of the Department of Defense staff informed of our progress. If I can provide any additional information relative to the Department of Defense needs as described in your letter, please advise me. Your support in this important effort would be appreciated.

Sincerely yours,

Chairman

The Honorable Robert S. McNamara
Secretary of Defense

bcc: Chairman (2)

GM (2)

AGMR

OC

GM 36790

RD 11347

the meeting by calling upon Foster. Foster described the functions and meeting of the Thompson Committee on Non-Proliferation. Then he went on to speak on his memo (copy of memo attached without attachment) of November 12, 1964, with its two draft resolutions. These papers form the basis for this meeting of the Principals. Foster described the three points in his memorandum, namely, 1. should we attempt to build a non-acquisition pledge into the resolution; 2. should each resolution include a provision calling upon States which are not members of the United Nations to declare their readiness to undertake the same obligations; 3. the danger of an amendment to the resolution seeking to bar the MLF. He mentioned the rationale for the tactics to be employed, and the dangers involved and said that the two courses of action and the two resolutions are merely illustrative. He said that he would like approval of the basic course of action and then would come back to the Principals with regard to detailed wording.

Rusk said that he thought a basic question was whether we should have a non-proliferation policy in which no other countries might acquire nuclear weapons beyond the present five; are we clear that this should be a major objective of U.S. policy. For example, we might want to be in a position where India or Japan would be able to respond with nuclear weapons to a Chinese threat. McNamara felt that it would take decades for India or Japan to have any appreciable deterrent strength, but he said that, nevertheless, he thought that this question of a non-proliferation policy should be studied, perhaps by a Committee. Rusk mentioned the possibility of having an Asian nuclear group of countries, pointing out that the real issue is between Asian countries and not between the Whites and the Asians. McNamara said there are three courses of action that might proceed simultaneously: 1. a Committee to study this question of a non-proliferation policy, 2. the deliberations of the Gilpatric Committee, and 3. the work on the resolutions regarding non-proliferation that might be introduced in the United Nations General Assembly, which is the subject of the meeting today. He pointed out that a policy of non-proliferation requires the U.S. to give guarantees of defense of nations who agree to non-proliferation and want such defense by the U.S.

Foster reiterated that although these are valid points we must remember that the U.S. will be faced with a number of resolutions as the United Nations meets, and we must be ready with a course of action. Rusk suggested that we continue the discussion on the basis that the U.S. policy is one of non-proliferation and suggested that the question of whether this should be our policy or not ought to be settled by about January. Bundy warned about the need to proceed very quietly on this basic question of whether the U.S. policy should be non-proliferation, because everyone assumes that this is our policy and any news to the contrary would be very disturbing throughout the world. I expressed my doubt as to the feasibility of any non-non-proliferation policy, saying that I thought this would lead to a loss of control by the U.S. and would inevitably lead to trouble. Foster then went on to describe the proposed U.N. resolution in some detail.

Rusk questioned whether paragraph 3 in the resolution should be part of an international agreement. This is the paragraph that calls upon all States in possession of nuclear weapons to declare their readiness to undertake not to manufacture or otherwise acquire control of nuclear weapons. He also felt that the wording should be, "acquire national control of nuclear weapons." Rusk pointed out that there is a tendency for the non-aligned countries to prefer stronger and stronger resolutions over any actual disarmament as it might affect them.

I said that it might be worthwhile, at this meeting, to discuss the enforcement aspects of any non-proliferation policy. I pointed out the hopeful progress that had been made in the IAEA in the safeguards area. I felt that some recognition of

November 12, 1964

MEMORANDUM FOR THE COMMITTEE OF PRINCIPALS

SUBJECT: Attached paper on "Non-Proliferation
of Nuclear Weapons" - Course of action for UNGA

The attached paper on "Non-Proliferation of Nuclear Weapons" is submitted by the special Committee on Non-Proliferation chaired by Ambassador Llewellyn E. Thompson. It sets forth a general course of action for the US at the forthcoming United Nations General Assembly. While, as the paper notes, it will be necessary to retain tactical flexibility in order to take account of the results of consultations and the developing situation with respect to the General Assembly, it seems appropriate for the Principals to consider and approve the general tactical line.

In order to make this line as clear as possible, an illustrative UNGA non-proliferation resolution is appended (TAB 1). Essentially, this resolution would note that the international agreement called for in the Irish Resolution has not been achieved, record the intention of non-nuclear states not to manufacture or acquire control of nuclear weapons and their readiness to enter such an agreement, and request the ENDC urgently to prepare a draft of the agreement. Similarly, in the event that we cannot obtain a consensus favorable to a substantive resolution along these lines, a draft procedural resolution is also appended which could be used in a "fallback" effort to refer further consideration of all resolutions in this field to the ENDC at Geneva (TAB 2).

The recommended course of action is based on the assumption that it remains US policy to prevent or curtail proliferation of national nuclear capabilities. At the same time, it also seeks to head off various unacceptable proposals in this field which other states are likely to offer and which, if offered, we shall have to counter.

Three points seem to stand out as particularly important for consideration by the Committee of Principals:

(1) Should we attempt to build a non-acquisition pledge into the resolution? This question is discussed in the text and reflected in the bracketed language in operative paragraph two of the illustrative resolution (TAB 1).

(2) Should such a resolution include a provision calling upon states which are not members of the UN to declare their readiness to undertake the same obligations? This issue is also discussed in the text and reflected in operative paragraph three of the illustrative resolution.

(3) Finally, there is the danger of an amendment seeking to bar, or suspend, negotiations on the MLF. There is, of course, no way in which we can guarantee that such an amendment will not be offered to any resolution, but we must anticipate that the USSR and possibly others will seek UNGA support for an anti-MLF recommendation in any event. The illustrative resolution attempts in operative paragraph five to head off such an amendment by preemptive introduction of broad language which would not inhibit negotiation of a MLF.

In addition to these three major points, several other tactical problems are noted. With respect to operative paragraph one, the illustrative resolution attempts to harness wide support by reference to the OAU and Non-Aligned Conference resolutions, without endorsing portions of those resolutions which involve prohibitions or limitations on transit. In operative paragraph six, the referral of results of the Geneva deliberations to the UN Disarmament Commission by a stated date would be intended to head off calls for a world conference, while showing regard for urgency of action and taking into account the anticipated view of non-ENDC members that they should have a voice in the preparation of any agreement they are expected to sign. Such tactical questions, however, will have to be decided in the light of developments at the Assembly.



William C. Foster
Director

Attachment:

Paper on "Non-Proliferation of Nuclear Weapons"
submitted by the special Committee on Non-Proliferation.

CROSS REFERENCE SHEET Document # 903990

TITLE OF DOCUMENT (Attachment) Applying NSAM
TO TWO pending cases. 11/24/64, 4 pages

This document requires further classification review and has been removed from this folder.

Jeffrey B. Isahn
Name

August 26, 1986
Date

this aspect with respect to the resolution might be in order. I pointed out that if this were neglected and the countries signed a resolution with no reference to enforcement, they might then later refuse to accept safeguards on their civilian nuclear power reactors on the basis that it was impugning the honesty of their declaration to require them to submit themselves to inspections. I also said that it might be worthwhile to talk to Western suppliers of nuclear materials for civilian nuclear power purposes to try to convince them to strengthen their safeguards, and I mentioned the United Kingdom and Canada as examples. I also said that it might be worthwhile to talk to some of the nuclear powers in order to convince them to apply safeguards to their own civilian nuclear power programs. When Rusk called on Cleveland to comment on my suggestions, Cleveland said he agreed and said he thought something on the safeguards should be put into the resolution. Rusk said then let's redraft the resolution to include this matter of safeguards. This would come into paragraph 2 of the resolution, which states that the member States voting for this resolution which do not possess nuclear weapons, declare that they are ready to undertake, through an international agreement to be concluded under U.N. auspices, not to manufacture or otherwise acquire control of nuclear weapons.

McNamara said that we simply must stop the leaks which come out of meetings like this, and particularly the fact that the position of the U.S. on non-proliferation is being studied simply must not leak. Foster said he would set up a committee to make this study as soon as possible. (After the meeting Palfrey and I talked to Bundy to suggest that Bill Webster be added to the Gilpatric Committee, and Bundy agreed.)

At 5 p.m. I called Jack Valenti (LBJ Ranch, Texas). I told Jack if he hasn't already set a date with the President for the Fermi Award ceremony, we might do this in January when Congress is back. Jack said that the President would definitely do this, and he would suggest to him (the President) that they set the time in January when Congress is back. I said that we would go ahead and make the press release here in Washington if that is O.K. and he said we should go ahead. I said when the President returned to Washington, we could get together on a proper date in January for the ceremony.

At 5:30 p.m. I received a telephone call from Kermit Gordon. 1. I asked him if he had an opportunity to read my letter to the President. He said he had it on his desk, but he had not read it. 2. I asked what the prospects were for our meeting. He said he had learned that the President will spend the better part of next week in Texas, and there is a possibility that he (the President) will be calling him to Texas next week. Gordon said that he and Moyers had talked about things they might discuss with the President; and, if he did call perhaps we (Gordon and I) could make a joint trip, or he could go down one day and I could follow the next day. He said he would be talking with Moyers tomorrow morning and maybe something could be worked out. I said this would be the best possible solution from my point of view. 3. I advised him of the reorganization of our Reactor Development Division and said I thought we now have a very strong set up.

Tuesday, November 24, 1964 - Germantown

This morning I sent my biweekly letter to the President (copy attached).

At 11 a.m. I called William Webster regarding the Gilpatric committee which is to study the problem of non-proliferation of nuclear weapons. I said that the President is about to appoint many high-powered people to the committee, but none of them are closely related to nuclear power. We are anxious to have someone on the

November 24, 1964

L. BY DOE
NOV 86

Dear Mr. President:

I have the pleasure of submitting to you the regular bi-weekly report on significant developments in the atomic energy program.

1. Desalting

Coincident with the signing of the U.S.-U.S.S.R. desalting agreement, a team of U. S. desalting experts from the AEC and the Department of the Interior visited the Soviet Union. In addition, a similar AEC- Department of Interior team arrived in the United Arab Republic on November 23 for a visit of two weeks. The team will acquaint themselves with the current and projected U.A.R. water and power needs and will discuss the technical and economic feasibility of a proposed nuclear power-desalting plant at Borg-El-Arab, near Alexandria. The International Atomic Energy Agency has been invited to participate as an observer. Afterwards the team will proceed to Tunisia for discussions of power and water technology in the desalting field.

2. Safeguards

- a. In my letter to the Editor of The New York Times (printed November 22), I replied to a November 10 editorial which argued that the International Atomic Energy Agency should be relieved of its responsibility for safeguarding nuclear materials and equipment against diversion to military use. My letter emphasizes the specific and concrete role which these control systems are playing in limiting the spread of nuclear weapons and their importance in developing, demonstrating and securing acceptance of the principles and techniques of international control.
- b. Inspectors from the International Atomic Energy Agency are performing the first safeguards inspection of U. S. reactors pursuant to a new agreement with the Agency signed on June 15, 1964, for the application of Agency safeguards to certain U. S. reactor facilities. This

agreement replaced a more limited two-year agreement which had expired. Following the inspection of the Brookhaven Graphite Research Reactor, which began on November 12, inspection of the Yankee Nuclear Power Station at Rowe, Massachusetts, began on November 16. This is the first time a large U. S. power reactor has been inspected by the Agency.

3. Raymond

The AWC is engaged in a multi-phased effort to place a new solid wood-plastic composite, called Raywood, at the disposal of American industry, especially in the Appalachian region. Raywood results from impregnating wood with a liquid plastic and then exposing the treated wood to radiation from a gamma ray source such as cobalt-60. The process essentially converts soft woods to a product which promises to be superior in hardness and other construction properties to ordinary hardwoods. On the basis of data obtained in a three-year research program, the AWC is negotiating with the Vitro Engineering Company of New York to conduct engineering design studies and cost analyses leading to and including a conceptual design for a pilot plant to produce Raywood. An extensive laboratory sample testing project is contemplated for the Research Triangle Institute, Durham, North Carolina. Concurrently with these efforts, plans are in progress to convert samples into Raywood for application testing by the wood products industry.

4. Service of Radiation Instruments at Nevada Test Site (RTS)

The service at RTS has been terminated and essentially all of the workers have returned to their jobs.

5. Project Sully (Confidential)

As a result of the strike at the RTS, Project Sully, a 100-ton (0.1 RT) nuclear entering experiment in hard rock (granite) has been delayed by at least a week. Originally scheduled for the first week in December, Project Sully has been temporarily coordinated with other Government agencies and your office and is designed to develop data on entering parameters and radioactivity release and distribution. The bulk of the radioactivity from this very small low yield explosion will be contained so that its effect will not be detectable for any appreciable distance beyond the test site.

Responsibility submitted,

Signed: Glenn T. Seaborg
Glenn T. Seaborg

The President
The White House

committee who understands civilian nuclear power and safeguards, and I asked whether he would be willing to be a member of this committee. He replied that, if he didn't have to put in too much time, he would be glad to help. I said we would be willing to help him as much as possible. (I called Spurgeon Keeny and told him Webster would be willing to work on this committee.)

At 12:40 p.m. I received a telephone call from Kermit Gordon. Gordon said that, after spending a good part of the weekend reviewing the problem, he is prepared to recommend to the President the three concept converter reactor program. He will do this when he sees the President in Texas tomorrow. If the President concurs, Gordon will let me know as soon as he returns to Washington and we can then go ahead. He said he would take a copy of my letter to the President for him to read. Gordon mentioned that the case for the seed and blanket program has strengthened considerably recently. (This makes my proposed trip to Texas to discuss this with President Johnson unnecessary and represents somewhat of a triumph for our AEC program.)

At 12:45 p.m. I had lunch with McDaniel, Kolstad, and Ruark in the Germantown Cafeteria.

At 2:45 p.m. I presided over Information Meeting 430 (notes attached). Among the items discussed was Kermit Gordon's November 23rd memo regarding the Great Society (copy attached) and the Statement of the President on the Great Society on November 19th (copy attached on November 19th). My response to Gordon was subsequently sent on November 27th.

Pete arrived home from Harvard about 6:45 p.m. to spend Thanksgiving Day holidays here with us.

I attended an evening meeting of the Bureau of the Budget held in the Executive Office Building. We discussed possible uniform policies in the DOD, NASA, and the AEC on support of Independent Research and Development in industry. I held out for criteria of relevancy to the program which distresses the DOD since they want a much more liberal policy. This will be considered further in an attempt to reach a compromise.

Wednesday, November 25, 1964 - Germantown

I sent a letter to Moyers making a number of suggestions for President Johnson's State of the Union Address (placing National Laboratories at the disposal of Universities, production of useful heavy isotopes, desalting, plowshare, nuclear power underseas, etc.) (Copy attached.)

At 10 a.m. I presided over Information Meeting 431 (notes attached).

The Commission made the determination of national interest to authorize the operation of one of Savannah River's reactors at a neutron flux of $2-5 \cdot 10^{15}$ next spring to produce larger quantities of Cf-252 and to demonstrate the feasibility of producing Cm-244 in quantity and on a shorter time scale.

At 11 a.m. the Commission met with Bob Seamans to hear the preview of NASA's letter to President Johnson (in response to his request last December) outlining future programs for advanced space missions, some of which will require nuclear power.

At 12:30 p.m. I presided over Regulatory Meeting 207 (action summary attached).



UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON 25, D.C.

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NOV 86

COPY NO. 2
November 24, 1964

INFORMATION MEETING 430

2:45 p. m., Tuesday, November 24, Room A-410, Germantown

1. Advanced Converter Reactors

The Chairman reported Mr. Kermit Gordon, BOB, had informed him he will recommend to the President approval of the three converters.

2. Secretary of Defense McNamara's November 20 Letter re Nuclear Maritime Prototype

Noted.

3. Meeting of Principals, November 23

The Chairman reported briefly on the meeting at which he had made the point of IAEA involvement in non-proliferation previously discussed by the Commission. The Committee has requested a re-draft of the resolution to include these considerations.

4. Meeting of the Gilpatric Committee

The Chairman said the Committee is now scheduled to meet on December 1 and 2 and Mr. Palfrey will represent the Commission. Mr. Bundy, White House staff, has accepted the recommendation for participation by Mr. William Webster.

5. Fermi Award Ceremony

6. Meeting of the Steering Committee for Interdepartmental Energy Study, 9:30 a. m., Tuesday, December 8

The Chairman will attend. (Fritsch)

7. Attendance of Governor Brown and Senator Pastore at AIF Dinner, San Francisco

8. Proposed Letter to Frank Carey, Associated Press, re John Finney Article of November 19

The Commissioners approved the short version with revisions and requested circulation and transmittal tomorrow. (AGMA)

9. President's State of the Union Message
suggested

The Chairman/any further comments should be directed to Mr. Fritsch and the letter is to be sent to Mr. Bill Moyers, White House staff, tomorrow. (Fritsch)

10. Telegram from Senator Cannon re NTS Strike

The Chairman noted receipt of the additional query from Senator Cannon. The General Manager reported the basis of return to work of the most of the monitors and the Chairman requested preparation of an early response to Senator Cannon. (SAGM)

11. BOB Mark-up of FY 66 Budget Due Tonight for Preliminary Consideration Tomorrow Morning

Mr. Abbadessa reported the Bureau, in connection with the BOB FY 66 mark-up has requested a hearing on the production program Friday or Monday. The Chairman requested they be informed of the status of the joint AEC-DOD study and our hope that a hearing may be deferred pending further results of this study. The Chairman noted again the need for preparation of a definitive production cost analysis. (OC-DMA-Prod)

12. Study of ATLAS Sites

The General Manager reported he has called Mr. John Conway, JCAE staff, who will inform Congressman Holifield of the AEC study now underway.

13. Commissioners' Meeting with Mr. Seamans Tomorrow Morning

14. Status of Response to the Joint Committee Letter re Weisner-York Article (SECY)
- ✓15. Mr. Kermit Gordon's November 23 Letter re the Great Society and Attached Statement of the President

The Commissioners discussed with the staff the theme for a responsive letter due Monday, November 30. The Commissioners requested additionally, preparation of a letter to the President re bold new programs or ideas, a copy of which will be attached to the letter to Mr. Gordon. (OC-AGMA)

PRESENT

Dr. Seaborg Mr. Hollingsworth
Mr. Ramey Mr. Bloch
Dr. Tape Mr. Abbadessa
Dr. Bunting Mr. Vinciguerra
 Dr. Fritsch
 Col. Hill
 Mr. McCool
 Senior Staff*

DISTRIBUTION

Commissioners
General Manager
General Counsel
Secretary

W. B. McCool
Secretary

*Attendance for Item 15.

EXECUTIVE OFFICE OF THE PRESIDENT
BUREAU OF THE BUDGET
Washington, D. C. 20503

UNCL. BY DOE
NOV 86

November 23, 1964

MEMORANDUM FOR AGENCY HEADS


At the Cabinet meeting November 19, the President made a statement on the Great Society which he wishes to direct to the heads of all Departments and Agencies. A copy of the statement is attached hereto.

The President desires that each agency head make a searching review of his agency's activities and transmit to him a statement of desirable reforms in ongoing programs -- responsive to paragraphs 4-7 of his statement -- which would help to free funds in the 1966 and subsequent budgets to meet more urgent requirements.

The President has requested that in preparing these statements, each agency head

- Consider actions that require new legislation as well as actions that can be accomplished administratively.
- Consider actions that involve program substance as well as actions that relate to administrative matters (such as field office organization and user charges).
- Estimate the budgetary effects of the proposed adjustments and reforms for fiscal year 1966 as well as for subsequent years.

The President would like to have these statements from each agency head by noon Monday, November 30.


Kermit Gordon
Director

Attachment

November 25, 1964

Dear Bill:

I am enclosing the suggestions of the Atomic Energy Commission for the President's State of the Union message as he requested in his memorandum of November 2, 1964. For convenience, we have divided the material into two categories: first, individual paragraphs, one or more of which could be inserted into the draft message; and second, a more extensive text for your detailed consideration.

If we can be of any further assistance in this regard, kindly let us know.

Cordially,

Glenn T. Seaborg

Glenn T. Seaborg

Honorable Bill D. Moyers
Special Assistant to the President
The White House

ABF/suk

Nuclear Maritime Applications

The Great Society will trade and do commerce with the many nations of the world. We shall have a re-vitalized merchant marine through the exciting new applications of nuclear power to merchant ship propulsion. The American maritime fleet will again be pre-eminent with the coming into being of this new generation of swift, long-range merchant vessels.

Pleasure

The Great Society will soon have in its hands the means to change the very face of the earth - to build vast canals, to construct harbors, to level mountains. The harnessing of the awesome power of nuclear weapons to peaceful purposes has given us this modern-day Pleasure.

Radiation

The Great Society will benefit from the myriad uses and applications of radiation. New materials will come forth. New processes will be developed. New industries will arise. For example, in the coming years of the Great Society, I see a great impact to be made by the radiation pasteurization and preservation of our foodstuffs, assisting us in our fight against hunger.

The Oceans - New Vistas

For centuries the sea has kept its secrets hidden from the eyes of men because of our inability to penetrate beneath its surface for any great distances or for any considerable periods of time. But already our nuclear submarines have shown how we may

November 25, 1964

Federal and Government Labs as National Resources

I would like to make clear my intent to build upon the start made during the past years in harnessing to the task of education the vast resources of men and equipment in the many Federal and national laboratories throughout our country. The national resources in these laboratories can benefit the research and education processes in the universities; the laboratories will, in turn, greatly profit from their association with the universities.

Energy - Nuclear Power

The future growth and well-being of the Great Society must use all its resources, both man and mineral. Energy, especially electrical energy, with its versatility in meeting the needs of the individual and of industry will be a key. We will need to exploit with wisdom and foresight the major energy reserves with which we have been abundantly blessed, developing multiple fuel sources to provide options, conserving those resources which are scarce or which can become scarce, and developing vigorously the technology necessary to exploit such new plentiful resources as nuclear energy to meet our Great Society's ever-increasing demands.

Desalting

Another vital ingredient in the future growth and well-being of the Great Society is additional fresh water for our growing population and expanding industries. I have directed the Department of Interior in collaboration with the Atomic Energy Commission to proceed with an aggressive program leading toward the development of an economic means to convert the salt water on our shores into fresh water to meet these ever-increasing needs. Nuclear power appears promising as an energy source to carry forth this task in dual purpose electric power and desalting plants.

overcome this handicap by staying submerged for extended lengths of time. We are also beginning to be able to develop the new materials which will withstand the tremendous pressures of the ocean's depths. We can forecast nuclear power bathyscapes and even further in the future permanent exploration stations at the bottom of the sea. We will then be truly able to mine the oceans for the mineral wealth and harvest the seas for their plentiful foodstuffs.

Advances in Bio-Medicine

From time to time in the progress of human history there emerge new capabilities of extraordinary promise. Thus at the Atomic Energy Commission's Oak Ridge National Laboratory biologists, chemists, physicists and engineers have joined forces to develop remarkable new techniques for gently separating and precisely analyzing the myriad of chemical and physical constituents in human tissues. Tools such as this provide new keys to our understanding of living processes and the alleviation of human sufferings and diseases.

New Man-Made Chemical Elements

The scientists in this Great Society stand on the threshold of a new age of discovery - the discovery of several new chemical elements to add to the hundred-odd elements discovered to date. Very recent scientific advances have made possible new tools and techniques for their production, thereby providing American scientists with the keys to the discovery and naming of these new elements.

Techniques have also been perfected to produce substantial quantities of other of the already-known heavy isotopes for important practical applications. Tons of plutonium have already been produced. Now pounds of curium can be produced for use as a power source in space and terrestrial applications, and ounces of californium as an extremely strong neutron source for technical applications.

National Defense

Fundamental to the Great Society is its peace-keeping strength - a sound nuclear weapons program is the key to our arsenal. In addition, our nuclear Navy is the most advanced in the world - a silent bulwark in the cause of peace.



UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON, D.C. 20545

COPY NO. 2
November 25, 1964

INFORMATION MEETING 431

UNCL. BY DOE
NOV 86

10:00 a.m., Wednesday, November 24, Chairman's Conference Room, Germantown

1. White House Acknowledgment of AEC Comments on John Finney's Letter re International Operation of a Gaseous Diffusion Plant

The Chairman said Mr. Bill Moyers, White House staff, had called to thank him for AEC comments on the Finney letter and to say they look forward to receipt of the AEC study. (SAGM)

2. Chairman's Conversation with Ambassador Smyth re Director General of the IAEA

3. Mr. Robert Ginna's Call to the Chairman re Negotiations on the HTGC Reactor

4. Chairman's December 8 Meeting with Representatives of U. S. Steel

5. Chairman's and Staff's Attendance at November 24 Evening Meeting with the BoB and Other Officials to Discuss Cost of Independent R&D

6. John Macy's November 20 Letter re December 4 Ceremony

The General Manager confirmed appropriate arrangements are being made. The Chairman plans to attend. (PER)

7. AEC 1130/10 - Draft AEC/DoD Agreement

Approved. (DMA)

8. Mr. Ramey's November 23 Memorandum and November 9 Letter from J. F. Young, GE

Staff will review a response with Mr. Ramey. (DGM)

9. Commissioners' Speeches at the AIF Conference in San Francisco

10. Reply to the Secretary of Defense re SNM Production (General Crowson's November 24 Memorandum)

Approved, with revisions. (DMA)

11. Stanford University - IBEW Petitions (General Manager's November 20 Memorandum)

Approved, with revisions. (DGM)

12. Guard Services at NTS (General Manager's November 23 Memorandum)

The Commissioners requested review with Mr. Ramey. (DGM)

13. Membership of AEC Board of Contract Appeals (General Counsel's November 24 Memorandum)

Approved. The Chairman suggested consideration of additional representation from a university or a business school. (GC)

14. Pending Contractual Matters - Report 77

Noted.

15. Agenda for the Week of November 30

Approved, as revised. (Secy)

PRESENT

Dr. Seaborg	Mr. Hollingsworth
Mr. Palfrey	Mr. Bloch
Mr. Ramey	Mr. Abbadessa
Dr. Tape	Mr. Hennessey
Dr. Bunting	Dr. Fritsch
	General Crowson*
	Mr. McCool

DISTRIBUTION

Commissioners
General Manager
General Counsel
Secretary

W. B. McCool
Secretary

*Attendance for Item 10

UNITED STATES GOVERNMENT

Memorandum

UNCL. BY DOE
NOV 86

TO : Harold L. Price, Director
of Regulation

DATE: November 25, 1964
Approved _____

FROM : W. B. McCool, Secretary ^{Original signed}
W. B. McCool

H. L. Price
Date _____

SUBJECT: ACTION SUMMARY OF REGULATORY MEETING 207, WEDNESDAY, NOVEMBER 25,
1964, 12:20 P.M., ROOM A-410, GERMANTOWN, MARYLAND

SECY:AJ

Commission Business

1. Minutes of Regulatory Meetings 204, 205, and 206

Approved, as revised, subject to comments by Commissioner Ramey.

2. AEC-R 4/30 - Amendment to 10 CFR Part 2 - "Rules of Practice"

Approved, as revised.

The Commission requested the amendment to 10 CFR Part 2 become effective 30 days after publication in the Federal Register. (ADR/OGC)

3. AEC 152/177 - Possible Courses of Action With Regard to a Finding of Practical Value for Certain Nuclear Power Reactors

Approved, as revised.

The Chairman requested the first paragraph of the letter to the National Coal Policy Conference, Inc. be revised.

The Commission requested paragraphs numbered 1 through 4 of the Public Announcement be deleted. (OGC)

cc:
Commissioners

At 12:30 p.m. I presided over Commission Meeting 2058 (action summary attached).

At 1:10 p.m. I had lunch with Commissioner Gerald Tape and Paul McDaniel in the cafeteria.

I received the markup of the FY 1966 budget which, to our dismay, totals only \$2.46 billion which is below the base budget that we submitted last month! We will appeal a large number of items including funds for the maritime reactor prototype, high energy physics items at Brookhaven, the maritime reactor, 710 program at Evandale, Snap 8, the sodium graphite and spectral shift reactors, etc.

Thursday, November 26, 1964 - Home

I read AEC papers during the day.

The entire family had Thanksgiving dinner together at home without any guests.

Friday, November 27, 1964 - D.C.

I sent a letter to Joseph Moody (President, National Coal Policy Association) telling him that the AEC has set December 17, 1964, for the Information Conference and January 28, 1965, for the Public Hearing on the question of possible determination of Practical Value of nuclear power reactors (copy attached). Moody and Dunn have been pressing us hard to set a date for the Hearing.

At 12:30 a.m. Commissioner John Palfrey and I had lunch with Roswell Gilpatric at the Metropolitan Club. We discussed Gilpatric's program for his committee on non-proliferation of nuclear weapons. The report is scheduled for the end of January. We described the Atoms for Peace program and the irrationality of trying to stop or curtail this in view of U.S. commitments and the efforts of other nations to sell reactors without safeguards as stringent as those of the U.S.

At 2:10 p.m. I presided over Commission Meeting 2060 (action summary attached).

I recorded by phone a message for Larry Reed for Station KCEE, in Tucson, Arizona, on the anniversary of the first chain reaction for use on December 2, 1964.

At 3 p.m. I called Roy Ferguson (of Howard University) and a longtime Berkeley friend regarding his invitation to address Howard University students after the new semester begins. I told him I would like to do this, if it is possible. I asked about a morning or afternoon session and he said they have found that 5 p.m. is usually a successful time. Ferguson said that he would be in touch with me the early part of February.

At 3:05 p.m. I received a telephone call from Kermit Gordon. He called to report on his talk with the President on the advanced converters. The President read his (Gordon's) report and my letter. Gordon told the President they had changed their view and they now strongly recommend the three-concept approach. He said the President professed to be dubious and said he would like to have this reviewed by his old friend, Don Cook, who is President of American Electric Power. Gordon asked if I knew Cook and I said that I did not. Gordon said he supposed that American Electric Power has been a leader in this field. Gordon has a call in to Cook now and will propose to him that they put together a package of materials which will give him the necessary background and mail it to him; then, if he wants further briefing, they might send one person from the AEC along with Fred Schuldt to see Cook next week. I told Gordon unless the proposed meeting with Cook was



UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON, D.C. 20545

UNCL. BY DOE
NOV 86

NOV 27 1964

Dear Mr. Moody:

This is in reply to your letters of October 30 and November 16, 1964 in which you urge that the Commission schedule for public hearing and complete as rapidly as possible its proceeding on the question whether a finding of practical value should be made pursuant to section 102 of the Atomic Energy Act of 1954, as amended, with respect to some type or types of light water, nuclear power reactors.

The Commission is publishing in the Federal Register a notice that an informal conference of interested members of the public will be held on December 17, 1964, prior to the public hearing; and that the public hearing will be held on January 28, 1965. A copy of this notice and a public announcement of these dates are enclosed.

The purpose of the conference will be to assist those who plan to participate in the hearing to focus upon the principal matters to be considered at the hearing.

We are placing your letter of November 16, 1964, concerning the "seed and blanket" concept, in the record of the pending rule-making proceeding where it will be considered as a part of the material furnished by the National Coal Policy Conference, Inc. in support of its petition for a finding of practical value.

Sincerely yours,

(Signature) Paul I. Seaborg

Chairman

Enclosures

Mr. Joseph E. Moody, President
National Coal Policy Conference, Inc.
1000 Sixteenth Street, N. W.
Washington, D. C.

AEC SCHEDULES INFORMAL CONFERENCE AND PUBLIC HEARING ON
QUESTION OF FINDING OF PRACTICAL VALUE FOR SOME
TYPES OF REACTORS

The Atomic Energy Commission today announced plans for two further steps in connection with its consideration of whether a finding of practical value should be made for some types of nuclear power reactors.

An informal conference of interested members of the public will be held at 9:30 a.m. December 17 at the Commission's Bethesda, Maryland, office. This conference will be preparatory to the holding of a public rule making hearing January 28, 1965, on the question of whether a finding of practical value should be made for some type or types of light water nuclear power reactors. The hearing will be at 10:00 a.m. in the auditorium at AEC headquarters, Germantown, Maryland.

On July 10 the Commission published a notice in the Federal Register requesting public comments on the question of whether a finding of practical value should be made on some types of power reactors according to section 102 of the Atomic Energy Act. The Commission announced on August 21 that an informal conference or conferences and a public hearing would be held after expiration of the comment period. Today's announcement sets the date for an informal conference and the public hearing.

Purpose of the December 17 informal conference is to assist those who plan to participate in the hearing to focus upon the principal matters to be considered at the hearing. The January 28 hearing will be conducted essentially as a legislative-type hearing, without the right accorded to public participants to examine or cross-examine witnesses.

The National Coal Policy Conference, Inc., the National Coal Association and the United Mine Workers of America have petitioned the Commission to issue a rule finding that boiling light water reactors and pressurized light water reactors have been sufficiently developed to be of practical value for commercial or industrial purposes.

