Interagency Security Classification Appeals Panel

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Director
INFORMATION SECURITY OVERSIGHT OFFICE

March 18, 2014

Grant F. Smith
Director
Institute for Research: Middle Eastern Policy
Calvert Station
P. O. Box 32041
Washington, DC 20007

Dear Mr. Smith:

Please be advised that the Interagency Security Classification Appeals Panel (ISCAP) has concluded its consideration of the mandatory declassification review appeal filed by you and that the 60-day period during which an agency head may appeal an ISCAP decision to the President has expired. Enclosed is a copy of the document and a chart that outlines the ISCAP decision with the exception of any information that is otherwise authorized and warranted for withholding under applicable law, we are releasing all information declassified by the ISCAP to you. If you have questions about this appeal, please contact Neena Sachdeva or William C. Carpenter at (202) 357-5250.

Sincerely,

William A. Cira
for

JOHN P. FITZPATRICK
Executive Secretary

Enclosures

cc: Mr. Joseph Lambert [Letter and Chart and Document]
Director, Information Management Services
Central Intelligence Agency Member to the ISCAP

ISCAP DECISION ON THE MANDATORY DECLASSIFICATION REVIEW APPEAL FILED BY MR GRANT F. SMITH

IDENTIFYING NUMBERS	DESCRIPTION OF DOCUMENT	ACTION
Smith, document No. 1 ISCAP No. 2013-078 CIA EOM-2009-01073	Nuclear Diversion in the U.S.? 13 Years of Contradiction and Confusion December 18, 1978 62 pages Secret	DECLASSIFIED SOME PORTIONS AND AFFIRMED THE CLASSIFICATION OF OTHER PORTIONS E.O. 13526 §3.3(b)(1) as 25X1 Some information remains withheld by the Central Intelligence Agency under the statutory authority of the Central Intelligence Agency Act of 1949, 50 U.S.C. §403(g).

C01162251

REPORT BY THE

Comptroller General

OF THE UNITED STATES

~~SECRET~~

Nuclear Diversion In The U.S.? 13 Years Of Contradiction And Confusion

"NATIONAL SECURITY INFORMATION"
UNAUTHORIZED DISCLOSURE SUBJECT
TO CRIMINAL SANCTIONS

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2

UNITED STATES GENERAL ACCOUNTING OFFICE

~~SECRET~~

B-157767

EMD-79-8

DECEMBER 18, 1978

C01162251

[redacted]

Classified by letter from FBI to GAO dated October 25, 1978 and a letter from CIA to GAO also dated October 25, 1978.

C01162251

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COMPTROLLER GENERAL OF THE UNITED STATES
WASHINGTON, D.C. 20548

B-157767

The Honorable John D. Dingell
Chairman, Subcommittee on
Energy and Power
Committee on Interstate and
Foreign Commerce
House of Representatives

Dear Mr. Chairman:

On August 12, 1977, you requested that we initiate an investigation to determine the extent and contents of intelligence and related nuclear safeguards information regarding a possible diversion of nuclear material from a U.S. facility and the extent to which this information was disseminated among those agencies having responsibilities in this area.

In response to your request, this report primarily discusses two questions

--what information has been developed about the alleged diversion? and

--were the investigations done by the Federal Government adequate?

As agreed with your office we plan to distribute the report to certain other parties having an interest in it. Specifically, we plan to provide the report to the Chairman of the House Committee on Interior and Insular Affairs and the Chairman of the Subcommittee on Energy, Nuclear Proliferation and Federal Services, Senate Committee on Governmental

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Affairs. Further, we will also be providing the report to the House and Senate Select Intelligence Committees and the Federal agencies included in our review.

The report has been classified as SECRET/National Security Information by the Federal Bureau of Investigation and the Central Intelligence Agency. We made every attempt to issue an unclassified report on this matter. However, neither the Federal Bureau of Investigation nor the Central Intelligency Agency was able to provide us with a declassified version of the report.

Sincerely yours,

Comptroller General
of the United States

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REPORT OF THE COMPTROLLER GENERAL OF THE UNITED STATES

NUCLEAR DIVERSION IN THE UNITED STATES? 13 YEARS OF CONTRADICTION AND CONFUSION

D I G E S T

PREFACE

It is not GAO's function to conduct criminal investigations and this review should not be construed as one. This report is simply a presentation of facts as we have examined them regarding the alleged diversion and its accompanying 13 years of contradiction and confusion. GAO's efforts focused on the implications such an alleged incident would have for improving the effectiveness of the Nation's current nuclear safeguards program. Investigations of the alleged incident by the FBI and the Department of Energy's (DOE) Office of Inspector General are still underway.

WHY GAO'S REVIEW WAS MADE

Chairman John Dingell of the House Subcommittee on Energy and Power requested GAO to examine an alleged incident involving over 200 pounds of unaccounted for uranium-235, the material used in the fabrication of nuclear weapons, from a nuclear plant in western Pennsylvania. Also, Chairman John Glenn of the Subcommittee on Energy, Nuclear Proliferation, and Federal Services, Senate Committee on Governmental Affairs, and Chairman Morris K. Udall of the Subcommittee on Energy and Environment, House Committee on Interior and Insular Affairs, expressed interest in the review.

Chairman Dingell specifically asked GAO to examine the extent and content of intelligence and safeguards information regarding the alleged incident, and the extent to which this information was provided to DOE and the Nuclear Regulatory Commission (NRC) for their use in assuring that nuclear materials were being adequately protected in this country. Chairman Dingell requested that GAO review " * * * all necessary files

and reports including those of ERDA, NRC, CIA, and the FBI * * *."

CONSTRAINTS ON GAO'S REVIEW

GAO attempted to satisfy the Chairman's request by interviewing responsible Federal and private individuals and by examining pertinent reports and documentation. While DOE 1/ and NRC provided full access to all their records and documentation, GAO was continually denied necessary reports and documentation on the alleged incident by the Central Intelligence Agency (CIA) and the Federal Bureau of Investigation (FBI).

CIA provided GAO a written chronology of contacts with other Federal agencies, however, the CIA denied GAO access to any source documents on the case. According to agency officials, this was a decision made by the Director of the CIA [redacted] The CIA did subsequently allow selected staff of Chairman Dingell's Subcommittee access to CIA documents, however, access to the documents was not extended to include GAO.

Withheld under statutory authority of the Central Intelligence Agency Act of 1949 (50 U.S.C., section 403g)

1/The Atomic Energy Commission (AEC) was formerly responsible for both regulating and promoting all nuclear activities in the United States. In January 19, 1975, it was split into the Nuclear Regulatory Commission and the Energy Research and Development Administration (ERDA). NRC became responsible for nuclear regulation and ERDA became responsible for nuclear development and promotion. Under Public Law 95-91, ERDA's functions were placed in the Department of Energy effective October 1, 1977. NRC remained intact. Throughout the report, DOE is used to refer to the Department of Energy, ERDA, and AEC.

The FBI's rationale for denying access was that it did not want to jeopardize an ongoing investigation of the alleged diversion incident.

Because GAO was denied access to documentation, it had to rely, for the most part, on oral evidence obtained in interviews with knowledgeable individuals and staff. The lack of access to CIA and FBI documents made it impossible for GAO to corroborate or check all information it obtained. Whenever possible, GAO attempted to corroborate the information with other knowledgeable individuals. One must keep in mind, however, that the alleged incident occurred more than 13 years ago. These limitations impeded GAO's efforts to fully collect and evaluate all facts of possible relevance to the alleged diversion incident.

While GAO normally would not continue work where it was continually denied access to pertinent and important documentation, it did continue in this case because of the significant nuclear safeguards implications and the congressional interest. This rereport is focused on the implications the alleged incident has for improving the effectiveness of the Nation's current nuclear safeguards program.

BACKGROUND

The alleged incident surfaced in 1965 at the Nuclear Materials and Equipment Corporation (NUMEC). Since that time, many allegations concerning the incident have been made in newspaper and magazine articles and at congressional hearings. These allegations include:

--The material was illegally diverted to Israel by NUMEC's management for use in nuclear weapons.

--The material was diverted to Israel by NUMEC's management with the assistance of the CIA.

--The material was diverted to Israel with the acquiescence of the United States Government.

--There has been a cover-up of the NUMEC incident by the United States Government.

CIA officials provided us with their views on the first allegation and stated that they had no information to substantiate any of the others. Based on the totality of GAO's inquiry, we believe that the allegations have not been fully or adequately answered.

Investigations of the incident were conducted by DOE and the FBI. The CIA, NRC, and the Joint Committee on Atomic Energy also have some knowledge of the facts surrounding the incident. All investigations 1/ of the alleged incident ended with no definitive answer and GAO found no evidence that the 200 pounds of nuclear material has been located. However, as a result of the NUMEC incident the safeguards programs in the United States have undergone substantial changes and have improved significantly.

This report addresses the two major questions still surrounding the incident and their implications for this country's continuing responsibilities for safeguarding strategic nuclear materials. These are:

--What information has been developed about the alleged NUMEC diversion?

--Were the investigations conducted by the Federal Government into the alleged incident adequate?

1/CIA officials informed GAO that they have no authority to conduct "investigations" of unaccounted for nuclear materials in the United States. As used in this report the term "investigation(s)" is used in the context of the entire Federal effort to resolve the incident.

WHAT INFORMATION HAS BEEN DEVELOPED ABOUT THE ALLEGED NUMEC DIVERSION?

Based on its review of available documents held by DOE and discussions with those involved in and knowledgeable about the NUMEC incident, GAO cannot say whether or not there was a diversion of material from the NUMEC facility. DOE has taken the position that it is aware of no conclusive evidence that a diversion of nuclear material ever occurred at the NUMEC facility, although it recognizes that the possibility cannot be eliminated. Agents from the FBI involved in the current investigation told GAO that while there exists circumstanial information which could lead an individual to conclude that a diversion occurred, there is no substantive proof of a diversion.

Currently the FBI is continuing its investigation into the alleged NUMEC incident.

In an August 1977 meeting a former high ranking CIA official informed GAO, in the presence of several current CIA officials, that information was developed by the CIA that made it appear that the NUMEC facility was the "most likely" source of the material [redacted] GAO's understanding of the information that was presented at this meeting was subsequently provided to CIA in a memorandum of conversation. A knowledgeable CIA official who reviewed the memorandum expressed no opposition to GAO's use of the term "most likely."

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Later, in a November 1977 meeting with CIA officials, GAO was informed that there was no data to specifically support such a conclusion. Further, GAO was informed by CIA officials that characterizing NUMEC as the "most likely" source of the uranium-235 held by Israel was not the official position of the Agency but of perhaps one or two former Agency officials. The CIA officials GAO contacted informed us that the position expressed in the August 1977 briefing should

have been changed to reflect a less conclusive position. The CIA officials suggested that NUMEC be recognized as only one of many possible sources of enriched uranium going to Israel. Subsequently, however, two former senior CIA officials responsible for collecting and analyzing such data told GAO that information does exist within the CIA linking the unaccounted for NUMEC material to Israel. One of these former officials was one of the five highest ranking employees of the CIA and reported directly to the Director of the CIA on this matter.

Current CIA officials told GAO that these two former officials were drawing on memory as they recalled past events. The CIA officials having current access to the files advised GAO that a search of the available data reveals a "semantic" problem concerning the use of the term "evidence." In short, CIA states there is no hard evidence on a diversion from NUMEC to Israel. At the same time, current CIA officials recognize that the available data, when coupled with past recollections of events, could lead former officials to speak in terms of "linking" the unaccounted material from NUMEC to nuclear developments in Israel. GAO was unable to determine whether the CIA changed its opinions about any NUMEC/Israel link or whether the CIA inadvertently failed to comment on the inaccuracy of the "most likely" position conveyed to GAO in the August 1977 briefing. The FBI agent currently in charge of the investigation told GAO that the FBI also received conflicting stories from the CIA. Initially, the CIA told the FBI investigators they had information supporting the possibility that the material missing from the NUMEC facility went to Israel. The CIA later reversed itself and told the FBI it did not have this type of information.

In 1975, the entire regulatory function of DOE was taken over by the newly created NRC, which was made responsible for the regulatory oversight of commercial nuclear facilities like NUMEC, and consequently has become involved in the incident. In a February 1978 report related to the NUMEC incident,

NRC concluded that their previous official position of "no evidence" to support a diversion may need to be reconsidered in light of the many uncertainties surrounding the incident.

WERE THE INVESTIGATIONS CONDUCTED BY THE FEDERAL GOVERNMENT INTO THE ALLEGED INCIDENT ADEQUATE?

If a diversion or theft of nuclear material is suspected or actually occurs in this country, the Federal Government must be able to quickly and definitively determine how and why it happened so that the public can be protected against the potential hazards from such an occurrence. To do this, agencies of the Government with capabilities for investigating and responding to such incidents must work together to assure that all relevant information is obtained and is timely. This did not happen with the alleged NUMEC incident. Federal investigations of the alleged NUMEC incident were uncoordinated, limited in scope and timeliness, and, in GAO's opinion, less than adequate. There was not a unified and coordinated investigation of the incident by those agencies having the capabilities to fully resolve the matter --DOE, the FBI, and the CIA.

During 1965 and 1966 DOE investigated NUMEC's accountability and safeguards system focusing on the diversion possibility. Prior to the alleged 1965 incident, DOE conducted six accountability inspections at NUMEC in order to assure that nuclear materials were being adequately protected. The inspections were directed solely at the material accounting requirements of the time which were much less vigorous than those in existence at nuclear facilities today. Each inspection revealed significant deficiencies, but DOE allowed the facility to continue nuclear operations even though a key field investigator at one point recommended that DOE stop providing nuclear material to the facility.

The FBI, which had the responsibility and authority to investigate the alleged incident, did not focus on the question of a

possible nuclear diversion until May 1976 --nearly 11 years later. Initially, the FBI declined DOE's request to conduct an investigation of the diversion possibility even though they are required to conduct such investigations under the Atomic Energy Act. Two sources familiar with the matter gave GAO differing views on why the FBI declined to undertake the investigation. Between 1965 and 1976 the FBI's efforts were directed at investigating the actions and associations of NUMEC's president. FBI and Department of Justice staff told GAO that after a request by President Ford in April 1976 the FBI did begin to address the diversion aspect. GAO was not furnished any documents regarding President Ford's request and thus could not specifically determine its nature and scope. This investigation, which is currently ongoing, is obviously hampered by the 11-year gap since the alleged incident occurred. Also, although it may not affect the investigative outcome, GAO found that certain key individuals had not been contacted by the FBI almost 2 years into the FBI's current investigation.

According to the CIA, it did not conduct a domestic investigation of the incident because it had no authority to do so.

