

November 1, 1978

SECY-78-425A

COMMISSIONER ACTION

For:

~~The Commissioners~~

From:

Clifford V. Smith, Jr., Director
Office of Nuclear Material Safety
and Safeguards

Thru:

Executive Director for Operations *CS*

Subject:

RESPONSE TO RECOMMENDATION FROM THE OIA/OGC "INQUIRY INTO
THE TESTIMONY OF THE EXECUTIVE DIRECTOR FOR OPERATIONS,"
VOLUME 1, SUMMARY REPORT, DATED FEBRUARY 1978

Purpose:

To provide to the Commission an analysis of the allegations
made by Mr. J. H. Conran concerning thefts or diversions of
nuclear material.

Discussion:

In his July 29, 1977, testimony before the Subcommittee on
Energy and Environment, Mr. Conran testified that "There are
other instances of theft and material stolen than the NUMEC
installation, thefts or suspected thefts. That information
is included in an appendix of my draft overview study....
There have been other successful attempts to steal nuclear
material - not always a large quantity, not always bomb-grade
material. There have been a number of instances in which
nuclear material was stolen."

In February 1978 a report, "Inquiry into the Testimony of the
Executive Director for Operations," was published by the NRC
Offices of Inspector and Auditor and General Counsel. In that
report it was concluded that "because of emphasis on the NUMEC-
Apollo matter, the public record on other possible thefts or
diversions of SNM remains unclear in light of Mr. Conran's
testimony in the July 29, 1977 hearing...." The OIA/OGC
report went on to recommend that "NRC safeguards experts
should identify, clarify publicly, and take whatever action
may be appropriate with respect to other alleged successful
thefts or diversions mentioned by Mr. Conran in his July 29,
1977 testimony."

Two enclosures respond to the above recommendation as follows:
Enclosure 1 consists of Attachment A to Mr. Conran's March 10,
1977, memorandum to OIA and Appendix J of Mr. Conran's Draft

Contact:

J. Davidson, NMSS
4195

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Overview Study, which contain his allegations. Enclosure 2 is an assessment of each of these allegations. In a March 10, 1978, memorandum to Mr. Conran, I requested any additional information in Mr. Conran's possession concerning alleged thefts or diversions of nuclear material and, in particular, special nuclear material. On March 28, 1978, I repeated my request to Mr. Conran, noting that, in the absence of a response on this matter, "I will conclude that you do not have any additional information concerning alleged thefts or diversions of nuclear material...." To date, Mr. Conran has not responded to either of my requests.

All data that NMSS has located concerning the allegations in Attachment A and Appendix J is included in this assessment in order to provide as clear a perspective of the events as possible and to assist in determining any safeguards significance they may have had. To summarize, 44 of the 51 allegations dealt with rumors and attempted swindles, did not involve SNM, or involved less than three grams of nuclear material. Of the remaining seven, in one event, the material, which was in the form of fuel plates, was recovered. In two events, it was concluded that the material was buried as waste. In four events, the final disposition of the material cannot be definitely determined. These four involve the loss of a fuel rod at Chalk River, Canada, fuel plates at the National Lead Co., and two entries involving inventory differences -- Items A-6 and J-50.

It should be noted that, except for the material inventory differences that occurred at NUMEC, Apollo, Pennsylvania, and NFS, Erwin, Tennessee, in the 1960's, this paper does not address inventory differences (ID's). We believe that ID's are adequately covered by NUREG-0350, Vol. 1, No. 1, titled, "Report on Strategic Special Nuclear Material Inventory Differences" and NUREG-0430, Vol. 1, No. 1, titled, "Licensed Fuel Facility Status Report." Two other NMSS documents bear on this issue: 1) the Safeguards Summary Event List, which was placed in the Public Document Room and provided to members of Congress in April 1978, and 2) SECY-78-404A, September 1978, which contained instances of alleged successful thefts or diversions of strategic special nuclear material.