The Atomic Energy Act provides that whenever the Commission has made a finding that any type of reactor has been sufficiently developed to be of practical value for industrial or commercial purposes, the Commission may thereafter issue licenses for facilities of such type under section 103 of the law. Licenses for nuclear power reactors built to date have been issued under section 104b, a section which pertains to developmental facilities.

A copy of the Commission's notice is attached.

ATOMIC ENERGY COMMISSION

[10 CFR Ch. 1]

[Docket Nos. RM-102-1; FRM-102-A]

CONSIDERATION OF POSSIBLE FINDING OF PRACTICAL VALUE

Scheduling of Informal Conference and
Public Rule Making Hearing

The Atomic Energy Commission published a notice in the Federal Register on July 10, 1964, that it has under consideration the question whether a finding of practical value should be made pursuant to § 102 of the Atomic Energy Act of 1954, as amended, with respect to some type or types of light water, nuclear power reactors. By notice of August 22, 1964, published in the Federal Register, the proceeding was consolidated with a petition for rule making filed by The National Coal Policy Conference, Inc., The National Coal Association, and The United Mine Workers of America. This notice also stated that the Commission would hold a public rule making hearing in this proceeding.

Notice is hereby given that the Commission will hold an informal Conference on December 17, 1964, at 9:30 a.m., in the hearing room of the United States Atomic Energy Commission, 4915 St. Elmo Avenue, Bethesda, Maryland. The purpose of the conference will be to assist those who plan to participate in the hearing to focus upon the principal matters to be considered at the hearing.

Notice is also given that a public rule making hearing will be held on January 28, 1965, at 10:00 a.m., in the auditorium of the United States Atomic Energy Commission, Germantown, Maryland. The hearing will be conducted as a legislative type hearing without the right accorded to public participants to examine or cross-examine witnesses.

(Sec. 102, 68 Stat. 936; 42 U.S.C. 2132; sec. 161, 68 Stat. 948; 42 U.S.C. 2201.)

Dated at Washington, D. C., this ____ day of _____,
1964.

FOR THE ATOMIC ENERGY COMMISSION

W. B. McCool
Secretary to the Commission

UNITED STATES GOVERNMENT

Memorandum

TO : R. E. Hollingsworth, General Manager DATE: November 30, 1964

FROM : W. B. McCool, Secretary *Original signed
W. B. McCool*

SUBJECT: ACTION SUMMARY OF MEETING 2060, FRIDAY, NOVEMBER 27, 1964, 2:10
P.M., ROOM 1113-B, D. C. OFFICE

SECY:GF

Commission Business

1. AEC 412/38 - Civil Rights Act of 1964 - Title VI Regulations

Approved. (OGC)

The Commission noted Commissioner Palfrey would make the appropriate telephone calls. (Secy)

2. Draft Letter from the President to Prime Minister, Israel, re Preventing Nuclear Proliferation in the Near East

Approved, as revised.

The Commission requested the State Department be notified of the Commission's comments. (DIA)

3. Draft Letter From Administrator, NASA, to the President re Mission Requirements

Discussed.

cc:
Commissioners

held on Friday, all of the Commissioners would miss it because they will be in San Francisco attending the Atomic Industrial Forum meeting, but we would work something out. Gordon will let me know as soon as he hears from Cook.

At 4 p.m. I had an appointment meeting with S. P. Smith (Vice President and General Manager of Douglas Aircraft) and Richard A. Toole (their Washington representative). They described the interest of the Douglas Company in the contract for operating the reactors at Hanford. They said they would build a laboratory there doing some of the work that otherwise would have been done in their Huntington Beach Laboratory; that they would give a grant of \$500,000 to the University of Washington to help them start a campus and that they would transfer some of their production work from the Charlotte complex.

They emphasized the importance that they placed on an educational facility in the area. They have already bought land on the Columbia River from the City of Richland for their laboratory at a rather nominal price of about \$150 an acre, on terms where the land will revert to the City of Richland if they don't break ground for a laboratory within six months or so. The University of Washington has similarly bought land nearby as has Battelle for their laboratory, and the U.S. Testing Service for their laboratory.

At 4:45 p.m. I called Don Cook (President of American Electric Power Service Corporation, New York). I told him I understood that he would be making a study for the President on future power requirements. He said that the Director of the Budget had called him and said that the President had asked him (Gordon) to call and ask if he would do this. He said he had accepted as he had been willing over the years to do anything the President had asked him to do. I told him we were pulling some material together to send him and would be ready to meet with him any time after Thursday of next week, mentioning that all the Commissioners would be in San Francisco attending the Atomic Industrial Forum meeting until then. He said he would want to give the material his careful attention, and since he would be out of town two days next week (Washington, D.C. on Friday) it probably would be the following week before he would be in touch with me. I said, if he had any time on Friday when he was in Washington, he might give me a call.

I sent letters to President Johnson and Kermit Gordon describing our program and reforms in response to the President's request for such information in connection with his plans for the Great Society (copies attached).

Saturday, November 28, 1964 - Washington, D.C. - San Francisco, California

I worked at the "H" Street Office during part of the day.

I signed the letter to President Johnson enclosing the AEC Regulations covering the civil rights requirements of grant recipients, etc., implementing Title VI of the Civil Rights Act of 1964 (copy of letter attached).

Pete and I took Dianne and her friends, Abbe Kaufmann and Lisa Gordon, along with Eric and his friend, Joe Canary, to the John F. Kennedy playground.

At 6 p.m. Arnold Fritsch and I left Washington, D.C., on Trans World Airlines Flight No. 63 and arrived in San Francisco, California, at 8:30 p.m.

We stayed overnight in the Durant Hotel in Berkeley.

NOV 27 1964

Dear Mr. Gordon:

This is in response to your letter of November 23, 1964, and the attached statement by the President regarding the Great Society. The Atomic Energy Commission heartily subscribes to the views in this statement including both the formulation of imaginative new ideas and programs and the carrying out of hard-hitting, tough-minded reforms in existing programs. Concerning the latter point, the Atomic Energy Commission has long been dedicated to conducting its affairs in an efficient and economical manner. Under the leadership of the President, we have re-emphasized our efforts regarding this objective and will continue to do so.

In preparing this statement of desirable reforms in on-going programs, we have carefully followed your guidance as to actions to be considered. Since, for the most part, these reforms are major in scope and require considerable more planning to bring them into sharper focus, the budgetary effect if any on Fiscal Year 1966 will be minimal and we are not in a position at this time to prepare meaningful estimates of their effect in subsequent years.

To very briefly illustrate our conviction in conducting our affairs in an economical manner, there follows a very few examples of our past and present actions. We will then discuss the major reforms we recommend for the President's consideration.

The Commission continues to pay close attention to organizational matters to insure adequate consideration of programs, better supervision of contractors (through whom essentially all programs are conducted) and achievements of greater economy, efficiency and progress. For example, we recently reorganized the management of reactor programs with the primary objectives of increasing effective technical direction and achieving program reforms which will result in long-term savings without detriment to the contributions nuclear reactors can make to the forging of a Great Society. The nuclear power and technology and the space and naval activities have each been given division status and have been placed directly under an Assistant General Manager for Reactors, thereby assuring these areas of the highest level of attention in policy and management matters.

Examples of past management actions to reform programs in the interest of achieving goals at lower cost and to adapt promptly to program changes, include:

1. Following an extensive study of the future weapons production workload, the Commission announced in April of this year that weapons facilities at San Antonio, Texas and Clarksville, Tennessee are scheduled to be closed by July 1966. The operations at these two plants will be transferred to the AEC facilities at Burlington, Iowa and Amarillo, Texas. Necessary construction to permit the move is under way and on schedule. The one time cost of the transfer including construction costs at Amarillo and Burlington were estimated at \$4.5 million and the annual savings after consolidation will be approximately \$4 million.
2. Our 1962 Civilian Nuclear Power Report to the President envisioned the construction of 7 or 8 prototype reactors, about half of which would be advanced converters and half breeders. Earlier this year, AEC reconsidered the initiation, in the next few years, of four advanced converter prototype and one breeder (classified as a low-gain breeder), and concluded that its near term objectives can be met by placing its confidence in two rather than four advanced converters plus the low-gain breeder.

To effect this program reform, the Commission rejected two specific proposals received from industrial and utility groups in answer to its previous requests for proposals. One project, the Spectral Shift Reactor, had already been legislatively authorized and \$30 million had been appropriated. As you know we have applied these funds to reduce our 1966 budget request. In addition, the elimination of the other prototype will reduce future planned expenditures by about \$45 million. In addition, research and development support for these two reactor concepts has been substantially limited in contrast to previously planned work with these concepts. The result is an additional savings of approximately \$28.0 million. These reforms made in the Civilian Nuclear Power Program will result in reductions in planned expenditures of slightly over \$100 million during the next 4 or 5 years.

3. Management of our production program has resulted in increased efficiency and lower unit costs. Highlights include:

- a. Reactor Operations

During the 1961-1964 period economy steps were taken at the Richland and Savannah River operations to reduce costs. Further emphasis on this was adopted in December 1963 by approval of an

an austere operating program at production reactor sites. It is a positive effort to maximize efficiency to the extent consistent with meeting production objectives within established safety criteria, but with some risk of not achieving maximum production. This change in philosophy has permitted making real savings in operating practices (reducing staffing level for technical and maintenance support, curtailing plant-scale tests which would emphasize increased production rather than improved economics, and reducing certain supporting administrative staffs). These actions saved more than \$2 million in FY 1964 and are expected to reduce costs another \$4 million per year in the future.

b. Enriched Uranium Production

Major cost reductions have been made in the production of enriched uranium since 1961. Employment has been reduced by an average of more than 30% at all uranium production sites. Some parts of the diffusion plants were shut down and power reduced. Plant operating efficiency has increased, mainly as a result of a vigorous process development and plant improvement program, while the somewhat reduced pressure of requirements has allowed emphasis to be placed on minimum cost instead of maximum production. These lowered production costs have been reflected in lowered charges for enriched uranium used for peaceful purposes such as in electric power plants, both domestically and abroad. During the period FY 1961-1964 these actions, including power reductions made possible by plant improvement alone, have resulted in savings of \$120.0 million.

c. Feed Material Operation

Significant economies have been effected over recent years through partial or total shutdown of production facilities, consolidation of facilities, as well as other economies resulting in many cases from studies leading to more efficient plant operating programs. Such facilities include a refinery at Fernald, Ohio, and feed plants at Oak Ridge, Tennessee, and Portsmouth, Ohio. Savings for the FY 1961-1964 period from these changes approximate \$40 million.

Examples of current management actions to reform programs and obtain further economy include:

1. The Commission has taken action to terminate operations of the Heavy Water Components Test Reactor. This action will result in

an estimated savings of approximately \$7.0 million over the next two years. The Test Reactor was used in the development of technology associated with heavy water moderated and cooled reactor systems; but our recent decision to pursue organic as a coolant reduces the need for this facility. The organic program, however, also requires use of an irradiation test facility. In that connection, detailed evaluation of available AEC-owned and Canadian test facilities has shown that, if the Canadian facilities could be used, a minimum net savings of \$15.0 million could be realized over the next five years. Realization of the savings is subject to completion of detailed negotiations with the Canadians.

2. AEC has had efforts under way to obtain labor stability, and thus further economy, in operations at the Nevada Test Site, through the establishment of a Site-wide construction agreement and a maintenance agreement covering non-construction work. These will provide for appropriate work schedules and reasonable subsistence, fringe benefits and overtime provisions. A drilling operations agreement has already been negotiated. It includes most of these provisions and is resulting in savings of approximately \$700,000 annually. If the additional agreements can be successfully negotiated, they should result in stabilization of the situation and in additional savings. It is possible that these savings may be achieved only at the expense of program interruptions such as difficult and protracted labor negotiations as well as strike threats and actual strikes.
3. As reported to you and the President, we have intensified an on-going aggressive and effective cost reduction program directed toward greater efficiency in on-going programs. Contractor participation has significantly increased the total effectiveness of our use of appropriated funds. Three of our employees will shortly receive Presidential recognition for their efforts in this field.
4. In our regulatory program we are making a continuing effort to divest ourselves of functions which can be conducted by the States. Over the past several years we have transferred certain regulatory responsibilities to qualified States and engaged in training programs which will assist additional States to take on such activities. The ninth State will have assumed these responsibilities by January, 1965, eight are now negotiating with us and fourteen more have taken initial steps to qualify. We expect that possibly as many as nine additional States will bring the question before their legislators in 1965.

With respect to the President's request for desirable reforms in on-going programs, our review was directed to those with high potential savings to AEC or the Nation. Those which are oriented primarily toward saving money for the Government are listed first:

1. Private Ownership of Nuclear Materials

One major step toward reducing the subsidy on services that can be provided adequately at full cost, and toward turning over to private industry functions performed by the Government, was legislation terminating the mandatory Government ownership of Special Nuclear Materials, the fuels used in commercial nuclear power plants. The AEC initiated in 1963, and Congress enacted in 1964, legislation which provides that, following a transition period, all nuclear fuel inventories in commercial atomic power plants must be privately owned, rather than leased from the Government. The impact of this legislation will be avoidance of large Government investments in these fuel inventories, which could have reached \$4 billion by 1980.

2. Chemical Processing

The Commission is taking steps which will lead to the termination of its own activities in providing temporary Government services to industry, originally offered in order that the growth of a nuclear power reactor industry would not be inhibited during its early years. As an inducement to American industry to provide a commercial service for the reprocessing of irradiated commercial power reactor fuels, the Commission is aiding in bringing the first such plant into being by providing a portion of the fuel load that industry found necessary to justify construction of the plant. The Commission is also looking forward to achieving a competitive situation for commercial chemical processing services by maintaining the ability to offer for a limited period an additional fuel load to induce the construction of another commercial plant. These activities should permit industry eventually to provide a complete competitive chemical processing service to the reactor power industry and thus achieve the economics expected to result from such competitive relationships.

3. Richland Diversification Program

The Commission's cooperative effort with the cities of Pasco, Kennewick and Richland, Washington, directed toward reducing the dependence of that geographical area on the government as the principal employer, has been accelerated since the announcement of the reduction in plutonium production at the AEC's Hanford Works.

The replacement of the present operating contractor by a number of new contractors, each of which is chosen partly on its potential for bringing additional private work into the area, is being carried out with significant innovations in government contracting procedures. The main thrust of the Commission's effort is the continuing use of government-owned facilities for nuclear or non-nuclear purposes in order to keep the area attractive for recruitment and retention of scientific and technical personnel needed for the Commission's continuing programs.

In the immediate future two projects are the key to this diversification effort. The first is the selection of the Battelle Memorial Institute to operate the Pacific Northwest Laboratory for the AEC. Battelle has announced its intention to invest several million dollars in diversification programs in the area. Second, the Commission is currently reviewing proposals for several large industrial firms for the privately financed construction and operation of a fission product conversion and encapsulation plant with the materials to be commercially marketed. A successful effort will reduce the need to use some, perhaps all, of the funds (\$9 million) which have already been appropriated for this purpose.

The convertible features of the plutonium producing New Production Reactor, which would make it the largest power reactor in the world (800,000 kilowatts), are being exploited by installation of electric generating equipment by utilities. This will lessen the economic impact of AEC plant reductions and conserve resources by utilization of waste heat. The AEC's Hanford diversification program is being closely watched at the Washington level, including the President's Committee on the Economic Impact of Defense and Disarmament, because it may well suggest and demonstrate approaches which can be used in other areas of the country, on a national level, to cope with the adverse effects of reductions in government programs.

4. Domestic and International Trade

Research and development effort sponsored by AEC has led to demonstration of the economic advantages of using enriched, rather than natural, uranium as fuel for civilian nuclear power plants. All domestic nuclear power plants employ enriched uranium as fuel and there is an increasing interest abroad in reactors of this type, which provides a growing sales outlet for American industry engaged in manufacturing reactors and related components and equipment.

The expanding market for the enriching of uranium will provide a growing level of business for the AEC gaseous diffusion plants and

resultant large revenues to the Government, including the depreciation costs of facilities built originally for meeting military requirements. In addition, as noted by the Secretary of the Treasury in his letter of April 24, 1964, "Such sales can be of growing significance in the President's long-range trade expansion program."

5. Industrial Opportunities

The Commission is engaged in programs directed at assisting and accelerating widespread utilization of nuclear energy for peaceful purposes. As a consequence, there is a continual transfer of research and experimental data to industry for use in the civilian economy. These uses contribute to a better America in many ways. In addition, as industrial competence and capacity increases in the nuclear area, the AEC has sought and will continue to seek commercial suppliers of the materials and services required for its programs. This approach provides a strong foundation on which private investors can build the nuclear industry of the future and often offers opportunity for savings in Government expenditures.

The foregoing examples indicate that the Commission does not have static programs but ones that change with military requirements, move forward as new developments arise, or phase downward or out as industrial capability increases. As a result there has over the years been a constant demand on management to reform programs and management methods. The successful outcome of many of our efforts, including the transfer of some to industry and to the states, is indicative of the responsiveness of management to the dynamic and challenging responsibilities assigned to AEC.

We believe that AEC's nuclear energy programs will prove to be among the more significant Federal contributions to realization of the President's vision of a Great Society. In that belief, we have recently given the President several imaginative and somewhat bold suggestions for his consideration. We expect to develop further ideas of the roles AEC and nuclear energy can play in creating the Great Society and will keep him informed. A copy of our recent letter is enclosed.

Sincerely yours,

cc: Chairman (2)
Gen. Mgr. (2)
Secretariat (2)
AGFB

(Signature)

Chairman

Honorable Kermit Gordon
Director
Bureau of the Budget

Enclosure:
As stated above

NOV 27 1964

Dear Mr. President:

My fellow Commissioners and I welcomed your vigorous statement on the Great Society at the Cabinet Meeting on November 19. In response to it, we have submitted to Kermit Gordon a statement of desirable reforms in our ongoing programs. However, this only meets the second of the two directives you set forth, that of reforming existing programs. We thought you would be interested in knowing our reaction to the first of your directives, that of formulating imaginative new ideas and programs.

From the early beginnings, the vision of the atom's potential to benefit our society has dominated the Commission's development program of civil uses. As you know, recently many of those are coming to fruition. In addition, these new opportunities are opening up:

1. Nuclear Maritime Propulsion

Nuclear power plants in modern merchant vessels offer promise of revitalizing the American Merchant Marine. Nuclear power brings with it the advantages of high speed, long range vessels capable of attracting new trade and achieving new economies.

2. Desalting

The production of fresh water from saline sources will, for some time to come, only be economically practicable in large size plants. Nuclear power plants promise to be the most economical source of energy available in the very large sizes being considered. Added economies can be achieved in dual purpose desalting and electric power plants. With your guidance and leadership, the Department of Interior with the collaboration of the Commission is pursuing an aggressive program along these lines.

3. Plowshare

The peaceful and practical applications of nuclear weapons as nuclear explosives promises to provide us with unique capabilities. It will be possible to economically perform projects of large magnitude. We will literally be able to level mountains, to give us new mountain passes; to dig vast holes and trenches, to give us new harbors and canals; and to crush large bodies of low-grade ore to provide us new economic sources of minerals.

4. Heavy Chemical Elements

Techniques have recently been perfected to permit us to produce substantial quantities of the man-made radioactive elements heavier than uranium. Tons of plutonium have already been produced for furtherance of our civilian nuclear efforts and the national defense; now it will be possible to produce pounds of curium and smaller amounts of still heavier elements. Beside the obvious advanced research implications of this new capability, the curium produced may have significant applications as a power source in space and terrestrial applications.

5. Supercentrifuges in Biomedicine

The Oak Ridge National Laboratory has perfected an ingenious tool - the supercentrifuge - to permit us for the first time to separate certain of the chemical and physical constituents of human tissue. This new tool, perhaps as important a development as the electron microscope, promises to provide us with an important key in alleviating many of man's diseases and sufferings. This development demonstrates the happy combination of life sciences with the engineering competence developed in our nuclear energy program.

6. The Oceans

To truly harvest the plentiful foodstuffs of the sea and mine the mineral wealth of the oceans will require true submarine vessels of long endurance. A key to wresting control of the oceans' depths is a reliable source of power, one for which nuclear power is uniquely suited, to support underwater vehicles for an extended period of time.

We hope to proceed in several of these areas at a pace which appears reasonable and appropriate to their promise.

If we can provide any further information in any of these areas, we would of course be happy to do so.

Respectfully submitted,

~~(Signature)~~ Glenn T. Seaborg

Glenn T. Seaborg

The President
The White House

UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON 25, D. C.

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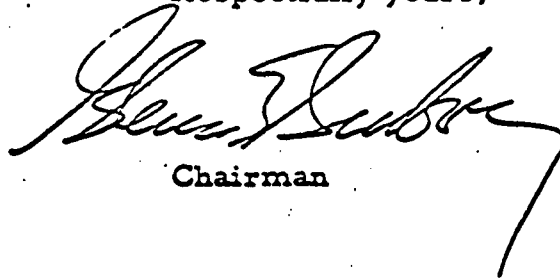
November 28, 1964

OFFICE OF THE CHAIRMAN

Dear Mr. President:

I am pleased to transmit herewith the Atomic Energy Commission's regulation implementing Title VI of the Civil Rights Act of 1964. This regulation is submitted for your approval pursuant to Section 602 of that Act.

Respectfully yours,



Chairman

The President
The White House

Enclosure

Sunday, November 29, 1964 - San Francisco, California

I went to Lafayette to visit our home and make some minor repairs.

I visited Mason McDuffie (Real Estate Company) in Lafayette, to discuss their attempts to find a renter for our Lafayette home.

I visited the Perlman's, had lunch with them, and also visited our other neighbors, the Peerys, Alexanders, and Cummocks.

I visited the Contra Costa Golf Club with Dan Wilkes and had dinner with Dan and Evelyn at Larry Blakes.

I stayed overnight in the Durant Hotel.

Monday, November 30, 1964 - San Francisco, California

I visited Robert Gerdes, Welchel, and Shermer Sibley (Pacific Gas and Electric) in San Francisco with Commissioner Ramey to discuss their future plans for nuclear plants. They plan to build plants by 1971 starting in 1967 on sites near Pittsburg, San Luis Obispo and Monterey.

I attended the Atomic Industrial Forum-American Nuclear Society luncheon where Chet Holifield spoke. He made complimentary remarks about me, endorsed the AEC's advanced converter program, and attacked the MLF concept.

I visited the Chemistry Group at the Lawrence Radiation Laboratory (Perlman, Ghiorso, Street, etc.) and discussed plans for the Omnitron. McMillan and others are resisting this under the fear that it will interfere with the 200 BeV Accelerator. I discussed the 200 BeV Accelerator with McMillan, Fidler and Reynolds, warning them of the difficulties standing in the way of its location in the Bay Area and the need for it to be a truly national machine.

I had dinner with John Foster, McMillan and Arnold Fritsch.

I stayed overnight in the St. Francis Hotel in San Francisco.

Tuesday, December 1, 1964 - San Francisco, California

I gave a talk in the Colonial Ballroom of the St. Francis Hotel at the AIF-ANS morning session, "The Next Decade: Opportunity and Challenge." My talk was entitled, "Nuclear Energy in the Next Decades." Holifield, Hosmer, and other panel members, James Campbell (President, Consumer Power Company), Ken Davis, Emerson Jones (Consumer Public Power District of Nebraska), Henry Nickel (Allis Chalmers), and other panel members gave talks. My talk was followed by many written questions, most of which I answered. The entire panel, presided over by Harry Smyth, participated in a press conference, including television and radio interviewers.

Commissioner Ramey, Holifield, Hosmer and I attended the opening of "Atom Fair" at the Civic Center (Brooks Hall).

I visited Livermore with Commissioner Ramey and Arnold Fritsch and went over their weapons program, reactor program, plowshare, disarmament questions, etc., with John Foster, Duane Sewell, Jack Gofman, Carl Hausman and others.

I had dinner with Chancellor and Mrs. Edward Strong and Kitty Malloy at the Strongs' home. After dinner, we went to a basketball game between members of the University of California varsity team and alumni of the University. I visited the alumni members in the dressing room, including many members of the 1959 NCAA Championship Team. We were glad to see each other. There is much trouble brewing on the campus due to the sit-in at Sproul Hall staged by the so-called Free Speech Movement.

I spent the night in the St. Francis Hotel.

Wednesday, December 2, 1964 - San Francisco, California

I gave a speech at the "Youth and the Atom" program before some 800 high school students from the area sponsored by Pacific Gas and Electric and utilities and arranged by Charles Yulish (Project Manager, AIF Public Understanding Program). Commissioners Gerald Tape, Mary Bunting and Welchel also spoke. I spoke briefly on the future of nuclear energy and the need for their future participation.

I met with Mrs. Feldman, Dr. Lana M. Boyer (of Women's International League for Peace and Freedom and San Francisco Women for Peace), Cecil Thomas, and Robert Mang to answer their questions about testing, fallout, safeguards, etc. My answers seemed to satisfy them.

I met with Richard Lamb to give him background information concerning Hanford for use in a Business Week story.

I had lunch with members of the CAAC in the Chancellor's Conference Room in Dwinelle Hall on the Berkeley campus and remained for their regular tri-weekly meeting. They discussed largely routine items despite impending serious trouble in Sproul Hall (sit-in of 1000 or more students).

I visited Sproul Hall with Wendell Stanley and went up to the second floor to see the hundreds of sit-in students under the leadership of Mario Savio defying University authority.

I had an appointment with Kerr to explain to him the importance of the 200 BeV Accelerators being under a truly national corporation and to warn him that the Los Alamos contract will almost certainly be changed to the University of New Mexico or Rocky Mountain University. We also discussed student troubles and he said Chancellor Strong is in serious trouble with the Regents.

I introduced Commissioner Mary Bunting (main speaker) at the AIF-ANS banquet, which was presided over by Kenneth Davis (President, AIF and Honorary Chairman of the Meeting). Senator Pastore, William Shoupp (President ANS) and Ken Davis also spoke. Commissioner Bunting gave an excellent speech.

I spent the night in the St. Francis Hotel.

Thursday, December 3, 1964 - San Francisco, California - Washington, D.C.

The police removed hundreds of students from Sproul Hall during the night. This will have a very serious impact on the University and its officials.

At 9 a.m. I left San Francisco, California, on TransWorld Airlines Flight No. 64 and arrived in Washington, D.C., at 4:45 p.m. Luis Alvarez sat next to me on the plane. He is very worried about the future of high energy physics and is disenchanted about it as an attractive field any more for bright young physicists.

Friday, December 4, 1964 - D.C.

I presented the AEC recipients of the special Presidential Award (plaques) for cost reduction achievement to President Johnson in a ceremony at Constitution Hall involving 30 recipients and their agency heads before a packed Hall. The AEC recipients included Samuel L. Hack and Alice C. Hodnett (of the New York Operations Office) and Peter B. Devine (Attorney).

At 12:30 p.m. I had lunch at the Roger Smith Hotel.

At 1:30 p.m. I received a telephone call from Gerald Johnson. 1. He told me he will be working with Gilpatric on the proliferation question, and that he had just returned from New York, after having met with him. The next time he is East, he will be in touch with me. 2. He then turned to the Plowshare Carryall Budget. He has talked with Undersecretary of the Army Steve Ailes with regard to the canal survey. Jerry told Ailes that they were trying to develop their program in such a way that they would have the Carryall Project (feasibility study of a mountain pass excavation in Southern California) completed and available for the report to the President. Ailes asked Jerry if he needed any help with the BOB or the White House on this and indicated he would be glad to do what he could. Jerry suggested to Ailes that he get in touch with me and let me know how he felt about it. Jerry wanted me to know that Ailes might call.

At 2 p.m. I attended the meeting of the Federal Interagency National Committee on Technology, Automation, and Economic Progress in Secretary of Commerce Luther Hodge's conference room. The group included Hodges, Secretary of Labor Willard Wirtz, Herbert Holloman, George Simpson, Gardner Ackley, Norman Paul, Rufus Myles, Donald Hornig, Dick Holton, Commissioner James Ramey, and others. We discussed our report to the Commission, laying out suggestions and course of action to be presented to them at their first meeting later this month.

At 3:15 p.m. I presided over Commission Meeting 2061 (action summary attached). The Commission discussed items in the FY 1966 budget which we are going to try to get reinstated.

Saturday, December 5, 1964 - D.C.

At 10:10 a.m. I presided over Commission Meeting 2062 (action summary attached). The Commission discussed items in the FY 1966 budget which we will ask the BOB to restore--about \$200 million total.



AEC Recipients of Presidential Citation, Constitution Hall, December 4, 1964

L to R: Joe Smith (Deputy Manager), Peter B. Devine (Attorney), Alice C. Hodnett (Chief Procurement Branch), Seaborg, Samuel L. Hack (Assistant Manager for Operations), New York Operations Office

UNITED STATES GOVERNMENT

Memorandum

TO : R. E. Hollingsworth, General Manager DATE: December 7, 1964
Approved _____
R.E. Hollingsworth

FROM : W. B. McCool, Secretary Date _____

SUBJECT: ACTION SUMMARY OF MEETING 2062, SATURDAY, DECEMBER 5, 1964,
10:10 A.M., ROOM 1113-B, D. C. OFFICE

*Original signed
by W. B. McCool*

SECY:ICB

Commission Business

AEC 1151/23 - Analysis of BOB Markup - FY 1966 Budget and
AEC 1151/24 - Statistical Tables on BOB Markup - FY 1966 Budget

Approved, as revised. (CC)

The Commission approved the following items and amounts for appeal to the BOB:

(In Millions)

Special Nuclear Materials

Cascade Improvement (Oper. Exp).....	\$2.5
Capital Equipment.....	2.5

Weapons

Research & Development (Oper. Exp).....	7.6
Continental Tests (Oper. Exp).....	4.5
Project 66-3-a	1.3

Reactor Development

Spectral Shift (Oper. Exp.).....	1.0
FFTR (Oper. Exp.).....	2.0
FFTR (Constr. A-E only).....	1.0
Sodium Cooled Coupled Reactor (Oper. Exp.).....	1.6
Sodium Graphite - General (Oper. Exp.).....	0.4
Merchant Ship (Oper. Exp.).....	2.250
Merchant Ship (Construction).....	22.0
MCR (Oper. Exp.).....	5.0

Reactor Development (continued)

(In Millions)

SNAP man-rated generator (Oper. Exp.).....	\$ 1.2
SNAP man-rated generator (Related GSO).....	2.7
SNAP 8 (Oper. Exp.).....	10.0
SNAP 50 (Oper. Exp.).....	25.0
SNAP 50 (Equipment).....	1.5
710 (Oper. Exp.).....	5.6
710 (Construction).....	0.5
Compact Reactor (Oper. Exp.).....	3.5
Pluto Technology (Oper. Exp.).....	1.0
Capital Equipment (in addition to the \$1.5 for SNAP 50 shown above).....	1.630
Rover (Oper. Exp.).....	1.4
Project 66-4-g	21.4
Project 66-4-0 (A-E only).....	3.0
General Reactor Technology.....	3.1

Physical Research

Advanced Design for 600-1000 BEV Accelerator (Oper. Exp.).....	1.0
R&D for Meson Facility (Oper. Exp.).....	3.0
Low Energy Accelerators (Equipment).....	4.0
Project 66-5-c(A-E only).....	2.0
Project 66-5-g.....	1.850
Project 66-5-h (A-E only).....	3.0
Project 66-5-k (A-E only).....	4.0
Project 66-6-a	1.0
Project 66-6-g	2.5

Biology & Medicine

Operating Expenses - General.....	3.7
Operating Expenses related to Project Carryall...	1.860
Project 66-7-b	0.5
Project 66-7-e	0.750
Project 66-7-f	5.0

(In Millions)

Training, Education & Information

Total Training & Education in the Physical & Life Sciences & Engineering (Oper. Exp.).....	\$ 0.995
Technical Information Services (Oper. Exp.).....	0.596
International Conferences & Exhibits (Oper. Exp.)..	0.250
Unassigned (Oper. Exp.)	-0.257
Capital Equipment	0.130
Project 66-8-a	1.250

Isotopes Development

POODLE (Oper. Exp.).....	2.0
POODLE (Capital Equipment).....	0.600
Project 66-9-b	1.0

Plowshare

Operating Expenses.....	6.550
Capital Equipment.....	0.355

Goods & Services on Order 25.7

Total Appeal \$208.550

The Chairman requested a telephone call be made to Mr. Crewe re the ANL cyclotron. (AGM-R&D)

The Chairman also requested he be provided appropriate background material on the Nuclear Traineeship Program. (NET)

The Commission agreed to defer until December 7 a decision on the facility consolidation matter -(AEC 484/4) - (OC)

Mr. Webb is to be informed of the Commission decision re funding for ROVER. (SNPO)

The draft letter to the BOB is to be re-written on the basis of the discussion at the Meeting. (OC)

cc:
Commissioners

Helen, Lynne, Dave and Steve attended the American Chemical Society reception and Black Tie dinner at the Madison Hotel where I was awarded the \$2,000 Charles Lathrop Parsons Award for Outstanding Public Service. I gave a speech entitled, "The Scientist as a Human Being." Jim and Alice Robinson also attended as our ACS guests, as did Mr. and Mrs. Tape, Mrs. Bunting, Mr. and Mrs. Fritsch, Mr. and Mrs. Napier, Hilma Howser, Esther Arnott, and others. Art Cope was Master of Ceremonies. Don Hornig, ACS President Maurice Arveson, Albert Noyes (also honored upon retirement as ACS editor), Roger Adams and Lee Haworth were at the head table. A congratulatory telegram from President Johnson was read (copy attached). Members of the Board of Directors and ACS members and staff were in the audience.