Several current and former FBI and DOE officials indicated that the CIA withheld this information from them, at a time when it could have affected the scope and direction of their investigations. However, current CIA officials we contacted stated that the full range of information

was not available during the FBI investigation in 1968. Current CIA officials told us that during the FBI's investigation beginning in 1976 the FBI was briefed by CIA in full and the FBI agent-in-charge told

the CIA that he did not see any new information in the presentation which was germane to the FBI investigation. CIA officials also told us that at about the same time

DOE officials, also briefed by CIA, said that the information was consistent with what had been known previously. GAO does not know the extent to which the CIA revealed to the FBI or DOE the information it possessed. While the CIA may have alerted these agencies, it does not appear to us that it provided them with all the information it had on this subject in an adequate or timely manner. It appears to GAO that the CIA may have been reluctant to aid the domestic investigation of the alleged diversion because of its concern about protecting its own "sources and methods" of obtaining information.

The failure of DOE, the FBI, and the CIA to coordinate their efforts on the suspected diversion when it occurred and as new information developed and the limitation in the scope and timeliness of the FBI efforts, lead GAO to conclude that the Federal efforts to resolve the matter were less than adequate.

Currently, there exists no coordinated interagency agreed upon plan which focuses on (1) an adequate detection and investigative system and (2) a reporting system to the appropriate congressional committees and to the President. As a result, if a similar incident were to occur today, this country may not be assured of any better investigation. The United States needs to improve its efforts for effectively responding to and investigating incidents of missing or unaccounted for weapons-grade nuclear materials. In view of increasing terrorist activities throughout the world, the ability to respond and investigate such incidents should be of concern to national security and the public health and safety.

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RECOMMENDATIONS TO THE HEADS OF AGENCIES

GAO recommends that the heads of DOE, NRC, the Department of Justice, and the CIA, as part of their responsibilities for the national security of the country, establish a plan for coordinated interagency action which focuses on a nuclear safeguards system that adequately detects, investigates, and reports to the Congress and the President on thefts or diversions of nuclear materials. The plan which should be submitted to the Congress within 90 days or less of the issuance of this report, should include

--a formal means for a timely determination of whether a loss has occurred;

--a clear and direct channel of communications between the agencies;

--a formal means for rapidly focusing the abilities of these agencies on the resolution of a diversion incident; and

--a means for allowing any incident involving the theft or diversion of nuclear material to be definitely resolved to the satisfaction of the Congress and the President.

GAO also recommends that the Attorney General, working with the FBI, take the lead in establishing the interagency plan since the FBI, under the Atomic Energy Act of 1954, is responsible for investigating incidents involving the diversion or theft of nuclear materials.

RECOMMENDATION TO THE CONGRESS

The committees of Congress having jurisdiction for domestic nuclear safeguards should

--review the nuclear safeguards plan to be submitted by the Executive Branch to assure that an adequate system is developed which deters and investigates thefts or diversions of nuclear materials.

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--request that the FBI and DOE's Office of Inspector General complete their investigations of the NUMEC incident as soon as possible and submit their reports to the committees.

These reports should be reviewed to determine the adequacy of the investigations and their implications for developing a more effective future system.

Even with complete information on all Government investigations, given the passage of time, it may be difficult to conclusively determine what specifically happened at NUMEC. GAO believes the important thing is to use the lessons learned from the NUMEC experience to make certain that the Nation develops an adequate detection and follow-up system to deter future nuclear thefts or diversions.

AGENCY COMMENTS

DOE's comments on the report are contained in a letter dated July 25, 1978. (See appendix II). DOE agreed with the thrust of the report. However, it disagreed with our recommendation concerning the need to enter into a formal interagency agreement with NRC, the FBI, and the CIA for more timely and effective action in investigating incidents of suspected or real diversions of nuclear material. DOE stated in its letter that a comprehensive plan and a memorandum of understanding with the FBI already existed for joint responses to nuclear threat situations. Further, DOE stated that it had open channels of communication to other agencies, including the CIA, for the exchange of information pertinent to nuclear threat situations.

These factors were known to GAO and are commendable. The current memorandum of understanding between DOE and the FBI is the beginning of an effective response plan to incidents of nuclear diversion, but is inadequate since it does not include CIA participation and cooperation. Without a formal interagency agreement placing positive reporting and investigative responsibilities on DOE, NRC, the FBI, and the CIA along the lines recommended by GAO, we believe the

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possibility exists for a repetition of the 13-year NUMEC investigation.

The comments received from the CIA are contained in a letter dated September 1, 1978. (See appendix III.) The letter takes no issue with the facts or recommendations included in the report. It does, however, point out some concerns about certain information in the report.

GAO believes that the concerns expressed by the CIA have been adequately addressed in the text of the report. However, we did not specifically address the CIA's concerns regarding its degree of cooperation with DOE and the FBI on the alleged NUMEC incident. In its letter the CIA disagreed with the statement in the report indicating that they failed to cooperate with DOE and the FBI. The CIA bases the disagreement on the fact that its officials briefed a large number of officials in the executive and legislative branches of Government on the NUMEC matter in 1976 and 1977.

GAO was aware that such briefings were provided. However, GAO believes that since the briefings were provided 4 to 6 years after some of the key information was developed their utility in helping to resolve the NUMEC matter was greatly diminished. Further, according to two former CIA officials familiar with the case, documents were prepared within the CIA linking the unaccounted for NUMEC material to Israel. This information was not passed on to DOE or the FBI according to the officials we contacted in those agencies. However, we believe it must be pointed out that the current CIA officials GAO interviewed said that such documents were not known to exist within the CIA.

The Department of Justice and the FBI did not furnish formal written comments. GAO provided them more than 3 months to do so, a time period longer than that provided DOE, the CIA, and NRC. While GAO did not have the benefit of official written comments from the Department of Justice and

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the FBI in preparing the final report, GAO did consider the view and comments of the FBI staff familiar with the alleged NUMEC incident during the course of the review.

NRC had no comment on the content of the report. However, NRC did state that the recommendations to the Heads of Agencies appears reasonable. (See appendix IV.)

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Contents

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ABBREVIATIONS

AEC	Atomic Energy Commission
CIA	Central Intelligence Agency
DOE	Department of Energy
ERDA	Energy Research and Development Administration
FBI	Federal Bureau of Investigation
GAO	General Accounting Office
JCAE	Joint Committee on Atomic Energy
NRC	Nuclear Regulatory Commission
NUMEC	Nuclear Materials and Equipment Commission

CHAPTER 1

INTRODUCTION

In 1965 the Department of Energy (DOE) 1/ found during an inspection that about 206 pounds of uranium-235 could not be accounted for at the Nuclear Materials and Equipment Corporation (NUMEC), a nuclear facility located in Apollo, Pennsylvania. DOE estimated that this much uranium could make at least four or five nuclear weapons. Although investigations were conducted, the uranium was never accounted for.

The Federal Government has generally remained silent about the incident. Information that has become known over the years has been vague and inconsistent. With the current high interest in assuring adequate safeguards over nuclear materials, speculation about the incident has surfaced again. Many allegations concerning the unaccounted for material and the NUMEC facility have been made in newspaper and magazine articles and at congressional hearings. These allegations include:

--The material was illegally diverted to Israel by NUMEC management for use in nuclear weapons.

--The material was diverted to Israel by NUMEC management with the assistance of the Central Intelligence Agency (CIA).

--The material was diverted to Israel with the acquiescence of the United States Government.

--There has been a cover-up of the NUMEC incident by the United States Government.

1/The Atomic Energy Commission (AEC) was formerly responsible for both regulating and promoting all nuclear activities in the United States. On January 19, 1975, it was split into the Nuclear Regulatory Commission (NRC) and the Energy Research and Development Administration (ERDA). NRC became responsible for nuclear regulation and ERDA became responsible for nuclear development and promotion. Under Public Law 95-91, ERDA's functions were placed in the Department of Energy effective October 1, 1977. NRC remained intact. Throughout the report, DOE is used to refer to the Department of Energy, ERDA, and AEC.

CIA officials provided us with their views on the first allegation and stated that they had no information to substantiate any of the others. Based on the totality of our inquiry, we believe that the allegations have not been fully or adequately answered.

Overall the nuclear safeguards systems in this country have been greatly improved as a result of the alleged NUMEC incident. Since the alleged incident occurred AEC and its succeeding agencies have placed much greater levels of control requirements on private nuclear facilities like NUMEC. There are many new requirements which include such measures as bimonthly inventory accounting, armed guards to protect unauthorized access to nuclear material and alarm systems designed to detect unauthorized movement of nuclear material. Nevertheless, two reports GAO recently issued 1/ cited major deficiencies in our domestic nuclear safeguards systems. These reports point out that there are thousands of pounds of weapons-grade material unaccounted for in this country today. This being the case, it is critical that the Government be prepared to quickly and effectively respond to allegations of loss of nuclear material to determine whether, when, where, and how it occurred.

The unresolved NUMEC incident raises questions on the U.S. capability to deal with unaccounted for nuclear materials. This report discusses, within the constraints of the data available to us, the scope and effectiveness of U.S. efforts to locate the unaccounted for uranium, and the implications the incident has for our current nuclear safeguards programs.

This report addresses two basic questions arising from the NUMEC incident.

--What information has been developed about the alleged NUMEC diversion?

--Were the investigations by the Federal Government into the alleged incident adequate?

With the amount of nuclear materials in this country increasing rapidly, the opportunities for diversion without

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1/EMD-76-3, "Shortcomings in the Systems Used to Protect and Control Highly Dangerous Nuclear Materials," dated July 22, 1976, and EMD-77-40, "Commercial Nuclear Fuel Facilities Need Better Security," dated May 2, 1977.

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adequate safeguards can also increase. Consequently, answers to these questions are important in order to insure that current Federal capabilities exist to respond to real or suspected incidents of nuclear material diversion.

AGENCIES INVOLVED IN INVESTIGATING 1/ NUMEC

Originally, there were three agencies involved in gathering information on the incident. These were DOE, the Federal Bureau of Investigation (FBI), and the CIA. However, DOE and the FBI have begun new investigations of the incident. In February 1978 DOE began an investigation to determine what officials in the agency knew about the alleged diversion incident. In April of 1976, at the oral request of President Ford, the FBI opened an investigation of the NUMEC incident aimed at determining whether a diversion of nuclear material ever occurred at the facility. Both of these later investigations are still ongoing and we have not reviewed these reports.

There are also other Federal bodies that have developed a substantial amount of information on the incident. These are the former Joint Committee on Atomic Energy (JCAE), NRC and GAO. A staff member of the former JCAE compiled a lengthy record of the events and incidents surrounding the alleged diversion and wrote a report which was inconclusive about whether a diversion ever occurred at the NUMEC facility. The report was written in about 1967 or 1968. NRC issued a report on certain aspects of the NUMEC incident in March 1978. The NRC report, however, did not focus on the diversion question. It was aimed at what specific NRC officials knew about the alleged diversion incident. GAO issued a report to the former JCAE in June 1967 which focused primarily on NUMEC's accountability controls over nuclear material. In that report GAO said it found no evidence of diversion and after considering information available had no reason to question AEC's conclusion that while it could not be stated with certainty that diversion didn't take place, the survey team found no evidence to support the possibility.

GAO's current report focuses on the allegations and information developed since that time in attempting to answer the

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1/CIA officials informed GAO that they have no authority to conduct "investigations" of unaccounted for nuclear materials in the United States. As used in this report the term "investigation(s)" is used in the context of the entire Federal effort to resolve the incident.

questions of what information has been developed about the alleged diversion, and were the investigations done by the Federal Government adequate.

ACCESS TO RECORDS DIFFICULTIES

During our review, we were denied documents pertinent to the NUMEC incident by the FBI and the CIA. We repeatedly tried to obtain documents from these groups, but with no success. A written chronology of contacts with other Federal agencies was provided by the CIA, however, the CIA denied GAO access to any source documents on the case. According to Agency officials, this was a decision made by the Director of the CIA [redacted] The CIA did subsequently allow selected staff of Chairman Dingell's Subcommittee to review some CIA documents at CIA Headquarters. Access to these or any other CIA documents was not extended to include GAO. Further, the CIA did not cooperate with GAO in arranging some interviews with knowledgeable current and former CIA officials. This was significant since former CIA officials, although not required, can be expected to inform CIA before discussing their former activities with others. The FBI's rationale for denying GAO access to their documents was that the Bureau did not want to jeopardize its ongoing investigation of the alleged diversion incident.

These constraints made it impossible to obtain corroborating evidence for some of the report's contents. Nonetheless, we made every attempt to do so and, where it was not possible, we have so noted it in the report.

CHAPTER 2

WHAT INFORMATION HAS BEEN DEVELOPED ABOUT THE ALLEGED NUMEC DIVERSION?

Until the summer of 1977, the only publicized Government view on the NUMEC incident was that there was no evidence to indicate that a diversion of nuclear material had occurred. However, in congressional hearings before the House Subcommittee on Energy and Environment and the House Subcommittee on Energy and Power in July and August 1977, respectively, it was revealed that the CIA might possess information which did not support this conclusion and, in fact, that a totally opposite position could be taken.

We attempted to obtain all the information developed by the Government on this matter. We reviewed documents, reports, and studies made available to us. We also interviewed those individuals most involved with the incident and the subsequent investigations of it.

Based on our work, we cannot say whether or not there was a diversion of material from the NUMEC facility. Following is the information and views which we obtained from the three principal agencies involved in the alleged incident --DOE, FBI, and CIA.

DEPARTMENT OF ENERGY'S INVOLVEMENT WITH NUMEC INCIDENT

DOE records show that in December 1957, the NUMEC facility located in Apollo, Pennsylvania was licensed to possess enriched uranium for manufacturing nuclear fuel, recovering scrap, and conducting nuclear research and development. NUMEC obtained various forms of enriched uranium and other nuclear material from the United States Government and commercial sources. During the period 1957 through 1967, NUMEC received over 22 tons of uranium-235--the material used in the fabrication of nuclear weapons.

Until 1975 DOE was responsible for insuring that licensed commercial nuclear facilities such as NUMEC provided adequate safeguards and material control. DOE's records show that until June 1967 the policy for safeguarding nuclear materials relied primarily on the monetary value of the material. DOE believed that the financial penalties imposed upon licensees for the loss of or damage to nuclear material, and the criminal penalties provided by the Atomic Energy Act of 1954, would be sufficient to motivate licensees to adequately protect the material from loss, theft, or diversion. Material

accountability requirements, while written into licensee contracts and the Code of Federal Regulations, were more directed to health and safety concerns than in protecting nuclear material from theft or diversion. Our review of DOE records showed that at the time (1) there were no limits placed on the amount of unaccounted for nuclear materials, (2) facilities were required to inventory their nuclear materials only once a year, and (3) estimating inventories was a widespread practice at all nuclear facilities at that time. The elaborate material control and physical security measures in place at commercial nuclear facilities today were developed since 1967. Such measures were not present before then.

DOE officials told us that in the mid-1960s material accountability capabilities and methods were just being developed. As a result, uncertainty existed on the part of both the agency and the industry about nuclear material control standards and criteria. DOE officials and NUMEC's president told us that the situation at NUMEC was further complicated by the fact that NUMEC was involved in many unique first-of-a-kind nuclear projects.

DOE, pursuant to its regulatory responsibilities, conducted six accountability inspections at NUMEC--prior to the alleged 1965 incident--to assure that nuclear materials were being adequately protected. Each inspection revealed major deficiencies.