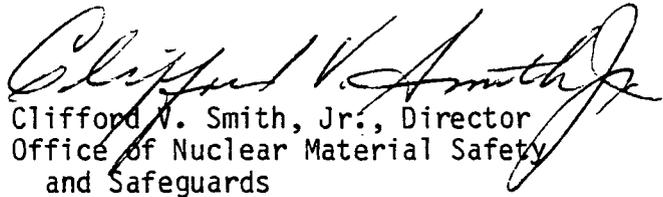
Subsequent to its review of Attachment A and Appendix J, NMSS undertook a survey of additional materials referred to by Thomas B Cochran in his letter to Chairman Hendrie, dated July 18, 1978. These materials consist largely of background notes prepared by Mr. Conran and provided by him to the Division of Rules and Records through the Office of Standards Development on November 30, 1977, in response to two FOIA requests. These rough notes are largely handwritten, often cryptic, and difficult to interpret. A preliminary review of this additional material reveals that many of the events are duplicative, a number appear to involve ID's, and others are too obscure to be interpreted. Excluding from consideration duplicative events and those pertaining to license-exempt material, we have identified three events that might be pertinent to this assessment. From the scant data available, it appears that these three events involve a possible lost fuel bundle, material lost in transit, and U-235 in less than formula quantity whose reason for inclusion in Mr. Conran's notes is unknown. However, since location and other clarifying detail are not provided for these three events, no staff judgment as to their relevance can be made at this time.

Enclosure 3 addresses these three events and also three alleged events relating to license-exempt material referred to in paragraph 5(a) on page 240 of the July 29, 1977, Oversight Hearing before the House Subcommittee on Energy and the Environment. Should further review of the license-exempt events be desired, the list would have to be forwarded to the appropriate agencies with a request for analysis.

The information in this analysis resulted from extensive research of known and in some instances obscure records and therefore may not in every case be complete. It does represent a sincere effort on the part of the staff to gather as complete and accurate a history as possible.

Recommendation: This paper is an unclassified edition of SECY-78-425. It has been prepared to permit placement in the PDR to better service requests for such information. It is recommended that the paper be placed in the PDR.

Coordination: The Offices of Inspection and Enforcement, Nuclear Reactor Regulation, and Standards Development concur. The Office of the Executive Legal Director has no legal objection.


Clifford V. Smith, Jr., Director
Office of Nuclear Material Safety
and Safeguards

Enclosures:

1. Attachment "A" to Conran's
March 10, 1977 memo to OIA
and Appendix "J" of Conran's
Draft Overview Study
2. Assessment of Attachment "A"
and Appendix "J"
3. Additional Events Referenced in
Letter to Chairman Hendrie from
Thomas B. Cochran, Dated July 18,
1978

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SECY NOTE: Commissioner action was completed on SECY-78-425, no further response is required.

ATTACHMENT "A" TO JAMES H. CONRAN'S MARCH 10, 1977 MEMO TO OIA
AND APPENDIX "J"
OF CONRAN'S DRAFT OVERVIEW STUDY

Attachment 1:

Documented Instances* of Theft or Suspected Theft of Nuclear Material:

1. June/July 1968 Theft of seven fuel plates at MIT, containing 4.29 Kg depleted U and 19.98 gm HEU powder (98% U₂₃₅) [Plates recovered - returned by person who took them.]
- Jan. 1968 Suspected Theft of two ETR fuel plates at National Lead containing 25.95 gm HEU and 27.12 gm HEU [Not recovered]
- Nov. 1966 Theft of 20 fuel elements (400 lbs of natural U) discovered at Bradwell Nuclear Station in England [Recovered on tip from informant]
- July 1970 Theft of 2700 lbs U₃O₈ in two 55-gal. drums from Western Nuclear in Wyoming. [Recovered by FBI in Salt Lake City, Dec. 1970, after lengthy sale.]
- April 1969 ~100 lbs depleted uranium, missina-presumed-stolen from Kalite Tungsten Co., N.J., offered for sale as HEU cubes in swindle attempt
- Nov. 1966 Settlement made with AEC by NOREC (~\$939,000) for ~670 HEU COUPE for operations over period Dec. 1957 - Dec. 1966. JIC developed information indicating existence of intel. assessment that material had been diverted to the purp. of a foreign government.