Helen and I went to the AERWA dance in Bethesda after the ceremony.

Sunday, December 6, 1964 - Home

I read AEC papers and journals during the day.

Dianne went to Priscilla Cobb's birthday party and with the party group to the Santa Claus parade in Bethesda.

Monday, December 7, 1964 - D.C.

At 9:50 a.m. I presided over Regulatory Information Meeting 133 (notes attached).

At 10:05 a.m. I presided over Information Meeting 432 (notes attached). Among the items we discussed were a draft letter to McNamara regarding our Nuclear Maritime Program (copy attached) in response to his letter of November 20, 1964 (copy attached) and another letter to McNamara regarding nuclear weapons custody and dispersal.

At 12:40 p.m. I had a luncheon appointment with John Graham at the Metropolitan Club. With respect to the invitation to speak at the 200th anniversary at Winston-Salem in March 1966, I said it was too early to decide and that they might get in touch with me next year when they need a decision. The invitation is extended by Wallace Carroll, publisher of the Winston-Salem newspapers, who will get in touch with me either directly or through John Graham.

At 2:20 p.m. I presided over Commission Meeting 2063 (action summary attached).

At 3:55 p.m. I received a telephone call from Melvin Josephs (Feature Editor, Chemical and Engineering News). Josephs said he was at the Parsons Award dinner Saturday night. C&EN would like to have my approval to publish the talk in their December 21st issue. I said I would be delighted to have them publish it. I asked whether I could see proof, and he said they would send it to me. Also, they will plan to delete the first paragraph, which, they feel, were primarily remarks to those at the head table. They will make an appropriate notation to the effect that this speech was delivered at the time I was given the Parsons Award.

At 4:05 p.m. I called Leslie Holmes (President, Northern Illinois University, DeKalb, Illinois). I called Holmes in response to his letter of November 25th, inviting me to speak at the dedication of their chemistry and physics building, with February 5, 1965, as the date of first choice. I told him that, by coincidence, I will be speaking in Chicago that day at a luncheon of the Executives' Club, and I wondered whether this could be worked in with their dedication. He said he thought this would be feasible, but would check and call me either today or tomorrow. He said they would pick me up at 2 p.m. and I could be at DeKalb by 3:30 p.m., and they would arrange to get me to the airport to 451A

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DR ARTHUR G COPE, CHAIRMAN (CARE ASST HOTEL BRCH IN CITY

PERSONS AWARD FROM AMERICAN CHEMICAL SOCIETY CARE HANSON

HOTEL 19 AND N YCS

MY I JOIN WITH ALL THE MEMBERS OF THE AMERICAN CHEMICAL SOCIETY IN CONGRATULATING DR ARTHUR G COPE, CHAIRMAN OF THE BOARD OF THE AMERICAN CHEMICAL SOCIETY AWARD FOR CHEMISTS WHOSE RESEARCHES IN THE FIELD OF CHEMISTRY HAVE BEEN OF GREAT SERVICE TO THE PUBLIC GOOD, TO SCIENTIFIC KNOWLEDGE, AND TO THE CAUSE OF HIGHER EDUCATION. DR COPE HAS SHOWN IN BOTH HIS PUBLIC AND PRIVATE ENDEAVORS A HIGH SENSE OF THE RESPONSIBILITIES WHICH A SCIENTIST HAS BOTH IN HIS OWN COUNTRY AND IN THE WORLD COMMUNITY. I CONGRATULATE THE AMERICAN CHEMICAL SOCIETY FOR ITS OUTSTANDING CHOICE FOR THIS IMPORTANT AWARD

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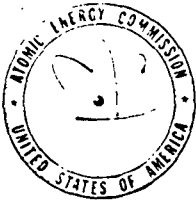
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UNITED STATES
ATOMIC ENERGY COMM
WASHINGTON, D.C. 20545

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COPY NO. 2
December 7, 1964

REGULATORY INFORMATION MEETING 133

9:50 a.m., Monday, December 7, Chairman's Conference Room, D.C. Office

1. Member of the Advisory Committee on Reactor Safeguards

Approved. (Secy)

2. Hearing on Finding of Practical Value (Mr. Price's November 25 Memorandum)

For further discussion. (DR)

3. Draft Public Announcement - AEC Regulatory Staff Pre-Application Safety Reviews (Mr. Price's December 2 Memorandum)

Approved, with revisions. (DR)

4. Proposed Atomic Safety and Licensing Board for Malibu (Mr. Price's December 3 Memorandum)

Approved. (DR)

5. December 1 Letter from Electrical World re Bodega Bay

The Commissioners suggested Messrs. Brayner and Luntz be invited to lunch and that it be suggested to Mr. Brayner that he publish the Chairman's November 21 letter. (DR)

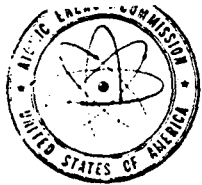
PRESENT

Dr. Seaborg Mr. Price
Mr. Ramey Dr. Beck
Dr. Tape Mr. Hennessey
Dr. Bunting Dr. Fritsch
Mr. McCool

DISTRIBUTION

Commissioners
Director of Regulation
General Counsel
Secretary

W. B. McCool
Secretary



UNITED STATES
ATOMIC ENERGY COMMISS
WASHINGTON, D.C. 20545

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NOV 86

COPY NO. 2
December 7, 1964

INFORMATION MEETING 432

10:05 a.m., Monday, December 7, Chairman's Conference Room, D.C. Office

1. Letter to the BOB re FY 66 Budget Appeal

Approved, with revisions relating to format, Maritime ship program, PLOWSHARE program, cooperation with India, consolidation of facilities and the 500 MEV electron Linac at MIT. The Chairman requested background material on the Maritime ship program and special nuclear material production. Mr. Abbadessa reported on his telephone conversation with Mr. John Conway, JCAE Staff Director, re the Rochester-GA project and the LSBR. (Controller)

2. Frank Carey Article re Atomic Energy Commission

The Commissioners discussed briefly desirable changes in the forthcoming article. The Chairman will telephone Mr. Carey. (Fritsch)

3. NASA Reaction to AEC Comments on Mission Requirements

Mr. Ramey suggested a check with Mr. Webb's office. (DGM)

4. Commissioners Meeting with Harold Vann, 10:00 a.m., December 29

The Chairman suggested re-scheduling early in January. (Fritsch)

✓ 5. Draft Letter to Secretary of Defense McNamara re Nuclear Maritime Program

Approved. (DGM)

✓ 6. November 21 Letter from Mr. Lee White, White House Staff, re AEC Security Clearances

The General Manager reported the information requested by Mr. White will be available shortly (S)

7. Execution Data for Final Events of WHETSTONE II Series (General Crowson's November 30 Memorandum)

Approved. (DMA)

8. Report on Results of NTS Event Saturday

9. Report on Equipment Accident

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10. Letter to the Secretary of Defense re Nuclear Weapons Custody and Dispersal (General Crowson's October 6 Memorandum)

For further discussion. (SECY)

11. Burn-up of SNAP 9A (Deputy General Manager's December 3 and Secretary's December 4 Memoranda)

The Commissioners agreed the material in the Questions and Answers memo circulated December 4 may be used subject to review with the Commissioners. (AGMA)

12. Positions of Area Managers - Pinellas Area Office and Kansas City Area Office

Approved. (PER)

13. Pending Contractual Matters (Rpt. No. 78)

The Commissioners noted Mr. Bloch's report on the contract for the initial study for the 200 BEV Accelerator.

14. Los Angeles Metropolitan Water District Project

In response to Mr. Ramey's query, the General Manager said staff recommendations will be available for discussion tomorrow. (DGM)

15. 200 BEV Accelerator Organization (Dr. McDaniel's November 25 Memorandum)

The Chairman and Dr. Tape discussed briefly their conversations with interested parties. The National Academy of Sciences letter to the Universities will be circulated and the Commissioners confirmed that Dr. Edwin McMillan's views will be given full consideration. (SECY-R)

16. MARK-12 Re-Entry Vehicle (Mr. Bloch's November 20 Memorandum)

Noted.

17. Talking Paper for Meeting with Maritime Administration Representatives

The Chairman suggested review of the proposed talking paper and Dr. Bunting's draft letter to the President for further discussion. The Chairman said he would call Mr. Johnson regarding a joint meeting. (Fritsch-SECY)

18. Disposition of CP-1 Graphite (General Manager's December 1 Memorandum)

Approved. (DGM)

19. GE Gas Centrifuge Program (General Manager's November 25 Memorandum)

For discussion tomorrow. (SECY)

20. Guard Services at NTS (General Manager's November 23 Memorandum)

For discussion tomorrow. (SECY)

21. Discussions at Department of State Today re SULKY

Mr. Ink reported briefly on the meeting which will be held this afternoon. AEC staff will attend.

22. Personnel Matters (Executive Session)

Approved, in part. (DGM)

PRESENT

DISTRIBUTION

Dr. Seaborg	Mr. Hollingsworth
Mr. Ramey	Mr. Bloch
Dr. Tape	Mr. Ink
Dr. Bunting	Mr. Abbadessa
	Mr. Hennessey
*Attendance for	Dr. Fritsch
Items 7, 8 and 9.	Gen. Crowson*
	Mr. McCool

Commissioners
General Manager
General Counsel
Secretary

W. B. McCool
Secretary



UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON 25, D.C.

UNCL. BY DOE
NOV 86

DEC 9 1964

Dear Bob:

Thank you for your November 20 letter outlining the interests of the Department of Defense in the economic application of nuclear power in the merchant marine. I also share your view that nuclear power must result in an overall reduction in the cost of transporting cargo if it is to have an impact on our merchant marine problems.

Results of careful study made over the past few years have convinced me that nuclear powered merchant ships have a near term potential of providing competitive seafreight costs for an express cargo type of maritime service. This service, which would otherwise be an economic impossibility, will utilize high-speed cargo ships of the latest automated design serving specific trade routes. Studies of specific trade routes are now being carried out by Maritime Commission contractors and are expected to further confirm this conclusion and identify the most attractive routes for initial application. One of the most important conclusions of the early studies was that express service will, of itself, generate substantial additional cargo. Interest in the commercial potential of this express service has been shown by a major east coast shipping company to the extent that the company is willing to enter into a contract with the Maritime Administration to purchase and operate a flight of express nuclear ships.

You have indicated in your letter that a reduction in overall seafreight cost is of prime interest to the Department of Defense and that in some situations high speed, endurance, and logistic freedom would be beneficial. It is my belief that these aims will all be achieved through vigorous pursuit of the service described above.

A number of nuclear power plant designs have been examined in detail by my staff over the past year. Since early operation of this express service is desired, only those plant designs based on firm technical foundations were considered. This

approach has led us to selection of a compact pressurized water plant. Through significant improvements in mechanical design and the use of slightly enriched nuclear fuel it appears that a compact plant can be built that will produce propulsion energy at a nuclear fuel cycle cost of about 2.3 mils per shaft-horsepower-hour.

You have mentioned the potential application of these plants to certain non-combatant and auxiliary naval vessels. The cost of the unit referred to above is about 6 million dollars and produces 70,000 shaft horsepower. A smaller unit producing 20,000 shp would cost about 4 million dollars. The larger size results in the most favorable savings and it is this power level toward which our program is aimed.

I am hopeful that a positive program for moving ahead with a land-based prototype can be included in our 1966 fiscal year budget. If we are able to accomplish this, the prototype can be placed in operation in early 1969 to support construction of a flight of nuclear ships which could be in full commercial operation in 1971. The expected widespread use of maritime nuclear power by the mid-1970s will result in the usual benefits of high production and lead to significant cost reductions.


My staff members are keeping various members of the Department of Defense staff informed of our progress. If I can provide any additional information relative to the Department of Defense needs as described in your letter, please advise me. Your support in this important effort would be appreciated.

Sincerely yours,

Walter T. Sesterg

Chairman

The Honorable Robert S. McNamara
Secretary of Defense

bcc: Chairman (2) 
GM (2)
ACMR
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RD 11347

20 NOV 1964

NOV 23

Honorable Glenn T. Seaborg
Chairman
U. S. Atomic Energy Commission
Washington, D. C. 20545

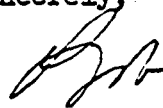
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Dear Glenn:

As I have stated to you previously, the Department of Defense does not have a need for nuclear powered merchant ships. In fact, for the contingencies we consider most reasonable to prepare for, the present "merchant ship reserve" may be more than we need. We are, however, interested in reducing our overall sealift cost. We are interested in the development of an economical nuclear power plant of the type which would be suitable for installation in merchant ships. In some military situations the high speed, endurance, and logistic freedom of nuclear powered merchant ships would be beneficial. An economical plant developed for merchant marine applications might also have the potential for application in certain naval non-combatant ships and auxiliaries (e.g., replenishment ships), but the cost differential between nuclear and conventional ships would have to be reduced substantially before this became the case.

If your evaluation indicates that such a nuclear power plant can be provided on a timely basis, I would endorse a program for a reactor prototype.

Sincerely,



CC:
Hon. Nicholas Johnson
(MarAd)

UNITED STATES GOVERNMENT

Memorandum

TO : R. E. Hollingsworth, General Manager
DATE: December 8, 1964
Approved: R.E. Hollingsworth

FROM : W. B. McCool, Secretary
Date: _____

SUBJECT: ACTION SUMMARY OF MEETING 2063, MONDAY, DECEMBER 7, 1964, 2:20 P.M.,
ROOM 1113-B, D. C. OFFICE

*Original signed
W. B. McCool*

SECY:GT

Commission Business

1. Minutes of Meetings 2055 and 2057

Approved, as revised, subject to comments by Commissioner Palfrey.

2. AEC 25/316 - Proposed Safety Rules

Approved. (DMA)

3. AEC 25/317 - Proposed Navy Safety Rules

Approved. (DMA)

4. AEC 25/318 - Proposed Air Force Safety Rules

Approved. (DMA)

5. AEC 1170 - Proposed Contract with Battelle Memorial Institute

Approved.

The Commission noted the compromise solution in paragraph 16.c. would be implemented on a trial basis. (DC)

6. AEC 289/³⁴30 - Revision of AEC Procurement Regulations

Approved, as revised.

The Commission requested that the regulations be effective 30 days after publication.

The Commission noted that the matter of exclusive licenses would be considered separately.

(OGC)

December 8, 1964

7. Presidential Order re Establishment of Commission on Patents

The Commission approved the recommendation. (OGC)

8. AEC 412/39 - Issuance of New 10 CFR Part 3 to Implement Title VI of the Civil Rights Act of 1964

Approved. (OGC)

9. AEC 20/160 - Uranium Procurement Under Cotter Corporation Contract (see also AEC 20/161 - Panel Report on Domestic Uranium Procurement)

Discussed.

The Commission agreed to deny extension of the uranium procurement contract. (RM)

10. AEC 484/4 - Proposed Consolidation of Facilities

Deferred.

Information Items

1. General Manager's Telephone Conversation with Mr. Harold Brown, DOD re MCR

2. Guard Services at NTS

The Commission approved the draft letter to Mr. Sterling Cole, Counsel for FSI. (OGC)

You noted you would discuss the matter with the JCAE.

cc:
Commissioners

catch whichever plane I wished. I said I would want to leave Chicago not later than 6 p.m.

At 5 p.m. I called Nicholas Johnson (Maritime Administrator). I said I wondered whether it would be worth our getting together to explain what we are doing. I said that our budget is due this week, but we realize that their study isn't completed yet. Johnson said that they are working nights and weekends, and their goal is to have the study ready to present to us on December 15th and said it could be done that morning. I said this might be all right if we could meet then, because our budget could drag out that long. I said we are trying to see the BOB about reinstating some things in our budget, including the whole maritime budget, probably on the basis of a prototype, which would, of course, just be holding a bridgehead. He said that his own view is that, at a minimum, we will want to do the work that will get us the kind of reactor we would want when we finally do build a ship. He said he will check with his people and call tomorrow; I said that, in the meantime, I will check with our people.

At 7 p.m. I attended a working dinner of the General Advisory Committee of the Arms Control and Disarmament Agency (ACDA) at the Alibi Club. ACDA Director William Foster asked me to speak and I talked about the U.S. Atoms for Peace Program, explaining that non-proliferation is best achieved through IAEA safeguards and not by trying to stop the nuclear power program because other countries will aid the developing countries in acquiring nuclear power without safeguards. Others present at the dinner included John McCloy, Roger Blough, Ralph McGill, James Perkins, Herman Phleger, Isidor Rabi, Herb York, Adrian Fisher and Jacob Beam.

Tuesday, December 8, 1964 - D.C.

At 9 a.m. Commissioners James Ramey, Gerald Tape and I attended the meeting of the Steering Committee of the Interdepartmental Energy Study, in the Executive Office Building. I criticized the draft report because of its failure to discuss advanced converters, nuclear fuel reserves, and the urgency of nuclear power, despite the fact that the Committee was formed as a result of the AEC's 1962 Report to President Kennedy.

At 11:30 a.m. I presided over Information Meeting 433 (notes attached). Among the items discussed was a letter of December 2nd from David Lilienthal regarding international inspection of nuclear power reactors (copy attached) and my subsequent reply (copy of letter of December 31st attached).

At 12:30 p.m. I had lunch with Bob Toth of the Los Angeles Times at the Metropolitan Club.

At 2:30 p.m. I met with L. B. Worthington (President, United States Steel), Stephen M. Jenks (Executive Vice President in charge of research), and William G. Whyte (Washington representative) to hear their expression of interest in a contract to operate the Hanford reactors and fuel plant.

I sent my biweekly letter to President Johnson (copy attached).

At 3:55 p.m. I called Dr. Rolf (Northern Illinois University, DeKalb, Illinois). I said that the schedule of February 5th for my talk there at the dedication of their building looks pretty tight, but it would be feasible. I said that I am a little concerned about charter plane flights at that time of the year. Rolf said that, if the weather were good, we could use the plane; and, if not, they would drive me to and from the Chicago airport. He asked that we let him know where they are to pick me up in Chicago. I said that Napier would be in touch with him regarding the title of the talk and other details. It was agreed that a 20-minute



UNITED STATES
ATOMIC ENERGY COMM
WASHINGTON, D.C. 20541

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NOV 86

COPY NO. 3
December 8, 1964

INFORMATION MEETING 433

11:30 a. m., Tuesday, December 8, Chairman's Conference Room, D. C. Office

1. Personnel Matter (Executive Session)

Approved.

2. Meeting with Jackson and Moreland

The Chairman reported the meeting with Harold Vann could be re-scheduled for January 5. (Fritsch)

3. Commission Meeting with GE Representatives

The Chairman reported that GE representatives would meet with the Commission this Friday at 3:00 p. m. on the 630A program. Appropriate staff will attend. (AGMRD)

4. December 1 Letter from Jose Otero re Participation by AEC in the DON Program

Noted. (AGMIA)

5. December 3 Letter from Adm. Ralph K. James, Committee on American Steamship Lines re Nuclear Power for Merchant Ships

Noted. (RD)

6. Proposed Telegram to U. S. Embassy in New Delhi (Mr. Ink's December 4 Memorandum)

Approved, as revised to delete City of Madras reference. (DIA)

7. Interdepartmental Energy Study Meeting

The Chairman reported briefly on the meeting held this morning.

8. ACDA Advisory Committee

The Chairman reported his attendance last night at the dinner and that he had been called on to speak.

9. Letter to the Secretary of Defense re Nuclear Weapons Custody and Dispersal (General Crowson's October 6 Memorandum)

Approved, as revised. (DMA)

10. Los Angeles Metropolitan Water District Project

The Commissioners noted that staff recommendations had been cleared with the Commissioners individually

11. Talking Paper for Maritime Meeting Week of December 14 (Dr Vander Weyden's December 3 Memorandum) and Draft Letter to the President

The Chairman will talk to Nicholas Johnson regarding the proposed letter to the President. The meeting is to be scheduled for 3:00 p. m., December 15. (SECY-Fritsch-DRD)

12. JCAE Executive Session on Weapons Program

The General Manager reported that the JCAE plans to hold Executive Session with laboratory representatives and staff on or about January 13 or 14. (DMA)

13. SULKY Event

The General Manager reported temporary delay because of weather.

✓ 14. December 2 Letter From David E. Lilienthal, Development and Resources Corporation

The Chairman indicated that Dr. Fritsch was preparing a draft reply. (Fritsch)

15. Materials Requirements

Mr. Bloch reported that the Secretary of Defense had signed the letter to the President on requirements for 1972 and 1973 and that a copy of the letter is en route to the AEC today.

16. WHETSTONE III

Mr. Hollingsworth noted that information on the WHETSTONE III series is being circulated for Commission review today.

17. Article on Desalting

Mr. Ramey reported that he had been invited, following the AIF meeting in San Francisco, to contribute an article for publication in Nuclear Industry and that the draft would be cleared with the other Commissioners and forwarded to him in Mexico.

18. Thorium Reserves

The General Manager reported that he plans to initiate action on a study of Thorium reserves with the participation of the U. S. Geological Survey. (RM)

19. Contract Matter

PRESENT

Dr. Seaborg
Mr. Ramey
Dr. Tape
Dr. Bunting

Mr. Hollingsworth
Dr. Fritsch
Mr. Bloch*
Mr. Ink*
Mr. Hobbs

DISTRIBUTION

Commissioners
General Manager
General Counsel
Secretary

F. T. Hobbs
Assistant Secretary

*Partial Attendance

DEVELOPMENT AND RESOURCES CORPORATION

UNCL. BY DOE
NOV 26

W. E. LILIENTHAL
CHAIRMAN OF THE BOARD

JOHN OLIVER
PRESIDENT

ONE WHITEHALL STREET
NEW YORK, N. Y. 10004
(212) WHITEHALL 4-4521

December 2, 1964

Dr. Glenn T. Seaborg
Chairman
U. S. Atomic Energy Commission
Washington 25, D. C.

Dear Glenn:

I read your recent excellent address on the international atom with the greatest interest, as well as your letter to the New York Times on the inspection activities of the international body resident in Vienna.

Those statements are the occasion for this letter of inquiry.

You recall, of course, the work of a Board of Consultants to the State Department on international control of atomic energy. Building on the thinking of many scientists within the Manhattan District, we prepared a Report, in March 1946.

We on that Board spent much time analyzing "safe" and "dangerous" applications of the then existing knowledge. The substantial inseparability, at some stages, of peaceful and military applications of atomic energy development was apparent; this led us, naturally enough, to consider the effectiveness of inspection as a general proposition, and certain specific measures of inspection, as part of an international control system. In this we were aided greatly by the report of a Committee of the Manhattan District headed by Dr. Manson Benedict, called the "Technical Committee on Inspection and Control."

We took a rather dim view, back in 1946, of inspection as "the only instrument of control," as did the "Technical Committee." We also were sure that technical considerations were by no means the sole or perhaps the only criteria.

Dr. Glenn T. Seaborg

2

December 2, 1964

What the Board of Consultants said on the questions of "inspection" by an international body is set out in our report, as published by the Department of State, particularly at pp. 4 et seq.

I would appreciate, as a private citizen, your opinion about the applicability to today's changed situation of the doubts and limitations about international inspection we entertained in 1946.

The proposal for international control set out in our 1946 report failed of acceptance, but an international agency does exist and is functioning. Many other relevant things have changed since 1946, in the political field and perhaps also technically. But in your speech you refer to the large quantities of fissionable material, some of it weapons material, the U. S. has exported for use in atomic power plants in other lands. The "proliferation" of nuclear weapons capability, in short, the "dangerous" side of atomic development, ostensibly or primarily for power production, is no longer an abstract issue.

I hope I am not one to set up impossible goals; but I would feel a great deal better about the export of atomic power capability if I could have those earlier doubts about international inspection, by an international agency, modified or dispelled.

Would you, or someone on the AEC staff, be able to find time to clarify this question in my mind? I should think increased support for the international agency would be more readily forthcoming by an exposition on this theme. Or perhaps it has already been done, and I have missed it.

With very best wishes, I am

Sincerely,



David E. Lilienthal

DEL:mb

UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON, D.C., 20545

GT FILE

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NOV 86

OFFICE OF THE CHAIRMAN

December 31, 1964

Dear Dave:

This is in answer to your thoughtful letter of December 2 pointing out the concern expressed in 1946 by the Board of Consultants over the adequacy of international inspections to provide "security against atomic warfare".

In reviewing the Board's report, I was again impressed by the concept proposed and, at the same time, again cognizant of the gulf which has come to separate the conditions existing in 1946 and the conditions of today. In 1946, it appeared that we might be able to choose between completely controlled atomic energy development or no atomic energy development at all. The choice with which we are confronted today is between world-wide development of atomic energy without controls or with those controls which we can achieve through prudent cooperation and assistance.

Since 1946, much of the basic scientific knowledge associated with the development of nuclear energy has become generally available; first, through independent efforts as in the case of the USSR and later through open scientific dissemination, as in the case of the three Geneva Conferences. As a result, many nations have recognized the broad potential of nuclear energy and embarked on ambitious programs drawing from their own resources and any available outside resource to meet their needs. The atomic energy developments in these nations which can be made subject to control today are those dependent on material or equipment transferred between nations or groups of nations or those developments which individual nations may voluntarily submit to such control. The control system which has on-site inspection as one of its major facets is designed to assure that these specific assisted or volunteered activities are not used to further a military purpose. This is in contrast with the system contemplated in 1946 under which any "dangerous" atomic energy activities in the world could be developed only by, and therefore under the control of, the international body. While the International Atomic Energy Agency does not have the exclusive responsibility

for development of "dangerous" atomic energy activities, it does have affirmative promotional and coordinating functions which contribute to the effectiveness of its control system.

A great effort is being made today to develop the organization, procedures and techniques for international inspection needed to keep pace with the expanding international nuclear activities. The International Atomic Energy Agency is conducting inspections of reactors which have been made subject to control in many countries. Detailed procedures based on proven accountability techniques and intimate knowledge of the types of reactors being inspected are followed in a manner commensurate with the potential strategic significance of the facilities. Although no system of control is absolutely foolproof, I feel that the present one gives, insofar as the facilities subject to it are concerned, such a high degree of assurance of detecting any diversion that a potential violator would be unlikely to run the risk of detection.

As regards the direct role of the United States in the development of peaceful nuclear energy capabilities abroad, I feel as I mentioned in my October 27 address on the international atom, ". . .that if we did not cooperate in sharing our peaceful nuclear technology and nuclear materials, there would be other countries - not all of which necessarily would agree to the need for safeguards - other countries which might be willing to provide nuclear materials and technology without a firm assurance as to their eventual peaceful end use".

I hope you find this an adequate response to your concern and would be pleased to correspond further with you on it if you desire. Or perhaps a better course would be to have lunch together to discuss this and other matters. If you think well of this idea, I should like to suggest that John Palfrey join us.

Sincerely,



Glenn T. Seaborg

Mr. David E. Lilienthal
Chairman of the Board
Development and Resources Corporation
One Whitehall Street
New York, N. Y. 10004

Rewritten in Chairman's Office
ARF/smk

December 9, 1964

Dear Mr. President:

I have the pleasure of submitting to you the regular biweekly report on significant developments in the atomic energy program.

1. Burnup of Space Nuclear Generator (SNAP-9A) (OWD)

The burnup of a space nuclear generator (SNAP-9A) upon reentry of its satellite into the earth's atmosphere was reported publicly by the AEC last May. This announcement, based on preliminary data, has now been further confirmed by analysis of radioactive debris collected through the high altitude sampling program.

Analysis of samples collected in September and October, still under way, is expected to confirm the conclusion that the generator fuel burned up. Pending this confirmation, expected in mid-January, we do not plan to issue a press release.

The plutonium-238-fueled AEC generator providing auxiliary power for a Navy navigational satellite was launched in April of this year from Vandenberg Air Force Base, California, by an Air Force Thor Able Star Space booster.

2. French Atomic Energy Budget

The budget request of the French Commissariat a l'Energie Atomique for 1965, which was recently presented to the French National Assembly, was for 4115 million in funds and 4425 million in authorizations (as compared to the 1964 budget of 4015 million and 4402 million respectively). In addition, the Ministry of Armed Forces is budgeting 3310 million in funds and 4435 million in authorizations for military atomic energy programs.

3. Reorganization of British Research and Development Programs (C99)

The British Government has recently provided information concerning plans for the reorganization of government research and development programs. A Science and Technology Bill was introduced in Commons on November 13 by the Secretary of State for Education and Science which provides for legislative approval of organizational changes, and the Prime Minister and Minister of Technology have issued statements to clarify the role of the new Ministry of Technology. Proposed changes include: (a) enlarging the functions of the Atomic Energy Authority to permit the "undertaking of scientific research in such matters not connected with atomic energy as may, after consultation with the Authority, be required by the Minister of Technology"; (b) dissolution of the National Institute for Research in Nuclear Science and transfer of its activities to a newly created Science Research Council under the Department of Education and Science; (c) concentration of the scientific research program under the Department of Education and Science in four research councils: Agricultural, Medical, Natural Environment, and Science Research. It is expected that, though hotly debated in Parliament, the bill will be passed without major revision.

4. U.S. - U.S.S.R. Exchanges

A team of ten reactor specialists from the U.S. will arrive in the Soviet Union on December 11 for discussions and tours of Soviet installations involving fast breeder reactor and nuclear superheat projects. During the past year the U.S. and U.S.S.R. have exchanged reciprocal visits of scientists in the fields of controlled thermonuclear reactions, solid state physics and desalting. In addition an American waste disposal team visited the Soviet Union in November and it is expected that Soviet scientists in the field of waste disposal and power reactor development will make return visits to installations in the U.S. early in 1955.

5. Annual Meeting of Atomic Industrial Forum

The other Commissioners and I were among the nearly 600 representatives of industry, labor, and the Federal government who attended the annual conference of the Atomic Industrial Forum in San Francisco, November 29 - December 3. Among the highlights were the following:

- a. Representatives Hollifield and Hoerner indicated they were skeptical about the proposed Multilateral Force, but said the plan should be fully considered by the Congress.
- b. Frank Di Luzio, staff director of the Senate Committee on Aeronautical and Space Sciences, said Congress should push for reinstatement of the flight-test phase (NIT) of the nuclear rocket program (Project Rover) to permit early utilization of the technology gains made during the past year.

This year's meeting was optimistic in outlook with the feeling that nuclear power is making solid gains and that the industry is diversifying on many fronts.

Respectfully submitted,

Glenn T. Seaborg

The President
The White House

talk would be fine. This will be strictly a local affair, with visitors and educators from around that area.

McNamara wrote Bundy disagreeing with the AEC's recommendation to Bundy to supply contractual uranium-235 to France for their land-based nuclear submarines. (Rusk supported this in a letter to Bundy dated December 1st.) McNamara also opposed the French purchase of advanced computers on the basis that this might help their weapons program. The AEC had supported the French purchase on the basis that this is a basic science issue.

Lynne received her first paycheck (\$15.77) today for her work as a dental assistant.

I received an announcement concerning Earl Hyde spending ten days in the nuclear laboratory at Dubna, near Moscow (copy attached).

Wednesday, December 9, 1964 - Germantown

At 11:15 a.m. I talked to Doyle Berry (of Berry Brothers, Louisiana) regarding the AEC's role in placing a 60-watt Sr-90 Snap 7F device in the Gulf of Mexico as a source of power for their operations. Phillips Petroleum will be the contractor.

At 12:30 p.m. I had lunch with Milton Shaw and Arnold Fritsch in the Germantown cafeteria.

I called Nick Johnson (Maritime Administrator) to try to enlist his support of a letter to President Johnson supporting a maritime nuclear prototype in the FY 1966 budget.

I called Clint Anderson to discuss our FY 1966 civilian nuclear power prototype program and his moves toward replacing the University of California as a LASL contractor with the group of Rocky Mountain Universities, including the University of New Mexico. He agreed to proceed slowly, pending any further discussions with the University of California.