In April 1961 DOE conducted its first material control inspection and found "significant" deficiencies in the material accounting systems. During its second inspection in May 1962, DOE found that, although NUMEC had corrected some accounting deficiencies, it still did not follow practices necessary for the maintenance of adequate material control. During this inspection, the agency discovered that NUMEC was mixing nuclear material among various contracts--a practice that was expressly prohibited. According to DOE inspectors, such commingling made it difficult, if not impossible, to trace discrete batches of material through the plant and to determine how the material was being used.

DOE's next inspection in July and August of 1963 did not show much improvement, and revealed additional problems with the material accounting systems. In early 1964 another inspection was undertaken and more inadequacies were identified. DOE's records show that at this point, the agency became so concerned with the inadequate controls at the facility that it began considering whether to prevent NUMEC from receiving any additional nuclear materials. Later, in September of 1964, DOE attempted to take a physical inventory of the material held by NUMEC but could not do so since, in

the opinion of DOE investigators, NUMEC's records were so poor that they were unauditable. As a result, the inventory check was canceled.

In April of 1965, DOE began another inspection and, for the sixth consecutive time, found fundamental problems with NUMEC's ability to control material. The inspection report concluded that "safeguards control of [nuclear material] at NUMEC is inadequate." It was during this inspection that a large amount of highly enriched uranium was unaccounted for. The loss, initially identified as 53 kilograms (117 pounds) was later adjusted to 61 kilograms (134 pounds). This was about 2 to 3 times higher than was experienced by other similar facilities operating at that time.

Although DOE had made financial arrangements with NUMEC to insure payment for the loss, the highly significant safeguards implications of the loss sparked a lengthy investigation. The investigation which began in early November 1965 was aimed at (1) determining the exact total cumulative loss of highly enriched uranium at NUMEC since its startup in 1957 and (2) explaining the 134 pound loss under its most recent contract involving 93 percent enriched--weapons-grade--uranium.

The investigation lasted until mid-November 1965 and revealed a cumulative loss of 178 kilograms (392 pounds) of material. DOE was able to trace 186 pounds to waste and gas filters leading from the plant, but the remaining 206 pounds could not be accounted for.

The November 1965 investigation did not provide DOE with a conclusive answer as to what happened to the unaccounted for material. However, according to agency officials, enough information existed to develop a "theory" on the probable cause of the missing material. The "theory" developed by the DOE staff and accepted by top DOE officials was that through April 1965 NUMEC consistently underestimated its material losses from contract to contract. As each job was completed and NUMEC had to pay DOE for the actual losses sustained, the differences between the estimated and actual losses were passed on from completed jobs to new jobs. The theory concluded that these actions continued over the 8 years of the company's operations until April 1965 when, strictly by chance, only one contract was being processed at the facility, and it was possible for DOE to isolate the total cumulative material unaccounted for.

DOE documents showed that because of the poor condition of NUMEC's material accounting records, it was not possible to establish when the losses occurred or even whether the material was used to offset losses on previously completed

contracts. NUMEC's president contended that the nuclear material was not stolen or diverted but unavoidably "lost" in the processing system itself through adherence to the equipment and piping and amounts discarded as waste. Consequently, the DOE investigators concluded that DOE could not say, unequivocally, that the material was not stolen or diverted from the facility.

We learned from a discussion with a former DOE official, that in February 1966, DOE asked the FBI to determine whether a theft or diversion of the material had occurred. The DOE files contain a memorandum of discussion with the FBI. The memorandum stated that " * * * the Bureau had decided not to undertake an investigation at this time * * *" even though they were required to investigate such incidents under the Atomic Energy Act of 1954. Consequently, DOE continued its own. After examining the facility records, cleaning out processing equipment, searching some of the company's nuclear waste burial ground, and interviewing many key NUMEC employees, DOE was still unable to conclusively determine what happened to the material.

In 1966 NUMEC paid DOE $1.1 million for the missing 206 pounds of enriched uranium as required by NUMEC's contract, and the DOE investigation of the incident was, for all practical purposes, closed unresolved. The $1.1 million was paid partly from a $2,500,000 revolving credit note account that NUMEC arranged with the Mellon Bank. The balance was paid through the return to DOE of some nuclear material for which NUMEC was credited. Atlantic Richfield Corporation later purchased the facility in April 1967 and it is now owned by the Babcock and Wilcox Corporation who bought the facility in 1972.

Other information relevant to the NUMEC incident

We identified several occurrences from our review of DOE files and interviews with DOE officials, which impact on the NUMEC incident. We learned that:

--After the November 1965 investigation, NUMEC management hired one of DOE's on-site investigators who was an expert in material control and accountability. The investigator had responsibility for conducting a major part of the material control review at the facility.

--During a period of rising concern with unaccounted for material at NUMEC, some material accounting records were reported to DOE as being inadvertently destroyed

during a labor dispute at the facility in January-February 1964. According to a former head of DOE's nuclear material management group, and investigators from the FBI, the records might have affected DOE's ability to trace the material held by the facility.

--NUMEC mixed material among various contracts--a practice that was explicitly prohibited by DOE. According to DOE investigators, this practice made it very difficult, if not impossible, to track the material through the facility.

Further, DOE was concerned with the foreign interests and contacts maintained by NUMEC's president. DOE's records show that, while president, this individual had various high-level contacts with officials of the Government of Israel, both in that country and in the United States. The records also show that, for a time, he acted as a sales agent in the United States for the Defense Ministry of Israel. Also, while president of NUMEC, he had a 50-percent interest in a nuclear facility in Israel established for the purpose of radiation experimentation on various perishable commodities.

Several current and former officials we interviewed at DOE and the FBI, and a former CIA official told us that, in view of the poor nuclear material control at NUMEC and the general sloppiness of the operation, NUMEC management could have diverted material from the facility, if they wanted to. A principal field investigator for DOE at the time, told us that the sloppiness of NUMEC operations made it very conducive to a diversion. This investigator noted that on a visit to the facility in 1963 or 1964 he saw nuclear material deposited in the crevices of the stairwells and on the floor. However, of all DOE officials we interviewed, including a former Chairman and two former members of the Atomic Energy Commission, only one, a former DOE security expert, actually believed that a diversion of material occurred. According to this individual, who was not familiar with the material accounting practices established by DOE, his conclusion was based on inspections he conducted at NUMEC. He told us he visited NUMEC several times between 1962 and 1967 to conduct physical security inspections for DOE. He said that in an inspection report dated February 10 and 11, 1966, he noted that a large shipment of highly enriched uranium was made to France roughly equivalent to the material identified as missing in DOE's November 1965 inspection--100 kilograms. According to him, the circumstances at the facility were such that it would have been relatively easy to ship highly enriched (weapons-grade) uranium to another country instead of low enriched uranium since the enriched uranium storage system at NUMEC did

not clearly distinguish between weapons-grade and nonweapons-grade material.

Current DOE officials informed us, however, that while the United States did not make independent verification of the shipments being dispatched to a foreign country, at the time of the NUMEC incident, it did conduct safeguards inspections as provided in bilateral agreements for cooperation with various countries. According to DOE, inspections in this particular foreign country were conducted to account for enriched uranium shipped from the United States. DOE officials told us that two of these inspections were conducted which identified material in the form, enrichment level, and approximate quantity shown in the U.S. (NUMEC) transfer documents.

The former DOE security inspector also said that the entire security program at NUMEC was very bad and that, to a large extent, contributed to his concern that the missing material at NUMEC had been diverted. Two other former security officials at DOE concurred in this latter point. These three individuals agreed that, based on their knowledge and experience with the NUMEC facility, it was very possible that the material unaccounted for from NUMEC could have been diverted. One of these security officials told us that NUMEC's security program was widely "disrespected" among the DOE investigative staff. However, none of these individuals were able to provide us with any direct evidence that would support the view that a diversion of material had occurred. Further, DOE records show that of the 37 NUMEC employees interviewed by DOE in 1966, none believed that a diversion of nuclear material had occurred.

In 1975 NRC was made responsible for the regulatory oversight of commercial nuclear facilities like NUMEC, and consequently has become involved in the incident. In a February 1978 report related to the NUMEC incident, NRC concluded that their previous official position of "no evidence" to support a diversion may need to be reconsidered, in light of the many uncertainties surrounding the incident. Included in that report is a letter from the Chairman, NRC to the Chairman of the Committee on Interior and Insular Affairs, concluding that "* * * for regulatory purposes we must assume the circumstances [surrounding NUMEC] were such that a diversion could have occurred, and we must construct our safeguards requirements accordingly."

FEDERAL BUREAU OF INVESTIGATION'S INVOLVEMENT WITH NUMEC INCIDENT

The FBI is responsible for gathering domestic intelligence on activities affecting the national security of the

United States. It is also responsible for investigating all alleged or suspected criminal violations of the Atomic Energy Act of 1954 including the theft or diversion of nuclear material. In this role the Bureau has initiated three investigations involving NUMEC with one still ongoing.

Our efforts to obtain and evaluate the information collected by the FBI on the NUMEC matter were repeatedly denied by the Department of Justice. The Department of Justice told us that since their latest investigation was still underway they could not give us any documentation related to the NUMEC incident. The denial included information developed as part of Justice's prior two investigations. This position was formally communicated to the Comptroller General of the United States from the Attorney General in a letter dated February 8, 1978. (See Appendix V for a copy of this letter.)

The FBI did, however, brief us twice and responded to several follow-up inquiries. We also contacted 12 former and current officials of the Department of Justice and the Bureau including the current Attorney General and two former Attorneys General. (Appendix I contains a summary of the individuals we contacted during our review.)

Our first briefing by the FBI was provided by the agent-in-charge and two other FBI representatives on October 6, 1977. The briefing covered all FBI investigations related to NUMEC. We received a follow-up briefing on December 14, 1977, in order to clarify some of the information we had obtained earlier. This briefing was provided by a new FBI agent-in-charge since the former one was transferred off the case shortly after our October 1977 briefing.

We were informed at these briefings that in June of 1965, the FBI was asked by DOE to investigate the possibility that NUMEC's president might need to register his activities in the United States under the Foreign Agent Registration Act. DOE's specific concern stemmed from the individual's associations with Israeli officials. According to information we received at the October 1977 briefing, NUMEC's president's capacity as sales agent for the Ministry of Defense of Israel was of particular concern to DOE.

At the October 1977 briefing, we were told that the FBI began the investigation in August of 1965. In October of 1966, after 14 months of effort, it reported that NUMEC's president did not have to register as a foreign agent since NUMEC's activities with Israel were conducted under applicable U.S. laws and regulations. Further, according to the Department of Justice, the business activities established between Israel and NUMEC were all found to be legitimate.

In a letter to the Director of the FBI dated February 17, 1966, DOE asked the Bureau to investigate the suspected diversion of nuclear material from the NUMEC plant. FBI responded on February 25, 1966, stating that it "decided not to undertake this investigation at this time." According to the former FBI agent in charge of the current investigation, the reason for the decision was that in DOE's discussions with the Bureau, DOE presented a convincing case that there was no diversion at the facility. However, we were informed by a former Executive Director of the Joint Committee on Atomic Energy, that the reason the Bureau did not want to get involved was twofold: (1) the Bureau did not think that a diversion occurred based on the presentation provided by DOE, and (2) it simply did not like conducting investigations involving unaccounted for nuclear materials.

We were informed at the October 1977 briefing that the FBI's next involvement in the NUMEC matter occurred as a result of an April 1968 letter from the Director of CIA to the Attorney General. The FBI was asked to "initiate a discreet intelligence investigation of the relationship of NUMEC's president with the Government of Israel." [redacted]

The former FBI agent in charge of the investigation told us that in September 1969, the FBI Director advised the CIA Director that surveillance of NUMEC's president had been terminated because the FBI did not believe further investigation would develop any new information. The Associate Deputy Director for Operations at the CIA told us the CIA was not satisfied with the FBI's termination of the case and requested the Bureau to reinstitute its surveillance in a letter to the Director of the FBI dated October 13, 1969. However, according to this CIA official, no formal request was ever made to the Attorney General and no investigation was initiated as far as he could determine. The former FBI agent in charge of the investigation said he was unable to corroborate this information. CIA officials advised us that they have file copies of correspondence to the FBI which support its position that requests were made to the FBI to continue a counterintelligence investigation of NUMEC's president. We, however, did not see this correspondence.

The CIA provided us with a chronology of their contacts with the FBI. It indicated that in September 1970 the CIA again asked the FBI to reinstitute the investigation based on information that NUMEC's president was planning to [redacted] But, again, the CIA official said no further work was undertaken by the FBI.

~~SECRET~~

At the two FBI briefings, we were provided with information the FBI had developed on the background, associations, and business activities of NUMEC's president with Israeli government officials, agents, and citizens. According to the FBI agents giving the briefings, the information developed, while circumstantial in nature, raised serious questions concerning the national security risks posed by NUMEC's president.

In reviewing DOE files, we found that during the FBI's surveillance activities, the FBI became so concerned about the security risks posed by NUMEC's president that they asked DOE whether it planned to terminate his security clearance or stop the flow of nuclear materials to NUMEC. According to the FBI's liaison with GAO, the FBI recommended that NUMEC's operating license be taken away.

DOE files also show that in early 1969 the FBI briefed President Nixon on the questionable activities of NUMEC's president. The files further show that top level Government concern about the security risks posed by the president of NUMEC continued until 1971. We were told by a former Deputy Director of Security at DOE that in 1971 a former Commissioner of AEC aided the NUMEC official in obtaining employment with Westinghouse Electric Corporation, where he would have no need for access to national security information. The former Deputy Director of Security said he helped the former Commissioner in obtaining such employment for NUMEC's president. The former Commissioner declined to comment to us on this matter. We believe this is particularly important since we were informed by the president of NUMEC that he may attempt to obtain employment in an area which will involve a top secret clearance. If this should occur, the question of his obtaining a security clearance may surface again.

In the FBI briefing on December 14, 1977, we were told by the current FBI agent in charge of the investigation, that no additional surveillance activities or investigations of any kind were undertaken by the FBI concerning NUMEC from September 1969 until April of 1976, when ordered to do so by President Ford. A Department of Justice staff attorney assigned to the case later confirmed this. He told us that the FBI's current investigation was the direct result of a request to the then Attorney General by President Ford in April 1976. According to the Justice staff attorney it was at that time President Ford asked the FBI to investigate the possibility that weapons-grade materials might have been diverted from the NUMEC facility to Israel. GAO was not furnished any documents regarding President Ford's request and thus could not specifically determine its nature and scope.

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We were told by both the former and current FBI agents involved in the investigation that, during all the FBI's investigations into NUMEC, it did not obtain any information conclusively showing that a diversion of nuclear material occurred at NUMEC.