* Source - Files of NRC/IS&E | ERRA/PSS (and Internal Security)

Summary List of Incidents (Threat Relevant) from NRC & ERDA Files

(Major Items Excerpted From Appendix K)

1975

1. Late Oct-Early Nov Union Oil Company extortion threat involving IND, 20kt device claimed, and 5×10^6 dollar demand
2. Mid-to-late Oct. N.Y.C. Pu dispersal device/extortion threat
3. 9/13/75 Threat to explode IND in Boston
4. 9/1/75 Zion guards intercept radio message (CB) concerning bomb plot - two unidentified intruders
5. 8/9/75 D.R.H. showed ERDA employee bomb sketch (IND) - adversary group claimed to have Pu, ERDA facility sabotage planned in 1976
6. 7/7/75 Threat to detonate IND on large Amer. City (L.A., San Diego Houston, Chicago, El Paso); IND device & D&T component included - Gun & Implosion Assembly System sketches provided.
7. 7/3/75 Threat to use IND against Chase Manhattan - 30×10^5 dollar demand - " " (Levy/BNL - regarding CFE design)
8. ** May-June/75 Known active criminal infiltrated K-M guard force; eventually discovered/discharged - Subsequently involved in robbery/shootout
9. ** 6/13/75 Incendiary bomb found in LBL employee's car gas cap - removed and detonated by FBI (Cricket lighter)
10. 5/29/75 Prairie Is. overflight/reconnaissance photo by known criminal
11. 5/24/75 Zion guard shot at by four men in a car
12. 5/6-7/75 JCPL (Forked River) bomb threat, sketch of bldgs. and area provided in extortion note. Guards found lock missing in perimeter fence and at Met. tower (evidence of break-in)
13. 4/25/75 Threat to detonate IND in large Amer. city if U.S. does not intervene against Vietnam takeover
14. 4/11/75 Threat to use IND against PG&E facility. \$300k demand
15. 4/7/75 Point Beach - Guard shack fired on - Alarm wire cut

16. 4/8/75 Threat to use IND to blow up Ohio water supply (Place in camper/pickup and park near dam)
17. 3/27/75 PG&E tower bombed
18. ** 2/26/75 Two persons penetrated fence at NFS Erwin - detected by IR beam
19. May, 1975 Fessenheim (French) Reactors sabotaged/explosives in reactor bldg. under construction
20. 4/30/75 Several possible attempts of theft, ^{reported} of nuclear weapons from NATO EUCAM storage sites - intrusion attempts, surveillance operations, guards have fired on intruders (Source-Cong. Record)

1974

21. 12/16/74 LEU pellets found outside bldg. at K-M; Zip-gun found in locker inside plant
22. Dec. '74 LLL Insp. reports cite open gates, no patrol, unchallenged U-Haul truck parked near gate
23. 9/10/74 NFS guards strike
24. 9/5/74 samples stolen from railcar shipment GJO to Nat'l Lead
25. 8/29/74 Incendiary explosive found at Pilgrim
26. 6/15/74 Apollo Facility - Inspector found double vehicle gate open/unattended and other serious security violations cited
27. 6/5/74 Possible theft of SNM pellets from K-M - reported (alleged to have occurred in 1970)
28. 5/29/74 Gulf Nuclear, New Haven - Intrusion and breakin of bldg. in which SNM processes/stored
29. **3/29/74-5/29/74 Attempted breach of fence at NFS Erwin; 2 men with 12' 2x4 heard and seen
30. ** date??? U.S. Nuclear, Tennessee - Noise attracted guard - shadowy figure seen - messenger wire cut

1973

31. ** 3/15/73 Break-in of Fuel Storage bldg. at Ocononee - No fuel believed stolen!!