At 3:30 p.m. I called Hornig. 1. I told him we have decided to make a pitch for the MIT accelerator despite our budget problems. I said I don't know what chance we would have for the MIT machine; that we had asked for it in 1961, 1962 and 1963, but somehow or another it wasn't put in our budget request for 1964. I told him both buildings (Princeton-Penn and University of Pennsylvania) have been eliminated by the Bureau of the Budget. 2. I said that we had a report from Dwight Ink on the trip of our delegation on desalting to the Soviet Union and asked if he had been brought up to date. He said that John Calhoun and Robert Barlow had briefed him and had said that a. the Russians were doing much better than they had thought, and b. they were treated extremely well.

I told him that there is still a little concern at the AEC as to the way we had been represented in these meetings. Hornig said he thought that perhaps he should write a letter which specifically divided the responsibilities. He said he thought all of the nuclear aspects of the desalination program should be my responsibility with direct contact with Petrosyants. I said that apparently Dwight Ink had been told several times by Petrosyants that he (Petrosyants) hoped he could continue to have contacts with me. Hornig said he thought Stewart Udall had to be convinced on this. I said that the U.S.-USSR exchange program in the atomic energy field is going extremely well and we are very pleased. Hornig said he would like to think about the problem; that he would be in touch with Udall and try to work out a time when the three of us could lunch together to discuss the matter.

I wrote to Pete to fill him in on family activities

*Udel: This is really pretty good, the
Prof. must have been very successful.*

8 December 1964

bb 18

USSR INTERNATIONAL AFFAIRS

AMERICAN VISITS DUBNA; SOVIET GROUPS IN U.S.

Jents

U.S. Scientist

Moscow TASS International Service in English 1847 GMT 4 December 1964--L

(Text) Moscow--The noted American scientist Prof. Earl Hyde has spent 10 days at Dubna, near Moscow, as guest of the management of the Joint Nuclear Research Institute. He is one of the chief members of Glenn Seaborg's group at Berkeley, which discovered several new chemical elements. Most of his working time he spent in the nuclear reactions laboratory, where Soviet scientists recently (discovered?) the new, 104th element.

Regarding research into nuclear reactions caused by heavy ions as an extremely important branch of physics, Professor Hyde displayed great interest in questions connected with them. In a TASS interview he said that acquaintance with several Soviet physicists and chemists, with their works, and also his new impressions, give him the right to say that Soviet science is very strong, particularly in nuclear physics.

Professor Hyde emphasized that he was greatly impressed by the data obtained as a result of the discovery of element 104.

Speaking about international scientists exchanges, he emphasized the great significance of such trips because, he said, it is impossible to gain a correct idea on many things without personally inspecting the equipment and conversing with the experimenters.

One indication of the great value of Soviet-American scientific exchanges, he said, is the fact that his study of the work of the joint institute could prove extremely useful in planning research at Berkeley.

Thursday, December 10, 1964 - Germantown

Commissioner Palfrey and I met with Herb York to discuss the effect of civilian nuclear power (U.S. aid to foreign countries) on proliferation in connection with his role on the Gilpatric Committee.

At 12:30 p.m. Commissioners James Ramey, John Palfrey, Gerald Tape, Mary Bunting, members of the staff (Bob Hollingsworth, John Hall, Nelson Sievering, Myron Kratzer, Glenn Bradley) and I had lunch with Jules Gueron and Curt Heidenreich to discuss U.S.-Euratom cooperation in the field of organic-cooled heavy-water reactors. Gueron would like the U.S. to collaborate in building a prototype in Europe, which is probably not too feasible; but collaboration of a substantial kind is probably possible if we can overcome Euratom's suspicion that the U.S. is trying to exploit their progress on the ORGEL Project.

At 4 p.m. I presided over Commission Meeting 2064 (action summary attached).

At 4:50 p.m. I called James Killian. He said that he has been looking at the overall economics of the accelerator proposed for MIT, and he thought it was important to point out that they have already committed Institute funds for part of the cost. He said if the AEC could make available \$4.6 million they will undertake to commit themselves toward the \$1 million for overall cost. He said this might make it necessary to make some modifications to the accelerator itself, but none that would result in not having a good machine when they are through. He said that purchase of the land would cost on the order of a couple of hundred thousand dollars. I said we were asking for \$6 million in our budget, and we speak of an additional amount for the land which we say MIT is talking of--actually it is down for \$6.4 million of which MIT might provide \$.4 for certain sections of the building. Killian said he appreciated our giving them a chance to look at this. I told him I hoped that we could do this, that we are also asking for a total of \$500,000 for the support of nuclear engineering at various schools, but we don't know how this is going to turn out either.

I announced today that ten U.S. nuclear reactor specialists will arrive in Moscow on Friday (December 11th) to visit Soviet installations. (Press Release attached.)

I wrote a long letter to Peter to answer the questions he had asked in his last letter.

Friday, December 11, 1964 - D.C.

At 9:55 a.m. I presided over Regulatory Information Meeting 134 (notes attached).

At 10:10 a.m. I presided over Information Meeting 434 (notes attached). Among the items discussed were the letter of December 10th from Nicholas Johnson expressing interest in maritime nuclear propulsion but emphasizing the need to make it economically competitive (copy attached), my letter to Averell Harriman urging that the U.S. keep its commitment to deliver U-235 nuclear fuel to South Africa for their research reactor (copy attached), and our proposed letter to the President requesting permission to conduct the Whetstone III underground nuclear weapon testing program.

The SULKY shot, originally scheduled for December 8th, is still holding pending favorable weather.

I presented the AEC's Citation award to Clark Center in the presence of Commissioners Gerald Tape, James Ramey, John Palfrey, Mary Bunting, members of the staff, Berny Mason (President, Union Carbide), Kenneth Rush (Executive Vice

UNITED STATES GOVERNMENT

Memorandum

UNCL. BY DOE
NOV 86

R. E. Hollingsworth, General Manager

DATE: December 10, 1964

Approved

R.E. Hollingsworth

Date

F. T. Hobbs, Asst. Secretary

Original signed by
F. T. Hobbs

FROM :

SUBJECT:

ACTION SUMMARY OF MEETING 2064, THURSDAY, DECEMBER 10, 1964, 4:00 P.M.,
ROOM A-410, GERMANTOWN, MARYLAND

SECY: ICB

Commission Business

1. AEC 751/342 - Safeguarding the Eurochemic Plant

Approved. (DIA)

The Commission requested EURATOM be advised that the U.S. reserves the right to review the safeguard procedures at the end of a specified time limit. (DIA)

2. AEC 352/47 - Proposed Sale of Materials to the United Kingdom

Approved. (DMA)

3. AEC 352/48 - Transfer of Materials to U.K. for Research and Development Purposes

Approved. (DMA)

Information Items

1. Letter to the President re Maritime Prototype

Approved, as revised.

The Chairman said he would call Secretary Hodges if necessary.

The Commissioners noted staff would meet with Maritime Administration staff prior to the Commission's meeting with Administrator Johnson on December 15, and requested they be appropriately informed. (Fritsch)

2. Commissioner Palfrey's Scheduled Informal U.N. Talk

3. Authorization for Project SULKY (See General Manager's
December 9 Memorandum)

The Commission accepted the General Manager's
recommendation. (DMA)

4. Funding for Plowshare Program in FY 1965 and 1966 (AEC 811/123)

The Commission requested the proposed letter to Mr. Bundy
be held and that Mr. Charles Johnson, White House staff, be
informed. (GM)

5. Meeting with General Electric Representatives re 630-A

The General Manager noted a draft of the forthcoming staff
paper had been distributed.

6. Commissioners' Luncheon with Mr. Jules Gueron Today

The Commission noted Minutes are being prepared for
discussion at the Information Meeting tomorrow. (DIA)

cc:
Commissioners



U
ATOMIC ENERGY COMMISSION
WASHINGTON, D.C. 20545

No. G-286
Tel. 973-3335 or
973-3446

FOR IMMEDIATE RELEASE
(Thursday, December 10, 1964)

UNCL. BY DOE
NOV 86

PRESS RUM DEC 10 1964 3³⁰ P.M.

**10 U.S. POWER REACTOR SPECIALISTS TO ARRIVE
IN USSR ON DECEMBER 11 FOR TOUR OF INSTALLATIONS**

Dr. Glenn T. Seaborg, Chairman of the Atomic Energy Commission, today announced that 10 U.S. nuclear reactor specialists will arrive in Moscow on Friday (December 11) to visit Soviet installations.

This visit, part of a series of unclassified exchanges between the two countries within the framework of inter-governmental agreements, was specifically provided for in the Memorandum signed in Moscow by Dr. Seaborg and Mr. A. M. Petrosyants, Chairman of the USSR State Committee on the Utilization of Atomic Energy, in May, 1963.

U.S. specialists making the trip are:

Alfred Amorosi, Atomic Power Development Associates, Detroit, Mich.;

Joseph J. DiNunno, Division of Safety Standards, AEC Hdq.--Bethesda, Md.;

Donald H. Imhoff, General Electric Company, San Jose, Calif.;

Stephen Lawroski, Argonne National Laboratory (AEC), Argonne, Ill.;

Walter V. Mosgovoy, General Electric Company, Pleasanton, Calif.;

U. M. Staebler, Division of Reactor Development and Technology, AEC Hdq.--Germantown, Md.;

F. W. Thalgott, Idaho Division, Argonne National Laboratory, Idaho Falls;

(more)

Glen W. Wensch, Division of Reactor Development
and Technology, AEC Hdq.--Germantown, Md.;

John M. West, Combustion Engineering, Inc.,
Dunedin, Fla., and

J. H. Wright, Westinghouse Electric Corporation,
Pittsburgh, Pa.

The U.S. delegation is scheduled to visit the nuclear superheat reactor at Beloyarsk; the fast neutron reactor and the AM-1 power station at the Obninsk Physical-Technical Institute; the nuclear power station at Novovoronezh; the Scientific Research Institute of Atomic Energy Reactors at New Melekes; the Kurchatov Atomic Energy Institute, Moscow, and Headquarters of the State Committee in Moscow to discuss fast breeder reactor and nuclear superheat projects.

The U.S. and the Soviet Union have completed reciprocal visits of scientists in the fields of controlled thermonuclear reactions and solid state physics during 1964 and a group of eight U.S. waste disposal experts visited the Soviet Union last month as provided in the Memorandum. It is expected that USSR scientists in the fields of waste disposal and power reactor development will make return visits to U.S. installations early in 1965.

#

12/10/64



UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON, D.C. 20545

NOV 86 08

COPY NO. 2
December 11, 1964

REGULATORY INFORMATION MEETING 134

9:55 a.m., Friday, December 11, Chairman's Conference Room, D. C. Office

1. Matter of Jersey Central Power and Light Company (Director of Regulation's December 10 Memorandum)

Mr. Price discussed briefly the decision of the Atomic Safety and Licensing Board and suggested the Commissioners read the decision. He will discuss the matter with Commissioner Palfrey.

2. Cable re N. S. SAVANNAH Diversion to the Azores

Mr. Price reported briefly on the diversion of the N. S. SAVANNAH for the purpose of debarking a crew member who is ill.

3. Report on Engineering Safeguards
4. Report on Malibu

PRESENT

Dr. Seaborg Mr. Price
Dr. Tape Mr. Hennessey
Dr. Bunting Mr. Doan
 Dr. Fritsch
 Mr. McCool

DISTRIBUTION

Commissioners
Director of Regulation
General Counsel
Secretary

W. B. McCool
Secretary



UNITED STATE
ATOMIC ENERGY COMMISSION
WASHINGTON, D.C.

2. 4. 11, 1964

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NOV 86

INFORMATION MEETING 434

10:10 a. m., Friday, December 11, Chairman's Conference Room, D. C. Office

1. AEC Membership on U. S. Intelligence Board

The Commissioners agreed it would be desirable to continue AEC membership on the Board. An appropriate letter will be prepared for the Chairman's signature and the Chairman will call Mr. McCone. (AGMA)

2. Letter to the Joint Committee re Gilpatric Committee

The Chairman noted Mr. Palfrey's suggestion that the Joint Committee be informed. An appropriate letter will be transmitted. (Fritsch)

3. Commissioner Ramey's Article for NUCLEAR INDUSTRY re Desalting

The Commissioners discussed briefly the draft article. Dr. Tape said he had suggested Reactor Development provide some additional material. (Secy)

4. Meeting of the Subcommittee of the Defense Industrial Advisory Committee, January 4, 1965

The Chairman noted the meeting at which the matter of independent research and development will be discussed and suggested appropriate staff attendance. (OC-SAGM)

5. Semiannual Meeting of the Agreement States with AEC Regulatory Staff, 8:30 a. m., Monday, December 14, D. C. Office

The Commissioners discussed briefly the desirability of Commissioners' attendance for the opening of the meeting. (Secy)

- ✓6. December 10 Letter From Nicholas Johnson, Maritime Administrator, re Marine Nuclear Prototype Program

The Commissioners approved the draft proposed revision for authorizing legislation for FY 1966 and requested discussion with Fred Schuldt, BOB. Dr. Bunting will call Mr. Johnson and the draft letter to the President will be held pending further developments.

7. General Manager's December 10 Memorandum re Contract Extension with Johnston Laboratories

Approved. (DID)

8. WHETSTONE Test Bulletin No. 17

Noted.

- ✓9. Proposed Letter to the President re WHETSTONE III

The Commissioners discussed revisions to the letter and the Chairman suggested the desirability of clarifying the plans for PLOWSHARE experiments. (DMA) (Copy of the letter filed in the "Secret File" for the day of December 14, 1964)

- ✓10. December 4 Letter from the Secretary of Defense re Exports to France (Filed in the "Secret File" for 1964 for the day of December 8, 1964.)

Noted.

11. Pending Contractual Matters Report No. 79

Noted.

12. Deferral of Oak Ridge Spin-off Study

The General Manager reported briefly on the problem re use of funds and said action on the study is deferred pending availability of funds in the FY 1966 budget. (OC)

13. Meeting with Surgeon General Terry, Public Health Service, re Reports on Radioactivity in the Columbia River

Mr. Ink reported on his meeting with Dr. Terry and others and said agreement had been reached on the desirability of resolving any differences before either agency reports to the Jones Subcommittee. Congressman Jones has agreed to this procedure.

14. Agenda for Week of December 14

Dr. Tape queried the status of the briefing on command and control in relationship to the safety rules papers now scheduled for consideration next Friday. (DMA)
Approved, as revised. (Secy)

15. Heavy Water Moderated Organic Cooled Reactor Program, U.S. - European Cooperation

The Commissioners approved the basis of cooperation as outlined in the minutes of conversation on the December 10 luncheon with Jules Gueron. (DIA)

✓ 16. Proposed Letter to Governor Harriman re Delivery of U-235 to South Africa

Approved, as revised. (DIA)

17. Personnel Item

Approved. (PER)

PRESENT

Dr. Seaborg
Dr. Tape
Dr. Bunting
Mr. Hollingsworth
Mr. Bloch*
Mr. Ink
Mr. Hennessey
Dr. Fritsch
Mr. McCool

DISTRIBUTION

Commissioners
General Manager
General Counsel
Secretary

W. B. McCool
Secretary

*Partial Attendance



U.S. DEPARTMENT OF
MARITIME ADMINISTRATION
WASHINGTON, D. C. 20235

UNCL. BY DOE
NOV 86

OFFICE OF THE ADMINISTRATOR

December 10, 1964

JSS 12/11/64

Honorable Glenn T. Seaborg
Chairman
Atomic Energy Commission
Washington, D. C. 20545

Dear Mr. Chairman:

Confirming our phone conversation, I would like again to express the interest of the Maritime Administration in your marine nuclear prototype research program.

As you know from our letter of October 28 and subsequent conversation, the first run on our economic feasibility studies will not be available for presentation to you until Tuesday morning, December 15. The final results of this series of studies will not be fully completed until some time late in January. Therefore, I am unable to give you any information on economic feasibility at this time.

There are a number of reasons, however, why we urge you to continue your research in reactor technology with marine applications.

The high subsidy costs confronting the Government in the maritime industry are a product of shipbuilding costs roughly double those of foreign yards, and of wage costs five times those on foreign ships. Every increase in productivity on board ship will reduce subsidy as well as produce economic benefits to the industry.

We believe that nuclear power can play an essential role in increasing productivity by providing needed increases in power, speed and long-range operational capability at relatively lower fuel and other operating costs. (We are thinking of 30-knot nuclear-powered ships, compared with 20, and at the fastest 24, knot ships with standard propulsion plants.)

The possibility that nuclear-powered ships might actually be economically competitive at the present time is limited to a rather precise set of conditions. The ships would have to operate on very long runs (we are investigating Trade Route 12 from New York to the Far East) and at high sustained speeds; the resulting superior service would hopefully attract a high percentage of high-value cargo, perhaps at higher freight rates. The increased revenue and decreased transit time may well increase productivity enough to offset the additional capital cost of the reactor, and of the additional wage costs. (Both construction and operation are subsidized.) In the event these conditions were not realized the ships could not be operated competitively at this time.

Thus, at the present time it is impossible for us to say that nuclear-propelled ships offer any prospect for dramatic subsidy savings during the next three to five years. It may be that the 30-knot service will prove to be worth testing in actual market conditions, but that determination will have to await the outcome of our economic feasibility studies.

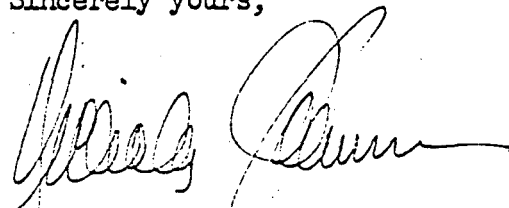
Whatever we may decide to do during the next three to five years, it is clear to us that if the United States is to have a truly competitive merchant marine, some dramatic cost breakthroughs will be necessary. We are exploring the possibilities of the surface effect ship. Another possibility would be a conventional ship with a power plant far more simple to construct and operate than that presently found on conventional or nuclear-powered merchant ships.

Existing technology may well be insufficient to meet this goal. We therefore urge that you undertake development of significantly advanced nuclear propulsion plants. Present research and development activities may well ultimately fix our position in international maritime affairs in the period beginning 8 to 10 years in the future.

In any event, it is important to note that the economic feasibility of nuclear-powered merchant ships may well prove to be simply a function of the price of fuel oil. In planning for the merchant marine we think in terms of 20-year periods at the shortest--for that is the minimum useful life of a ship--and often plan far beyond that. Our projections of the increase in fuel costs indicate that nuclear ships may prove to be economically feasible from this standpoint alone sometime during our present long-range forecast.

The cooperative projects undertaken by our agencies in the past--the nuclear ship SAVANNAH and other marine nuclear research--have produced a valuable reservoir of experience and information. I look forward to continuing this fruitful cooperation.

Sincerely yours,

A handwritten signature in cursive script, appearing to read "Nicholas Johnson".

Nicholas Johnson
Maritime Administrator

cc: Commissioner Bunting

CLASS. BY DOE
NOV 86

Dec-10, 1964

Dear Governor Harriman:

I understand that you are currently considering whether the delivery by the U. S. of 3.9 kg. of U-235 to be leased to South Africa as the first fuel charge for its research reactor should be allowed to proceed. I am certain that your staff has provided you with the background information which you will need to arrive at a conclusion on this matter and that there is no need for me to review in detail the pros and cons on this question. Briefly, the question is whether the United States should fulfill an undertaking made through an international agreement in the face of political difficulties which are expected to result if the shipment takes place. I felt, however, that it would be desirable to let you know directly of the importance which the Commission attaches to our proceeding with this delivery promptly.

Since 1954, the United States has pursued an active program of encouraging, under effective safeguards, the development and application of peaceful uses of atomic energy abroad. A cornerstone of this program has been the supply of U. S. enriched uranium, which represents for most purposes the most efficient and economical sources of nuclear fuel. Since enriched uranium is available in ample supply and at attractive prices only from the U. S., we have faced a continuing difficulty in persuading our partners abroad that United States assurances on the supply of the material could be relied upon. The effort to establish the adequacy and reliability of our supply has included the development of carefully worked out contractual policies and public statements of reassurances by the Commission and by the President, and has been largely successful.

The failure to meet our commitment by the delivery of this material to South Africa would confirm the contention of our detractors, such as the French, and our competitors, such as the British, that

our supply commitments will not be honored when it becomes politically difficult or embarrassing for us to fulfill them. I believe that it is no overstatement that this single act of denial could almost fully destroy the confidence in the assurances that we have given, and thereby reverse the widespread trend which has developed around the world toward the use of U. S. reactors and enriched uranium fuel. Among many unfortunate consequences, this could lead to the selection by many foreign nations of reactor systems based upon the use of natural uranium which would probably not be subject to the effective safeguards which accompany the use of U. S. enriched uranium.

Because of the importance of this issue, I hope that we would have the opportunity to express our views further if it appears that a negative decision might be reached.

Sincerely,

Chairman

Honorable W. Averell Harriman
Under Secretary of State

cc: Chairman Seaborg (2)
Commissioner Bunting
Commissioner Palfrey
Commissioner Ramey
Commissioner Tape
CM
AGYIA
Secretariat (2)
CCC



Atomic Energy Commission Citation Award to Clark E. Center, Union Carbide, AEC Office, Washington, D.C.
December 11, 1964

L to R: Clark Center, Seaborg, Mrs. Center

President), Robert Charpie (Director of Technology), Mrs. Center, Alvin Weinberg, Clarence Larson, E. A. Wende (Oak Ridge), and John Moore (Assistant Manager for Operations, Oak Ridge). After the presentation, we had lunch at the International Club, hosted by Berny Mason and Kenneth Rush.

At 3 p.m. I presided over Commission Meeting 2065 (action summary attached). Among the General Electric representatives present during the meeting were George Haller (Vice President, Schenectady, New York), James F. Young (General Manager, Atomic Productions, Palo Alto, California), William H. Long (Manager, Nuclear Materials and Propulsion Operations, Cincinnati, Ohio), David E. Trumbell (Atomic Productions, Palo Alto, California), and John Barnard (Manager, Government Atomic Power Applications, Washington, D.C.). We heard their presentation on the 630-A maritime reactor (low-enrichment fuel) which is safer and has better economy in a fuel cycle. I said that this proposal is coming so late it will be difficult for the AEC to share support of R & D on it with General Electric.

At 4 p.m. I had an appointment meeting with Dr. Seitz (President, National Academy of Sciences). Commissioner Tape was also present. Seitz described his plan for a meeting of the university presidents of 25 universities, to discuss the formation of a National Corporation in connection with the construction and operation of the 200 BeV accelerator and said that Sunday, January 17th, was the most likely date. It was agreed that Hornig and I should also attend and speak to the group. I pointed out the need for Atomic Energy Commission involvement in the procedure for the formation of the National Corporation that might be responsible for this and Seitz agreed. It was also agreed that if President Kerr attends the meeting of the university presidents, he should make it clear that the University of California regards this as a truly national enterprise.

I sent a note to the President to thank him for his telegram on the occasion of the Parsons Award.

At 5:30 p.m. Dave, Steve, Eric and I attended the presentation of the World Record Black Marlin by Alfred Glassell to the Museum of Natural History. The kids met President Johnson (for the first time). Earl Warren explained his view of the sequence of shots in the Kennedy assassination to David and me. Dillon Ripley, Secretary of the Smithsonian Institution, offered David a summer job.

Saturday, December 12, 1964 - D.C.

I worked all day at the "H" Street office.

At 10:10 a.m. I called Robert Seamans (NASA) regarding his invitation to me to attend the NASA briefing on nuclear space projects on Wednesday. I told him the time for this coincides with that for our Commission meeting with Bradbury of LASL, and he immediately said that I should feel free to bring Bradbury. He went on to say that they will have an "in house" review on Tuesday where they won't follow the program quite so closely, but they would be happy to have me attend that. He said the morning program (presumably on another subject) would be long and drawn out, but that he could check with me about 12 noon about the timing for attending in the afternoon. I told him I would like to do this and asked him to call me at noon on Tuesday, December 15th.

At 11 a.m. I received a telephone call from Commissioner Ramey (Mexico City). He wanted to know how things are going and I told him we have heard nothing on the advanced converters or our budget. He mentioned the Cotter Corporation matter and said that Senator Anderson has an interest in this through one of the officers of Cotter. He said Conway called Holifield (who is with Ramey) and suggested that he (Ramey) call Anderson which he did. Ramey asked that I pass this information on

UNITED STATES GOVERNMENT

Memorandum

UNCL. BY DOE
NOV 88

TO : R. E. Hollingsworth, General Manager DATE: December 11, 1964
Approved _____
Original signed by: F. T. Hobbs Date _____
FROM : F. T. Hobbs, Assistant Secretary R.E. Hollingsworth
SUBJECT: ACTION SUMMARY OF MEETING 2065, FRIDAY, DECEMBER 11, 1964, 3:00 P.M.,
ROOM 1114-H, D. C. OFFICE

SECY:JCH

Commission Business

Mr. Jack Howard's December 11, 1964 Memorandum to Mr. Bundy,
White House

The Commission concurred in the waiver of the requirement for a certification of implementation of CABAL procedures.

cc:
Commissioners

to Hollingsworth and Jim Yore. Ramey said that Anderson seemed to be satisfied with his (Ramey) explanation. Jim said from what he gathered from Conway, our people did not sit down with the Cotter people as Hollingsworth said we would, and Marquart, the Cotter representative, said he received the notice of termination, cold. Jim said he planned to be back in the office on Wednesday, returning through Los Angeles. He said that Holifield would be back East on Friday--he is dedicating the Truxton (nuclear-powered submarine) in Camden, New Jersey, on Friday or Saturday. He said he hoped that Holifield was invited to the ceremony for signing the agreement on the nuclear desalting plant in Los Angeles--that he had been in touch with Interior about this. Jim can be reached in Mexico City at the Hotel Meurice Isabella, Room 909, until early Tuesday morning.

At 11:10 a.m. I called Robert Hollingsworth. I said I had just talked with Jim Ramey in Mexico City and Jim had talked with Senator Anderson on the Cotter arrangement, who seems to understand it, and I don't think we have any problem. Hollingsworth said that on Tuesday of this week, George Quinn and Rafford Faulkner went to Denver to see the Cotter people including Marquart. I mentioned that Marquart had said he had received this information cold, but then it depends on what he considers "cold."

At 11:15 a.m. I called Kermit Gordon. I asked about communications with Don Cook, and he said he has received a letter from him. Gordon said he has talked with Hornig about this and suggested that the three of us meet at 5 p.m. today to discuss it. Since the letter was sent as a personal and confidential report, Gordon feels that it should be held very close. Unless I hear from him to the contrary, the 5 p.m. meeting in Gordon's office is firm.

At 5 p.m. I met in Gordon's office at the Bureau of the Budget with Gordon, Staats and Hornig to discuss Donald Cook's letter written in reply to President Johnson's request that he evaluate the AEC FY 1966 budget request for the HTGR (in cooperation with Rochester Gas and Electric Company) and the seed and blanket reactor (in cooperation with the State of California) prototypes, and design money for the heavy-water moderated, organic-cooled prototype. Cook's recommendation is not to build all three at this time but lists priority as HTGR (first), HWOCR (second), and SB (third). The BOB has already approved the AEC's FY 1966 request for the HTGR and SB arrangements. This adverse recommendation by Cook, a private utility man (President of American Electric and Power Company) could lead to trouble with the JCAE when it comes to light if the President accepts it. It was decided that I will write a letter to President Johnson reaffirming our budget request and Hornig and Gordon will write to the President supporting our request.

Sunday, December 13, 1964 - Home

I worked on AEC papers and my letter to President Johnson commenting on Cook's recommendations regarding the AEC's FY 1966 prototype program.

I read numerous newspaper clippings from the San Francisco Bay Area papers on the Free Speech Movement controversy. It looks as though there will be real trouble ahead for U.C. President Clark Kerr and Berkeley Chancellor Ed Strong and the University of California in view of the way it is developing, especially with respect to the huge faculty vote (824 to 115) recommending complete liberalization of rules and amnesty for the students who violated the rules, which the Regents are not apt to accept at their meeting next Friday.

Monday, December 14, 1964 - D.C.

I greeted the representatives of the nine States engaged in agreements with the AEC to take over responsibility for some regulatory functions (relating to

radioisotopes), who are here for a regular meeting with the staff of our Regulatory section. This greeting was filmed to serve as an introductory part of a film which is being made for use in connection with meetings with states.

I wrote to President Johnson asking for approval for Whetstone III underground tests.

At 12:30 p.m. I had lunch with Arnold Fritsch, John Napier and Stan Schneider, my new assistant, at the Roger Smith Hotel.

At 2:10 p.m. I presided over Information Meeting 435. Among the items discussed was a proposed response to Arizona Senator Hayden regarding conversion of Hanford reactors for power recovery (copy attached).

I wrote to Peter to send him material on SLATE from the Berkeley campus.

At 6:30 p.m. I called Frank Pittman (now with North American Aviation, El Segundo, California) regarding the date for the Leif Erikson Award dinner. I said that January 22nd or 23rd would be preferable for me, but he said that hotel accommodations were not available for those dates. He mentioned that a Friday night is preferable to a Saturday in order to assure a large turnout, and, therefore, they would like to try for January 29th, a night when the Ambassador Hotel would be available. After some discussion I agreed on the 29th, stating I hope nothing will make it impossible for me to do it that night. He said that the dinner will be by invitation, anticipating an attendance of 350-500. Invitations will be sent to people belonging to the Leif Erikson Association, as well as people connected with atomic energy. He asked that I send him a list of personal and Scandinavian friends whom I would like invited. I said I would supply him with a list of people--these would be expected to buy their tickets, rather than be invited as guests of the Association.

At 7:30 p.m. I attended a dinner given by Joe Swidler (Chairman, Federal Power Commission) at the Madison Hotel, celebrating the issuance of their Power Survey. Among those present at the dinner were Under Secretary of Interior John Carver, Kenneth Holum, R. J. McMullin, Alex Radin, Norman Clapp, Walker Cisler, Phil Sporn, Bill Webster, Morehouse, and G. O. Wessenaar. Several of the guests in attendance gave short talks after dinner, including me.

Tuesday, December 15, 1964 - D.C.

At 9:25 a.m. I had a meeting by appointment with General Kenneth D. Nichols and Percival Brundage. They gave me a brief review of the report of the AIF Committee on toll enriching. The Committee will recommend that the toll enrichment customers be allowed to keep the tails, or be given their equivalent in monetary value, and that they be given a leeway on the degree of derichment of the tails corresponding to the uranium which they are having toll enriched.

The Committee will recommend that the low limit of the 1980 predictions for nuclear power be used and the gaseous diffusion power levels be cut down to a level below the 2970 MW now scheduled for 1967. They think that the proper eventual level will be somewhere between 500 and 2,000 MW, and then after it reaches this minimum, the power level will, of course, go up later on. The Committee feels that with respect to toll enrichment for foreign customers there should be no discrimination, i.e., the prices and policies should be the same as for domestic toll enrichment and they should be allowed to keep their tails; also foreign customers should be allowed to build up an inventory of enriched uranium for their power reactors. They feel that the AEC should declassify cost information in connection with the gaseous diffusion process. Although this



ATOMIC ENERGY COMMISSION

WASHINGTON, D.C. 20545

COPY NO. 2
December 14, 1964

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NOV 86

INFORMATION MEETING 435

2:10 p.m., Monday, December 14, Chairman's Conference Room, D. C. Office

1. December 9 Letter from Mr. Warne and December 8 Letter from Mr. Porter re the LSBR

Noted.

2. Proposed Letter to Senator Sparkman re Los Alamos Telephone System

Approved, as revised. (GC)

3. Proposed Letter to Arthur Kranish, TRENDS PUBLISHING, INC.

Approved. Staff will discuss with NUCLEONICS and others.
(AGMA)

4. DIA December 14 Memorandum re Plutonium Supply Contract for EURATOM Fast Reactor Program

To be scheduled Wednesday, December 16. (Secy)

5. Letters from Universities of Harvard and California re Nominees for Advanced Executive Training Programs (December 8 and December 9 Letters)

Mr. Hollingsworth said staff will review. (AGMA)

6. AEC 580/218 - Nuclear Materials Production

General Crowson reported a staff analysis of the Secretary of Defense's letter relating to production, research and development and materials will be submitted shortly. The schedule for the joint recommendations referred to in the last paragraph of the Secretary of Defense's December 8 memorandum for the President will be discussed with White House staff tomorrow. The Commissioners requested preparation of a letter to Mr. Bundy, White House staff, re disarmament. (DMA)

7. AEC 580/219 - Uranium Production Planning

The Commissioners requested preparation of an abstract. (DMA-AGMPP)

8. Union Carbide Corp. (General Manager's December 11 Memorandum)

The Commissioners had no objection to the staff proposal and suggested an attempt be made to provide more than the minimum announcement time specified. Data on pay is to be developed and staff will now prepare responses to the possible questions. (AGMA-LAR)

✓ 9. Proposed Response to Senator Hayden re Conversion of Hanford Reactors for Power Recovery (General Manager's December 14 Memorandum)

The Chairman will sign the letter. (Fritsch)

10. GE Request for a Base Fuel Load (General Manager's December 11 Memorandum)

Staff will now develop an announcement inviting proposals. The announcement is to be circulated to the Commissioners. (DGM)

11. Proposed Contract with Combustion Engineering and Atomics International

To be discussed at the Commission meeting on Friday, December 18. (Secy)

12. Agenda for Commissioners' Meeting with American Public Power Association, Tomorrow Morning, 9:30 a.m.

Approved.