As part of its recent investigation, the former agent-in-charge told us the FBI questioned the CIA regarding information it might have developed on the alleged diversion. According to this agent, the CIA initially told the FBI they possessed information linking the unaccounted for NUMEC material to Israel. The CIA later, however, informed the FBI that they did not have such information. The CIA representatives told the FBI that they knew no more than the FBI did about the matter. The CIA officials having current access to the files have advised us that a search of the available data reveals a "semantic" problem concerning the use of the term "evidence." In short, CIA states there is no "hard evidence" of a diversion from NUMEC to Israel. [redacted] Without access to the records showing the exact nature of the information exchanged between these two agencies, we were unable to determine what information exchange did occur. However, two former officials of the CIA, a former Deputy Director of Science and Technology--who was one of the five highest ranking officials in the CIA and who reported directly to the Director of the CIA on this matter --and another source, who asked not to be identified, told us that the CIA had prepared several internal analyses discussing this particular incident. [redacted] The current FBI agent in charge of the investigation, who was never briefed by the CIA, told us that he was unaware of this information.

A newspaper article on January 28, 1978, appeared to further support the existence of such information. The article identified the existence of a special intelligence report prepared by the CIA in 1974. The newspaper article noted that the CIA had mistakenly released the "top-secret" report. One of the conclusions of the report was that Israel had developed nuclear weapons and that the source of the nuclear material for the weapons was obtained partially through "clandestine means." The CIA never denied the validity of the newspaper article. Subsequently, we obtained a copy of the report. [redacted]

[redacted]

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The CIA officials we contacted told us that they did inform the FBI of this information in a May 1977 meeting on the subject. The previous FBI investigator in charge of the investigation attended the May 1977 meeting. The current one did not. The CIA officials we interviewed believed that the May 1977 briefing constituted formal advice to the FBI on what was known by the CIA about the situation concerning Israeli's acquisition of a nuclear weapons capability.

The FBI is currently preparing a report on its most recent investigation. FBI agents involved in the current investigation told us that while there exists circumstantial information which could lead an individual to conclude that a diversion had occurred, there is no substantive proof of a diversion. The report was submitted to the Attorney General on February 16, 1978. However, a staff lawyer in the Internal Security Section at the Department of Justice, informed us on May 25, 1978, that there were still several items the FBI had to cover in its report before the Justice Department would accept it. Currently, the FBI is still investigating the alleged NUMEC incident.

CENTRAL INTELLIGENCE AGENCY'S INVOLVEMENT WITH NUMEC INCIDENT

On August 29, 1977, we met with the CIA for a briefing on their knowledge of and involvement in the alleged NUMEC incident. Subsequently, we had several follow-up discussions with CIA representatives on the matter. We contacted 11 former and current CIA employees. However, as we got further into our review, the CIA blocked our efforts to continue. While the CIA did provide selected staff members of Chairman Dingell's House Subcommittee on Energy and Power with the opportunity to review at CIA Headquarters some documentation on their knowledge of the NUMEC incident, CIA officials refused to provide us with access to any source documents on their intelligence activities surrounding the Israeli/NUMEC matter. Furthermore, the CIA did not cooperate with us in arranging interviews with knowledgeable current and former officials.

Withheld under statutory authority of the Central Intelligence Agency Act of 1949 (50 U.S.C., section 403g)

At the August 1977 briefing, [redacted] briefing. Additionally, we later provided the CIA with a memorandum on the information presented to us at the briefing to assure that our interpretation of the information was accurate. The CIA official who reviewed the memorandum suggested certain changes but did not comment on the accuracy of GAO's stated position regarding the alleged diversion incident which identified the NUMEC facility as the "most likely" source of Israel's nuclear weapons material.

[redacted]

A former high ranking CIA official at the briefing provided us with the following additional information on the incident. He cited these items as further support for his belief about the Israel/NUMEC connection.

--The ease with which nuclear materials could have been taken from the NUMEC facility.

[redacted]

The CIA also told us much of the same information that the FBI had provided us. In an interview with a CIA official on September 12, 1977, we were informed that the intelligence information developed on the matter was so strong that everyone in the intelligence community concurred with the CIA's opinions, except one--DOE. However, like the FBI, the CIA emphasized that they had no conclusive evidence tracing the unaccounted for nuclear material from NUMEC to Israel.

One former official stated that the CIA was so confident in the NUMEC information that a former Director briefed President Lyndon Johnson on the incident in 1968 or 1969. The former CIA Director later told us he could not recall such a briefing.

We were told by a CIA official on September 12, 1977, that at least one intelligence estimate was prepared by CIA staff on this incident. However, in commenting on this report CIA officials advised us that the currently available files do not contain an estimate on the NUMEC incident and it is their belief that this official was referring to an overall intelligence estimate on nuclear proliferation. We were also told by the former CIA Deputy Director of Science and Technology on October 18, 1977, and another source formerly employed by the CIA on January 28, 1978, that a series of papers were written [redacted]

On January 16, 1978, we asked the former CIA Director involved in the matter about these papers and he told us that he could not recall any such documents. However, he qualified this statement by indicating that he did not intend to say that the documents do not exist.

In a meeting with several CIA representatives on November 17, 1977, the CIA appeared to change its views about the alleged diversion. [redacted] We asked the CIA to explain its apparent change in views concerning NUMEC. Specifically, we asked them to state, in writing, the CIA's official position on the alleged diversion. Their last submission to us was their formal comments on this report, which still did not adequately address this point.

In several meetings with CIA officials who have current access to the files, it was explained to us that a search of

the available data reveals a "semantic" problem concerning the use of the term "evidence." In short, CIA stated there is no "hard evidence" of a diversion from NUMEC to Israel.

[redacted]

We were unable to determine whether the CIA changed its opinion about any NUMEC/Israel link or whether the CIA inadvertently failed to comment on the inaccuracy of the "most likely" position conveyed to us in the August 1977 briefing. Further, we asked for any reports the CIA might have prepared on the matter. We have never received any. A January 28, 1978, newspaper article, however, alleged the existence of at least one such report.

[redacted]

Moreover, in November 1977 the CIA refused to assist us in contacting former or present CIA employees having knowledge of the incident. At one point we attempted to discuss a particular CIA briefing with a former Chairman of NRC who had participated in the briefing. However, since the discussion would have involved CIA information, the former NRC Chairman wanted prior approval from the CIA. We attempted to obtain the necessary approval from the CIA but were informed that this request could not be honored due to the Director's decision to work solely with Chairman Dingell's Subcommittee on this investigation.

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CHAPTER 3

WERE THE INVESTIGATIONS BY THE FEDERAL GOVERNMENT INTO THE ALLEGED INCIDENT ADEQUATE?

If a diversion or theft of nuclear material is suspected or actually occurs in this country, the Federal Government must be able to quickly and definitively determine how and why it happened so that the public can be protected against the potential hazards of such an occurrence. To do this, agencies of the Federal Government with capabilities for investigating and responding to suspected diversion incidents must work together. This did not happen with NUMEC. Whether a diversion(s) ever occurred at NUMEC still remains unanswered. What can be said, however, is that the Federal investigations of the matter were uncoordinated, limited in scope and timeliness, and in our opinion less than adequate.

DEPARTMENT OF ENERGY

We believe certain DOE actions prior to and after the alleged NUMEC diversion(s), raise questions on the adequacy of DOE's implementation of its regulatory responsibilities and its investigation of NUMEC. DOE did not take corrective action against the NUMEC facility prior to the alleged incident, even though DOE inspections revealed repeated NUMEC material accountability and physical security deficiencies. DOE's investigation of NUMEC omitted one potentially significant avenue of investigation, i.e. that the unaccounted for material could have been erroneously shipped to another country. Also, recognizing DOE's dual role for promotional and regulatory responsibilities over nuclear activities, its investigation of NUMEC cannot be considered truly independent. Prior to January 1975, DOE was responsible for regulating nuclear materials as well as promoting the use and development of nuclear energy in the United States. Consequently, a discovery that a large amount of weapons-grade material could have been diverted from a U.S. facility would have been embarrassing to DOE and detrimental to its promotional responsibilities. Congress recognized these conflicting DOE roles and split DOE's regulatory aspects from its promotional role effective January 19, 1975.

From the time NUMEC was licensed in 1957 until the missing material was identified in April 1965, every accountability inspection conducted at NUMEC by DOE found significant weaknesses in NUMEC's accountability over nuclear material.

In view of the problems DOE was experiencing with NUMEC and investigations which were conducted, the FBI's liaison

with GAO and a former Executive Director of the JCAE, told us that the FBI and the JCAE recommended to DOE that NUMEC's license be taken away and that it be prohibited from receiving additional nuclear materials. However, they could not recall when or how these recommendations were communicated to the agency. (We were unable to find any record of these communications.) Further, in a letter to DOE on July 26, 1965, a DOE official who played a key role in the investigation of the NUMEC facility, wrote

> "* * * if it were within my province to do so I would, * * * stop all further deliveries of enriched uranium to NUMEC until such time as they had straightened out their procedures and had satisfactorily accounted for all enriched uranium entrusted to them to date."

We found no indications that DOE took corrective action against NUMEC based on these recommendations.

DOE's reluctance to take action against the facility in light of continuing material control problems is questionable. In some informal notes we obtained from DOE's files, a former DOE official in charge of DOE's overall investigation of NUMEC, admitted the agency did not know whether the material had been stolen or diverted. Yet the facility was not ordered to cease operations, and it continued to obtain nuclear material contracts. According to this official, who was a former DOE Assistant General Manager, there was "no good answer" as to why these conditions were allowed to persist over the years of NUMEC's operation.

DOE's handling of physical security inspection reports on the NUMEC facility by top DOE security officials also raises some concern. Two former DOE security inspectors told us on March 31 and April 3, 1978, that during most of the 1960s, including the period of the alleged NUMEC incident, DOE's Division of Security would not issue an "unsatisfactory" security report on a nuclear facility. According to these inspectors the security reports had to be written in a certain manner in order to be approved by the top security official at DOE, the Director of Security. For example, one security inspection report on the NUMEC facility conducted on February 10 and 11, 1966, noted two "principal" and several "minor" security deficiencies at the facility. The deficiencies were significant enough to prompt the Director of Security to visit the NUMEC plant to discuss the problems with facility management. The two former security inspectors told us, however, that the conclusion in the inspection report did not represent the actual findings. The report concluded: "During the course of the inspection several deficiencies were discovered though not sufficient

to seriously detract from the otherwise satisfactory aspects of the security program * * *." However, three former DOE security investigators, including the former Deputy and Assistant Directors of Security, told us that the entire NUMEC security program was inadequate.

We were unable to discuss this matter with the former Director of Security due to his current ill health.

We were told by the former DOE security inspector for the NUMEC facility that during the February 1966 physical security inspection at NUMEC he identified some unusual circumstances regarding the control of nuclear material held by NUMEC. Although this individual was not familiar with the material accounting practices, the circumstances led him to believe that an amount of highly enriched uranium about equal to the amount unaccounted for from the NUMEC facility might have been erroneously shipped to France. This former inspector became so concerned about the matter that he attempted to report it to the former Director of Security upon returning from the inspection. However, according to this individual and his former supervisor, the Director of Security told him to "get out of his office" and not pursue the matter any further. According to both these individuals, the entire matter was suppressed and was never considered by top DOE security officials. According to DOE officials, as it later developed an authorized shipment of highly enriched uranium was sent to France and was identified by DOE inspectors as being in that country.

Since NUMEC was both a DOE contractor and a licensee, the facility's nuclear activities were split between DOE's conflicting regulatory and promotional responsibilities. These conflicting responsibilities may have affected DOE's conclusion about the alleged diversion incident. DOE developed a "theory" about what happened to the material, even though DOE had no conclusive information showing that a diversion did or did not occur at the NUMEC plant. Moreover, at a top level staff meeting on February 14, 1966, a former Assistant General Manager of AEC advised the members of the former AEC that:

> "* * * it would be theoretically possible to ship material abroad in excess of the amounts indicated in the company's records." And that "* * * the AEC material accountability system might not reveal a deliberate and systematic attempt to divert material * * *."

Further, 3 days after AEC was advised of the possibility of a diversion, they briefed the FBI and, according to the former agent in charge of the investigation, presented a convincing

case that there was no diversion or theft of material from the NUMEC facility.

FEDERAL BUREAU OF INVESTIGATION

Our evaluation of the FBI's investigation of NUMEC was blocked by the FBI's denial to provide us with supporting documentation. However, based on our interviews with FBI and Department of Justice officials, we believe that: (1) the FBI's investigations of the incident were untimely; and (2) the scope of the investigation was limited.

From August 1965 to September 1969, the FBI developed a substantial amount of information on the actions and associates of NUMEC's president. According to the FBI investigators, this information was developed in response to requests from DOE and the CIA. However, it was not until April of 1976 that the FBI began to investigate whether there was a diversion of material at the NUMEC plant--about 11 years after DOE's investigation of the incident.

On February 17, 1966, DOE staff met with the FBI to discuss the incident and requested them to investigate the matter. The FBI is required by the Atomic Energy Act of 1954 to investigate all alleged or suspected criminal violations of the act. A diversion of nuclear material is a criminal violation of the act; however, on February 25, 1966, the FBI informed DOE that it would not undertake an investigation of the incident. The question of diversion was not addressed by the Bureau again until 1976. The former agent in charge of the investigation stated that since such a long period of time had elapsed since the alleged incident occurred it was very doubtful whether the FBI would be able to develop any evidence that would resolve the incident.

During our review we found that the scope of the FBI's current investigation appeared limited since they had not interviewed at least eight key officials about their knowledge of the NUMEC incident. These included a Chairman of the former AEC during the NUMEC incident; a former Deputy Director of the CIA responsible for gathering and analyzing data on nuclear activities in Israel during the time of the alleged incident; the loan officer at the Mellon Bank who approved the loan to NUMEC; a key DOE staff member responsible for material control investigations at NUMEC; and the chief DOE field investigator for NUMEC. These officials told us that the FBI never interviewed them about the NUMEC incident. Two individuals, the former Deputy Director of the CIA and DOE's chief field investigator, told us that they could not understand why the FBI had never discussed the matter with them in light of their extensive and direct involvement.

In the FBI briefing we received on October 6, 1977, we learned of another limitation in the scope of the FBI's current investigation. The former agent in charge of the FBI's investigation told us that the FBI did not investigate the source of funds for NUMEC's payment for the missing nuclear material. Although he saw this as an important aspect of the investigation--since NUMEC's financial position did not appear to support such a loan--it was not pursued because the FBI anticipated legal difficulties in getting the appropriate bank records. However, we obtained much of the data simply by requesting it from the responsible bank official over the telephone. Although the information we obtained did not reveal any peculiarities in NUMEC's financial dealings, it did serve to further demonstrate the limited scope of the FBI's investigation of the incident.

The FBI's efforts to effectively investigate the incident have also been impeded by its lack of technical expertise in dealing with nuclear facilities such as NUMEC. This is particularly significant since the Atomic Energy Act requires that the FBI investigate such occurrences. According to the former agent in charge of the investigation at the FBI, the FBI is not competent to do the type of investigation needed to determine the causes of unaccounted for nuclear material without expert assistance. Consequently, he did not think the FBI could ever conduct effective diversion-type investigations without relying heavily on DOE or NRC for technical assistance and guidance.