1972

32. 7/7/72 Torn tarp & broken seals on UF-6 container - Shipment British Nuclear Fuels to ORO (Edlow)
33. 4/7/72 Reported availability of 4 drums (750gms each) HEU for sale by American Consul Luanda -
34. ** 3/23/72 Former United Nuclear Corp, New Haven employee approached by acquaintance with criminal record and solicited to be involved in theft of uranium for money

1971

35. Nov. 1971 Arson at Indian Point #2 - 5×10^6 dollar damage
36. 8/30/71 Theft of 0.5gm HEU + 1.5gm Thorium from Gulf Eng & Env. Sys. San Diego
37. 2/16/71 Theft of 50 lbs. depleted uranium and small amounts HEU by NUMEC employee (recovered)
38. 1970-1973 Yellow cake thefts and series of attempted swindles which resulted.
- a. Also involved alleged 50k bribe of a mill owner to use his equipment to upgrade and reintroduce into legitimate fuel cycle
 - b. Flora (Denver Compliance Office) "Possible existence of 400k lbs. stolen yellowcake.. we believe material exists because..."
 - c. 2700 lbs. (two 55 gal. drums) stolen from Western Nuclear Jeffrey, Wyo. - recovered by FBI Salt Lake Central Stock Exchange - attempts to prosecute - Hahn (ERDA says 2 men jail)
39. Feb-Aug, 1971 FBI advised AEC of offer to sell 2 1/2 lbs. HEU
- a) Reported in N.J. and Brooklyn
 - b) Involved FBI informant/infiltrator of mafia org.
 - c) Offered for sale to Russians for \$400k - ($\2.10^6 worth)
 - d) Alleged obtained in J.F.K. Airport theft

1969

40. * 10/1/69 Border Patrol had informant information that Pu-calibration source offered for sale
- Stolen from J.F.K. in Aug. 1969 - identified as property of Atom Chem. Corp.
 - Informant had seen cannister and shipping papers
41. * /16/69 Truck hijacked-shipment to Mound Lab aboard - Pu-Be source stolen
42. * 6/27/69-7/2/69 Theft of 7 depleted uranium plates and 19.98gms HEU powder at MIT
43. * 6/9-10/69 FBI notified AEC of recovery of hijacked truck in Newark, NJ area
- Manifest showed 11lb. HEU powder alloy in cargo-shipment B&W/KAPL
 - HEU not recovered with truck - flap ensued - found later had been removed prior to hijack but papers not changed
44. 6 : 69 FBI reported to AEC attempt to sell cubes of uranium stolen from National Lead
45. 4/4/69 ~ 100 lbs depleted uranium stolen from Kulite Tungsten Corp, NJ cut into cubes
- offered for sale as 26 lbs. pure uranium in NYC
 - alleged contact with Isreal Consulate
 - FBI informant
46. Jan., 1969 30 plates and 72 platelets and a foil missing at ID
- Cause unknown
 - Assumed buried by mistake
 - One of many such at ID

1968

7. * 9/20/68 Chalk River-Fuel Element missing from storage
- Cause unknown
 - 177gms HEU + 109gms ThO₂

8. 3/31/68

LASL Disappearance of six fuel plates

- a) 355 HEU
- b) Cause unknown - investigation continuing
- c) One of several at LASL

9. 1/28/68

Suspected theft of ETR Fuel Plates at National Lead

- a) 55gms HEU
- b) Cause unknown - investigation continuing

10. 1966-67-68

NFS - 74kg NUMEC - 67kg HEU - MUFs

- a) Intel. report that NUMEC material diverted said to exist
- b) ~\$10⁶ settlement each - Regulations changed - Congress came unglued
- c) GAO/JCAE/AEC/FBI/CIA investigations
- d) Arguments for NRC/Licensee Management/Guard collusion analysis derive in part from these fiascos