13. General Manager's December 11 Meeting with NASA Officials to Discuss Organization

14. December 13 and 14 Meetings of the Gilpatric Committee

Mr. Palfrey reported briefly on his attendance at these meetings and said the next meeting of the Committee is scheduled for ~~January 7, 1965~~ and it is planned that the Principals will attend. The Chairman requested background material for his use and Mr. Palfrey noted that continued assistance from the staff is required. (AGMA-DIA)

*noted on
Calendar
me*

PRESENT

DISTRIBUTION

Dr. Seaborg	Mr. Hollingsworth	Commissioners
Mr. Palfrey	Mr. Bloch	General Manager
Dr. Tape	Mr. Ink	General Counsel
Dr. Bunting	Dr. Fritsch	Secretary
	General Crowson*	
	Mr. McCool	

W. B. McCool
Secretary

*Attendance for Items 6, 7 and 8.

US BOM ADMINISTRATION
326 US ATOMIC ENERGY
COMMISSION

SECRETARIAT

Dd.
10/2 1402
Folder *Hanford*

DEC 14 1964

Dear Senator Hayden:

This is in reply to your letter of November 6, 1964, which set forth a number of questions concerning the possibility of use of nuclear power, obtained either by conversion of existing Hanford production reactors or by building new reactors, as a source of energy for pumping water to relieve water shortages in the Pacific Southwest. The attached report provides some background information on the existing Hanford reactors and contains answers, to the extent possible with available data, to the questions you have asked.

Preliminary studies have been conducted over the past year by the General Electric Company, operating contractor for the AEC facilities at Hanford, of the feasibility of converting a small Hanford production reactor for electric power generation. This work was initiated in view of the decision announced last January to shut down three of the small Hanford reactors. These studies, while not carried out in extensive detail, do provide a sufficient basis for reaching conclusions as to the feasibility of converting existing reactors relative to construction of new power reactors. Available information on current and planned commercial nuclear power projects has provided a basis for estimating the economics of new facilities. Such available information, however, is not specific to the location in question, but we believe sufficient to permit reaching judgments as to which approach is the more attractive course of action. Much more detailed studies would, of course, be required to establish firm economic data.

In contemplating a potential new load of 6,000,000 kilowatt-years of electrical energy annually in the Pacific Northwest, we believe that the use of nuclear power plants warrants serious consideration. On the basis of experience elsewhere in the country, nuclear power should find extensive application in the Pacific Northwest in the future, in competition with fossil fuels since in that area fossil fuel costs are relatively high. We are, therefore, pleased that in developing plans for the water pumping project, nuclear power is under consideration.

With respect to the availability of the existing Hanford production reactors for conversion to power reactors, future requirements for nuclear materials will determine the extent of this

Sup 7/10/64 435

availability. On the basis of the results of the studies, however, we would not favor conversion of the existing reactors for power production, since: (a) cost estimates indicate that it would be less expensive to build new reactors; (b) the age of the existing reactors, ranging from 10 to 20 years, makes uncertain their future life and reliability; and (c) improved technology and improved safety could be secured in new reactors.

If new nuclear power facilities were to be built in the Pacific Northwest, location of them at the Hanford site warrants serious consideration in view of the many advantages available there, particularly the amount and type of land, laboratory facilities and technical personnel, and other supporting facilities provided for AEC production and development programs. The Atomic Energy Commission would, of course, be anxious to cooperate in making the resources of its Hanford plant available for any purpose that would be in the national interest, to the extent that there would be no conflict with its mission of producing nuclear materials for military and other purposes.

I trust the answers provided in the attachment will be of assistance in your consideration of intended legislation. We welcome this opportunity to provide information on the potential application of nuclear power to the purpose you are considering, as well as information on the advantages of the Hanford site as a location for new nuclear facilities.

Sincerely yours,

DOE ARCHIVES

Glenn T. Seaborg

Honorable Carl Hayden
United States Senate

Enclosure

Retyped in Chairman's Office
ARFritsch/smk 12/14/64

Committee doesn't have the assignment to look into the ownership of gaseous diffusion plants, they feel another group will be looking into this in the future.

At 9:40 a.m. I presided over the Commissioners' meeting with the American Public Power Association representatives - R. J. McMullin (President), J. Dillon Kennedy (Past President), John P. Gallagher (Past President), Francis H. King (First Vice President), Kirby Billingsley (Second Vice President), John B. Preston (Director), Ivan L. Bateman (Director), William Stebbins (Chairman of the Atomic Energy Committee), Eugene Koffman (Vice Chairman of the Atomic Energy Committee), Alex Radin (General Manager), J. E. Brown (Assistant General Manager), Lawrence Hobart (APPA staff), and Northcutt Ely (Attorney)--to discuss areas of mutual interest such as small reactors, their survey of nuclear power interest, etc. I pledged more such meetings.

At 11:15 a.m. Commissioners Gerald Tape, John Palfrey, Mary Bunting, members of the staff, and I met with Nick Johnson, Stephen Friedman, Slinger, Delma Crook, and others of the Maritime Administration to discuss their trade route study as it applies to the use of nuclear power. Johnson was not very encouraging despite the fairly favorable report by his staff. I feel that we will not get good support for our hoped for maritime program, including the proposed prototype reactor.

At 12:50 p.m. I had lunch with Gerald Tape, Mary Bunting, and Arnold Fritsch, at the Roger Smith Hotel, to work on the letter to President Johnson replying to Cook's adverse letter on our prototypes.

At 2 p.m. Commissioner Gerald Tape and I attended the NASA briefing on nuclear power in space.

I received the BOB's reply to our request for reconsideration of \$200 million worth of items in our FY 1966 budget. We got a total budget of \$2.47 billion, with most of our appeal items denied, but nevertheless, some important ones are included so it isn't too bad. The three prototypes are in if we can convince the President to ignore Cook's recommendations--the maritime prototype reactor is out.

I sent a note to Pete to let him know that the materials he needs are available in the Library of Congress and the Department of Justice library.

Wednesday, December 16, 1964 - D.C.

I sent a letter to President Johnson refuting consultant Donald Cook's adverse recommendations to our FY 1966 prototype program (copy attached).

At 10 a.m. I presided over Information Meeting 436 (notes attached).

At 12:15 a.m. the Commission had lunch with the Science and Technology Committee members and the Atomic Energy Advisory Panel members of the U.S. Chamber of Commerce at the Madison Hotel. Edgar Dessen presided. Others present at the luncheon included Roy Chope, Jesse Hobson, D. P. Krotz, Michael Michaelis, Norman Spector, J. F. Young, Roger Coe, C. D. Harrington, I. B. Venoble, H. C. Nickel, V. L. Parsegian, R. L. Loftness and others.

At 3:10 p.m. I presided over Commission Meeting 2066 (action summary attached). The Commission received the BOB's new markup for FY 1966 last night and decided today to appeal \$20 million worth of items. We were allowed some \$40 million, in effect, of the requested \$200 million appeal.

At 3:30 p.m. Robert Hollingsworth, Commissioners James Ramey, Gerald Tape, John Palfrey, Mary Bunting, and I met with Norris Bradbury (Director, Los Alamos



Meeting of American Public Power Association with U.S. Atomic Energy Commission and Staff, Washington, D.C., December 15, 1964

Standing L to R: C. Emerson Duncan (Ely, Duncan and Bennett, APPA legal counsel), Eugene Koffman (Senior Nuclear Engineer, Department of Water and Power, Los Angeles, California, Vice Chairman of APPA Atomic Energy Committee), J. Dillon Kennedy (Commissioner, Department of Electric and Water Utilities, Jacksonville, Florida, member of APPA Board of Directors), Francis H. King (Manager, Gas and Electric Department, Holyoke, Massachusetts, First Vice President APPA), B. G. Adkins (Superintendent, Electric Department, Danville, Virginia, member of APPA Board of Directors), R. J. McMullin (General Manager, Salt River Project, Phoenix, Arizona, President of APPA), Kirby Billingsley (Manager, Chelan County Public Utility District, Wenatchee, Washington, Second Vice President APPA), John Gallagher (Director of Utilities, Piqua, Ohio, member of APPA Board of Directors and APPA Atomic Energy Committee), Alex Radin (General Manager of APPA), William A. Stebbins (Superintendent, Burlington Electric Light Department, Burlington, Vermont, Chairman of APPA Atomic Energy Committee), Ivan Bateman (Assistant General Manager and Chief Engineer, Department of Water and Power, Los Angeles, California, member of APPA Board of Directors), Lawrence Hobart (Director of APPA Atomic Energy Service), and J. D. Brown (Assistant General Manager of APPA).
Seated L to R: John Palfrey, Mary Bunting, Glenn Seaborg, and Gerald Tape

December 16, 1964

Dear Mr. President:

I understand that Mr. Donald C. Cook has raised questions concerning the Atomic Energy Commission's proposed program for the development, in cooperation with private and public entities, of several prototype nuclear power reactors, which suggests that I might usefully add this postscript to my letter of November 18, 1964.

We rate these projects as the highest priority non-military items in our FY 1966 budget. We believe this program is a well balanced, minimum-cost effort, vital to the success of our entire civilian nuclear power campaign. All three reactor concepts are needed in order to meet the varied requirements put on nuclear power and therefore the successful operation of one of them does not displace the need for the others as suggested by Mr. Cook. This program will contribute significantly to achieving the goals set forth in the recent report of the Federal Power Commission calling for a 26% reduction in electrical generating costs by 1980.

A crucial aspect of this program is the unprecedented large amount of non-Federal financial participation which we have succeeded in negotiating for the construction and operation of two prototypes which would begin during FY 1966. This amounts to about \$80,000,000 for the private-utility-sponsored, high temperature gas cooled reactor, and about \$150,000,000 for Admiral Rickover's seed and blanket reactor, sponsored by Governor Brown and the State of California. These represent unique "good business opportunities" for the very reactors that are crucial to our Nation's program, and these non-Federal funds are not likely to be available to us at a later time. I suspect that Mr. Cook did not realize the importance of timing in taking advantage of these non-Federal sources of funds.

The high temperature gas cooled reactor for a private utility will be financed with funds that had been provided for another previously authorized and funded concept that has been cancelled.

We are requesting new funds in FY 1966 for the construction of only one prototype - the seed and blanket reactor for the State of California, which is the one that Mr. Cook's recommended deferral would, in effect, eliminate. In addition, we are seeking design money for a heavy water moderated organic cooled reactor for which we plan to seek authorization and funding in a subsequent year, hopefully also under cooperative arrangements favorable to the Government.

210
Electronics
7-11-65
1120.

We feel that our FY 1966 budget request is crucial with respect to the timing and the nature of the program for civilian nuclear power reactors.

Respectfully yours,

(Signed) Glenn T. Seaborg

Glenn T. Seaborg

The President
The White House



ATOMIC ENERGY COMMISSION

WASHINGTON, D.C. 20545

COPY NO. 2
December 16, 1964

UNCL. BY DOE
NOV 86

INFORMATION MEETING 436

10:00 a. m. , Wednesday, December 16, Chairman's Conference Room, D. C. Office

1. Meeting with Mr. Ellison Taylor, ORNL, This Morning

The Chairman noted Mr. Taylor has just returned from Russia and suggested the Commissioners meet with him prior to the luncheon meeting with the Chamber of Commerce.

2. Meeting of Messrs. Bundy, McNamara and Seaborg to Discuss SNM Production, Week of January 4, 1965

Noted. (Secy)

Meeting

3. Commission/on the FY-1966 Budget, 2:15 p. m. , Today

The Commissioners discussed several items for the budget discussion this afternoon among them

- a. letter to the President re advanced converters
- b. Heavy Water Organic Cooled Reactor (A-E funding)
- c. Effect on GE of budget cuts - the Chairman requested consideration of how to discuss this matter with GE.

Letters to GE regarding the 630A project will be circulated

- d. Maritime Prototype - the Chairman requested preparation of a short letter to Mr. Johnson, Maritime Administrator. (a fall-back position is to be considered)
- e. SNAP 8 - the General Manager will call Mr. Seamans
- f. Merit salary increases - Dr. Tape will talk to Dr. Hornig

g. Compact reactors, AGS conversion, solid state science building at Argonne, and MIT accelerator. (AGM-OC-EAGM-Secy)

4. AEC Annual Report

The Chairman noted receipt of the draft attached to the December 15 memorandum and suggested review by the Commissioners.

5. Possible December 28 Meeting with Mr. William Webster

The Chairman noted the possibility of a meeting this month with Mr. Webster to discuss, among other things, the possible Yankee - Spectral Shift proposal. The Commissioners suggested consideration should now be given to a response to a possible proposal in light of the budget situation. (OC)

6. AIF Committee Report on Toll Enrichment

The Chairman and the General Manager discussed briefly their respective meetings with Messrs. Nichols and Brundage. Mr. Bloch said a summary of the staff meeting with AIF on this subject will be circulated. (AGM)

7. Plutonium Supply Contract for EURATOM Fast Reactor Program (General Manager's December 14 Memorandum)

Approved. (DIA)

8. International Cooperation for a Very High Energy Accelerator (Dr. Tape's December 14 Memorandum)

Approved. The Chairman suggested Dr. Tape call Dr. Hornig. (Secy)

9. Congressman Rogers' December 10 Letter re NOVAVOOD Project for Amarillo

A meeting with staff will be arranged. (EAGM)

10. Pending Contractual Matters (Rpt. No. 80)

The Commissioners noted Mr. Bloch's comment re a possible over concentration problem if Burns & Roe, Inc., were to be selected for the 200 BEV accelerator project and the advanced research reactor project.

11. U.S. -EURATOM Fuel Sale and Purchase Contracts -- SENA Project (General Manager's December 15 memorandum)

Approved. (DIA)

12. Area Manager - Amarillo Area Office (General Manager's December 14 Memorandum)

Approved. (PER)

13. AEC Comments on NASA's Report on Future Space Missions (General Manager's December 14 Memorandum)

For discussion on Friday. (Secy)

14. Exchange Program with Rumania for 1965 (General Manager's December 15 Memorandum)

Approved. (DIA)

15. Export Control Procedures (Mr. Kratzer's December 14 Memorandum)

Approved. (DIA)

16. NTS Event Scheduled for Today

The Commissioners noted the General Manager's report.

17. Joint AEC-Labor Department Conference on Workmens Compensation and Radiation Injury (See Mr. Smith's November 4 Memorandum)

Mr. Bloch reported briefly on the problem that has developed by the AFL-CIO suggestion on limitation of the agenda items. He will report further on this matter Friday.

PRESENT

Dr. Seaborg	Mr. Hollingsworth
Mr. Palfrey	Mr. Bloch
Dr. Tape	Mr. Ink
Dr. Bunting	Mr. Schur
	Dr. Fritsch
	Mr. McCool

DISTRIBUTION

Commissioners
General Manager
General Counsel
Secretary

W. B. McCool
Secretary

UNITED STATES GOVERNMENT

Memorandum

UNCL. BY DOE
NOV 86

TO : R. E. Hollingsworth, General Manager

DATE: December 17, 1964
Approved _____

R.E.Hollingsworth

FROM : W. B. McCool, Secretary

Date _____

SUBJECT: ACTION SUMMARY OF MEETING 2066, WEDNESDAY, DECEMBER 16, 1964,
3:10 P.M., ROOM 1113-B, D. C. OFFICE

SECY:GF

Commission Business

Final Appeal on EOB Mark-up of AEC FY 1966 Budget

The Commission approved the following appeals:

<u>Program</u>	<u>Amounts</u> (In Millions)
SNAP 8 (Oper. Exp.).....	\$ 5.0
HWOGR (Const.).....	2.0
710 Program (Oper. Exp.).....	3.0
Vallicitos Superheat Reactor (Oper. Exp.).....	2.5
Solid State Physics Facility, ANL (Const.).....	4.0
Low Energy Accelerator (Equip.).....	2.5
Maritime Program, R&D (Oper. Exp.).....	<u>2.5</u>
Total.....	\$21.5
GSO.....	<u>5.0</u>
Grand Total.....	\$26.5

The Commission also approved the following reprogramming of funds under the TE&I Program:

<u>Program</u>	<u>Amounts</u> (In Thousands)
<u>Division of Nuclear Education & Training</u>	
Fellowships.....	\$ 207
Traineeships.....	200
Reactor Research Assistance.....	<u>-0-</u>
Total	\$ 407

<u>Program</u>	<u>Amounts</u> (In Thousands)
<u>Division of Technical Information</u>	
DTI Spin-off.....	\$ 150
Other.....	100
<u>Division of Special Projects</u>	100
<hr/>	
Total.....	\$ 350
Grand Total.....	\$ 757

cc:
Commissioners

Scientific Laboratory) according to our new schedule of meetings with Laboratory Directors. We discussed his program at LASL in detail and his views on changing contractor. He doesn't favor changing the University of California but would involve Rocky Mountain Universities in more research and education.

I sent a letter to my mother to tell her of the Leif Erikson Award dinner.

Thursday, December 17, 1964 - Washington - New York - Washington

At 10 a.m. I left Washington, D.C., on an Eastern Airlines shuttle and arrived in New York at 11:07 a.m. to attend William E. Knox's 18th Annual Pre-Christmas luncheon, held at the University Club (One West 54th Street). Among those present were Vice President-elect Hubert H. Humphrey, Richard M. Nixon, Fred Foy, Edgar Kaiser, James Farley, David Rockefeller, William Hearst, John McCloy, Clint Murchison, Arthur Hays Sulzberger, Franklin D. Roosevelt, Jr., Arthur Ochs Sulzberger and Juan T. Trippe. I sat between Jack Howard (President, Scripps-Howard Newspapers, New York City), and Austin Tobin (Executive Director, the Port of New York Authority).

At 4 p.m. I left New York City on an Eastern Airlines shuttle and arrived in Washington, D.C., at 5:10 p.m.



Christmas party of William E. Knox of Westinghouse, New York, December 17, 1964

L to R: Knox, Vice President Humphrey, Seaborg

Friday, December 18, 1964 - D.C.

At 8.30 a.m. I received a call (at home) from President Johnson. The President said he had read in this morning's paper about the nuclear desalting plant on Long Island, whose construction, with State of New York and federal funds, was announced by Governor Rockefeller. The President wanted to know whether the AEC had committed any federal funds to this, and I assured him that it had not. He indicated that he would not favor the use of federal funds for this purpose. He asked how our nuclear desalting projects were progressing, and I said we had a number of them in mind. He said he would like to see these progress, and I said that funding was an important aspect of such progress.

At 9:30 a.m. I called Kermit Gordon. I called to inform him that the President had called me this morning (around 8:30 a.m. at home), expressing concern about getting on with nuclear desalting projects. I told Kermit I thought the President was worried about the news item this morning that Governor Rockefeller is planning the construction of a desalination plant on Long Island and alluding to use of federal funds. I said I assured the President that we didn't have any federal funds earmarked for this project, and he had intimated that they would not be approved. Kermit thanked me for calling him.

At 9:50 a.m. I presided over Regulatory Information Meeting 135 (notes attached).

At 10 a.m. I presided over Information Meeting 437 (notes attached).

At 11:30 a.m. I presided over Regulatory Meeting 208 (action summary attached).

At 11:35 a.m. I presided over Commission Meeting 2067 (action summary attached).

At 1:05 p.m. I had lunch with James Cobble (of Purdue University) at the Metropolitan Club.

I met with Howard Brown and Reichardt concerning placing Snap devices in China, suggested by CIA staff members. I doubt that this is a very sensible project.

At 2:15 p.m. I had an appointment meeting with Failick Rainey (University of Pennsylvania). He said he wanted to talk to me about his program of archeological exploration, using physical science tools. The NSF is withdrawing its support of some \$30,000 a year, which had been added to the University of Pennsylvania's support of some \$60,000 a year. He has unsuccessfully sought funds from the Ford Foundation. I told him that it would be difficult for the AEC to support research in this area due to the nature of the research and our lack of funds, but I suggested that he could talk to our staff about it. I introduced him to Arnold Fritsch, who, in turn, was to put him in touch with John Pomeroy of the Division of Research.

At 2:30 p.m. I had an appointment meeting with John L. Kuranz (Vice President, Nuclear Chicago Corporation). 1. Kuranz said he wanted to talk about our isotope program. He thought that the three aspects, that is, a. the work in the Division of Isotopes Development; b. the isotopes development in the Division of Reactor Development; and c. the production aspects of isotopes, might well be combined under a single leadership. He remarked that good leadership always gives better results. He also said that it may not be efficient to use the same staff for the promotion of isotopes as for the development of their use. I said I would give this consideration and discuss it with the staff. He said he didn't want to bring this up before the Isotopes Advisory Committee because it might be embarrassing to some members of the staff. 2. I told him that I had answered his letter of November 13th on December 16th regarding the use of measurement modules. I told



ATOMIC ENERGY COMMISSION
WASHINGTON, D.C. 20545

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NOV 86

COPY NO. 2

December 18, 1964

REGULATORY INFORMATION MEETING 135

9:50 a.m., Friday, December 18, 1964, Chairman's Conference Room,
D. C. Office

1. Connecticut Yankee - Finding of Financial Qualification

Approved. (DR)

2. Regulatory Staff Meeting with AIF Today to Discuss Technical
Specifications

PRESENT

Dr. Seaborg
Mr. Palfrey
Dr. Tape
Dr. Bunting

Dr. Beck
Mr. Lowenstein
Mr. Hennessey
Dr. Fritsch
Mr. McCool

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Secretary

W. B. McCool
Secretary



ATOMIC ENERGY COMMISSION

WASHINGTON, D.C. 20545

REC. BY DOE
NOV 86

COPY NO. _____

December 18, 1964

INFORMATION MEETING 437

10:00 a.m., Friday, December 18, 1964, Chairman's Conference Room,
D. C. Office

1. Westinghouse Request to Assist Fiat in Nuclear Propulsion Reactor (General Manager's December 17 Memorandum, with Attachments)

Admiral Rickover and staff discussed briefly with the Commissioners the background of the recommendation in Mr. Kratzer's December 15 memorandum to the General Manager. The Commissioners approved the General Manager's recommendation and requested the White House be informed. (ADM-DIA)

2. San Diego Gas and Electric Company Invitation to December 30 Meeting (December 14 Letter to the Chairman)

The General Manager said Admiral Rickover will review the letter and discuss the matter further with him. Commissioner Ramey is to be informed. (Secy)

3. WASHINGTON POST December 18 Article re. Sale of U. S. Computers to France

Mr. Hollingsworth reported John Finney's query re the story. The Commissioners agreed to a proposed response which would include reference to AEC initiative. The White House is to be informed. (AGM-AGMA)

4. AEC 688/9 - Nuclear Engineering Article Commenting on Dr. Seaborg's FORATOM Speech

The Chairman commented on Mr. Goldschmidt's views.

5. Invitation from Mr. Homi Bhabha to Visit Trombay Plutonium Plant - January 1965

The Chairman will respond, indicating attendance by a Commissioner, if possible.

6. Gerald Johnson's Call re the PLOWSHARE Program

7. The President's Early Morning Query re. NEW YORK TIMES December 18 Article on Nuclear Desalting Plant on Long Island

8. MIT 400 Mev Accelerator

The Commissioners reviewed a position to discuss with BoR at the appropriate time. (C)

9. U. S. Desalting Visit to the U.S.S.R. (Mr. Ink's December 15 Memorandum)

The Commissioners suggested copies be sent to Mr. Charles Johnson, White House, and Messrs. Hornig and Calhoun. Mr. Ink noted an interdepartmental meeting is scheduled for next week to discuss U.S. - U.S.S.R. exchange in this area. The Chairman commented on the need for appropriate AEC representation. (Secy)

Proposed Memorandum to Mr. Webb, NASA, re NASA Letter to the President (General Manager's December 14 Memorandum)

The Commissioners agreed a brief note only should be sent. (Secy)

Proposed Letters and Press Release on the 630-A Project

Approved, as revised. (EAGM)

Responses to Joint Committee Inquiries re the LSBR

Approved for transmittal. The Commissioners requested a careful review of the language. (EAGM)

13. U.S. Plywood Letter to AEC re Use of Term "Novawood" (General Manager December 15 Memorandum)

The Commissioners requested preparation of a letter to the U.S. Plywood Corporation. (GC)

14. Public Announcement re Novawood (General Manager's December 16 Memorandum)

The Commissioners approved Tab "B". (DIP)

15. Report on Fission Products - 200 Area Proposals

Mr. Bloch reported briefly on the proposals that are now in Headquarters. He said a draft paper will be distributed to the Commissioners next week.

16. BoB Report to the President on Computers

Mr. Hollingsworth noted the Bureau's request for AEC comments.

17. Joint Committee Informal Meeting on the Maritime Program Week of December 21

Noted.

18. Discussions with NASA Officials re Joint Office

Noted.

19. Annual U.S.-Canadian Policy Meeting

The General Manager informed the Commission Mr. Lorne Gray, President, Atomic Energy of Canada, Ltd., will be sending a letter to the Chairman suggesting the establishment of yearly joint meetings.

20. Form of Assurance - Civil Rights Title VI

Mr. Hennessey reported the BoB now accepts the proposed short form of assurance.

21. Amendment to the Price-Anderson Act

Mr. Hennessey reported John Conway, JCAE, had informed him the Joint Committee will draft an amendment.

22. Report on December 17 Private Hearings Conference on a Finding of Practical Value

PRESENT

Dr. Seaborg Mr. Hollingsworth
Mr. Palfrey Mr. Bloch
Dr. Tape Mr. Ink
Dr. Bunting Mr. Hennessey
 Dr. Fritsch
 Adm. Rickover*
 Mr. L. O'Donnell*
 Mr. McCool

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Commissioners
General Manager
General Counsel
Secretary

W. B. McCool
Secretary

*Attendance for Item 1

UNITED STATES GOVERNMENT

Memorandum

L. BY DCS
NOV 88

Harold L. Price, Director
of Regulation

DATE: December 18, 1964

FROM : W. B. McCool, Secretary

SUBJECT: ACTION SUMMARY OF REGULATORY MEETING 208, FRIDAY, DECEMBER 18, 1964,
11:30 A.M., ROOM 1113-B, D. C. OFFICE

SECY:AJ

Commission Business

1. Minutes of Regulatory Meeting 207

Approved, as revised, subject to comments by Commissioner Ramey.

2. AEC-R 30/51 - Amendment to 10 CFR 30 - Interval of Testing Devices

Approved. (Western)

cc:
Commissioners

UNITED STATES GOVERNMENT

Memorandum

UNCL. BY 6002
NOV 86

TO : R. E. Hollingsworth, General Manager DATE: December 18, 1964
Approved _____
R. E. Hollingsworth

FROM : W. B. McCool, Secretary Date _____

SUBJECT: ACTION SUMMARY OF MEETING 2067, FRIDAY, DECEMBER 18, 1964, 11:35 A.M.
ROOM 1113-B, D. C. OFFICE

SECY:ICB

Commission Business

1. Minutes of Meetings 2054, 2056 and 2058

Approved, as revised, subject to comments by Commissioner Ramey.

2. AEC 1172 - Proposed Contracts with North American Aviation and Combustion Engineering

Approved. (Contracts)

The Chairman requested the Commission be informed before the final contract is signed. (Contracts)

3. AEC 843/20 - Control of Private Restricted Data

Approved, as revised. (AGM P&P)

The draft Part 26 regulation is to be revised to incorporate the suggestions made during the discussion at the Meeting. (AGM P&P)

The Commission requested staff examine the desirability of making restricted data relating to "thermoelectric and thermionic systems for use in space in conjunction with nuclear reactors" subject to Part 25. (Classification)

4. AEC 843/31 - Gas Centrifuge Technology

To be scheduled for an early Information Meeting. (GM/Secy)

5. AEC 688/8 - Commercial Publication of Technical Progress Reviews

Approved. (Technical Information)

R. E. Hollingsworth, Gen. Mgr. -2-
Action Summary 2067

December 18, 1964

6. AEC 580/219 - Uranium Production Planning
AEC 580/221 - Uranium Production Planning
AEC 580/222 - Supplement to AEC 580/219

Discussed.

To be rescheduled for discussion at 10:00 a.m., and 2:30 p.m.,
December 21, 1964. (Secy)

Information Items

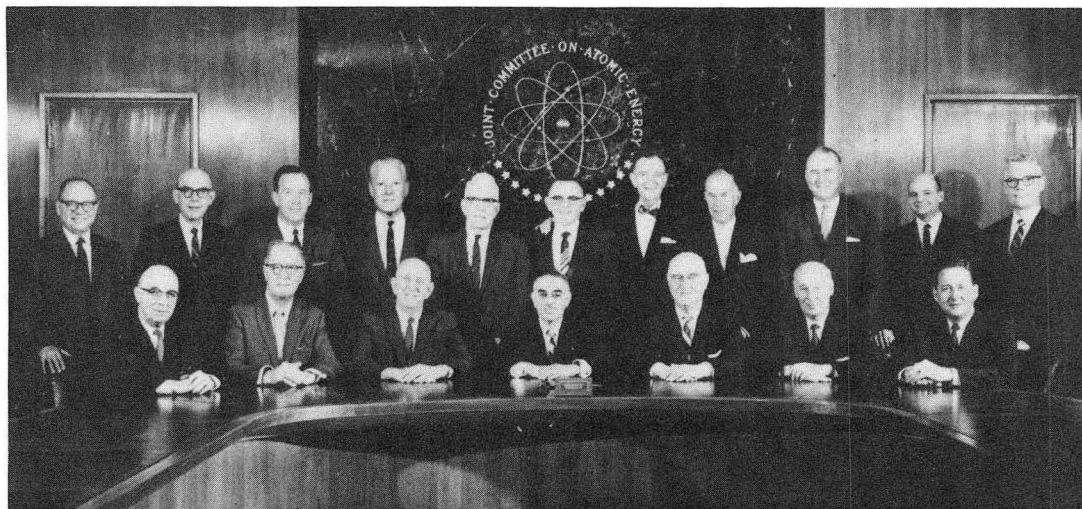
1. AEC Limousines

The Commission approved your proposed course of action.

2. Letter from BCB re Advanced Converters

Noted.

cc:
Commissioners

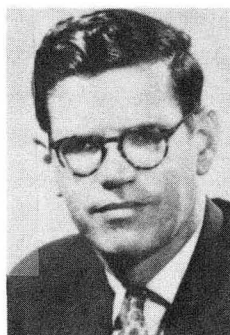


JOINT COMMITTEE ON ATOMIC ENERGY

SEATED: SEN BOURKE B. HICKENLOOPER (IOWA), SEN CLINTON P. ANDERSON (NEW MEXICO), SEN RICHARD B. RUSSELL (GEORGIA), SEN JOHN O. PASTORE (RHODE ISLAND) CHAIRMAN, REP. CHET HOLIFIELD (CALIFORNIA) VICE CHAIRMAN, REP. MELVIN PRICE (ILLINOIS), REP. CRAIG HOSMER (CALIFORNIA).

STANDING: SEN. CARL T. CURTIS (NEBRASKA), SEN. WALLACE F. BENNETT (UTAH), SEN. HENRY M. JACKSON (WASHINGTON), SEN. ALBERT GORE (TENNESSEE), SEN. GEORGE D. AIKEN (VERMONT), REP. WAYNE N. ASPINALL (COLORADO), REP. ALBERT THOMAS (TEXAS), REP. JACK WESTLAND (WASHINGTON), REP. WILLIAM H. BATES (MASSACHUSETTS), REP. THOMAS G. MORRIS (NEW MEXICO), REP. JOHN B. ANDERSON (ILLINOIS).

PALFREY



BUNTING



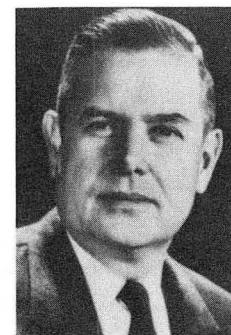
SEABORG



RAMEY



TAPE



Joint Committee on Atomic Energy of the 88th Congress and members of the U.S. Atomic Energy Commission,

December 1964

him I suggested in the letter that he explore this further with Dr. English. 3. He explained why Nuclear Chicago and Abbott Laboratories are trying to merge, that is, in order to give Abbott Laboratories the competence of physical scientists, and to give Nuclear Chicago an outlet for some of their biological products. He doesn't think, therefore, that it has any aspects of a trust.