CENTRAL INTELLIGENCE AGENCY

From interviews with a former CIA official and with former and current officials and staff of DOE and the FBI we concluded that the CIA did not fully cooperate with DOE or the FBI in attempting to resolve the NUMEC matter. Although CIA officials told us that they believe they did fully cooperate with DOE and the FBI, it appears to us that the CIA was reluctant to provide information which could have been helpful to the domestic investigation because of its concern about protecting its "sources and methods" of information.

[redacted]

According to the CIA, a briefing similar to that provided to the FBI in May 1977 was provided to certain key DOE officials on July 29, 1977. Those present at the meeting are no longer with DOE and have not been interviewed by GAO. However, we interviewed several former officials, including a Chairman of AEC and two other Commissioners at AEC during the time period 1965-1972, who told us that they were not aware that such information existed even though several individuals agreed that it would have been important information to have at that time. [redacted]

Further, we were told by two former CIA officials, a former Deputy Director of Science and Technology, and an individual who did not wish to be identified, of the existence of internal reports discussing the alleged NUMEC diversion. The Deputy Director was one of the five highest ranking officials in the CIA at the time of the NUMEC incident and reported directly to the Director of the CIA on the matter. [redacted] Officials currently handling the NUMEC matter at the CIA told us that they have been unable to identify or find any such documents. Yet the two individuals who told us about the documents said they assisted in preparing them. DOE and FBI representatives we questioned said they were not aware of the existence of the documents. The appearance of the January 28, 1978, newspaper article discussed on pages 14, 17, and 18 of this report, leads us to believe that the CIA was less than forthright in dealing with us and the FBI. The CIA disagrees with this opinion.

[redacted]

25X1, E.O.13526

CHAPTER 4

OBSERVATIONS, CONCLUSIONS, AND RECOMMENDATIONS

WHETHER A DIVERSION OCCURRED AT NUMEC REMAINS TO BE ANSWERED

Although large amounts of circumstantial information have been developed by DOE, the FBI, and the CIA on this incident, these agencies did not provide any information, nor did we independently identify any, that would conclusively show that a diversion of material occurred at the NUMEC facility. Consequently, whether or not such an incident occurred is still debatable.

DOE has taken the position that it has no conclusive evidence that a diversion of nuclear material ever occurred at the NUMEC facility, although it cannot deny such a possibility.

DOE supports the theory that the nuclear material unaccounted for from NUMEC was caused by inadequate inventory management. All current and former DOE officials we interviewed, except one, agreed with this theory. On the other hand, many of these same officials also agreed that the facility was sufficiently unable to control its nuclear materials so that a diversion could have been carried out.

FBI agents involved in the investigation believe that there is a substantial amount of information which tends to support the diversion theory. However, it is circumstantial in nature. The FBI is still investigating the matter.

The data which was made available to us by a former CIA official [redacted] left us with the understanding that NUMEC was the "most likely" source of some of the nuclear material that was diverted to Israel. However, during the course of our work, CIA appeared to change its opinions on the matter and told GAO that it had no data to specifically support such a conclusion. [redacted] The newspaper article of January 28, 1978, seemed to confirm this. Current CIA officials told us that the former officials were drawing on memory as they recalled past events. The CIA officials who have current access to the files have advised us that a search of the available data reveals a "semantic" problem concerning the use of the term "evidence." In short, CIA states there is no "hard evidence" of a diversion from NUMEC to Israel. At the same time current CIA officials admit

available data, when coupled with past recollections of events, could lead former officials to speak in terms of "linking" the unaccounted material from NUMEC to nuclear developments in Israel.

NRC, in a February 1978 report related to the NUMEC incident, concluded that their previous official position of "no evidence" to support a diversion may need to be reconsidered in light of the many uncertainties surrounding the incident.

DOE stated that it had no evidence to indicate that a diversion of nuclear material had occurred. We believe that the agency could have been much more tentative in its conclusions on the matter, instead of informing the public and Government officials that there was no need for concern about a possible diversion of weapons-grade material from the NUMEC facility.

Moreover, we believe that the FBI and CIA may have already collected information which, if added to data held by DOE, could provide a more definitive answer to the question of whether a diversion did occur. Until all information held by these organizations can be consolidated and reviewed in its entirety, a complete evaluation providing authoritative answers to the questions surrounding the NUMEC diversion cannot be obtained.

FEDERAL MECHANISMS TO COORDINATE INVESTIGATIONS OF MISSING NUCLEAR MATERIAL ARE LACKING

It is essential that the nuclear safeguards systems employed by the United States be continually monitored and improved as weaknesses in it are identified. Overall, the safeguards systems in this country have been greatly improved as a result of the alleged NUMEC incident. Since the alleged incident occurred AEC and its succeeding agencies have placed much greater levels of control requirements on private nuclear facilities like NUMEC. There are many new requirements which include such measures as bimonthly inventory accounting, armed guards to prevent unauthorized access to nuclear material and alarm systems designed to detect unauthorized movement of nuclear material. Nevertheless, two recent GAO reports pointed out significant shortcomings in the ability of Government and commercial nuclear facilities to adequately monitor and control nuclear materials with current accountability systems. These reports pointed out that due to limitations in the state-of-the-art of measurement instrumentation, diversions of nuclear material from a U.S. facility can still occur and would probably not be discovered in a timely manner.

The NUMEC incident and its associated 13-year investigation highlight this country's current inability to effectively deal with possible diversions of nuclear material. The combined capabilities of DOE, FBI, and CIA were never directed at all the factors involved in the alleged diversion. The institutional barriers existing among these agencies may have prevented it. Each agency did "its own thing," to the detriment of a unified, comprehensive investigation. A formal coordinated interagency plan agreed upon plan is needed to focus the combined capabilities of these agencies in a more timely and effective manner. The agreed upon plan should focus on (1) an adequate detection and investigative system and (2) a reporting system to the appropriate congressional committees and to the President. As a result, if a similar incident were to occur today, this country may not be assured of any better investigation. The United States needs to improve its efforts for effectively responding to and investigating incidents of missing or unaccounted for weapons-grade nuclear materials. In view of increasing terrorist activities throughout the world, the ability to respond and investigate such incidents should be of concern to national security and the public health and safety. We believe a timely, concerted effort on the part of these three agencies would have greatly aided and possibly solved the NUMEC diversion questions, if they desired to do so.

While incidents of unaccounted for material have been experienced in the past, there has not been another incident involving public allegations such as those at NUMEC. We believe this can possibly be attributed to the increased emphasis the Government has placed on protective measures against diversions or thefts but it may also be due to a little good luck in that people may have not tried to do it.

RECOMMENDATIONS TO THE HEADS OF AGENCIES

GAO recommends that the heads of DOE, NRC, the Department of Justice, and the CIA, as part of their responsibilities for the national security of the country establish a plan for coordinated interagency action which focuses on a nuclear safeguards system that adequately detects, investigates, and reports to the Congress and the President on thefts or diversions of nuclear materials. The plan which should be submitted to the Congress within 90 days or less of the issuance of this report, should include

--a formal means for a timely determination of whether a loss has occurred;

--a clear and direct channel of communications between the agencies;

--a formal means for rapidly focusing the abilities of these agencies on the resolution of a diversion incident; and

--a means for allowing any incident involving the theft or diversion of nuclear material to be definitely resolved to the satisfaction of the Congress and the President.

We also recommend that the Attorney General, working with the FBI, take the lead in establishing the interagency plan since the FBI, under the Atomic Energy Act of 1954, is responsible for investigating incidents involving the diversion or theft of nuclear materials.

RECOMMENDATION TO THE CONGRESS

The committees of Congress having jurisdiction for domestic nuclear safeguards should

--review the nuclear safeguards plan to be submitted by the Executive Branch to assure that an adequate system is developed which deters and investigates thefts or diversions of nuclear materials.

--request that the FBI and DOE's Office of Inspector General complete their investigations of the NUMEC incident as soon as possible and submit their reports to the committees.

These reports should be reviewed to determine the adequacy of the investigations and their implications for developing a more effective future system.

The committees should note that with the passage of time it is difficult to conclusively determine what specifically happened at NUMEC. However, the important point to remember is that we should use this lesson and make certain that the Nation develops an adequate detection and follow-up system to deter future nuclear thefts or diversion.

AGENCY COMMENTS

DOE's comments on the report are contained in a letter dated July 25, 1978. (See appendix II.) DOE agreed with the thrust of the report. However, it disagreed with our recommendation concerning the need to enter into a formal interagency agreement with NRC, the FBI, and the CIA for more timely and effective action in investigating incidents of suspected or real diversions of nuclear materials. DOE states in its letter that a comprehensive plan and a memorandum of

understanding with the FBI already existed for joint responses to nuclear threat situations. Further, DOE stated that it has open channels of communication to other agencies, including the CIA, for the exchange of information pertinent to nuclear threat situations.

These factors were known to us and are commendable. The current memorandum of understanding between DOE and the FBI is the beginning of an effective response plan to incidents of nuclear diversion, but it is inadequate since it does not include CIA participation and cooperation. Without a formal interagency agreement placing positive reporting and investigative responsibilities on DOE, NRC, FBI, and the CIA along the lines recommended by GAO, we believe the possibility exists for a repetition of the 13-year NUMEC investigation.

The comments received from the CIA are contained in a letter dated September 1, 1978. (See appendix III.) The letter takes no issue with the facts or recommendations included in the report. It does, however, point out some CIA concerns about certain information in the report.

We believe that the CIA's concerns have been adequately addressed in the report. However, we did not specifically address the CIA's concerns regarding its degree of cooperation with DOE and the FBI on the alleged NUMEC incident.

In its letter the CIA disagreed with the statement in the report indicating that they failed to cooperate with DOE and the FBI. The CIA based the disagreement on the fact that its officials briefed a large number of officials in the executive and legislative branches of Government on the NUMEC matter in 1976 and 1977.

We were aware that such briefings were provided. However, we believe that since the briefings were provided 4 to 6 years after some of the key information was developed their utility in helping to resolve the NUMEC matter was greatly diminished.

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This information was not passed on to DOE or the FBI according to the officials we contacted in those agencies. However, we believe it must be pointed out that the current officials we interviewed said that such documents were not known to exist within the CIA.

The Department of Justice and the FBI did not furnish formal written comments. We provided them more than 3 months to do so, a time period longer than that provided DOE, CIA, and NRC. While we did not have the benefit of official

written comments from the Department of Justice and the FBI in preparing the final report, we did consider the views and comments of the FBI staff familiar with the alleged NUMEC incident.

NRC had no comment on the content of the report. However, the Commission did state that the recommendations to the Heads of Agencies appears reasonable. (See appendix IV.)

CHAPTER 5

SCOPE OF REVIEW

We obtained the information contained in this report by reviewing documents, reports, correspondence, and other records of the former AEC and ERDA, and DOE and NRC. We also interviewed officials at

--DOE headquarters, Washington, D.C., and Germantown, Maryland;

--CIA headquarters, Langley, Virginia;

--FBI headquarters, Washington, D.C.;

--NRC headquarters, Bethesda, Maryland; and

--many other locations across the country.

Because we were unable to obtain source documents from some of the organizations involved in the matter, we conducted extensive interviews with former and current Government agency employees about their knowledge of the incident. We also interviewed people outside of the Government having an involvement with the NUMEC operation. Specifically, we contacted 42 former and current employees of DOE and NRC. We contacted 12 former and current officials of the Department of Justice and the FBI, 11 from the CIA, and 20 other individuals, including 7 people that formerly worked at NUMEC. Our interviews were with those most knowledgeable of the incident at all levels of these organizations, including the former Chairman of AEC, two former Attorneys General of the United States, the president of NUMEC, former and current presidential aides, and FBI/CIA/DOE investigators. (See appendix I for a summary listing of individuals contacted during our review.)

We believe we conducted the most thorough and complete investigation possible under the severe limitations imposed on us by several Federal agencies.

SUMMARY LIST OF INDIVIDUALS

CONTACTED IN PREPARING REPORT

AEC/ERDA/DOE

1 former Chairman, AEC
2 former Commissioners, AEC
14 former staff members, AEC/ERDA
13 current staff members, DOE

CIA

Current Director
General Counsel
1 former Director
2 former Deputy Directors
6 current staff members

NRC

1 former Chairman
5 former staff members
6 current staff members

DOJ

Current Attorney General
2 former Attorneys General
3 staff attorneys

FBI

3 former agents
3 current agents

NUMEC

Former President of company
Former Vice President of company
Former Treasurer of company
Former Secretary of company
3 former employees

JCAE

2 former executive staff directors

Senate Select Intelligence Committee

1 current staff member

Others

6 former and current Presidential aides
2 staff members Pennsylvania Department of Revenue and Taxation
1 staff member U.S. Securities and Exchange Commission
1 official of Mellon Bank, Pittsburgh, Pennsylvania

~~SECRET~~

Department of Energy
Washington, D.C. 20545

July 25, 1978

Mr. Monte Canfield, Jr., Director
Energy and Minerals Division
U. S. General Accounting Office
Washington, D.C. 20548

Dear Mr. Canfield:

Thank you for the opportunity to review and comment on the GAO draft report entitled "Nuclear Diversion in the U.S. - 13 Years of Contradiction and Confusion."

In our July 21, 1978 meeting with Mr. J. Howard and other members of your staff, we discussed our comments and concerns with the draft report as written. As the result of our meeting, we understand that certain changes are to be made which will point out that DOE has made significant improvements in strengthening past safeguard policies and practices since 1965. We also understand that the report will be clarified in other respects consistent with our comments furnished under separate cover. However, we are concerned that the readers of the report and its recommendation might obtain an incorrect impression of DOE's ability to respond to threats or incidents of suspected or real theft or diversion of nuclear material (SNM).

DOE responds in a very timely and effective manner to terrorism threats and incidents of suspected or real diversions or thefts of nuclear materials in the U.S. We have a comprehensive plan and a memorandum of understanding with the FBI for joint responses to nuclear threat situations. We also have clear and open channels to other agencies such as the CIA and NRC for the exchange of information pertinent to potential nuclear theft, alleged black market incidents involving SNM, etc. Further, we have an arrangement with the FBI to provide formal in-service training for agents in the technical and scientific sophistications relevant to nuclear investigations. NRC has fully participated in this program. Also, we have briefed Congress in some detail on various aspects of our emergency preparedness and response program. Information on our emergency preparedness and response program, including our formal policies and procedures, continues to be available for review by your representatives.

~~SECRET~~

APPENDIX II

Mr. Monte Canfield, Jr.

July 25, 1978

The thrust of the recommendations concerning investigation of threats was clarified during our discussion to apply to after-the-fact resolution of reasons for or causes of threat indications. It is proposed that these recommendations be restated to make clear that they are directed to agencies other than DOE and not to DOE or its ability to investigate and respond to threats or diversions of SNM in a timely and effective manner.

Sincerely,

Fred L. Hiser, Director
Division of GAO Liaison
Office of the Controller

~~SECRET~~

The Director
Central Intelligence Agency

Washington, D.C. 20505

APPENDIX III

1 September 1978

The Honorable Elmer Staats
Comptroller General of the United States
Washington, D.C.