ASSESSMENT OF ATTACHMENT "A" OF JAMES H. CONRAN'S
MARCH 10, 1977 MEMO TO OIA AND APPENDIX "J" OF
CONRAN'S DRAFT OVERVIEW STUDY

SUMMARY ASSESSMENT OF CONRAN ALLEGATIONS

Before examining each of the 56 allegations contained in Attachment A and Appendix J of Mr. Conran's "Report of the Overview Study of Existing Safeguards Regulations," a brief review of them is useful. Three allegations in Attachment A are repeated in Appendix J and one allegation in Attachment A is repeated twice in Appendix J so that there are not 56 allegations but only 51. These 51 allegations can be divided into two categories -- events that did not involve nuclear material and events that did involve nuclear material. These two categories will be briefly examined in turn.

Thirty of the 51 allegations did not involve nuclear material, and only 18 of these 30 allegations dealt with events occurring at NRC licensees. These 18 events involved rumors, suspicious or unusual activity, and in one case (Appendix J Statement #35), arson at a nuclear power plant construction site. While some of the 18 allegations dealing with NRC licensees but not involving nuclear material are of safeguards interest, investigations at the time of each event concluded that no material was stolen nor was the public health and safety endangered as a result of these events.

The remaining 12 of the 30 allegations not involving nuclear material occurred at non-NRC licensed facilities, occurred at a location not processing or using nuclear material, or involved nuclear extortion threats that could be characterized as hoaxes since no nuclear explosion occurred or no nuclear device was found.

Twenty-one of the 51 allegations dealt with events in which nuclear material was involved. Two of the 21 events can be dismissed because they were the result of poor documentation or unsubstantiated rumor. Two of the 21 events involved offers to sell material that appear similar in nature to numerous attempted frauds based on the alleged possession of SNM. Six of the 21 events involved yellowcake or depleted or low enriched uranium that could not have been directly used in making an improvised nuclear device (IND). In only 11 events was SSNM involved and determined to be missing or misplaced. However, in five of these 11 events the material was recovered or investigators concluded that the material was accidentally disposed of. Of the remaining six events involving SSNM, two involved two grams or less of nuclear material, and in two other events, the material, which was in the form of a fuel rod and fuel plates, was only a fraction of that required for an IND. The remaining two allegations dealt with large unexplained inventory differences. Based on information available to NRC at the present time, there is no conclusive evidence that a diversion of a significant amount of strategic SNM either did or did not take place in those two events.

In summary, 44 of the 51 allegations contained in Attachment A and Appendix J of Mr. Conran's "Report of the Overview Study of Existing Safeguards Regulations" dealt with rumors and attempted swindles, did not involve SNM, or involved less than three grams of nuclear material.

In one event, the material, which was in the form of fuel plates, was recovered and in two events, it was concluded that the material was buried as waste. In four events, involving a fuel rod at Chalk River, Canada, fuel plates at the National Lead Co., and particularly the two entries involving inventory differences (items A-6 and J-50), no definite conclusions about the final disposition of the material can be made.

DETAILED ASSESSMENT OF CONRAN ALLEGATIONS IN ATTACHMENT "A"

Conran Attachment A Statement #1

"June/July 1968 - theft of seven fuel plates at MIT, containing 4.29 kg depleted U. and 19.98 gm HEU powder (98% U-235) (Plates recovered - returned by person who took them)."

NRC Files Reflect

On July 1, 1969, the Massachusetts Institute of Technology (MIT) reported the loss of four depleted uranium plates weighing 2.45 kg in addition to the loss of 20 grams of highly enriched uranium. These materials were subsequently found on the desk of an MIT professor following police questioning of a suspect. The consensus of MIT personnel knowledgeable of this incident was that access to the material was probably gained through the use of an unauthorized MIT master key. (As a result of this event, material was subsequently stored in a lead safe and the locks on the door leading to the storage area and safe were changed so that they were no longer of part of the Institute's master lock and key system. Locks leading to the reactor area were also changed.) A graduate student at MIT was the prime suspect in the case, but prosecution was not sought after the FBI investigation was unable to develop sufficient evidence of criminality.