At 2:50 p.m. I called Watson Davis (Science Service) and returned his call of yesterday. He said he wanted to discuss with me the best way to approach the President to speak at the Science Talent Search banquet on March 1, 1965. I said that his draft letter sounds all right. He prefers to have someone hand the letter to the President. I said I don't know how I can give it to him personally. Davis said he could mention in the letter that I will be a judge; I agreed, asked that he send me a blind carbon, and after that, I can call Jack Valenti.

At 3:40 p.m. I called Secretary Udall. I told him I have just seen the broadtape on his press conference where he has been asked about Governor Rockefeller's plan to construct a desalination plant on Long Island, and that I want to advise him that the President called me this morning regarding this. Stew said he didn't wish to throw cold water on it; he thought Rockefeller or his people had worked this out with me, although he had heard nothing of it. I told him that we knew nothing about it until we saw the item in the newspaper; however, this afternoon we had received a letter (copy attached with my reply of January 4, 1965) from Oliver Townsend regarding the matter. He thanked me for calling. I mentioned to Stew that we might get together on the Soviet desalination program and other matters. I said the Soviets are very anxious to deal directly with the AEC since they are placing great emphasis on the nuclear end of the project. Stew said he would like to meet with me as he has several other things to discuss and we might do this at lunch.

At 6 p.m. we had the Christmas party for the office staff at my home. Commissioners Gerald Tape and Mary Bunting attended in a group of about 50.

Pete came home from Harvard for the Christmas holidays.

Saturday, December 19, 1964 - D.C.

I worked until about 3 p.m. at the "H" street office. I worked on AEC papers, read journals, etc.

At 11:15 a.m. I called Averell Harriman. I asked Harriman whether he has had a chance to look at the Matter of U-235 fuel for the South African research reactor. He said he looked at it, but hasn't come to any conclusion. I said that, to be fair to the South Africans, we should decide it pretty soon. I mentioned that they would need delivery by the end of the month in order to keep their schedule. He asked whether this material would be under supervision, and I said it would be under our safeguards, adding that there is nothing they could do with this small amount of fuel except use it in their low power research reactor, which could not make plutonium. I said this is a commitment that we undertook some time ago. He asked whether they could get this fuel elsewhere, and I replied that they could probably get it from the British.

At 11:20 a.m. I received a telephone call from Averell Harriman. Harriman said he had a memo from Llewellyn Thompson, asking some questions regarding the matter of the U-235 fuel for South Africa. He asked me to call him back this afternoon with the answers, and then to confirm them in a memo (copy of December 21, 1964, attached). He asked what would be the potential for South Africa to attain a nuclear weapons capability. I replied that the potential would be only to the

NEW YORK STATE
ATOMIC AND SPACE DEVELOPMENT AUTHORITY

230 PARK AVENUE, NEW YORK, N. Y. 10017

INCL. BY DNE
NOV 86

December 16, 1964

Dr. Glenn T. Seaborg, Chairman
U. S. Atomic Energy Commission
Washington 25, D. C.

JTS 12/12/64

Dear Chairman Seaborg:

This refers to my letter of April 15, 1964 to Mr. Alvin R. Luedecke, then General Manager of the Atomic Energy Commission, which described this Authority's program leading to the construction on eastern Long Island of a dual purpose nuclear reactor project of pilot plant size.

We are pleased now to be able to inform the Commission that the New York State executive budget for the fiscal year beginning April 1, 1965 will include an appropriation request of \$3,500,000, so much as necessary of which may be expended for such a project producing 1,000,000 gallons of water per day and 2,500 kilowatts of electricity.

The project as now contemplated will be a multi-purpose plant producing not only water and power, but also transmuted radioisotopes to help serve the large projected requirements for such materials as curium-244 and plutonium-238.

We are also pleased to be able to inform you that we have in hand an offer to purchase the water produced by the proposed plant for the first 25 years of its operation at a price ranging from 35¢ to 45¢ per 1,000 gallons, and averaging 43¢ over the 25-year period. The Long Island Lighting Company has offered to purchase the electric power produced by the plant at 15 mills per kilowatt hour.

A number of sites for the project are available at attractive prices on the north shore of the North Fork of eastern Long Island within feasible distribution distance of the primary market area for water. Several of these have been discussed with appropriate AEC personnel and appear to be qualified from

Dr. Glenn T. Seaborg

-2-

December 16, 1964

the safety point of view on the basis of current reactor siting criteria.

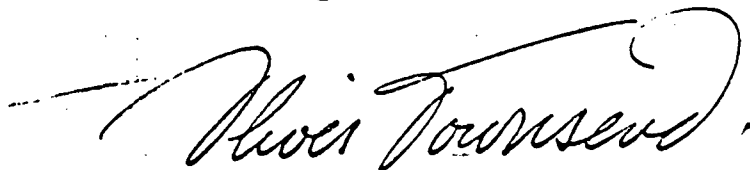
We have invited expressions of interest from the nuclear equipment industry to construct the entire proposed facility for a fixed price and have received eight positive responses. As a result, we intend within the next few days to solicit definitive proposals from these industrial concerns.

It is our intention to proceed with this project on a schedule that calls for the acquisition of the site, the execution of contracts, and the filing of a construction permit application with the Commission by mid-1965, with the objective that construction could be commenced early in 1966 and the project could be operational in 1968.

As we stated in our letter to Mr. Luedecke, we wish to incorporate features in the nuclear and desalination portions of the project that will advance pertinent technologies sufficiently to justify financial participation in the project by the Atomic Energy Commission and the Office of Saline Water of the Department of the Interior. We consequently intend in the near future to submit a definitive proposal to the Commission for appropriate Commission participation, particularly with regard to fuel lease charges, and design, engineering and related research and development. In our selection of a reactor design we will bear in mind the Commission's programmatic objectives, and we will be in touch with appropriate AEC staff personnel about this.

In determining to proceed with this project, we have been encouraged by the Report to the President of September 22, 1964 by the Department of the Interior and the Commission, which cited the need for small size desalting plants both in this country and in most of the locations listed in the recent United Nations survey of desalting needs in 41 developing nations.

Sincerely,



Oliver Townsend
Chairman

522

1965

Dear Mr. Townsend:

This is in response to your letter of December 16, 1964 regarding your plans for a small multi-purpose nuclear plant on Long Island. As the General Manager mentioned in his letter of May 1, 1964, in response to your earlier letter of April 15, 1964, our cognizant technical personnel would be pleased to discuss the results of your recent study with you.

With regard to your intention to submit a definitive proposal for appropriate Commission action, we also agree it would be advisable to discuss the details of this planned proposal with our technical personnel prior to any formal submission.

In this regard, the application of nuclear power to small size units was carefully considered in developing our portion of the AEC-Department of Interior coordinated program and it was deemed doubtful that small units such as you are proposing would be economical. Our extensive experience with development, construction and operation of a number of similar sized plants has led us to the conclusion that the technical and economic contribution of another small plant project for this type of application would be highly questionable. In view of our extremely tight budget situation and the established priority program activities, we believe that the proposed project would have to identify very substantive contributions to our technical reactor development program in order to warrant support.

Sincerely yours,

s.c.: Chairman (2)
Comm. Bunting
Comm. Palfrey
Comm. Ramey
Comm. Tape

GM (2)
AGMR22 (Dr. Swarthout)
DRD&T

(Concurred in by
Chm. Seaborg & Comm
Ramey; by Dr.
Swarthout by phone)

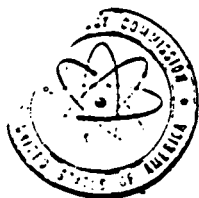
Chairman

Mr. Oliver Townsend, Chairman
New York State Atomic and Space
Development Authority
230 Park Avenue
New York, New York 10017

LA-CGM
ASKING:dhk
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EAGM AGM DGM GM
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23



UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON, D.C. 20545

L. BY DUE
NOV 86

DEC 21 1964

Dear Governor Harriman:

As you requested during our telephone conversation on Saturday, I am providing you with an evaluation of the contribution which the South African research reactor could make to a weapons program. This information was recently provided in a memorandum to the Department of State and I agree with the conclusions stated in it. Moreover, I think there is little doubt that the British would quickly supply the material if we fail to do so.

The Agreement for Cooperation with South Africa was entered into initially in July 1957. It provided, in common with our other agreements, that "the Commission will sell to the Government of the Union of South Africa", in accordance with terms and conditions to be agreed upon, enriched uranium for reactors which the Government of South Africa, in consultation with the Commission, decides to construct. This agreement was signed by Mr. Rountree, then Assistant Secretary of State for Near Eastern, South Asian and African Affairs and Mr. Strauss, Chairman of the Atomic Energy Commission. In June, 1962, it was extended for five years in an amendment signed by Mr. Tasca of the Department of State and myself.

We have always regarded these agreements as constituting an obligation to negotiate in good faith for the supply of material required by the other government for reactors which it decides to construct in consultation with the United States. The negotiations refer only to terms and conditions of a commercial nature, and South Africa has fully accepted our standard provisions in this regard in a lease contract entered into in April, 1963. Consultations concerning the reactor in question began in 1959 and on the strength of these South Africa initiated construction of the \$3,000,000 project in 1961. The specific order for the supply of fuel was accepted on April 4, 1963. While, like all similar contracts of the AEC the supply provides that the Commission will be subject to no liability for failure to deliver on a particular schedule, this provision is present only to cover unforeseen contingencies of an operating nature and we regard these contracts as

them to feel free to sell their natural uranium free of safeguards. The effect of this step on the problem of avoiding proliferation of nuclear weapons would far outweigh any effect of going through with our projected delivery.

I appreciate the efforts you are making to bring this matter to a prompt conclusion.

Sincerely,

(Signed) Elean T. Seaborg

Chairman

Honorable W. Averell Harriman
Under Secretary of State

Enclosure:
South African Fuel Supply

bcc: Chairman (2)
Commissioner Bunting
Commissioner Palfrey
Commissioner Ramey
Commissioner Tape
GM
AGMIA
Secretariat (2) ✓
OCC
Mat. Branch
AA/LA Branch

IA:MBK

AGMIA

AGM

DGM

GM

MBKratzer:inks
12/21/64

SOUTH AFRICAN FUEL SUPPLY

The Department of State has requested our views on the extent, if any, to which the activation of the South African research reactor would (1) directly or indirectly increase South African capability to manufacture atomic weapons and (2) to shift to an independent program based on natural uranium.

Before responding to this question as posed, it should be noted that the failure to deliver enriched uranium to the South African Government for this reactor would not prevent the reactor from being brought into operation. The quantity of enriched uranium required for the operation of this reactor is well within the capability for supply by the United Kingdom and the United Kingdom has repeatedly made clear its intent to compete strongly with the United States in connection with the supply of such material. The United Kingdom would, in fact, find it greatly to its advantage to fill a requirement which the United States had previously been committed to supply. We believe that the inevitable consequence of United States failure to supply the enriched uranium for the South African research reactor would be to push South Africa strongly in the direction of exploitation of natural uranium reactors--quite possibly with no effective controls. The following technical response to the questions which have been proposed should, therefore, be considered in the perspective of these considerations.

The South African research reactor has no specific application to the design of nuclear weapons. It has a modest capacity for testing the behavior of materials under irradiation, which could be employed in a development program for plutonium production reactors. Given the status of South African technical capabilities and the large body of information already available in this area, the utilization of the South African research reactor for this purpose could make no significant contribution to the body of information already available on a world-wide basis and, therefore, to that already available to South Africa.

South African personnel involved in the operation of the reactor and in its experimental utilization, would gain experience and practical knowledge in skills and areas of information which are relevant to the design and operation of plutonium production reactors. However, such training, including on-the-job experience, is already widely available to scientists and engineers from foreign countries in many parts of the world including the United States, the United Kingdom and France. Many South Africans have already acquired such training in the United States. Many others have undoubtedly already acquired it in the United Kingdom and even if the United States discontinued further training opportunities for South Africans, they would continue to have access to such experience in other countries. This training and experience would be equivalent if not superior to that obtained in their own reactor and would probably represent a more expeditious and less costly means of acquiring the necessary staff for the design and construction of a plutonium producing reactor should they decide to do so.

The enriched uranium inventory of the South African research reactor would not support atomic weapons programs and, moreover, is subject to the safeguards which would quickly detect its diversion to a military purpose. Even if several cores of irradiated material were present in South Africa several years hence, this irradiated material would be incapable of conversion to utilizable form in any South African facilities and, again, its attempted diversion would be quickly discovered.

The above comments are also largely applicable to the second part of the question. To reiterate, we believe the major relevance of the operation of this research reactor to South African ability to undertake a program based on natural uranium would be the training of people necessary for such an undertaking and this opportunity also exists outside of South Africa. We believe that the possible deterrence from denial of the fuel requirements for this reactor (even assuming such denial were not negated by U.K. supply of the material) would be far overshadowed by the effect this denial would have on inducing South Africa to proceed with a natural uranium program in order to be free of reliance on an undependable U.S. source of supply.

extent that it gives them more scientific capability: a means of training scientists and a little more experience in operating a small reactor, but this wouldn't help very much. I said I could check to see whether we have any other commitments. He asked whether we have a commitment to replace the fuel. He asked why didn't we furnish it originally, to which I replied that the fuel is not furnished until the reactor is ready.

I stated that we have an Agreement for Cooperation with South Africa, as a result of which we have made a commitment some years ago to furnish them with U-235. Harriman said that this comes at a very bad time because Tshombe is supposed to be in cooperation with South Africa. He asked how much money is involved. I said I would check and let him know. (At 11:30 a.m. I called and told him that 4,000 grams, at \$10-11 per gram, are involved, which will put the cost at \$40,000-50,000. I said that the payments are not a factor; the fuel would be leased from us.)

He reiterated that he would like to know anything that we could tell him about this increasing South Africa's nuclear weapons potential. Again he said this came at an unfortunate moment; they were hoping they could wait perhaps 30 days for a decision. I said that would lead to public attention, but Harriman said that might be good.

At 3:40 p.m. I called Averell Harriman. I reiterated that what I had told him earlier today was essentially correct, that is, that the contributions to nuclear capability for South Africa were minimal--mainly in the training line. He again expressed his concern that announcement of this transfer of nuclear material would have a generally adverse effect. He said he will get at this the first thing next week and let us know his decision.

I took Dianne to Woodward and Lothrop's store in the Wisconsin Avenue-Western Avenue shopping area to have her picture taken with Santa Claus.



Sunday, December 20, 1964 - Home

I read AEC papers and worked on my Leif Erikson speech, "Undiscovered Shores of the Future."

Helen and I attended the showing of Carol for Another Christmas in the auditorium of the Department of State. After the show, the entire family attended a party and buffet at the Georgetown home (3005 O Street) of the William Roths' (University of California Regent and Deputy Special Representative for Trade Negotiations).

Monday, December 21, 1964 - D.C.

At 10:10 a.m. I presided over Commission Meeting 2068 at which enriched uranium production was discussed. Attached is a copy of the Bundy memo of December 17.

Attached is a copy of the memorandum from William C. Foster for the Committee of Principals, dated December 3, 1964.

Removed pending review by other agencies

THE WHITE HOUSE
WASHINGTON

DC FILE

AS 12/19/64

December 17, 1964

ENCL. BY DOE
1988

MEMORANDUM FOR The Secretary of Defense
 ✓The Chairman, Atomic Energy Commission
 The Director, Bureau of the Budget

In reference to the December 8 memorandum from the Secretary of Defense to the President on nuclear materials production schedules through FY 1973, the Secretary of Defense, the Chairman of the Atomic Energy Commission and the Director of the Bureau of the Budget are requested to work with me in the development of a recommendation for a Presidential determination of enriched uranium production schedules for both military and non-military uses. The enriched uranium requirements for weapons production are those stated in the Secretary's memorandum.

This is also to confirm agreements with respect to timing and procedures that have already been tentatively arrived at through informal staff consultations. The Atomic Energy Commission and possibly the Department of Defense will produce background statements and agency recommendations for circulation to the other agencies involved by the end of the month in preparation for a meeting to take place in the week of January 4, 1965. This timing will permit the development of any additional staff analyses that may be required, but it is hoped that a final recommendation to the President can be agreed on at the meeting.

In order for the Government to avail itself of the most favorable contract terms, there must be a Presidential decision on future production schedules before February 15, so that notices of cutback may be issued to the electric power contractors on or before that date.

McGeorge Bundy

McGeorge Bundy

DC FILE

27 12

OFFICE OF THE DIRECTOR

December 3, 1964

OFFICE DIARY
GLENN T. SEABORG
Chf USAEC, 1961-72
FOLDER-PAGE 48223

MEMORANDUM FOR THE COMMITTEE OF PRINCIPALS

SUBJECT: Subjects to be discussed with the U.S.S.R. (S/D)

With reference to my memorandum for the Committee of Principals dated November 23, 1964, covering subjects to be discussed with the U.S.S.R., we have received comments from representatives of the Committee and have had informal consultations thereon.

We have revised certain of the items in that memorandum in accordance with those comments and I am attaching a new set of recommendations for your concurrence. We are hopeful that these recommendations can be concurred in by the Principals without the necessity of a formal meeting. I would appreciate having your comments if possible by the close of business on Friday, December 11.

Yester

William C. Foster

William C. Foster

* CLASSIFICATION CANCELLED *
 WITH DELETIONS
 BY AUTHORITY OF DOE/OC
J. Diaz 3/1/89
 REVIEWED BY DATE
 * Ltr NSC Graboske To DOE, OCFP Siebert dated 2/8/89
 * * Ltr ACDA To DOE, OC, 5/2/88
Fahm 3/3/89

December 3, 1964

OFFICE DIARY
GLENN T. SEABORG
CH USAEC 48224
FOLDER-PAGE

MEMORANDUM FOR THE COMMITTEE OF PRINCIPALS

SUBJECT: Subjects to be discussed with the USSR [REDACTED]

INTRODUCTION

The present time seems most appropriate to take up the dialogue on disarmament with the new Soviet leaders. This is particularly so with respect to the problem of preventing the spread of nuclear weapons. The priority assigned to solution of this problem in the President's address to the Nation on October 18 requires that a new high level effort be made to communicate with Soviet leaders prior to the public debate in the General Assembly on this matter where arguments over the MLF could so embitter the atmosphere as to preclude the needed early action to prevent nuclear spread.

In addition, indications of a flexible approach to "next steps" could have significant influence on Soviet policy as the new leaders weigh the competing pulls from Peiping and Washington.

* * CLASSIFICATION CANCELLED *
WITH DELETIONS
BY AUTHORITY OF DOE/OC

J. Diaz 3/1/89
REVIEWED BY DATE

* Ltr. Nsc Graboske To DOE, OCTP
Siebert dated 2/8/89

* Ltr. ADA To DOE, 5/2/82
Bahn 3/89

RECOMMENDATIONS

This paper recommends a renewed and broadly based effort to prevent nuclear proliferation. It outlines a five point program to accomplish this objective and to begin the "next steps".

First, an intensified effort to negotiate a non-proliferation agreement, which clearly commits all parties to halt proliferation in any form.

Second, informal discussions to prevent the spread of strategic nuclear delivery vehicles.

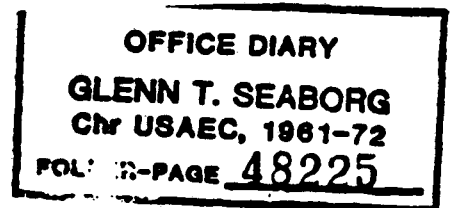
Third, the reinstatement of negotiations looking toward the achievement of a comprehensive nuclear test ban.

Fourth, a proposal to extend our freeze proposal to include reduction of an agreed number of nuclear delivery vehicles and launch sites.

Fifth, an understanding to halt the construction of any new land-based ICBM launch sites and ABM launch sites after July 1, 1965, while we negotiate limitations on nuclear delivery vehicles.

DISCUSSION

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Chr USAEC, 1961-72
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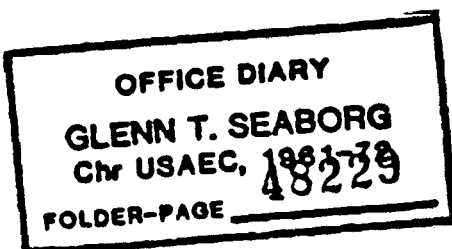
2. Preventing spread of nuclear delivery vehicles. The U. S. should indicate to the Soviet Union that it is in our mutual interests to prevent the further spread of strategic nuclear delivery vehicles.

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Chr USAEC, 1961-72
FOLDER-PAGE 48228

Preventing the spread of strategic nuclear delivery vehicles is a logical corollary of our policy of preventing the spread of nuclear weapons. Transfer of nuclear delivery vehicles to non-nuclear powers will reduce the national effort required by non-nuclear powers to develop a nuclear force. Therefore it is in the interest of non-proliferation to discourage those states from initiating a continuing effort to develop nuclear weapons by making it clear that SNDVs will not be available. The most immediate case in point is India where the decision to go nuclear would be encouraged if she were to obtain B-47's or TU 16's from the U. S. or the U.S.S.R. While a formal agreement on this subject does not appear wise or necessary, the Soviet Union should be informed that we do not intend to transfer such vehicles to other nations as long as they demonstrate similar restraint. The vehicles covered would have to be carefully defined.

3. Comprehensive Test Ban Treaty.

We should renew efforts to achieve a comprehensive test ban treaty. Such a ban might well force binding political decisions in India, Israel, Sweden and other countries not to produce nuclear weapons. The new Soviet leaders have stated their intention to seek such a ban, although they have given no indication as yet that they



would be prepared to permit any on-site inspection.

We should seek agreement with the Soviet Union to begin serious negotiations early next year. We should also initiate a priority review of the present U. S. position with respect to on-site inspections, unmanned seismic stations, and other verification processes and a reappraisal of the impact on the military balance of possible undetected treaty violations. We should include in such reappraisal a provision dealing with detonations for peaceful purposes which provides the assurance adequate to meet U. S. security requirements that weapons development shots are not disguised as peaceful uses detonations. Research within the government indicates our requirements can probably be adjusted without jeopardy to our security as the result of prospective developments in seismic detection and identification. We should indicate to the Soviets our view that a treaty at an early date is feasible.

4. Extending the Freeze to Include the Reduction of an Agreed Number of Strategic Delivery Vehicles

Soviet criticism of U. S. freeze proposal has been that it is inspection without disarmament. They have proposed instead a

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CHf USAEC, 1961-72
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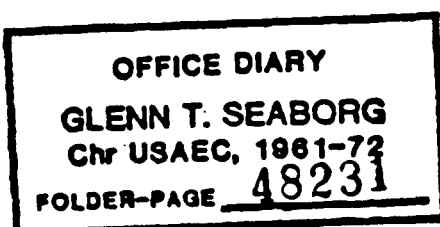
nuclear umbrella of an agreed number of nuclear delivery vehicles. While they have never been precise about the size of the umbrella, they have implied that the numbers are relatively small.

As a result of our buildup of strategic delivery vehicles, we are now in an excellent position to negotiate seriously on reductions of nuclear delivery vehicles without concurrent reductions in general purpose forces. We should therefore propose a separate reduction of strategic reduction of strategic nuclear delivery vehicles by offering to extend our freeze proposal to include the reduction of an agreed number of nuclear delivery vehicles and launch sites.

While internal studies within the U. S. government have related to 30% of all types of nuclear delivery vehicles, we should phrase the suggestion in general terms so as not to exclude the possibility of dealing with the problem of the MRBMs and IRBMs aimed at Europe in a more serious manner than would be possible in a 30% cut.

5. Halting Construction of New ICBM and ABM Sites.

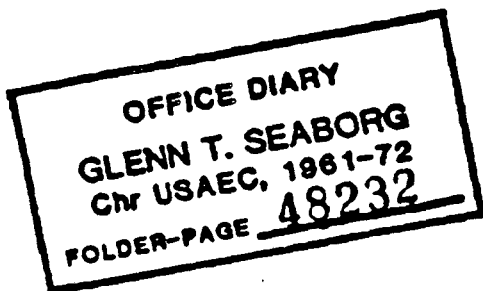
We should indicate to the Soviet Union that while we continue to negotiate limitations upon nuclear delivery vehicles, we would be willing to halt construction as of July 1, 1965 of new ICBM launch sites, and possibly ABM launch sites as well, for a



for a period of 18 - 24 months provided the U. S. S. R. did the same. This arrangement would be verified by our respective national capabilities.

The military consequences of the SNDV freeze have already been assessed and found satisfactory to the security of the United States. The more limited freeze on land-based ICBM launch facilities would be even more to the security advantage of the United States. While the present balance is satisfactory to the United States, there is no assurance that it will remain so. In the absence of any understanding regarding the eventual size of the strategic forces, the strategic arms race will continue. The Soviets will respond to U. S. strategic superiority by further deployment and hardening of ICBMs and missile launching submarines. The United States will increase its forces to maintain a damage-limiting capability.

The decisions open to the Soviet leadership in this situation may be very limited. One alternative is continued ICBM deployment, possibly accompanied by ABM deployment and the long-range development of multiple individual guided re-entry vehicles. This course of action would lead to increased U. S. SNDV deployment.



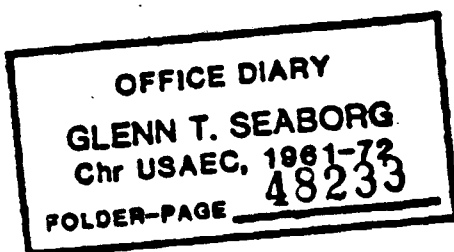
Another course of action would be the acceptance of the U. S. freeze proposal. Such action would, of course, markedly reduce the rate of U. S. SNDV procurement and freeze SNDV characteristics and deployment. The U. S. S. R. has been unwilling to accept the verification insisted on by the U. S. for the freeze.

The proposed course of action presents the Soviets with another alternative, one which could lead to a slowing of the arms race but one which could be verified by our respective national capabilities.

The proposed arrangement does not include seaborne missile launchers or MRBMs or IRBMs. Exclusion of seaborne launchers is justified by the difficulty of verifying any arrangement dealing with them by national means, and to avoid the introduction of the MLF into this aspect of discussion.

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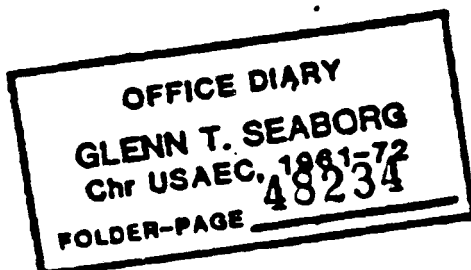
These figures, moreover, do not reflect the substantial qualitative difference in favor of the U. S. The measure may be subject to the



criticism that the exclusion makes the measure unacceptable to the Soviet Union.

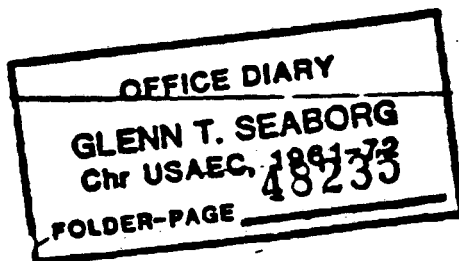
It may well be that this factor, coupled with their desire to thwart the MLF is such that the exclusion of seaborne launchers from such an arrangement may make it unacceptable to them. On the other hand, it is at least possible that, as in the case of the limited test ban, they may be willing to accept a measure which leaves both sides free to proceed in the area where they are behind. In any event, the exclusion of seaborne launchers from a U. S. initiative does not render the matter patently non-negotiable, and if raised by the U. S. S. R., the U. S. could decide which of a variety of responses it wished to make.

The exclusion of the MRBMs and IRBMs could also be based on difficulties of verification. It would not adversely affect the measure since it is believed that, even in the absence of an arrangement, the Soviet MRBM/IRBM force will not increase very much beyond the 750 launchers that are estimated to be deployed in mid-1965. Their inclusion in a measure would not seem advisable until such time as the discussions dealt seriously with the problem of reductions.



The question of whether ABMs should be included is related to the question of negotiability. Any permanent freeze should probably include ABMs and indeed the U. S. might not be able to remain even in an interim freeze if it had evidence of wide-spread deployment of an effective ABM system in the Soviet Union. On the other hand, a proposal in which seaborne launchers are permitted and ABMs are banned, both of which may be completely unacceptable to the Soviets, might prevent any serious consideration of the proposal on their part. Therefore, no recommendation is made on ABMs until the views of the other members of the Committee of Principals have been obtained.

Although national capabilities can detect with high confidence any significant build-up in ICBM launch sites, there will inevitably be some detection of activity which might be interpreted as new launcher construction but which cannot be definitely identified. For this reason the measure is proposed for a period of from 18 - 24 months pending the negotiation of a freeze with provisions for verification.



Removed pending review by other agencies

Removed pending review by other agencies

Tuesday, December 22, 1964 - Germantown

At 10:30 a.m. I presided over Commission Meeting 2070 (action summary attached).

At 1 p.m. I had lunch with Tom Karlson (President, AERWA), Jim Herring (Vice President, AERWA), Lee Sellers (in charge of "Operation Needy Family") and Arnold Fritsch.

At 2:30 p.m. I attended the AERWA Christmas party in the Germantown Cafeteria, and introduced Commissioners James Ramey, John Palfrey and Mary Bunting. I spoke briefly and praised the "Operation Needy Family."

I sent a biweekly letter to President Johnson (copy attached).

At 3:15 p.m. I presided over Commission Meeting 2071 (action summary attached).

I replied (copy attached) to the letter of December 8th (copy attached) from **531** Carley V. Porter (Chairman of the California Assembly Interim Committee on Water),

UNITED STATES GOVERNMENT

Memorandum

DC FILE

TO : R. E. Hollingsworth, General Manager

DATE: December 21, 1964

FROM : W. B. McCool, Secretary

Approved R. E. Hollingsworth

Date _____

SUBJECT: ACTION SUMMARY OF MEETING 2068, MONDAY, DECEMBER 21, 1964,
10:10 A.M., ROOM 1113-B, D. C. OFFICE

SECY:AJ/ICB

*Original signed
W. B. McCool*

Commission Business

AEC 580/219 - Uranium Production Planning
AEC 580/221 - Uranium Production Planning
AEC 580/222 - Supplement to AEC 580/219

Discussed.

The Commission requested development of a draft position paper with appropriate supporting material for consideration during the week of December 28, 1964. (AGMP&P)

cc:
Commissioners

DE 12/21/64

NOT DECLASSIFIABLE REFERENCE SHEET

Title of Document Letter from Penney to Seaborg

Date 12-7-64

This document has been determined to be NOT DECLASSIFIABLE and has been removed from this folder.

* Denied by DOE

PROVENANCE

OFFICE DIARY
GLENN T. SEABORG
Chr USAEC, 1961-72
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Name CPS

Date 8-17-88

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inclusive pages

December 22, 1964

3. Memorandum from Ed Welsh, NASC, re SNAP-9A Abort

The Commission noted Mr. Welsh's suggestion re publication of a report in a technical journal. (AGMO/RD)

4. Draft Editorial for International Science and Technology re Plowshare

Noted.

5. ADP Management Study Report (Mr. Ink's December 18 Memorandum)

Comments by individual Commissioners on the proposed letter to Mr. Seidman are to be given to Mr. Ink. (AGM)

6. AEC 843/31 - Gas Centrifuge Technology

The Commissioners agreed W. R. Grace and Company should be advised of the proposed new Part 26 and that there would be no guarantee for the issuance of a production license or clearances for additional personnel. (DIP)

7. December 14 Letter from San Diego Gas & Electric Company

The Commission requested early response. (DGM)

8. Application of Classification Policy for Lasers to North American Aviation Project (Mr. Marshall's December 18 Memorandum to the Commissioners)

Approved. (C)

9. Information Exchanges with Germany and Sweden in the Field of Nuclear Superheat (General Manager's December 18 Memorandum)

The Commission requested delay pending final approval of the FY 1966 Budget. (DIA)

10. Conflict of Interest Statement (Mr. Vinciguerra's December 17 Memorandum for the Chairman)

Approved. (EAGM)

R. E. Hollingsworth
Action Summary - 2069

-3-

December 22, 1964

11. Negotiations with Battelle Memorial Institute re Operation of Northwest Laboratory

The Commission approved the General Manager's revised negotiating position re indemnification. (DC)

12. Report on Negotiations with PRDC re Use of Fermi Reactor

The General Manager reported the status of negotiations.

cc:
Commissioners

UNITED STATES GOVERNMENT

Memorandum

UNCL. BY DOE
NOV 86

TO : R. E. Hollingsworth, General Manager DATE: December 22, 1964
Approved _____
FROM : W. B. McCool, Secretary Date _____
SUBJECT: ACTION SUMMARY OF MEETING 2070, TUESDAY, DECEMBER 22, 1964,
10:30 A.M., ROOM A-410, GERMANTOWN, MARYLAND

Original signed
W. B. McCool

SECY:GF

Commission Business

1. AEC 127/21 - Extension of Incentive Arrangements - Pinellas

Approved, as revised.