Dear Elmer,

In the period August 1977 to August 1978 CIA was in sustained contact with the General Accounting Office (GAO) concerning its current investigation of nuclear materials unaccounted for from the facilities of the Nuclear Materials and Equipment Corporation (NUMEC) of Apollo, Pennsylvania. We believe that this dialogue has contributed to GAO's understanding of some of the key issues that are touched on in the GAO report titled, "Nuclear Diversion in the United States? Thirteen Years of Contradiction and Confusion." One needs to note, however, that the issues that have been of primary interest to GAO in its present investigation find their origins in a complex situation that first came to the attention of the United States Government in 1965. As a result, while it is agreed that the nuclear material that has been unaccounted for since 1965 is uranium-235, it is less clear, despite lengthy investigations and inspections conducted at different times over the past thirteen years by GAO, the FBI and DOE, as to what actually happened to this uranium. In view of these circumstances, CIA officers have spent a substantial number of hours during several different meetings in recent weeks in reviewing with GAO personnel a number of factual errors and misunderstandings in the earlier versions of the draft report which were eventually eliminated. We find, however, that the tone of the GAO report suggests a less than forthright approach to the NUMEC issue by CIA. Insofar as this agency's role in this matter is concerned, which is all that we can address, this report creates an unfortunate and inaccurate impression which in our view cannot be substantiated by the facts as we have been able to reconstruct them. This judgment leads us, therefore, to comment in the following paragraphs on our reactions to the GAO report before it is made final.

The circumstances surrounding the identification of nuclear materials unaccounted for, when combined with media speculations on what may have happened to this material, have generated a number of allegations. It is important to note, therefore, that CIA's knowledge of those events which could in any way impact on these

APPENDIX III

allegations stems from this agency's pursuit of foreign intelligence and counterintelligence objectives which deal with the issues of worldwide nuclear proliferation. In short, CIA's interest in intelligence and counterintelligence matters enables it to comment on events in overseas areas to include the making of estimates about the growing capabilities of foreign countries in the nuclear arena. This situation has been explained to the GAO investigators on several different occasions. The GAO report implies, however, that there was a CIA estimate on the alleged NUMEC diversion which was never admitted to by this agency. The GAO cites a newspaper article to buttress this point. [redacted] This brief passage was contained in an overall estimate on nuclear proliferation worldwide. Despite the availability of this background information, the GAO report opts to leave this issue factually unclear.

In a policy sense the key allegations that continue to circulate relative to the material unaccounted for are:

a. The material was illegally diverted to Israel by NUMEC's management for use in nuclear weapons.

b. The material was diverted to Israel by NUMEC's management with the assistance of the CIA.

c. The material was diverted to Israel with the acquiescence of the United States Government.

d. There has been a cover-up of the NUMEC incident by the United States Government involving a President of the United States.

CIA has no "hard intelligence" concerning the allegations outlined in subparagraph a above. It was CIA, however, which requested an FBI investigation as early as 1968, [redacted] Despite this historical record, it is implied in the GAO report that CIA failed to cooperate with United States officials who were concerned with the NUMEC case. We believe the facts of the matter argue otherwise. Of particular note in this regard is the reality that since the NUMEC case was reopened in 1976 by Presidential direction, a large number of officials in the executive and legislative branches have been briefed on NUMEC-related developments by CIA. The DOE and FBI officials who received these CIA briefings as of 1976 stated that while more information was now

available on Israeli nuclear developments than had been the case in 1968, the new information did not change the thrust of their earlier conclusions concerning the previous allegations of a diversion.

GAO has also been advised, repeatedly, that CIA has no information that would substantiate the allegations outlined in subparagraphs b, c and d.

Also of concern to us is the GAO allegation that CIA changed its position on the alleged diversion of nuclear materials. This situation resulted from GAO participation in an August 1977 meeting at which they were given an oral briefing on Israeli nuclear developments and how these might impact on GAO's NUMEC investigation. The participants at the briefing were retired and active duty CIA officers. The retired employee spoke from memory on past events without the benefit of access to file data. The current employees talked primarily from data that had been retrieved from the files, since the principal briefer had not been a firsthand participant in monitoring Israeli nuclear developments in the 1965 to 1975 period. The GAO report tends to commingle the results of what was said at that meeting by both the retired employee and by the current employees into one official CIA position. This, in our view, is not a proper investigative technique, for it creates confusion where there should be none. In short, the retired official talked from memory and in so doing surfaced data that was not recorded either in our current files or in our institutional memory. This new material was not challenged at the time it was presented, but subsequent checks revealed that some of it could not be confirmed by documentary data. This does not mean the information as stated was not true. It simply reflects a situation in which file data on this topic has proven to be less than adequate. In addition, the retired employee mentioned one or two items that subsequent checks revealed were garbled. Although this entire matter has been explained to GAO investigators, and we have made the point that the key issue in this dialogue hinges on the semantic problem concerning the use of the term "evidence," the reader of the GAO report is left with the impression that GAO does not fully accept this explanation. This in turn raises a question of contradictions when in fact there is none.

We are of the opinion that part of the "confusion and contradiction" recorded in the GAO report reflects the results of investigators talking to employees of other agencies whom CIA did not brief on its knowledge of Israeli nuclear developments. If the employee contacted by GAO did not have access to his organization's files or did not recall a past event involving CIA action, the GAO report makes it appear that CIA was either remiss in not briefing the employee or is not recounting past events accurately. This is a distortion that needs to be corrected, for when

25X1, E.O.13526

CIA briefed an individual FBI or DOE employee, we were passing information to the institution that was involved and not the individual. If, in subsequent periods, the institution's current employees cannot retrieve this data or they do not have access to it within their organization, this factor should in our view not be stated or implied as a shortfall in CIA procedures or openness in dealing with other agencies.

The GAO report accurately states that its officers were denied access to documents [redacted] It should be stated in the report with equal vigor that congressional staffers directly engaged in the NUMEC case did subsequently review relevant CIA files and others, including GAO, were verbally briefed on CIA's knowledge of pertinent events.

The GAO report makes a number of recommendations. We cannot foresee how these will be acted on by those who have the responsibility to consider these key points. CIA remains fully aware, however, of the need to cooperate with those in the United States who have the legal mandate to investigate nuclear material unaccounted for. We will fulfill this responsibility while simultaneously meeting our obligations to protect sources and methods.

As a final point, let me say that my staff is looking at the question of what portion of the GAO report can be declassified. We will be in touch with your associates on this matter in a prompt manner.

[redacted]

Yours,

STANSFIELD TURNER

25X1, E.O.13526

~~SECRET~~

APPENDIX IV

UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D. C. 20555

JUL 13 1978

Mr. Monte Canfield, Jr., Director
Energy and Minerals Division
U. S. General Accounting Office
Washington, DC 20548

Dear Mr. Canfield:

SUBJECT: GAO DRAFT REPORT, "NUCLEAR DIVERSION IN THE US? 13 YEARS OF CONTRADICTION AND CONFUSION" (SECRET/NSI)

The Nuclear Regulatory Commission has no comments on the content of the report. The recommendations to Heads of Agencies appears reasonable.

Sincerely,

Lee V. Gossick
Executive Director
for Operations

(30513)

~~SECRET~~

Washington, D.C. 20530

APPENDIX V

February 8, 1978

B-164105

Honorable Elmer B. Staats
Comptroller General of the
United States
Washington, D. C. 20548

Dear Mr. Staats:

This is in response to your letter to me, dated December 16, 1977, requesting access to records, reports and files in the possession of this Department which relate to the Nuclear Materials and Equipment Corporation (NUMEC) of Apollo, Pennsylvania. Your inquiry into this matter was at the request of Chairman Dingell of the House Subcommittee on Energy and Power. You also requested to be informed of the scope of our investigation and the estimated date of its completion.

As you may know, in response to a similar request from Chairman Dingell, the Deputy Attorney General informed him, by letter dated September 8, 1977, that Department policy has been to provide oral briefings by the FBI to Congressional committees which have inquired about this matter. Such a briefing was offered to Chairman Dingell.

The recent meeting of FBI representatives with Mr. Canfield, Director of the GAO Energy and Minerals Division and members of his staff, to which you refer in your letter, was in fact a briefing by the FBI as a result of the Acting Comptroller General's letter to me of August 30, 1977.

APPENDIX V

In view of the fact that our investigation into this matter is continuing, I am not able to accede to your request at this time. Consideration will, of course, be given to your request upon the conclusion of our investigation.

I am unable to estimate when the investigation will be concluded. You may be assured, however, that it is being carried out as expeditiously as possible.

Yours sincerely,

Griffin B. Bell

Griffin B. Bell
Attorney General

Interagency Security Classification Appeals Panel

c/o Information Security Oversight Office
700 Pennsylvania Avenue, N.W., Room 100
Washington, D.C. 20408
Telephone: (202) 357-5250
Fax: (202) 357-5907
E-mail: iscap@nara.gov

MEMBERS

DEPARTMENT OF DEFENSE
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Sheryl J. Shenberger
NATIONAL SECURITY COUNCIL STAFF
John W. Fitzpatrick, Chair

EXECUTIVE SECRETARY

John P. Fitzpatrick
Director
INFORMATION SECURITY OVERSIGHT OFFICE

March 18, 2014

Grant F. Smith
Director
Institute for Research: Middle Eastern Policy
Calvert Station
P. O. Box 32041
Washington, DC 20007

Dear Mr. Smith:

Please be advised that the Interagency Security Classification Appeals Panel (ISCAP) has concluded its consideration of the mandatory declassification review appeal filed by you and that the 60-day period during which an agency head may appeal an ISCAP decision to the President has expired. Enclosed are copies of the documents and a chart that outlines the ISCAP decisions with the exception of any information that is otherwise authorized and warranted for withholding under applicable law, we are releasing all information declassified by the ISCAP to you. If you have questions about this appeal, please contact Neena Sachdeva or William C. Carpenter at (202) 357-5250.

Sincerely,

William A. Cira
for

JOHN P. FITZPATRICK
Executive Secretary

Enclosures

cc: Mr. Charles Piercy [Letter with Chart]
Executive for Business Support Services
National Archives and Records Administration

Mr. Joseph Lambert [Letter and Chart and Document]
Director, Information Management Services
Central Intelligence Agency Member to the ISCAP

Mr. David Stanhope [Letter with Chart and Document]
Acting Director
Jimmy Carter Presidential Library and Museum

ISCAP DECISION ON THE MANDATORY DECLASSIFICATION REVIEW APPEAL FILED BY MR GRANT F. SMITH

IDENTIFYING NUMBERS	DESCRIPTION OF DOCUMENT	ACTION
Smith, document No. 1 ISCAP No. 2012-167 Carter Library NSA Staff Files	Action Memorandum [for Zbigniew Brzezinski] July 29, 1977 1 page Unmarked	DECLASSIFIED THE DOCUMENT IN ITS ENTIRETY
Smith, document No. 2 ISCAP No. 2012-167 Carter Library NSA Staff Files	NUMEC MUF [Nuclear Materials and Equipment Corporation Materials Unaccounted For] November 27, 1979 1 page Confidential	DECLASSIFIED THE DOCUMENT IN ITS ENTIRETY
Smith, document No. 3 ISCAP No. 2012-167 Carter Library NSA Staff Files	Israel and MUF [Materials Unaccounted For] July 28, 1977 3 pages Top Secret	DECLASSIFIED SOME PORTIONS AND AFFIRMED THE CLASSIFICATION OF OTHER PORTIONS E.O. 13526 §§3.3(b)(1) and 3.3(b)(6) as 25X1 and 25X6
Smith, document No. 4 ISCAP No. 2012-167 Carter Library NSA Staff Files	Nuclear MUF [Materials Unaccounted For] August 2, 1977 3 pages Top Secret – Restricted Data	DECLASSIFIED SOME PORTIONS AND AFFIRMED THE CLASSIFICATION OF OTHER PORTIONS E.O. 13526 §§3.3(b)(1) and 3.3(b)(6) as 25X1 and 25X6 Some information remains withheld as Restricted Data under the statutory authority of the Atomic Energy Act of 1954, as amended and regulations issued under the Act.

IDENTIFYING NUMBERS	DESCRIPTION OF DOCUMENT	ACTION
Smith, document No. 5 ISCAP No. 2012-167 Carter Library NSA Staff Files	AEC Licenses ca. 1977 1 page Unmarked	DECLASSIFIED THE DOCUMENT IN ITS ENTIRETY
Smith, document No. 6 ISCAP No. 2012-167 Carter Library NSA Staff Files	Your Meeting with [Carl] Duckett November 3, 1978 3 pages Top Secret – Restricted Data	DECLASSIFIED SOME PORTIONS AND AFFIRMED THE CLASSIFICATION OF OTHER PORTIONS E.O. 13526 §§3.3(b)(1) and 3.3(b)(6) as 25X1 and 25X6 Some information remains withheld as Restricted Data under the statutory authority of the Atomic Energy Act of 1954, as amended and regulations issued under the Act.
Smith, document No. 7 ISCAP No. 2012-167 Carter Library NSA Staff Files	Memorandum for the Attorney General November 20, 1978 1 page Top Secret	DECLASSIFIED THE DOCUMENT IN ITS ENTIRETY
Smith, document No. 8 ISCAP No. 2012-167 Carter Library NSA Staff Files	Diversion of Nuclear Material to Israel November 6, 1978 1 page Top Secret	DECLASSIFIED THE DOCUMENT IN ITS ENTIRETY

THE WHITE HOUSE

WASHINGTON

5

July 29, 1977

ACTION

MEMORANDUM FOR: ZBIGNIEW BRZEZINSKI

FROM: JERRY SCHECTER

Congressman John D. Dingell (D., Mich.) called to report in very indignant tones that he is "troubled" about investigations of Materials Unaccounted For (MUF). He is insisting that two of his staffers on the Energy and Power Subcommittee be briefed on a series of matters relating to MUF, particularly the NUMEC plant in Apollo, Pennsylvania. Dingell said he was told by ERDA that only GAO and AEC have investigated the case. However, he said he understands both the FBI and the CIA have been involved. He says "he knows" that the FBI has been involved in investigations of special "Q" clearances, and that the CIA was involved in passing on these clearances.

Dingell implied that the CIA was involved in the Apollo case. He also said there is a question of when the NRC learned about the Apollo MUF. He has requested that two of the Subcommittee staffers, Michael Ward and Donna Levigne from the GAO be briefed by the NSC. I told him I would call him early next week, but made no commitment whatsoever other than to get back to him.

RECOMMENDATION:

Ask Dingell for a letter on this matter _____

Agree to have Tuchman brief the staffers _____

Other _____

cc: Jessica Tuchman

6802

Oplinger: Ltr 9

MEMORANDUM

NATIONAL SECURITY COUNCIL

~~CONFIDENTIAL~~ November 27, 1979

ACTION

MEMORANDUM FOR: ZBIGNIEW BRZEZINSKI

FROM: JERRY OPLINGER 252-5704

SUBJECT: NUMEC MUF (~~C~~)

I have a Top Secret memorandum from you to the President written by Jessica Mathews in August, 1977, concerning the above subject, i.e., missing nuclear material from the NUMEC plant in Apollo, Pa. It reports everything Jessica was able to learn about this matter in briefings by ERDA, FBI, and the CIA. (~~C~~)

Senator Glenn has for some time been pressing John Deutch of DOE for his views on this matter. Since John will be speaking for the Administration, he and I believe it is important that he should know the contents of the memorandum in order to avoid stepping into unknown pitfalls in this sensitive matter. (~~C~~)

RECOMMENDATION: That you authorize me to allow Deutch to read the memorandum in my office. (U)

Approve ___ Disapprove ✓

Brief him orally

~~CONFIDENTIAL~~

Review 11/27/85

~~TOP SECRET~~/SENSITIVE - XGDS

4

MEMORANDUM

NATIONAL SECURITY COUNCIL

July 28, 1977

MEMORANDUM FOR: JESSICA TUCHMAN

FROM: JOHN MARCUM

SUBJECT: Israel and MUF

Ted Schackley called today on a secure line and provided the following responses to our inquiries of yesterday:

25X1, E.O.13526

25X1, E.O.13526

I also asked Schackley to get us a rundown on the political aspects -- e.g., when were the President and Congressional officials briefed on the Israeli weapons program, on the NUMEC connection, and what were their reactions. In December, Carter was briefed on the NUMEC problem as President-elect by Bush in Georgia. I have also heard sketchy accounts of briefings for Johnson and Nixon, but it would be useful to get these details in hand in case there is a Congressional inquiry later.

We should discuss next steps on this issue and the MUF release. At this point, despite the FBI clean bill of health, I do not think the President has plausible deniability. The CIA case is persuasive, though not conclusive,

25X6, E.O.13526

MEMORANDUM

~~TOP SECRET~~

THE WHITE HOUSE

WASHINGTON

8b:5 any recommendation J 6 8/2/77

~~TOP SECRET~~/SENSITIVE

5367

MEMORANDUM FOR: THE PRESIDENT

FROM: ZBIGNIEW BRZEZINSKI ZB

SUBJECT: Nuclear MUF

DT

A review, as directed by you on our Weekly Report.

ERDA's long-planned release of U.S. MUF (Material Unaccounted For) data will take place on Thursday (August 4). As I mentioned to you in a recent Weekly Alert, the public release will undoubtedly focus intense press and Congressional attention on the missing material from the NUMEC plant in Apollo, Pennsylvania.

At your direction I have been thoroughly briefed by ERDA, FBI and CIA. The essential conclusions are these:

-- In the 1950s and '60s, the AEC did not require its licensees to make annual physical inventories of their special nuclear material. This lead to the practice of a plant's borrowing on a subsequent contract in order to cover operational losses (the major contributor to MUF) in a current contract. The NUMEC plant was particularly bad in this respect. No inventory was performed between 1957 and 1965. In mid 1965, the lack of an immediate subsequent contract forced NUMEC to do a material accounting which revealed that 170 kg of highly enriched uranium [redacted] was missing.

-- Upon receiving this accounting, the AEC immediately began a long series of investigations which continued through 1969, and which ultimately concluded that all but 56 kg of the missing material could be physically accounted for. ERDA believes now (but has no evidence) that even this remaining 56 kg can be accounted for by operational losses, but this will be a very hotly contested conclusion. The ERDA report also reaches a very carefully guarded conclusion that no evidence of theft of significant amounts of material has been found. The key paragraph is attached at Tab A.

-- The FBI has undertaken two lengthy investigations of this case. The first, beginning in 1965, looked at the question of Shapiro's (the President of NUMEC) relationship to the Israeli Government.

It concluded that Shapiro did indeed have frequent contacts with Israeli officials here, particularly the Science Attache who was thought to be an intelligence officer. They also discovered that Shapiro got VIP treatment on trips to Israel for which there was no obvious explanation. This is the essential sum of their findings. When these results were transmitted to Helms, then head of the CIA (at whose request the investigation had been undertaken), he responded with a series of letters to Hoover urging that the FBI take additional steps, including wiretapping and surveillance of Shapiro. Hoover refused.

-- The AEC, at the direction of Attorney General Mitchell, undertook its own investigation leading up to a full commission interview of Shapiro in 1969. Strangely, all that Shapiro was asked in that interview was whether he had ever divulged any classified information and not whether he had participated in a diversion of material. The AEC investigation was discontinued in September 1969.

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25X1, E.O.13526

Not surprisingly, Baker went to President Ford who then ordered the Attorney General to undertake an immediate investigation. This time the FBI mandate covered two questions: was there a diversion, and was there a coverup of a diversion. An intensive study, involving hundreds of interviews, a full-time team of 6 senior agents, and millions of dollars was undertaken. It was concluded one week ago. The investigation was unable to uncover any evidence of a theft although the interviews included many current and former NUMEC employees.

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25X1 and 6, E.O.13526

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~~TOP SECRET~~

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25X1 and 6, E.O.13526

The conclusion from all this is that while a diversion might have occurred, there is no evidence -- despite an intensive search for some -- to prove that one did. For every piece of evidence that implies one conclusion, there is another piece that argues the opposite. One is pretty much left with making a personal judgment -- based on instinct -- as to whether the diversion did or did not occur. So far as we know however, (and we have made serious effort to discover it) there is nothing to indicate active CIA participatio in the alleged theft.

There is a tremendous amount of interest in this issue in Congress, both because of the existing intelligence aspect and because of the implications for U.S. safeguards standards (i.e., that such a thing could have happened over a period of years without being detected).

We face tough sledding in the next few weeks (particularly in view of Cy's Mid-East trip) in trying to keep attention focused on ERDA's technical arguments and, if necessary, on the FBI investigations, and away from the CIA's information. We run an obvious risk in releasing this information since it is quite possible that Congressional investigations and press probings could lead to leaks of the sensitive material. However, with all the public expectation of the ERDA release, and the rumors already floating around, the political costs involved in withholding the release would be unacceptable.

64

AEC LICENSEES

NO. 449 P.7

AEC LICENSEES, PRIOR TO 1968, WERE REQUIRED TO MAINTAIN ACCOUNTING RECORDS, INVENTORIES, REPORT LOSSES OTHER THAN NORMAL OPERATING LOSSES, AND AFFORD THE AEC ACCESS TO THEIR FACILITIES FOR INSPECTION. THEY WERE ALSO REQUIRED TO ADEQUATELY CONTROL ACCESS TO SNM AND SECURE MATERIAL STORAGE AREAS AGAINST UNAUTHORIZED REMOVAL OF SNM. AT THOSE LICENSEES WHICH POSSESSED SIGNIFICANT QUANTITIES OF STRATEGIC SPECIAL NUCLEAR MATERIAL, AEC CARRIED OUT SEPARATELY AND PERIODICALLY ACCOUNTING SYSTEM AND PHYSICAL PROTECTION SURVEYS. IT IS NOT EVIDENT FROM THE RECORDS STILL AVAILABLE THAT THERE WAS NORMALLY A SIMULTANEOUS AUDIT OF ACCOUNTABILITY RECORDS AGAINST A COMPLETE PHYSICAL INVENTORY. NO DIRECT EVIDENCE OF ANY THEFT ATTEMPT WAS REPORTED FROM THESE SURVEYS. THERE HAS ALSO NEVER BEEN ANY DIRECT EVIDENCE OF A BLACK MARKET IN SNM.

1

MEMORANDUM (OUTSIDE THE SYSTEM)

~~TOP SECRET~~/SENSITIVE NATIONAL SECURITY COUNCIL

INFORMATION November 3, 1978

MEMORANDUM FOR: DAVID AARON

FROM: JESSICA TUCHMAN MATHEWS

SUBJECT: Your Meeting with Duckett

In the summer of 1977 I was briefed by ERDA (DOE), FBI and CIA on the purported diversion of nuclear material to Israel which Duckett wants to discuss with you. The essential conclusions were these (they were transmitted to the President):

-- In 1965, an inventory at the NUMEC plant isn Apollo, Pa., revealed that 170 kg of highly enriched uranium [redacted] was missing. Upon receiving this accounting, the AEC immediately began a long series of investigations which continued through 1969, and which ultimately concluded that all but 56 kg of the missing material could be physically accounted for. DOE believes now that even this remaining 56 kg can be accounted for by operational losses, but this cannot be proven.

-- The FBI has undertaken two lengthy investigations of this case. The first, beginning in 1965, looked at the question of the relationship of Zalmar Shapiro, president of NUMEC, to the Israeli Government. It concluded that Shapiro did indeed have frequent contacts with Israeli officials here, particularly the Science Attache who was thought to be an intelligence officer. They also discovered that Shapiro got VIP treatment on trips to Israel for which there was no obvious explanation. This is the essential sum of their findings. When these results were transmitted to Helms, then head of the CIA (at whose request the investigation had been undertaken), he responded with a series of letters to Hoover urging that the FBI take additional steps, including wiretapping and surveillance of Shapiro. Hoover refused.

-- The AEC, at the direction of Attorney General Mitchell, undertook its own investigation leading up to a full commission interview of Shapiro in 1969. Strangely, all that Shapiro was asked in that interview was whether he had ever divulged any classified information -- not whether we had participated in a diversion of material. The AEC investigation was discontinued in September 1969.

-- [redacted]

25X1, E.O.13526

Not surprisingly, Baker went to President Ford who then ordered the Attorney General to undertake

An immediate investigation. This time the FBI mandate covered two questions: was there a diversion, and was there a coverup of a diversion. An intensive investigation, involving hundreds of interviews, a full-time team of 6 senior agents, and millions of dollars was unable to uncover any evidence of a theft although many current and former NUMEC employees were interviewed.

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25X1 and 6, E.O.13526

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The conclusion from all this is that while a diversion might have occurred, there is no evidence -- despite an intensive search for some -- to prove that one did. For every piece of evidence that implies one conclusion, there is another piece that argues the opposite. One is pretty much left with making a personal judgment -- based on instinct -- as to whether the diversion did or did not occur.

So far as we know (though there are still lingering suspicions) there is nothing to indicate active CIA participation in the alleged theft.

The information in this memo is one year old. After Lora told me about this meeting I considered phoning the FBI to find out what had eventually happened to its investigation (which had not been accepted by Justice

at the time I talked to them and was therefore not officially completed) but decided not to stir up the coals until we found out what Duckett had to say. I should also mention that although I was briefed in order to prepare a full report for the President, and both CIA and FBI knew that, I am not confident that I got the complete story. I found out, for example, that a few weeks after I was briefed, one of Schlesinger's top aides was briefed, and got a story different in some respects from what I was told. The truth of what really happened may be irretrievably lost.

Please also note the highlighted portions of the attached article.

Mathews-FYI - only sent to Deckson for dispatch 11-20-78 g

THE WHITE HOUSE

WASHINGTON

~~TOP SECRET~~/SENSITIVE November 20, 1978

MEMORANDUM FOR

THE ATTORNEY GENERAL

Last year, the President requested the Assistant to the President for National Security Affairs to prepare a complete report for him on the matter of the possible diversion of nuclear material from the NUMEC plant in Apollo, Pennsylvania. It is necessary at this time to prepare an update on the status of this matter and I therefore request your cooperation in providing a complete briefing to Dr. Jessica Tuchman Mathews of the National Security Council staff, by the appropriate officials of the Federal Bureau of Investigation.

David Aaron
Deputy Assistant to the President
for National Security Affairs

~~TOP SECRET~~/SENSITIVE/XGDS

Authority of Zbigniew Brzezinski

[redacted]

6698-X

8A

MEMORANDUM

~~TOP SECRET~~/SENSITIVE NATIONAL SECURITY COUNCIL

ACTION November 6, 1978

MEMORANDUM FOR: DAVID AARON

FROM: JESSICA TUCHMAN MATHEWS JTM

SUBJECT: Diversion of Nuclear Material to Israel

I have attempted to set up a meeting with the FBI to get briefed on what has happened since I last talked to them in July 1977. The FBI has informed Jerry Jennings that the investigation is still on-going and since it is a criminal investigation they cannot brief me without instructions from the Attorney General. This is a little surprising since I don't remember having this trouble last time, but Jerry thinks that it could be handled relatively easily by your signing the attached note.

RECOMMENDATION:

That you sign the attached note to the Attorney General.

Interagency Security Classification Appeals Panel

c/o Information Security Oversight Office
700 Pennsylvania Avenue, N.W., Room 100
Washington, D.C. 20408
Telephone: (202) 357-5250
Fax: (202) 357-5907
E-mail: iscap@nara.gov

MEMBERS

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Michael Higgins
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John W. Fitzpatrick, Chair

EXECUTIVE SECRETARY

John P. Fitzpatrick
Director
INFORMATION SECURITY OVERSIGHT OFFICE

March 18, 2014

Grant F. Smith
Director
Institute for Research: Middle Eastern Policy
Calvert Station
P. O. Box 32041
Washington, DC 20007

Dear Mr. Smith:

Please be advised that the Interagency Security Classification Appeals Panel (ISCAP) has concluded its consideration of the mandatory declassification review appeal filed by you and that the 60-day period during which an agency head may appeal an ISCAP decision to the President has expired. Enclosed are copies of the documents and a chart that outlines the ISCAP decisions with the exception of any information that is otherwise authorized and warranted for withholding under applicable law, we are releasing all information declassified by the ISCAP to you. If you have questions about this appeal, please contact Neena Sachdeva or William C. Carpenter at (202) 357-5250.

Sincerely,

William A. Fitzpatrick

JOHN P. FITZPATRICK
Executive Secretary

Enclosures

cc: Mr. Charles Piercy [Letter with Chart]
Executive for Business Support Services
National Archives and Records Administration

Mr. Joseph Lambert [Letter and Chart and Documents]
Director, Information Management Services
Central Intelligence Agency Member to the ISCAP

Ms. Elaine Didier [Letter with Chart and Documents]
Director
Gerald R. Ford Presidential Library

ISCAP DECISION ON THE MANDATORY DECLASSIFICATION REVIEW APPEAL FILED BY MR GRANT F. SMITH

IDENTIFYING NUMBERS	DESCRIPTION OF DOCUMENT	ACTION
Smith, document No. 1 ISCAP No. 2013-062 Ford Library NL 12-031 no. 1	Richard Helms to Ramsey Clark April 2, 1968 2 page Secret	DECLASSIFIED SOME PORTIONS AND AFFIRMED THE CLASSIFICATION OF OTHER PORTIONS E.O. 13526 §3.3(b)(1) as 25X1
Smith, document No. 2 ISCAP No. 2013-062 Ford Library NL 12-032 no. 2	J. Edgar Hoover to Richard Helms September 3, 1969 2 pages Secret	DECLASSIFIED SOME REMAINING PORTIONS AND AFFIRMED THE CLASSIFICATION OF OTHER REMAINING PORTIONS E.O. 13526 §3.3(b)(1) as 25X1
Smith, document No. 3 ISCAP No. 2013-062 Ford Library NL 12-031 no. 3	To DCI [Memorandum] March 11, 1976 3 pages Secret	DECLASSIFIED SOME PORTIONS AND AFFIRMED THE CLASSIFICATION OF OTHER PORTIONS E.O. 13526 §§3.3(h)(1)(A) as 50X1-HUM Some information remains withheld by the Central Intelligence Agency under the statutory authority of the Central Intelligence Agency Act of 1949, 50 U.S.C. §403(g).
Smith, document No. 4 ISCAP No. 2013-062 Ford Library NL 12-033 no. 4	Memorandum for the Record March 9, 1972 7 pages Secret	DECLASSIFIED SOME PORTIONS AND AFFIRMED THE CLASSIFICATION OF OTHER PORTIONS E.O. 13526 §3.3(b)(1) as 25X1 Some information remains withheld by the Federal Bureau of Investigation under the Freedom of Information Act, 5 U.S.C. §522(b)(7)(C)

SECRET

CENTRAL INTELLIGENCE AGENCY

WASHINGTON, D. C. 20505

OFFICE OF THE DIRECTOR

1c

2 APR 1968

The Honorable Ramsey Clark
The Attorney General
Washington, D. C.