The Commission approved negotiation of a fee as set forth in AEC 127/21 except that the "zero band" should be \$100,000 and the limitation should be 20%. (DC)

2. AEC 484/4 - Proposed Consolidation of Facilities

Approved, as revised.

The Commission requested that operations at Hanford as discussed in AEC 484/4 be reduced to one shift and those at Rocky Flats be phased out as discussed at the Meeting. (DMA)

3. AEC 25/319 - Proposed Navy Safety Rules

Approved. (DMA)

4. AEC 25/320 - Proposed Navy Safety Rules

Approved.

The Commission noted that a paper on command and control concepts would be submitted to the Commission for review, to be followed by a briefing if the Commission so desired.

The Chairman suggested Commissioners Ramey and Palfrey discuss the matter of safety surveys with Mr. Howard, MLC. (DMA)

5. AEC 25/322 - Proposed Air Force Safety Rules

Approved. (DMA)

6. AEC 1130/11 - Test Readiness Posture

Discussed.

The Chairman suggested Commissioner Tape be prepared to testify before the Stennis Committee in early 1965. (SECY)

You said that a preliminary summary of the results of the underground program to date would be circulated for Commission review this week.

7. Annual Report to Congress for 1964

Discussed.

The Commission requested the chart on Pike Event results (page 232) be deleted, and appropriate reference be made to their publication in PHS' Radiological Health Data.

Commissioner Tape requested that, under "Broad Commission Actions and Decisions", the positions of the material on "Actions on Finding of Practical Value", and "Private Ownership of Special Nuclear Materials" be reversed.

The detailed comments of the Commissioners will be submitted to PAR, and more substantive remarks discussed at the Commission Meeting scheduled for Tuesday, December 29. (PAR)

8. Contractor Selection Board Preliminary Evaluation of Hanford FPCE-200 Area Proposals

Discussed.

R. E. Hollingsworth
Action Summary - 2070

-3-

December 22, 1964

The Commission noted that discussions would be held with BOB staff regarding the possibility of allocating fission product construction funds to the low energy accelerator (equip.), the solid state physics facility, ANL (const.), and the NOVAWOOD project (const.). (CC)

You noted a staff paper would be forthcoming without recommendations for discussion at the Commission Meeting scheduled for Tuesday, December 29, and that the point evaluation would be circulated to the Commissioners individually.

cc:
Commissioners

December 22, 1964

Dear Mr. President:

I have the pleasure of submitting to you the regular biweekly report on significant developments in the atomic energy program.

1. Flowshare Program

Project Sulky, a low yield (100 tons) nuclear cratering shot within the confines of the Limited Nuclear Test Ban Treaty was detonated at the Nevada Test Site on December 18. The detonation produced a mound of broken rock with a shallow depression in the center. Two days after the event there was no detectable radioactivity in offsite areas.

This test was designed to evaluate nuclear cratering explosions in hard rock (basalt), and is part of a continuing program to develop the necessary technology to perform such tasks as the construction of a sea-level canal in Central America. Recent budget limitations will seriously affect the Commission's ability to acquire this nuclear excavation data at a rate commensurate with the needs of the Isthmian canal study. The proposed rate of device development experiments and field experiments has been halved under the most recent BOB markup, and will probably make it impossible for us to carry out the prerequisite cratering experiments necessary to execute project Carryall. Carryall is a proposed cut through the Bristol Mountains in Southern California to allow realignment of Santa Fe railway lines and U.S. Highway 66 (Interstate 40). This project which has essentially been eliminated was planned to serve as an internal demonstration and development of U.S. nuclear excavation capabilities with the added advantage of immediate utilitarian value.

2. Reductions in Employment at Oak Ridge

The AEC's Oak Ridge Operations Office will announce at 1:00 p.m. on January 5, 1965, that employment at the Y-12 Plant in Oak Ridge, Tennessee, will be reduced by approximately 200 during January and February as a result of a reduction in weapons production programs based on DOD requirements. It is anticipated that about 800 additional employees at Y-12 will be affected by the reduced program requirements during the remainder of 1965. The affected plant currently employs about 5,100 persons and the entire Oak Ridge complex about 14,300.

On December 29, the AEC proposes, among other things, (a) to brief the Joint Committee on Atomic Energy and Senator Gore on this matter, and (b) to deliver copies of the announcement and questions and answers to Lawrence O'Brien and George Needy. On January 4, Tennessee's Congressional delegation will be notified and on January 5, employees and collective bargaining agents at Oak Ridge will be notified prior to the public announcement.

It should be noted that in connection with other employee reductions earlier this year Senator Gore was quite concerned. It is expected that this planned reduction will be a very sensitive matter to him.

3. Commissioners Meet with Business and Public Groups

On December 15, my fellow Commissioners and I met with representatives of the American Public Power Association for a preliminary discussion of APPA's recent survey of its member systems' interest in nuclear power. The possibility of pooling APPA utilities to install large nuclear power units and the potential of desalting seawater in conjunction with the production of electric power were discussed.

On the following day the Commission met informally with the U.S. Chamber of Commerce, represented by its Atomic Energy Advisory Panel and Committee on Science and Technology. The meeting provided an opportunity for a discussion of programs and issues of interest to the U.S. nuclear industry, including a recent report of the Chamber's Committee on Science and Technology on Criteria for Federal Support of Research and Development.

-3-

I want to take this opportunity to wish you, Mr. President, a Merry Christmas and a happy holiday season, in keeping with the bright prospects for a peaceful and prosperous New Year under your leadership.

Respectfully submitted,

Glenn T. Seaborg

The President
The White House

UNITED STATES GOVERNMENT

Memorandum

UNCL. BY DOE
NOV 86

TO : R. E. Hollingsworth, General Manager DATE: December 23, 1964
Approved _____
FROM : W. B. McCool, Secretary Date _____
R. E. Hollingsworth
SUBJECT: ACTION SUMMARY OF MEETING 2071, TUESDAY, DECEMBER 22, 1964,
3:15 P.M., ROOM A-410, GERMANTOWN, MARYLAND

SECY:AJ

Commission Business

1. AEC 671/9 - Operating Contract with Phillips Petroleum Company

Discussed.

The Commission noted staff will prepare a position paper in accordance with Alternative B for consideration next week. The Chairman requested consideration of university involvement in the program. (DC)

2. AEC 720/160 - Establishment of Guaranteed Prices for Pu. and U-233 and the Guaranteed Purchase Price Period for U-233

Approved.

The Commission requested notice be given that AEC plans to make various assessments prior to January, 1971 on whether to alter its policy re U-233 after that date.

The Chairman requested he be informed of the various editorial changes the General Counsel planned to make in the proposed letter to the JCAE.

The Chairman also requested his previous statement re proportionality criteria be reviewed. (OA&F)

3. AEC 1133/11 - NRDS Support Services Contractor

Approved. (DC)

4. AEC 1107/2 - Extension of Contract with Harvard College

Approved. (DC)

5. AEC 181/116 - AEC Current Fee Policy

Discussed.

The Commission agreed study and evaluation of AEC fee policies should continue. (DC)

6. AEC 1171 - Use of Commercial Facilities to Decontaminate AEC Laundry

Approved.

The Commission requested the Director of Labor Relations' suggestion contained as Appendix "I" to AEC 1171, be referred to in the proposed instructions to field offices. (DIP)

7. AEC 580/220 - Gaseous Diffusion Process Development Program

Approved. (PROD)

8. AEC 534/23 - Policy Statement re Contractor Personnel Management and Labor Relations

Approved. (LABR)

Information Item

Letters to Messrs. Porter and Sinott

Approved, as revised.

cc:
Commissioners

DEC 10 1964

Dear Mr. Porter:

This is in response to your letter of December 3, 1964. As you indicated the subjects you discussed are primarily of concern to the California Department of Water Resources. I would like to assure you that the Atomic Energy Commission will continue to supply the Department of Water Resources with any information they need concerning the seed-blanket reactor project.

As you know, Commissioner Ramey, Admiral Rickover, and members of the Commission staff gave a presentation on various aspects of the proposed seed-blanket reactor project in Los Angeles on November 13, 1964 at a meeting arranged by Congressman Hollifield. All parties interested in this project were represented. A question and answer period followed the presentation during which all questions asked by the parties in attendance were answered. Assemblyman Hanson and Mr. Robie of your committee attended that meeting.

The Atomic Energy Commission believes that the consideration by the Commission and the State of California of technical factors has been made in great detail. The parties have arrived at a final stage preliminary to formalizing an agreement.

The decision as to further studies by the State of California with or without other California entities of course is beyond our jurisdiction or responsibility.

- 2 -

We express a hope that there will not be undue delay in going forward with this program which we believe will be of mutual benefit to the parties involved.

Sincerely,

Glenn T. Seaborg

Honorable Carley V. Foster, Chairman
Assembly Interim Committee on Water
Assembly Box 38 - State Capitol
Sacramento, California

cc: Honorable Clet Hollifield, Vice Chairman
Joint Committee on Atomic Energy
Congress of the United States

Honorable William E. Wams, Director
California Department of Water Resources
Post Office Box 303
Sacramento, California

California Legislature

COMMITTEE SECRETARY

RUTH A. CLARK
SECRETARY

ROOM 2114
ASSEMBLY BOX 30
STATE CAPITOL
SACRAMENTO
PHONE: 445-6047

Assembly Interim Committee

ON
Water

CARLEY V. PORTER
CHAIRMAN



December 8, 1964

Mr. William E. Warne, Director, Department of Water Resources
 Dr. Glenn T. Seaborg, Chairman, U. S. Atomic Energy Commission
 Honorable Chet Hollifield, United States Representative
 Mr. Jack Horton, President, Southern California Edison Company
 Mr. Joseph F. Sinnott, President, San Diego Gas and Electric Company
 Mr. Samuel B. Nelson, General Manager and Chief Engineer
 Los Angeles Department of Water and Power
 Mr. Robert Gerdes, President, Pacific Gas and Electric Company

Dear Dr. Seaborg:

Since 1957 a Subcommittee on Saline Conversion and Nuclear Energy of the California Legislature has been following the developments of saline conversion and nuclear energy to determine their applicability to solving the water problems of the State of California. In 1959 the above Subcommittee became part of the Assembly Interim Committee on Water of which I am Chairman.

Particular attention has been given by this Subcommittee to the use of reactors as a source of pumping energy to meet the large requirements for low cost energy for the State Water Project. The Subcommittee first strongly recommended the evaluation of nuclear energy in 1957 and has since supported its further study and evaluation.

At a recent executive session of the full Committee an action was taken which the Committee has requested that I communicate to you and all other interested parties. The Committee adopted a portion of a forthcoming report of the Subcommittee on Saline Conversion and Nuclear Energy, reading as follows:

The Subcommittee recommends that the Department of Water Resources, the California Power Pool Companies, the Los Angeles Department of Water and Power, the Atomic Energy Commission, the water contractors and other interested groups use the time (during the coming winter and spring) as profitably as possible

Handwritten:
 by J. [unclear]
 12-16-64 Carley Dept. of Water Resources

December 8, 1964

in cooperative study of the unresolved problems discussed in the body of this report and such others as may be pertinent and report to the Legislature at least thirty days prior to committing the State to an energy source but in any event no later than June 1, 1965.

The language of this recommendation is primarily of concern to the Department of Water Resources which has the authority to commit the State to a source of pumping energy. The preparation of a report to the Legislature is likewise essentially the responsibility of the Department of Water Resources, although any reports or information by other interested parties will be given careful consideration by the Committee.

The Committee is taking this action based on the Fluor Corporation report to the Department of Water Resources entitled "Energy Source Study for the California Water Project", dated September, 1964. The report indicates that the State has until September, 1965 before it must make any decisions on an initial source of major pumping energy for the State Water Project. The June 1 date for a report to the Legislature has been selected because the Legislature will still be in session and can act at that time if it becomes necessary for any legislation to be passed as a result of the requested report.

The objective of the Committee's recommendation is to use the available time before any decision needs to be made to explore fully the alternatives open to the State to secure pumping energy and certain other problems. The Fluor report has narrowed the field of alternative sources from approximately forty to three which were given more detailed consideration. Of these three, the two involving the construction by the State of a nuclear power plant either by 1971 or by 1982 were considered preferable. The detailed evaluation of these two choices has not yet been made. Testimony at the Committee's hearing on November 5 made clear the serious concern on the part of both the publicly and privately owned utilities in California that more detailed study must be given to the pending decisions. No support was found among either the water contractors or the public for an immediate decision or narrowing of the alternatives.

Another matter requiring further evaluation is the offer of the California Power Pool Companies to negotiate further on their original proposals to supply pumping power. This offer to negotiate further was made because of recent developments such as the Pacific Northwest-Southwest high voltage transmission line, which has been recently approved by Congress, and the substantial increases in the pumping loads of the State Water Project as a result of recent increases in contract water demands made by water contractors. The Committee also believes that further progress must be made in the sale of the State's own peaking power generated at Oroville before decisions are made to secure off peak or firm power for pumping purposes.

December 3, 1964

A third major concern of the Committee is that there seems to have been no economic, fiscal and engineering analysis made of the advantages and disadvantages of the seed-blanket reactor versus other types of reactors, assuming that the State will construct a nuclear power plant. The Committee is unable to judge whether substantial long and short term differences in the costs and operating characteristics of different types of reactors exist or would be significant in terms of eventual impact on the State Water Project or the interests of the water contractors. The lack of any evaluation of this matter leads the Committee to the conclusion that some consideration should be given to it in the interests of sound decision making by the State in behalf of its water contractors and in the light of the very large plant investments involved. Similarly, the State needs to have a firmer understanding of the fiscal consequences of the large lump-sum costs of providing a second or third core for a seed-blanket reactor. At present it is not known how the estimated \$65 million cost of the second core could be financed by the State, since no provision for such an eventuality was included in the basic financing for the State Water Project.

It can be seen from the above discussion that the Committee's concern is that all the interested parties use the remaining time before certain energy source decisions must be made to secure the most careful evaluation of the remaining unresolved matters in the light of current conditions. In order to assure that all evaluations are fully made before the State makes any commitment, the Department of Water Resources is being asked to report the results of these evaluations to the Legislature.

The decisions to be made by the State are of untold importance to the State and to its water contractors, not only now but for many decades in the future when the water contractors will be paying for the power sources eventually selected. The Committee, the Legislature and the State have an obligation to all concerned to be cautious and prudent in making decisions. I am sure that you will also recognize the value of careful decision making to all proponents of different energy sources. Even though a given source of pumping energy may be rejected by the State, this may in the long run be to the advantage of the proponents of that source. In other words, a mistake by the State might result in attaching a stigma to that energy source which might be interpreted as a deficiency of the energy source for some more appropriate application.

Sincerely,


CARLEY V. PORTER

which seemed to imply a desire for a slow-down of the Seed-and-Blanket reactor prototype, saying that this has been studied sufficiently and we want to get on with it.

Our Selection Board recommends Martin-U.S. Rubber (above Monsanto-United Nuclear and Dow) to operate the Hanford Chemical Extraction Plant. My problem now is to keep politics out of it.

Wednesday, December 23, 1964 - D.C.

At 10:30 a.m. John Hall, Myron Kratzer and I met with Averell Harriman, Llewellyn Thompson, Edwin Kretzmann, Soapy Williams, Charles Johnson and Charles Thomas, representatives of USIA, and others in Harriman's office to discuss the shipment of 3.9 kilograms of U-235 to South Africa for their research reactor (built by Babcock and Wilcox Company). I argued for keeping our commitment, while Williams and the USIA representatives argued for not doing so because of the adverse effect on other African nations. This will be explored with South African Foreign Minister Hilgard Muller to see if postponement and arrangement of IAEA Safeguards can be effected.

At 12:40 p.m. John Napier, George Rogosa and I attended the luncheon at the Naval Research Laboratory, hosted by Captain Bradley Bennett. After the luncheon, we attended the ground-breaking ceremony for their 76-inch Cyclotron at which I spoke and turned the first shovel of dirt.

At 2:55 p.m. I met with Ambassador H. F. Eschauzier (Netherlands Ambassador to Vienna) to discuss his desire to apply IAEA safeguards to Euratom. This is difficult to insist on because of French resistance and the U.S. desire to strengthen the European Community by transferring U.S. Bilateral Safeguards to Euratom.

I met with members of the U.S. Reactor Team who have just returned from an exchange visit to Russia.

Herb Kinney, Commissioner Gerald Tape, and I met with Wray Smith (Director Job Corps-Urban Centers-Office of Economic Development), Ernest K. Smith (Wray's boss), Wade Robinson, and Henry Sullivan to discuss their interest in Camp Parks, near Livermore, California). (I decided that they should go ahead and use it, but leave way for subsequent possible use for the 200 BeV Accelerator.)

At 4 p.m. I had an appointment meeting with Fred de Hoffmann (President, General Atomic Division, General Dynamics Corporation). We talked about the mounting problems, having to do mainly with risk and possible potential extra cost to General Dynamics, which can be rather large, as a result of their continuing negotiations with Ginna of Rochester Gas and Electric. In the area of fuel cycle costs, since the AEC has decided they cannot pay for burn-up, there is extra cost because Ginna wants to operate at higher power and at a higher plant factor than originally planned. De Hoffmann asked whether, in connection with the fuel cycle, we could help them by treating it the way we treat the seed and blanket reactor, that is, could the AEC own the first core under conditions whereby General Atomic would pay for accidents, like fuel cracking, etc.; thus the AEC would own the U-233 formed, and GA would pay for the actual burn-up. This removes the uncertainty in the price that the AEC could pay for U-233 and the time range in which they could pay this. Another, though less desirable, alternative would be for the AEC to set the prices for the U-233 and the time that they would be effective and the prices for chemical reprocessing at an early time so that GA

could do their planning. De Hoffmann also mentioned other difficulties with Ginna regarding the \$21 million insurance for the furnishing of a replacement boiler in case the plant failed, saying that Ginna was also asking for compensation if the nuclear plant operated at less than full capacity.



Groundbreaking Ceremony for Cyclotron Bldg. Naval Research Laboratory
December 23, 1964

Seaborg turns a spade of dirt symbolically beginning construction of the U.S. Naval Research Laboratory's new cyclotron facility. Naval Officers looking on are RADM (John Leydon, Chief of Naval Research), Capt. Bradley F. Bennett (NRL Director) and RADM C. T. Booth (representing Chief of Naval Operations).

Thursday, December 24, 1964 - D.C.

Commissioner John Palfrey, Pete and I attended the Metropolitan Club Christmas party.

I received an advanced copy of Business Week, with my picture on the cover (copy of cover attached), which is carrying the story of Hanford diversification. It is a good story giving the AEC credit for leading the way in this field of providing for the impact of defense cut-backs.

I called Senator Jackson, in Washington state, to explore the question of discussing the choice of the Hanford Chemical Processing contractor selection with him (as he suggested to Ramey that we do). We may do this when he returns to Washington on Saturday, January 2nd.

BUSINESS WEEK

December 26, 1964

Fifty cents

A McGraw-Hill publication

Industry scrambles
to get plants built

Page 54

Below: At Hanford, Wash., Glenn T. Seaborg
is trying out a unique experiment to
soften the blow of AEC cutbacks [Research]



I saw a film on SULKY which failed to break the surface of the ground in a cratering action as we had hoped. Perhaps this shot was conducted in too conservative a manner in order to be sure of not violating the Test Ban Treaty.

The family, including Pete, spent our traditional Christmas Eve opening our presents.

Friday, December 25, 1964 - Home

The entire family had Christmas dinner together at home with David Lee. I helped Steve assemble his motor track Christmas present.

Dianne and I hiked to the Bureau of Terrestrial Magnetism (of Carnegie Institution of Washington) and back.

I spent the rest of the day reading journals, books, etc.



Christmas 1964

Saturday, December 26, 1964 - Home

Dave, Steve and I drove to George's Pet Shop in Bladensburg to exchange a light fixture which is intended to keep his pet black snake warm. (The snake is a gift Dave got for Christmas.)

I spent the rest of the day reading and talking and playing with the kids.

Sunday, December 27, 1964 - Home

Alice and Jim Robinson, Aunt Esther Williams, Jim's sister with Bill and Jean Walsh and children Marilyn and Tom (visiting from Detroit) dropped by for afternoon coffee.

Pete and I had a long talk (two hours) with Brian Turner, one of the leaders of the University of California Free Speech Movement--much progress was made and I shall try to convince Kerr to talk with him. Much of the trouble stems from lack of communication between the students and administration--people like Kerr and Strong.

Monday, December 28, 1964 - D.C.

At 10 a.m. I had an appointment meeting with W. S. Broffitt (Chief Engineer on Nuclear Systems Engineering, Allison Division, General Motors, Indianapolis). Broffitt explained to me, with very optimistic overtones, the present situation with respect to their development of the Military Compact Reactor (MCR). I told him that their problem was not with the AEC but with the high level management in the DOD, such as McNamara and Brown, and that as a result of a lack of requirement by the DOD, the MCR would probably be dropped at the end of FY 1965, thus not even completing the two-year development that had been suggested a year ago. Broffitt was quite shaken by this and indicated that he might try to see the proper people in the DOD.

At 12:30 p.m. Commissioner James Ramey and I had a luncheon appointment with Secretary of Interior Udall, and Assistant Secretary Holum in Secretary Udall's office. 1. We discussed the U.S.-USSR desalting exchange agreement, and it was agreed that the Atomic Energy Commission might play a more primary role here in view of the dominant role of the Soviet State Committee for the Utilization of Atomic Energy at their end of the agreement. Udall suggested that we send him a letter suggesting such a role for the AEC and he would respond affirmatively. 2. We discussed the Metropolitan Water District dual purpose reactor and agreed to take all steps necessary to bring this forward as fast as possible and preferably ahead of the Israel dual purpose desalting reactor. 3. We discussed the need for the Department of Interior to send an expert to the IAEA in response to their request, and it was agreed that Fred MacGowan might be a very good candidate here (MacGowan is being replaced by Frank DiLuzio as head of the Office of Saline Water in the Department of Interior). 4. Udall agreed to inviting Sigvard Eklund in some prominent role to the international conference on desalting to be held in the U.S. next fall.

At 3 p.m. I had an appointment meeting with Henry Nickel (General Manager, Atomic Energy Division, Allis Chalmers, Bethesda), and David Weiss (Manager, Atomic Energy Applications). Arnold Fritsch was also present at the meeting. 1. Nickel told me that they were very serious in their desire to obtain a contract for operating the Hanford reactors and that, although they do not have definite

proposals for adding activities to contribute to our diversification program, they intend to make such additions if they are awarded the contract. 2. Nickel described their plans in the nuclear power field, saying that they have some prospects for selling a reactor or two in Europe.

I talked by phone to Webb, who has tentatively decided to cut out Snap 8 from the FY 1966 budget to meet the stringent ceiling laid down by President Johnson. I said that we will look at our Snap 8 budget situation and let him know our reaction.

I dropped a line to Frank Ryan, quarterback of the Cleveland Browns, to congratulate him on his performance in yesterday's game and to tell him how glad I am that he is close to getting his Ph.D.

Tuesday, December 29, 1964 - D.C.

At 10:15 a.m. I presided over Regulatory Information Meeting 136 (notes attached).

At 10:25 a.m. I presided over Information Meeting 438 (notes attached). Among the items discussed were my letter to Kermit Gordon (copy attached) on the AEC guaranteed buy-back price for uranium-233 and correspondence with Maritime Administrator Nicholas Johnson regarding our disappointment at his lack of support of our nuclear maritime program which contributed to the severe cut in its budget at the BOB (copies of correspondence attached).

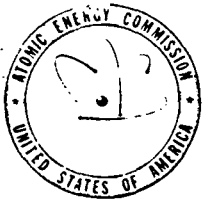
At 11:45 a.m. I had lunch and spoke at the Annual Christmas Convention of the Washington Junior Academy of Sciences at Georgetown University (Gaston Hall). Lynne and Dave attended. I gave a talk on Transuranium Elements to about 300 students in the audience. My talk was arranged by President Glenn Smoak (Yorktown High School) and Secretary Margaret Howell (Woodrow Wilson High School). The speech was well-received. After my lecture, I talked to Father Francis J. Heyden who promised to send me a tape recording of my lecture and a tape recording of a lecture by Lord Ernest Rutherford on "The New Atom," taken from some old disc recordings that he borrowed from George Gamow several years ago.

At 3 p.m. I presided over Commission Meeting 2072 (action summary attached). The Commission decided to recommend reduction to a level of 2000 MW and three site operations for gaseous diffusion plants. This level is to be reached by 1970.

Wednesday, December 30, 1964 - Washington - Pedernales River, Texas - Washington

At 7:50 a.m. Donald Hornig, George McGhee and I left Washington, D.C. on a Jetstar to meet with President Johnson at his LBJ Ranch on the Pedernales River, Texas. Kermit Gordon was also present at the meeting.

The purpose of the meeting was to discuss certain unresolved items in the Atomic Energy Commission budget for FY 1966, and, in particular, the question of whether the three advanced converter reactors, the high temperature gas cooled reactor (HTGR), the seed and blanket reactor (SBR), and heavy water moderated organic cooled reactor (HWOCR) should be included in the budget. Gordon began the discussion by saying that although it had been a close decision on his part, he was ready to recommend the inclusion of the advanced converters in the budget on the basis of their potential long-range contribution to the future of civilian nuclear power in the United States. The President said that he very much resented the pressure that had been put on him for the SBR by Admiral Rickover; he referred



UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON, D.C. 20545

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NOV 86

DC FILE

COPY NO. 2
December 29, 1964

REGULATORY INFORMATION MEETING 136

10:15 a.m., Monday, December 29, Chairman's Conference Room, D. C. Office

1. Malibu Reactor Project (Mr. Price's December 24 Memorandum)

Mr. Price discussed briefly the report attached to his December 24 memorandum.

2. Regulatory Staff Meeting with AIF Reactor Safety Committee (Mr. Price's December 24 Memorandum)

Mr. Price noted briefly the usefulness of the joint meeting and said AIF representatives will comment on the draft guidelines at the next joint meeting.

3. December 24 Letter from Mr. Charles F. Avila re January 8 Meeting with the Commission

Noted.

4. Navy Request for Entry of Nuclear Submarine into Boston Harbor

Mr. Price will review this matter later with the Commission.

5. Request for Release of Draft Indemnity Report to NUCLEONICS

Approved. (DR)

PRESENT

Dr. Seaborg
Mr. Ramey
Mr. Palfrey
Dr. Tape
Dr. Bunting

Mr. Price
Mr. Doan
Mr. Hennessey
Dr. Fritsch
Mr. McCool

DISTRIBUTION

Commissioners
Director of Regulation
General Counsel
Secretary

W. B. McCool
Secretary



UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON, D.C.

UNCL. BY DOE
NOV 86

COPY NO. 3
December 29, 1964

INFORMATION MEETING 438

10:25 a. m., Monday, December 29, Chairman's Conference Room, D. C. Office

✓ 1. Letter to the BOB re Guaranteed Prices for U-233

The Commissioners requested revision prior to transmittal today.
(AGMPP)

2. Commissioners' Dinner Meeting with the Joint Committee in January

The Chairman requested discussions with Joint Committee staff to schedule a meeting. (AGM-Secy)

3. Commissioner Attendance at Dedication of Trombay Plant in India, January 22, 1965

Commissioner Palfrey may attend. Appropriate staff will accompany him. (DIA)

4. GAC Meeting, Oak Ridge, January 11, 12 and 13, 1965

Commissioner Tape and the General Manager plan to attend.

5. February 18, 1965, Founders Meeting, Chicago (MURA Group)

Dr. Tape will inform the group of the Chairman's February 25 Chicago appointment.

6. Budget Mark-up of NASA Funds for the SNAP 8 Program

The Chairman reported briefly on Mr. James Webb's call yesterday regarding the mark-up of the FY-66 NASA SNAP 8 funds and Mr. Webb's preliminary reaction to go below the mark-up amount. The Chairman said he later called Mr. Elmer Staats, BOB, to reiterate support of AEC funding at \$9.5 million and Mr. Staats will discuss this matter further with the Chairman.

7. December 18 Letter to the Chairman From Mr. Lorne Gray, President, AECL

8. Secretary of Defense's Recommendations re Subcommittee

Noted.

✓ 9. December 21 Letter From Mr. Nicholas Johnson, Maritime Administrator Regarding the Nuclear Maritime Program

Noted.

10. Chairman's Meeting with Mr. W. S. Broffitt, Allison Division of General Motors, to Discuss the MCR Program

11. Meeting with Secretary of the Interior Udall Yesterday to Discuss Desalting Program

The Chairman said the Secretary agreed

- a. the Department of the Interior would provide a desalting expert for the IAEA assignment
- b. Mr. Sigvard Eklund should be invited to the 1965 international conference on desalting
- c. AEC should play a larger role in the US-USSR desalting program and he would welcome a letter from the AEC in this regard. (Commissioner Ramey will prepare with staff assistance) (AGM-DIA)

12. December 28 Report on Underground Test Program

The Commissioners requested revisions to provide a very brief narrative highlight report (DMA)

13. Chairman's Meeting with Mr. John Kuranz, Nuclear Chicago

The Chairman reported Mr. Kuranz had suggested the isotopes responsibilities of DID, DRD and Production be combined under a single division.

14. Chairman's Meeting with Mr. Frederic de Hoffmann, GA, to Discuss Rochester-GA Reactor Project

The Chairman reported briefly on Mr. de Hoffmann's discussions with Mr. Robert Ginna re problems on the fuel cycle. Mr. de Hoffmann suggested AEC funding of the first core and their assumption of fuel burn-up costs or, alternatively, establishment of a firm price for U-233 over a ten year period and some agreement on chemical processing arrangements. (AGMRD)

15. Commissioners' Meeting with American Public Power Association

Mr. Ink said Mr. Alex Radin had proposed meetings more often than annually. The Commissioners suggested Mr. Ink discuss the matter with Mr. Radin in terms of the possibility of a joint staff meeting semi-annually and Commission-APPA meetings as appropriate. (DIP)

16. Commissioners' Meetings with the Atomic Industrial Forum

The Chairman noted Mr. Kenneth Davis' suggestion for longer meetings and suggested staff explore the matter. (DIP)

17. Transmittal of the Report on High Energy Physics to Dr. Donald Hornig, Chairman, President's Science Advisory Committee

The Chairman noted the BOB mark-up on the AGS conversion project as described in Mr. Corso's December 24 memorandum to Mr. Hollingsworth. Mr. Ink said it would be useful to point out in the transmittal letter the BOB's comments regarding Phase 1 and Phase 2 of this project and the Bureau's position on the 600-1000 BEV accelerator as contained in the memorandum from Mr. Corso. The Chairman requested discussion of this matter with Commissioner Tape. (OC-R)

18. December 16 Letter from Mr. Lynn E. Weaver, Arizona Atomic Energy Commission

Mr. Bloch reported a reply is in preparation which would suggest notification of any event likely to result in a health hazard. Mr. Ink noted the possible desirability of including in the reply reference to a suggestion made by White House staff that members of the Governor's staffs of the States of Arizona, Utah and possibly New Mexico be cleared for access to additional information. (DMA)

19. Congressional Relations Office

The Commissioners suggested Mr. Bloch proceed as discussed and report back to the Commission. (AGM)

20. Sale of Surplus Vanadium Pentoxide, Lithium and Yttrium (General Manager's December 24 Memorandum)

The Commissioners had no objection to the General Manager's recommendation. (OC)

21. SNAP 9A Burn-up (General Manager's December 28 Memorandum)

The Commissioners requested revision of the press release and review with Commissioner Tape. (AGMRD-PI)

✓ 22. Proposed Letter to W. R. Grace Co. (General Manager's December 28 Memorandum)

Approved. (DGM)

23. Pending Contractual Matters (Report No. 81)

The Commissioners requested additional information on the proposed contracts with Dynatech Corp. and Parametrics, Inc. (PAR)

24. Commissioner Ramey's Report on his Meeting with Mexican Officials to Discuss the Desalting Program

25. Proposed Letter to Mr. Oliver Townsend re Plans for a Nuclear Plant on Long Island

The Commissioners requested submission of a shorter version.
(DAGMRD)

26. BOB Request for Reprogramming of Heavy Water Organic Program Funds (FY 1966)

Mr. Bloch reported on Mr. Schuldt's call from the Bureau in which he referred to Director Kermit Gordon's December 17 letter referring to the AEC Advanced Converter Program. BOB suggested that funds for the Heavy Water Organic Program should now be transferred from the desalting program to the Advanced Converter Program leaving only \$2.9 million in the Desalting Program. The Commissioners discussed briefly the desirability of appealing this action and agreed Mr. Ramey should discuss the matter with Mr. Elmer Staats. BOB.
(DGM-OC)

27. Meeting with Senator Jackson, Saturday, January 2, to Discuss Hanford

The Chairman will call Senator Jackson regarding an appointment on Saturday.