Dear Ramsey,

You are well aware of the great concern which exists at the highest levels of this Government with regard to the proliferation of nuclear weapons. With the expanding use of nuclear energy for power and the greater civilian involvement with nuclear material there is a real danger that clandestine traffic in these materials might occur.

In this connection I would like to bring the following matter to your attention. The Nuclear Materials and Equipment Corporation of Apollo, Pennsylvania, is one of the principal processors of nuclear materials such as plutonium and U 235 which if diverted could be used for weapons. Although NUMEC made periodic physical inventories and the United States Atomic Energy Commission performed a number of accountability surveys, a significant quantity of enriched U 235, possibly representing a cumulative loss over a period of years, could not be accounted for in the spring of 1965. These losses came to light in the closing out of a large contract. Because of the condition of NUMEC's records and the nature of the operation, the specific disposition of this material could not be identified. At that time the AEC reported that although it could not be stated with certainty that a diversion of this material had not taken place, no evidence had been found to support the possibility of diversion and that other information did exist to reduce such a possibility.

SECRET

25X1, E.O.13526

It is critical for us to establish whether or not the Israelis now have the capability of fabricating nuclear weapons which might be employed in the Near East. Furthermore, introduction by Israel of such weapons into their arsenal would undoubtedly affect the Non-Proliferation Treaty which has been placed before the United Nations by the United States and the USSR.

Given the aforementioned circumstances, I urge that the Federal Bureau of Investigation be called upon to initiate a discreet intelligence investigation of an all source nature of Dr. Shapiro in order to establish the nature and extent of his relationship with the Government of Israel.

Sincerely,

Richard Helms

~~SECRET~~

UNITED STATES DEPARTMENT OF JUSTICE

FEDERAL BUREAU OF INVESTIGATION

WASHINGTON, D.C. 20535

September 3, 1969

BY LIAISON

Honorable Richard Helms
Director
Central Intelligence Agency
Washington, D. C.

Dear Mr. Helms:

As you are aware, this Bureau has been conducting an investigation of Dr. Zalman Mordecai Shapiro, head of the nuclear processing firm, NUMEC, Apollo, Pennsylvania, since May, 1968. Copies of reports covering our inquiries, including a summary report prepared by our Pittsburgh Office under date of February 18, 1969, have been furnished to your Agency on a continuing basis.

Shapiro was interviewed by representatives of the Atomic Energy Commission (AEC) on August 14, 1969, concerning his relationship with Israeli officials. On the basis of information developed during this interview, particularly Shapiro's statement that throughout his associations with Israeli officials he has never been asked to furnish classified information, has never furnished, and would not, if asked to, furnish such information to unauthorized persons, the AEC has advised that it does not contemplate further action in this matter at this time.

We have conducted a thorough and extended investigation of Shapiro for more than a year, including substantial

~~SECRET~~

Group 1
Excluded from automatic
downgrading and
declassification

~~SECRET~~

Honorable Richard Helms

physical surveillance coverage. We have developed information clearly pointing to Shapiro's pronounced pro-Israeli sympathies and close contacts with Israeli officials, [redacted] It is believed most unlikely that further investigation will develop any stronger facts in connection with the subject's association with Israeli officials. The basis of the security risk posed by the subject lies in his continuing access to sensitive information and material and it is believed the only effective way to counter this risk would be to preclude Shapiro from such access, specifically by terminating his classified contracts and lifting his security clearances. However, after careful consideration, including an interview with Shapiro, AEC has advised that it plans no further action at this time.

Under these circumstances, we are discontinuing our active investigation of the subject. We will, of course, continue to keep interested agencies advised of any pertinent information concerning the subject which may be received from our sources.

Sincerely yours,

J. Edgar Hoover

~~SECRET~~

11 MAR 1976

DDS&T-1290/76

DCI read

MEMORANDUM FOR: Director of Central Intelligence

FROM : Carl E. Duckett
Deputy Director for Science and Technology

SUBJECT : Nuclear Materials and Equipment
Corporation (NUMEC)

1. The attached memorandum dated 9 March 1972 summarizes the NUMEC case. It was written by [redacted] who originated CIA action on this case and who is available to answer any further questions you may have.

2. Since the Agency was looking at this case from the point of view of obtaining information on the nuclear intelligence capability of a foreign government we did not make a concentrated effort to follow this case from the standpoint of its domestic implications subsequent to the time of the attached memorandum.

3. It is our understanding that Mr. Helms brought the intelligence aspects of this case to the attention of Presidents Johnson and Nixon as well as Attorney General Clark, Director of the FBI, Mr. Hoover, Secretaries of State Rusk and Rogers, Deputy Secretary of Defense Rush, General Manager of the AEC Brown, the Joint Committee on Atomic Energy, and the Special Assistant for National Security Affairs, Mr. Kissinger.

4. The matter was again brought up recently in your discussions with The Joint Committee on Atomic Energy. The DDS&T also briefed the Commissioners of The Nuclear Regulatory Commission on NUMEC. The ADD/S&T and [redacted] also discussed the matter at some length with Mr. Murphy, Staff Director of The Joint Committee, on 5 March 1976.

Withheld under statutory authority of the Central Intelligence Agency Act of 1949 (50 U.S.C., section 403g)

5. The following information outlines Agency efforts to persuade the FBI to undertake an investigation of Shapiro and NUMEC and to keep track of its activities in this regard.

a. On 2 April 1968 Mr. Helms sent a letter to the Attorney General urging that the FBI initiate a discreet intelligence investigation of Dr. Shapiro. Mr. Hoover had suggested this course of action.

b. On 23 April 1968 the Attorney General called Mr. Helms to say that he had directed the FBI to investigate.

c. On 3 September 1969 Mr. Hoover sent Mr. Helms a letter stating that the AEC doesn't contemplate any further action on the case at that time. Mr. Hoover said that the Director of Security, AEC, had asked Shapiro whether he had passed classified information to any foreign government. Shapiro replied that he had not. Apparently no mention was made of the passage of nuclear material to a foreign government. Mr. Hoover further stated that the FBI was discontinuing any further active investigation of the case.

d. On 13 October 1969 Mr. Helms sent a memorandum to Hoover, FBI, urging him to conduct audio surveillance of Shapiro since it appeared that Shapiro planned to emigrate to Israel.

e. On 17 October 1969 Mr. Hoover sent a memorandum to Mr. Helms stating that he had reviewed the Shapiro matter and Mr. Helms should take the matter up with the Attorney General. This was not done.

f. On 4 October 1970 the CIA asked the FBI if they had any further information on Shapiro's activities. On 3 February 1971 the FBI sent a response to CIA based on the 1970 request. One FBI report was received from the October 1970 request that was germane to the problem. The report indicated Shapiro had requested from an official of the Kawecki Berylco Company to be brought up to date on a sensitive AEC project two weeks after he joined the company. There was no further FBI reporting on the case after that.

~~SECRET~~ SENSITIVE

SUBJECT: Nuclear aterials and Equipment
Corporation (NUMEC)

[redacted]

50X1-HUM, E.O.13526

7. Our files in the NUMEC case consist for the most part of data received from the AEC and the FBI. A number of FBI reports were received and we presume these reports included all the substantive data collected by the FBI through February 1971 though we have no assurance of that fact. The AEC information consists of only a few documents on the results of their investigation of the NUMEC case. No investigative reports are in our file.

[redacted]

Carl E. Duckett

Withheld under statutory authority of the Central Intelligence Agency Act of 1949 (50 U.S.C., section 403g)

Attachment:
As stated

~~SECRET~~ SENSITIVE

9 March 1972

MEMORANDUM FOR THE RECORD

SUBJECT: Possible Diversion of Weapons Grade Nuclear Materials to Israel by Officials of the Nuclear Materials and Equipment Corporation (NUMEC)

1. From 1947 until the Atomic Energy Act of 1954 all special nuclear material was owned by the United States Government and with certain exceptions was held by the AEC and its cost type contractors operating Government owned and/or controlled facilities. The Act of 1954 was designed to widen participation in the use of atomic energy. While the material was still owned by the U.S., it was more widely held by Government contractors and by licensees who were not Government contractors. Legislation in 1964 made private ownership of special nuclear material permissible. The 1954 Act authorized the AEC to regulate the use of these materials and to guard against loss or diversion. In setting up regulations to enforce the control of material, the Commission concluded that the physical protection and accountability controls which licensees as prudent businessmen would maintain over special nuclear material because of its intrinsic value and their responsibility for its loss or damage and the severe criminal penalties provided by AEC's governing legislation would adequately protect the national interest from the standpoint of unlawful diversion. In 1955 a policy was adopted along these lines by the AEC. In May 1966, the AEC concluded that a change toward tighter controls was in order and the Commission amended their regulations on 25 January 1967.

2. In 1957 Dr. Zalman Mordechai Shapiro left Westinghouse and established a firm called Nuclear Materials and Equipment Corporation (NUMEC) in Apollo, Pennsylvania. Instrumental in the financing of the new firm was a Pittsburgh industrialist named David L. Lowenthal, a long-time, close, personal friend of Shapiro.

25X1, E.O.13526

SECRET/SENSITIVE

3. NUMEC owned and operated a uranium processing facility at Apollo, Pennsylvania. It first received material under lease arrangement in December 1957 and received its first material as an AEC contractor in December 1957. From the start up through 31 December 1966 NUMEC received 21,750 kg of U 235 and shipped 19, 865 kg U 235 reporting losses of about 260 kg or about 1.2% of total receipts. Starting about 1960 the AEC began a continuing, but in the opinion of the Comptroller General of the United States ineffective, campaign to get NUMEC to implement adequate control of the material in its plant. This matter came to a head in November 1965 when the AEC made a detailed survey to determine total losses since start up and to attempt to explain the "unexpectedly" high U 235 loss on the WANL contract (Westinghouse). The survey established the loss from 1957 until 31 October 1965 as 178 kg U 235. Of this total, 84.2 kg was estimated by the survey team to have been lost through known loss mechanisms (NOL) and the remaining amount of 93.8 kg was categorized as MUF. MUF is defined as usually the result of uncertainties in measurements, unknown losses and undetected errors in records. In 1964, a fire occurred in the vault containing nuclear materials at NUMEC, which effectively destroyed records of the input and output of material. The fire occurred during a strike when the plant was shut down. The AEC report on the November 1965 survey presented the view that while it could not be stated with certainty that diversion did not take place, the survey team found no evidence to support the possibility of diversion. The Comptroller General found that because of the condition of NUMEC's records, they were unable to state an opinion on the disposition of the MUF but had no reason to question the AEC conclusion with regard to diversion. The Comptroller had been asked to investigate this situation by an alarmed Joint Committee of the Congress on Atomic Energy on 7 September 1966. The Comptroller General's report to the Congress stated: "Notwithstanding extensive reviews of NUMEC's operations neither the AEC nor NUMEC have been able to identify with a high degree of certainty the specific causes of WANL material loss."

4. During the period August 1958 to October 1965, NUMEC shipped some 425 kg of U-235 overseas to various parts of the world under some 28 different contracts. The AEC report states the following: "Quantities in individual shipments, domestic as well as foreign, are not confirmed independently by the AEC. Such actions have been outside the scope of the present AEC system of control of nuclear material. Instead, reliance has been placed on a technical review of the shipper's internal controls and independently developed receivers data. The validity of this approach is of course largely dependent on the integrity of the shipper and the receiver."

~~SECRET~~/SENSITIVE

25X1, E.O.13526

~~SECRET~~/SENSITIVE

[redacted]

6. On the basis of the foregoing it must be assumed for the purpose of U.S. national security that diversion of special nuclear materials to Israel by Dr. Shapiro and his associates is a distinct possibility. Such a diversion might be evolutionary or revolutionary. NUMEC was formed by Dr. Shapiro and his associates in 1957 [redacted]

7. On the other hand, it is possible that the idea of diversion didn't occur until much later when the existence of the reactor at Dimona was discovered [redacted]

8. [redacted]

~~SECRET~~/SENSITIVE

[redacted] It is interesting in this connection to quote from the AEC investigation of 1966 when the AEC team requested NUMEC production control and process engineering records on the WANL and other contracts: "All efforts in this direction were negated when it was learned that many of the requested records had been inadvertently destroyed by supervisory personnel during a 'clean-up' campaign at the time of an employee strike, January 1 to February 25, 1964." (This was in addition to the fire mentioned in paragraph 3 above.)

9. To the best of our knowledge, the strike which gave supervisory personnel free run of the facility pinpoints the time at which the material could have been most easily diverted to Israel and the time at which evidence of such a diversion could best be covered up. Given the state of affairs at NUMEC from 1957 on, a diversion could have occurred at any time, but the period January - February 1964 is certainly the most suspect. With regard to the material itself, it could have been shipped in less than critical lots of say twenty pounds per lot. Lead coated or nickel plated, it would present no radiation hazard and could have easily gone by diplomatic pouch or Israeli merchant ship or even El Al Airlines. Transportation of diverted material to Israel would have been a simple matter.

10. In September 1969 CIA was informed by the FBI that Shapiro had been interviewed by AEC officials on 14 August 1969. On the basis of information developed during the interview, particularly Shapiro's statement that he had never furnished classified information to unauthorized persons, the AEC has advised that it does not contemplate further action on this matter. The FBI informed CIA that while they had developed information clearly pointing to Shapiro's pronounced pro-Israeli sympathies and close contacts with Israeli officials [redacted] the FBI believed that further investigation would be unlikely to produce any facts leading to conviction and therefore were terminating their active investigation. It should be noted that the AEC meeting with Shapiro was not coordinated with CIA although the AEC was well aware of CIA's interest in the affair. CIA attempts to persuade the FBI to continue the

investigation proved fruitless.

11. In June 1970 Shapiro resigned from NUMEC and took a position as Vice President for Research and Development with Kawecki Beryleo Company in Temple, Pa. [redacted] In July 1971 Shapiro left Kawecki Berylco and took a position as executive assistant to Westinghouse breeder reactor divisions' general manager. To quote Nucleonics Week of 8 July 1971, "At Westinghouse he'll be giving guidance and advice on the Fast Flux Test Facility project and breeders, with special concentration on fuel."

~~SECRET~~/SENSITIVE