28. PHS Paper on Fallout from Underground Nuclear Tests (Mr. Clark's December 11 Memorandum)

Mr. Bloch discussed briefly the problems presented by the submission of the paper to SCIENCE magazine and PHS for publication. He proposed to discuss the matter as soon as possible with PHS representatives and with the White House and commented on the need to point out to the White House the problems raised by EO 10501 in terms of its application to material not under the control of the AEC. Mr. Ink suggested telephoning Dr. Terry, Surgeon General, prior to discussion with PHS representatives and the Commissioners agreed this should be done. Staff will report back to the Commission the results of that discussion. (AGMA-DMA)

29. Public Release re Y-12 Reductions (Mr. Clark's December 28 Memorandum)

Mr. Bloch noted Senator Gore and Joint Committee staff are being informed today. Mr. Ramey suggested Congressman Joe Evins be informed at the appropriate time and Mr. Ink noted White House staff must be informed at the appropriate time. (AGM-AGMA)

30. AEC-NASA Joint Office

Mr. Bloch noted the Air Force is in general agreement with AEC recommendations and staff will now proceed to finalize the formal agreement with NASA. (AGMRD)

31. Declassification of Shut-down of Production Reactors

The Commissioners accepted Mr. Bloch recommendation.

32. Provisional Construction Permit of the Jersey Central Oyster Creek Power Plant, Unit No. 1

The Commissioners accepted the General Counsel's recommendation to defer consideration of this matter pending review of the staff petition. (GC)

33. Briefing on Oak Ridge

Mr. Ramey requested a briefing. (DMA-OEIC)

PRESENT

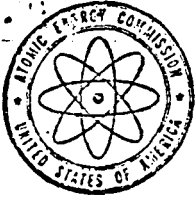
Dr. Seaborg*	Mr. Bloch
Mr. Ramey	Mr. Ink
Mr. Paifrey	Mr. Hennessey
Dr. Tape*	Dr. Fritsch
Dr. Bunting	Mr. McCool

DISTRIBUTION

Commissioners
General Manager
General Counsel
Secretary

W. B. McCool
Secretary

*Partial Attendance.



UNITED STATES
ATOMIC ENERGY COMMISSION
WASHINGTON 25, D.C.

UNCL. BY DOE
NOV 86

DEC 29 1964

Dear Mr. Gordon:

The Atomic Energy Commission plans to establish guaranteed purchase prices for privately-owned plutonium and uranium enriched in U-233 pursuant to section 56 of the Atomic Energy Act of 1954 as amended by section 11 of the Private Ownership of Special Nuclear Materials Act. The report of the Joint Committee on Atomic Energy on the private ownership legislation stated that it was expected that the Commission would establish guaranteed purchase prices for licensee-produced plutonium within six months after the enactment of the bill.

The period prior to January 1, 1971, for the guaranteed purchase price for plutonium is established by the legislation. For uranium enriched in U-233, it is intended that the Commission would continue to establish guaranteed purchase prices until the Commission had made a determination that the evolution of nuclear technology with respect to U-233 had reached the point where it was no longer necessary or appropriate for the Government to provide such a guaranteed market for this material. The same period as for plutonium is proposed as the initial period of guaranteed purchase price for uranium enriched in U-233 in recognition of (a) uncertainties in an appropriate value for that price, which stem from uncertainties in the current and future technology of thorium reactors and U-233 recycle, (b) uncertainties as to the terms of fuel supply arrangements in the post-1971 period, and (c) AEC desires to encourage industrial evaluation of thorium usage on the basis of the internal economics of U-233 recycle rather than on the basis of an AEC established guaranteed purchase price for the U-233 produced.

Guaranteed purchase prices apply to privately-owned plutonium and uranium enriched in the isotope U-233 delivered to the AEC prior to January 1, 1971, if such materials (a) are produced in a nuclear reactor by a person licensed under section 104 of the Act, (b) are produced through the use of special nuclear material which was leased or sold by the AEC pursuant to section 53 of the Act, and (c) meet AEC specifications. Material shall meet the criterion in (b) above only:

- (i) if such material has been produced in a reactor loading that would not go critical without the presence of special nuclear material, and
- (ii) if, during the time when such material or a radioactive precursor (e.g., protactinium-233) is contained in any nuclear reactor, all other special nuclear material present in that reactor was leased or sold by the AEC or previously determined by the AEC to be eligible for purchase under section 56 of the Act, and
- (iii) if material otherwise meeting the criterion is not blended (isotopically mixed) with material containing the same chemical element but not meeting the criterion,

except that amounts of material deemed by the AEC to be trivial (e.g., in fission counters or admixed portions of a small residue from previous processing in the same facility) may be disregarded in determining whether the criterion is met.

The guaranteed purchase price for plutonium shall be \$10 per gram of the contained plutonium isotopes Pu-239 and Pu-241.

The guaranteed purchase price for uranium enriched in the isotope U-233 shall be \$14 per gram of U-233 subject to the following adjustments for the presence of other uranium isotopes:

- (a) Calculate a weight fraction equal to the ratio of the weight of U-235 plus U-233 to the total weight of uranium. For that weight fraction, find the charge per gram of uranium and thence the charge per gram of U-235 from the AEC schedule of base charges then in effect for uranium enriched or depleted in U-235. (If the weight fraction exceeds 0.90, use the charge for 0.90.) Take the charge per gram of U-235 so determined as the value for each gram of U-235 in the mixture and 14/12 of that charge as the value for each gram of U-233. (The ratio of 14/12 is the ratio of values for highly enriched U-233 and U-235 prior to the deduction for U-232 given below.)
- (b) Make the following deduction for handling costs in dollars per gram of total uranium, depending on the concentration of the U-232 isotope. (This deduction will cover handling costs estimated to be incurred when uranium enriched in

U-233 is recycled as a reactor fuel, including such costs associated with the alpha activity of U-233 and the gamma activity of daughters of U-232.)

<u>Parts of U-232 per million parts of total uranium enriched in U-233</u>	<u>Deduction in dollars per gram of total uranium</u>
0	0.40
20	0.60
45	0.80
80	1.00
130	1.20
190	1.40
250	1.50
350	1.60
500	1.70
700	1.80
1000	1.90
1500 and above	2.00

For U-232 assays not specifically listed, the deductions are determined by linear interpolation between the nearest listed assays.

- (c) The sum of the values for U-235 and U-233 from (a) above, minus the deduction for handling costs from (b) above, shall be the guaranteed purchase price for uranium enriched in the isotope U-233.

Notwithstanding anything stated above, the guaranteed purchase price for uranium enriched in the isotope U-233 in which there are not more than 90 parts of U-233 per million parts of U-235 by weight nor more than 11 parts of U-232 per billion parts of U-235 by weight shall be equal to the charge for such material according to the AEC schedule of base charges then in effect for uranium enriched or depleted in the isotope U-235.

These guaranteed purchase prices have been determined by the AEC as not exceeding the estimated value of these materials as fuel in nuclear reactors relative to the present schedule of charges for uranium enriched in U-235. If that schedule is revised by AEC within the term of applicability of the above guaranteed purchase prices, the figures of \$10 and \$14 on page 2 shall be multiplied by the ratio of the base charge in such revised schedule in dollars per kilogram of uranium containing a weight fraction of U-235 of 0.90 to \$10,808 (the base charge per kilogram of uranium in the schedule of charges published in 27 F.R. 5006, May 29, 1962).

For uranium enriched in the isotope U-233 incorporating special nuclear material which was sold by the AEC, unless other arrangements are made pursuant to subsection 53c of the Act, the AEC shall (a) pay in cash for the computed value of U-233 minus the total deduction for handling costs when the result is positive or be paid in cash when the result is negative and (b) shall pay for the computed value of U-235 by supplying, in standard form at an AEC facility, uranium enriched in the isotope U-235 having an equal value according to the AEC schedule of charges then in effect for such uranium (consisting of base charges and withdrawal, packaging, and special service charges) and having a U-235 assay equal to the weight fraction determined from subparagraph (a) on page 2 (but not exceeding 0.90) or at any other U-235 assay mutually agreed to by the AEC and the licensee. For uranium enriched in the isotope U-233 incorporating special nuclear material which was leased by the AEC, the AEC shall pay in cash the guaranteed purchase price minus the computed value, in accordance with the AEC schedule of base charges then in effect for uranium enriched or depleted in U-235, of any contained or consumed uranium associated with the delivered material and still remaining at the time of delivery on the lessee's lease account for special nuclear material and shall make a corresponding adjustment in that lease account. (A negative result means that the lessee pays the AEC.) For uranium enriched in the isotope U-233 consisting entirely of uranium isotopes produced in a nuclear reactor, the AEC shall pay the guaranteed purchase price in cash.

Plutonium and uranium enriched in U-233, when delivered to the AEC, shall be in aqueous nitrate solution (standard form) or in dioxide or as metal or in such additional forms as AEC may specify from time to time and shall meet other AEC chemical and physical specifications, except that uranium enriched in U-233 containing not more than 90 parts of U-233 per million parts of U-235 by weight nor more than 11 parts of U-232 per billion parts of U-235 by weight shall be in hexafluoride meeting AEC specifications for such material being leased or sold by the AEC in effect at the time of delivery. Delivery shall be made f.o.b. designated AEC facilities unless otherwise agreed by the AEC.

Any person desiring to sell special nuclear material to the AEC pursuant to section 56 of the Act is responsible for supplying data demonstrating that the criteria of the third paragraph on page 1 have been met and, for this purpose, shall maintain and make available to the AEC a clear record of the circumstances of production of the material in a nuclear reactor and its subsequent history up to the time of delivery of the material to the AEC. Since ambiguities or

inadequacies in this record may delay or prevent acceptance of the material by the AEC, any such person shall notify the AEC as soon as feasible prior to initiating production of the material, shall provide an opportunity to the AEC to verify the circumstances of production (including the fabrication and loading of the fuel in the nuclear reactor), production, processing, and handling of the material, and at least three months prior to the intended delivery of the material to the AEC shall furnish the AEC with a statement of the anticipated quantity, physical form, and chemical and isotopic composition of the material, its source and its general history up to that time, and the expected delivery date; this statement shall be updated and amplified at the time of delivery of the material. At any time, the AEC may request and shall be furnished such additional information as the AEC may require to determine whether the materials meets the criteria of the third paragraph on page 1 and what payment shall be made for the material.

Any person desiring to sell special nuclear material to the AEC pursuant to section 56 of the Act shall be furnished with a standard form of contract for purchase of such material by the AEC. That contract shall be executed by such person and by the AEC prior to delivery of the material to the AEC.

In taking the above action the Commission has determined, as required by the legislation and the legislative history that:

- (a) the above guaranteed purchase prices are on a nondiscriminatory basis and do not exceed the Commission's determination of the estimated value of the subject materials as fuel in nuclear reactors and
- (b) the guaranteed purchase period for uranium enriched in U-233 is deemed necessary by the Commission in the light of the evolution of nuclear technology of U-233 as estimated by the Commission.

In the Federal Register notice 28 F.R. 5314, dated May 29, 1963, concerning charges for plutonium and uranium enriched in U-233, the AEC stated that \$10 per gram of Pu-239 plus Pu-241 in plutonium, and \$14 per gram of U-233 (subject to adjustment for the presence of other uranium isotopes), both in the chemical form of nitrate, represented the current AEC estimate of the value of these materials as fuel in thermal nuclear reactors relative to the present schedule of base charges for uranium enriched in U-235.

Recent analyses prepared by Hanford and Oak Ridge National Laboratory (ORNL) have generally reconfirmed many of the major points of the previous estimates. One significant new finding relates to the proposed adjustment, for uranium enriched in U-233, for the presence of the isotope U-232. The concentration of this isotope has a significant effect on the costs of recycling and refabricating these materials. However, recent successful demonstrations of the sol-gel process at ORNL have led to more optimistic estimates of the fabrication costs for recycle fuel than previously. Hence the new studies have led to about a 20% reduction in the AEC estimate of an appropriate recycle or handling penalty associated with the U-232 content as compared to estimates of about one year ago.

The guaranteed prices are based on the use of the materials as partial substitution for the U-235 requirements of a nuclear power reactor. The concentration of U-236 may affect the value of uranium enriched in U-235 or in U-233 and will be studied further in connection with future AEC actions on prices and charges for such material.

In developing the criteria for defining the meaning of the phrase "produced through the use of special nuclear material which was leased or sold by the Commission" the primary underlying principles were as follows:

- (a) A reactor operator may choose to obtain all special nuclear material required from AEC by lease or sale and obtain the benefits of guaranteed purchase of bred fuel by AEC, or he may choose to use toll enriched or other material in which case the benefits of guaranteed purchase of bred fuel produced during that period must be foregone.
- (b) The recommended criteria should not inhibit or penalize the recycle of bred fuel.
- (c) Bred fuel eligible for guaranteed purchase should not be mixed with other fuel of the same chemical element. This is to avoid or minimize problems such as material identification, use of reactor computations as a basis for payments, and other difficulties associated with complex payment situations.

The proposed method of payment for uranium enriched in U-233 which contains privately-owned U-235 has been developed to preclude the unintended purchase or repurchase of such privately-owned U-235. Where leased material is involved the payment method described provides for a simultaneous equitable adjustment for the lease account.

Honorable Kermit Gordon

- 7 -

Material may contain less than 90 parts of U-233 per million parts of U-235 and less than 11 parts of U-232 per billion parts of U-235 and still be "uranium enriched in U-233." Such material, however, is still suitable for introduction into the gaseous diffusion plant and should be considered financially equivalent to uranium enriched or depleted in the isotope U-235. Hence the guaranteed purchase price for such material is proposed to be set equal to the charge then in effect in the AEC schedule of base charges for U-235.

During the first week of January 1965, we plan to submit to the Joint Committee on Atomic Energy, in accordance with section 58 of the Atomic Energy Act, the proposed guaranteed purchase prices, guaranteed purchase period, and criteria for Commission determination of whether plutonium or uranium enriched in U-233 is "produced through the use of" special nuclear material which was leased or sold by the Commission.

Sincerely yours,

(Signed) Glenn T. Seaborg

Chairman

Honorable Kermit Gordon
Director, Bureau of the Budget



U.S. DEPARTMENT OF COMMERCE
MARITIME ADMINISTRATION
WASHINGTON, D.C. 20235

DC FILE

UNCL BY DOE
NOV 86

OFFICE OF THE ADMINISTRATOR

December 21, 1964

Mr. Glenn T. Seaborg
Chairman
United States Atomic Energy
Commission
Washington, D. C.

Dear Glenn:


Of course I was distressed with the news in your December 16 letter that your maritime request did not fare very well at the Bureau of the Budget.

Although I had hoped we could have more adequate information sooner, I was not aware of any real lack of coordination between the AEC and the Maritime Administration, and hope there is no misunderstanding at the Bureau of the Budget on this score.

I am sure we can do better in the coming year, and of course special legislation is always a possibility.

With all best regards,

Sincerely yours,


Nicholas Johnson
Maritime Administrator

December 16, 1964

UNCL. BY DOE
NOV 86

Dear Nick:

We received our final mark-up from the BoB last night, and unfortunately our maritime effort did not fare too well. The basis of the rather severe cuts in our requests, after careful consideration by the Director, Don Hornig, and the BoB examiner handling the maritime program, was the lack of adequate coordination between the AEC and the Maritime Administration in this program. This, of course, was the sort of thing I have been concerned about all along. Hopefully, we can do better in the coming year.

Cordially,

Glenn T. Seaborg

Glenn T. Seaborg

Honorable Nicholas Johnson
Maritime Administrator
Department of Commerce

UNITED STATES GOVERNMENT

Memorandum

UNCLASSIFIED BY DOE
NOV 86

TO : Edward J. Bloch, Acting General Manager DATE: December 29, 1964
Approved _____
E.J. Bloch

FROM : W. B. McCool, Secretary *Original signed by W. B. McCool* Date _____

SUBJECT: ACTION SUMMARY OF MEETING 2072, TUESDAY, DECEMBER 29, 1964, 3:00 P.M.
ROOM 1113-B, D. C. OFFICE

SECY:ICB

Commission Business

1. Minutes of Meetings 2059 and 2060

Approved, subject to comments by Commissioner Ramey.

2. AEC 25/323 - Proposed Air Force Safety Rules

Approved. (DMA)

3. AEC 25/324 - Proposed Air Force Safety Rules

Approved. (DMA)

4. WHETSTONE III

The Commission approved the recommendations of General Crowson's December 22 Memorandum. (DMA)

5. AEC 580/223 - Uranium Production Planning

Discussed.

A draft position paper with appropriate appendices will be developed on the basis of the discussion at the Meeting for consideration early next week. (AGM P&P)

6. Annual Report

Approved as revised. (PAR)

7. AEC 151/96 - U.S.-U.K. Nuclear Weapons Classification Guide, and Supplement to AEC 151/96 - Appendix B

Approved. (C)

E. J. Bloch
Action Summary Mtg. 2072

-2-

December 29, 1964

8. AEC 181/117 - AEC Use of Contractor Personnel

Discussed.

I will reschedule the paper at an early date.

9. AEC 671/10 - NRTS Contract

Discussed.

I will reschedule the paper at an early date.

cc:
Commissioners

to the telephone call that he had received from California Governor Pat Brown, instigated by Admiral Rickover, and said he did not like this method of operating.

Gordon called the President's attention to the letter (copy attached) of November 19, 1964, from Holifield (to the President), and he and the President agreed that the tone of this letter was unfortunate in its implication that the determination of the role of the civilian nuclear power program resided to such a large extent in the Joint Committee and the Atomic Energy Commission. Gordon suggested that the President make clear to Holifield, at an early meeting, that the initiative for decisions such as those on the advanced converters lies in the White House.

The President took time to read the letter from Donald C. Cook written to the President in response to the President's request for Cook's evaluation of the three advanced converters program; this letter recommended that only the HTGR be built at this time, to be followed at some time later, if necessary, by the HWOCR, with the SBR to follow even later, with the lowest priority, if it is built at all. The President also read my letter (copy attached on that date) to him of December 16, 1964, in which I took issue with Cook's recommendations and gave my arguments in rebuttal.

I then gave my arguments to indicate that the AEC feels that all three of the advanced converter reactors should be built in order to achieve our balanced program and that the success of one reactor does not obviate the need for the other two. I described briefly the attributes of the three reactors with emphasis on the ways in which they differ and, hence, contribute to a total reactor program. I emphasized the amount of money that the private utility (Rochester Gas and Electric) and the State of California were contributing to the program and that this was an important aspect. Hornig pointed out that there was a difference between one company's interests, which understandably might lead them to decide on only one approach, and that of our whole country which might find it prudent to explore two or possibly three approaches. The President said that he could appreciate Cook's concern as a businessman that unnecessary duplicative work should be avoided, but that he felt my arguments were persuasive and that he would go along with my recommendation and include the advanced converters in the FY 1966 budget.

He then turned to the other items at issue in the FY 1966 budget. Gordon opened the discussion by saying he had received excellent cooperation from the AEC in identifying the items in this crucial budget, arranged in a priority manner. The President then turned to me and I said that the AEC has been very cognizant of the need for a stringent budget; our various divisions made recommendations that totalled about \$3,400,000,000 which the Commission cut down to \$2,930,000,000 which we think include only the highest priority items, and the BOB then made a further cut of about \$450,000,000 bringing it down to \$2,472,000,000. I said that the issue today was only about \$20,000,000 worth of very highest priority items about which I feel strongly.

I pointed out that within the last few weeks we have returned \$12,000,000 from the weapons' program, and \$9,000,000 from the funding for the proposed Hanford Isotopes Separation and Packaging Plant and, thus, we have returned as much as I am requesting to be restored.

We then went through the items, one by one. I first took up the low energy accelerator for which we are requesting the restoration of \$2,500,000 and explained the critical situation with respect to universities such as Princeton,

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NOV 86

CONGRESS OF THE UNITED STATES
Joint Committee on Atomic Energy

November 19, 1964

The President
The White House
Washington 25, D. C.

Dear Mr. President:

I have studied the atomic reactor development program with great care, based on my eighteen years of service on the Joint Committee. The goal of economic electric power from the atom is near. The proof of this statement is provided by the willingness of non-Federal entities to invest their funds in the final development stages of several reactor approaches to find the most satisfactory answers.

Our Joint Committee is faced with a basic consideration at this time, in order to fully realize the benefits which are attainable as a result of our expenditures to date.

We must continue vital Federal research and development projects to improve our technology and to encourage those who are willing to invest significant private funds to help cover future developmental costs. If we fail to continue our program, then either full scale funding by the Federal Government will be required or we will have to abandon a vital national advance into the benefits of a great new and potentially inexhaustible energy source.

I know that neither you nor my Committee would want to lose our past investment in atomic electric power development nor foreclose to the people of our country the clearly seen benefits which are so close. I am not speaking in terms of additional billions, such as those we are investing annually in space R & D. I am speaking in terms of a Federal investment of perhaps four to five hundred million dollars over the next decade. I am referring, however, specifically at this time to the funding of the proposed Commission cooperative advanced converter program of approximately 50 million dollars in the FY 66 budget.

COPY

COPY

I am aware that some of your advisors may not agree with the combined judgment of the Atomic Energy Commission and the Joint Committee on the program we have jointly developed. I would respectfully point out that the responsibility for a successful program is fundamentally placed by statute in these two entities. The judgment and experience acquired through many years of decision making as to program, rests in these two entities. I can proudly say that our atomic program to date has placed the United States well ahead of all other nations in nuclear weapon capability and naval nuclear power. Likewise, I can just as proudly say that our peacetime progress in utilization of the atom today is without peer throughout the world. We wish to maintain our superiority.

Mr. President, I write this letter in this vein because of persistent rumors from many sources that the peacetime atomic power program advocated by the Commission after long and detailed consultation with our Committee may be in jeopardy through budget cuts. I trust this is not so. If these rumors are valid and if there are questions in your mind as to the facts, then I respectfully request that Senators Pastore and Anderson, Congressman Price and I be granted the opportunity to discuss this matter with you personally, before a final decision is made.

Sincerely yours,

/s/ Chet Holifield

CHET HOLIFIELD

Duke, Florida State, etc., that were lined up waiting for such machines. Although Gordon questioned this item, he wasn't too insistent. The President ruled that in view of the contribution to education involved and his interest in education, this machine should be included in the budget.

He then took up the Solid State Science Building planned for Argonne to cost \$4,000,000. I described the status of the changed operation of Argonne, that is, its operation through a consortium of universities and emphasized the contribution of this building to the Midwest universities education picture. I emphasized the fact that we haven't done so much for Argonne as we implied we would a year ago in our discussions with Senator Humphrey. I also said that the scientists are now spread throughout six buildings, including temporary structures, and need to be united in order to keep the group viable. Gordon pointed out that there already is \$17,000,000 for Argonne in the budget for the bubble chamber, and feels that in a stringent budget year this is as much as could be spared for the one laboratory. Hornig questioned the contribution of the Solid State Science Building to universities in the Midwest. The President decided that the reasons I presented were sufficient to impel him to include this item in the budget.

I then took up the item for research and development and design of merchant ship reactors, saying that the \$400,000 in the budget is entirely inadequate, and that we are requesting \$2,500,000. I described the role which I thought nuclear power would play in revitalizing the American Merchant Marine, and the great emphasis which foreign countries like Germany, Sweden, Norway and Japan were placing on nuclear powered merchant marines. Gordon pointed out that the Maritime Administration does not consider nuclear power for merchant shipping to be economic and that Secretary Hodges feels the same way and that since the responsibility should lie with these people, he cannot give great weight to the AEC's position. I pointed out that this move is needed in order to make progress in the design of reactors so that we can ascertain whether nuclear power can be economic at some time in the future.

There was considerable discussion whether the NS Savannah has been a worthwhile enterprise, and I indicated strongly that I think it has been. The President indicated that Secretary Hodges feels that the Savannah has not been worth the cost. The President said that perhaps a compromise in the amount requested would be in order and suggested that \$1,000,000 be added to the \$400,000, making a total of \$1,400,000.

I next described the 710 reactor program, saying that we are requesting an additional \$3,000,000 in order that the important high temperature materials work at Evandale, Ohio, laboratory could continue. I said that we had originally requested money for a prototype at the higher level of research, but the Bureau had recommended essentially the elimination of the entire program. I said I think this would be a great mistake and that it should continue at the level to keep the laboratory viable because this is one of the best high temperature groups in the United States. Gordon pointed out that this group is competitive with the group at Argonne also working on a tungsten fast reactor and, therefore, he recommended its termination. The President said he feels persuaded by my arguments and said he will restore the \$3,000,000 to the budget.

I then took up the matter of nuclear super-heat for the Vallecitos reactor for which we are requesting the restoration of \$2,500,000. I described the great amount of work that has been done by AEC and industry, and said I feel it would be a tremendous mistake to cut this program off just at the point when it is

beginning to give crucial information, since the Vallecitos reactor just started operating last spring. Gordon feels that the General Electric Company can carry on the work if it is so promising, particularly in view of the fact that they will profit from it in the sale of reactors. I suggested that this would remove some of our rights to the information and hamper our international exchange programs with Germany and Sweden, and our ability to generally disseminate the information yet to be obtained. I suggested, however, that we would be willing to terminate the program at the end of FY 1966; on that basis, the President agreed to add the \$2,500,000 to our budget.

I said that this completes our list, but I want to call his attention to some other items. I described the proposal for the meson factory at the Los Alamos Laboratory and said that, although we had this originally in the budget for \$55,000,000, it had been eliminated by the Bureau and in our first appeal we asked for research and design money to the extent of \$3,000,000, and A & E effort to the extent of \$4,000,000. I said we left it out in our second appeal since it was obvious that it wouldn't be restored. I said that Clint Anderson is very much interested in this and that actually it is needed in order to keep the laboratory healthy under a comprehensive test ban treaty. The President said he feels that he has given me almost all that I asked for out of the AEC appeal and that he feels it is time to terminate the discussion. After the President left the room, Gordon and I compared notes and felt that we are in agreement on the items restored by the President, and that these items together with related GSO amount to about a total of \$20,000,000. (Later upon return to Washington a difference of opinion developed as to whether the \$2,000,000 or \$3,000,000 for the design of the HWOCR prototype was included. I maintained that it was on the basis that the President had approved my letter to him of December 16, 1964, and Gordon maintained that was not included on the basis that the President had approved his recommendation regarding advanced converters in another document he gave the President which did not include this design money.)

After our budget discussions, the President took us on a tour of the ranch in his Lincoln Continental, including a stop at the little house in which he was born, which is being restored and which includes much of the furniture which was in the house at the time of his birth, including the bed in which he was born. During the luncheon that followed, which was attended by the President and Mrs. Johnson, Gordon, Hornig, McGhee, Horace Busby, and several of the President's secretaries, I mentioned to the President my idea of creating an international zone for science in Berlin, or near Berlin, in the corridor. The President seemed somewhat interested in this possibility and McGhee engaged in the conversation pointing out that it would be difficult to get the Germans to agree to such a venture.

Later in the afternoon, in the President's presence, I mentioned to Horace Busby the idea of referring in his State of the Union message, to the use of the country's federal laboratories in the research and education activities of neighboring universities in an increasing way. Busby, Hornig and I also discussed the possibility of including in the message a discussion of the value of basic research in science and the need for further support of the humanities, such as through a national humanities foundation. A little later, I discussed with McGhee the general program of the United States transferring its safeguards functions to the IAEA, and also the problems connected with the sale of plutonium to Euratom and the delivery of U-235 to South Africa for the research reactor, in view of the questions that have been raised in the fields of public reaction and the effects on non-proliferation; I said that the AEC advises completing the delivery of these materials in order to meet the commitments of the United States, and, because

through cooperation, probably more will be done to prevent proliferation than would be done through the withholding of the material. Upon leaving, I invited the President to visit some AEC installations and he said he will certainly try to do this.

I flew back to Washington with McGhee (to Dallas), Gordon and Hornig in a Jetstar and arrived back at Washington at 10:10 p.m.

Thursday, December 31, 1964 - D.C.

At 11:30 a.m. I called Congressman Holifield. I reached him at home (Prospect House, Arlington, Virginia), to advise him that our budget was O.K.'d by the President. I said that the President had gone over the items very carefully and had given us practically all we wanted after expressing confidence in me as his Chairman of the AEC. Chet and I briefly discussed the utility problems in California and agreed we have a long way to go on this. Chet mentioned that Governor Brown of California had pushed the President on this and I told Chet I knew this, and that the President didn't like being pushed. I asked Chet how Craig Hosmer stands on the matter and he said he doesn't really know, but he feels that if Robert Gerdes and Jack Horton are convinced it is O.K., Craig might be convinced.

Chet said he would like to know more about the projected need for electric power in California and wonders if we can supply him with material. He would like the report to take into consideration present supply and lay out a future schedule of growth and utilization, taking into consideration the amount of power that will come into California. I told him I am willing to get someone to work on this right away.

Chet said he wants to make a speech on the floor of the House next week on the subject of the new canal across the Isthmus of Panama (if possible). He said his concept of the new canal is that it should be a truly international canal run by a consortium of nations that will not only finance it but have a Board of Directors to operate it. The nations would include the Soviet Union, Japan, Germany, England, France, U.S., and there would be a binding obligation on each nation to maintain its integrity during war and not sabotage the canal.

He said that the President might want to put out a challenge to Russia on this and that this approach might remove the imperialistic stigma attached to the U.S. I asked what Russia's incentive would be and he said maritime. I asked if this would be counterbalanced by their sensitivity in helping us solve our problems. Chet said they haven't shown too much cooperation, but certainly from the standpoint of preventing war it would do no harm for us to suggest it. He feels if we could get Russia in on this, it would solve the problem of nuclear explosives being used for digging. He said he didn't advance this as a brilliant flash of genius, but it might be good propaganda. He mentioned joint use of nuclear devices in this connection, and I told him that our "clean" ones use the most advanced weapons concept, so that they would not be free to examine the design. Chet said, when he has a draft of his speech ready, he will send a copy to me to look at. Conway and Herb Roebuck (Staff Director of Government Operations) are working on this for him.

At 12:20 p.m. I called Richard Goodwin (Presidential speechwriter of the White House). I told him that while I was at the LBJ Ranch yesterday, I talked with Horace Busby a little about the state of the Union message, and one of the things

he thought highly of was the suggestion in my November 25th letter (copy attached on that date) to Moyers having to do with the role of the Federal laboratories as national resources to aid the universities in conducting research and education in the universities. I said that this is a trend and, in a sense, new. Goodwin said he would mention this and see if it could survive the cutting process; they now have a substantial section on education. I said the other point we discussed was whether there would be a way in which he (Goodwin) could mention, to the advantage of the President, his support of basic research. Goodwin said that Don Hornig has just been in his office discussing this. I said we also discussed whether it might make sense to mention the concept of a National Humanities Foundation. He said as far as he knew there had been no Presidential decision on this and I said that was right, but this would be a way of getting him to go in that direction.

At 12:30 p.m. Commissioner Tape, Arnold Fritsch and I had lunch at the Roger Smith Hotel.

I sent the high energy physics report to Hornig for review.

At 3 p.m. I called Ed Bloch. I mentioned the letter we have received from Samuel Nelson, General Manager and Chief Engineer of the Department of Water and Power in Los Angeles, dated December 28, 1964, and said that I think we should prepare ourselves on the SBR in California by having some figures on the schedule of need and the future supply of electric power; cost compared with other sources; schedule at which other sources of electric power will come in against the schedule for the projected need for power, etc. Ed said he would have this done fairly promptly.

At 3:10 p.m. I received a telephone call from Kent Purcell, Chairman of the Board of Supervisors, Alameda County, Oakland, California, who called regarding the Parks Air Force Base (near Livermore). They operate a large prison farm on this Base, of about 1500 prisoners, so they are concerned with the interest of AEC and the Peace Corps for use of the Base. He asked if I could give him up-to-date information so they would have some idea as to which direction they should take. I told Kent that we wouldn't bother him for years; that we didn't have any authorization for the big accelerator and when we do get it a year or two from now we have no selected site, but we wouldn't want to rule out the possibility of its being at Camp Parks, and for that reason we want to be sure our needs are taken into account in the procedure for disposal of the unused portion of Camp Parks.

I further told him that if we get the project authorized, we won't be building the accelerator until the beginning of 1967 or 1968 with completion date expected in 1972 or 1973. Kent said they use about 400 acres in one corner of the base for their 1500 prisoners and he wonders if this would interfere with construction work. I told him that offhand I couldn't say; that we would have to determine whether the accelerator happens to physically go through that corner. Kent asked if he was free to pass on to the Sheriff who is in charge that at this time the AEC has not applied for space nor had space approved for their use at Parks Air Force Base, and I told him that he is free to do this.

I spent the entire evening at home talking to Brian Turner (Pete's friend) and Pete about the Free Speech Movement problem at Berkeley. He is disenchanted with the tactics of Mario Savio.

The entire family was together, at home, to see the New Year in (together with a number of Lynne's and Pete's friends).

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