Comment

The loss of 20 grams of U-235 did not represent any threat to the public health and safety or national security. Material in this quantity does not require physical protection. This item is the same as item #42 in Appendix J.

Conran Attachment A Statement #2

"January 1968 - suspected theft of two ETR fuel plates of National Lead Co. containing 25.95 gm. HEU and 27.12 gm. HEU (not recovered)."

NRC Files Reflect

Two highly enriched uranium fuel plates consigned by the Idaho Nuclear Corporation to its inspector at the National Lead Company, New York, were reported missing January 29, 1968. The two fuel plates, containing a total of about 53 grams of U-235, were received by the inspector on Friday, January 26, 1968 and left wrapped on his desk over the weekend. The two plate identification numbers and the recipient's name were written on the package. There was no further identification on the package to indicate the nature of the contents. On Monday, January 29, 1968 the plates were missing. Subsequent search of the facility and interview of employees failed to locate the plates. The FBI conducted an investigation of this matter, but developed no suspects. The enriched uranium fuel plates were unirradiated, and were approximately 37-1/4 inches long, 3 inches wide, and 50 mls thick.

Comment

The loss of less than 60 gms. of U-235 did not represent a significant threat to the public health and safety or national security. Material in this quantity does not require physical protection. This item is the same as item #49 in Appendix J.

Conran Attachment A Statement #3

"Nov. 1966 - theft of 20 fuel elements (400 lbs of natural U) discovered at Bradwell Nuclear Station in England (Recovered on tip from informant)."

NRC Files Reflect

Twenty natural uranium fuel elements in cannisters were stolen from the Bradwell-on-Sea Nuclear Power Station, Maldon, Essex, England on or about November 18, 1966. The elements were recovered by police within a few days, and no damage to the material resulted nor was the public endangered.

The thieves were identified as a rigger working at the power station and a painter (not employed at the station). The perpetrators claimed they acted for monetary gain and that "a man in London" offered to pay them "twenty quid" for the fuel elements on delivery. The theft was initiated by the power station rigger who stole the elements from the plant storage area after working hours, wheeled the material to an outside fence, and threw it over to his accomplice who was waiting on the other side with a truck. The two thieves drove into London to deliver the fuel elements, but their connection never appeared. Police arrested the two several days later still in possession of the elements.

Each fuel element was 3 feet long, 4 inches in diameter, and weighed 10 kilograms. Each had a core of Uranium-238, with a very

Statement #3 cont.

low percentage of Uranium-235. The cannisters were valued at 200 British Pounds each.

Comment

The material was usable only in nuclear reactors, was not suitable for clandestine fission explosion fabrication, and did not pose a serious threat to the public's health and safety.

Conran Attachment A Statement #4

"July 1970 - theft of 2700 lbs U_3O_8 in two 55-gal drums from Western Nuclear in Wyoming (Recovered by FBI in Salt Lake City, Dec. 1970, after attempted sale)."

NRC Files Reflect

The following chronology is extracted from AEC records:

1. 7/1-2/70 - Western Nuclear conducts inventory. All material present.
2. 8/24/70 - Individuals purchase twenty-five 5-gallon containers identical to those later seized by the FBI at a Salt Lake City book store.
3. 8/25/70 - Former employee of Western Nuclear who was familiar with Western's operations receives a \$2000 check from individual. Notation on check indicates check issued for "mining consultant" although former employee states the check was for "jade" sold to the individual writing the check.
4. Early 9/70 - An individual attempts to sell uranium oxide to a Las Vegas company at \$3.50 per pound which was half the market price, saying he had six thousand pounds of material for sale.
5. 9/2/70 - An individual contacts Atlas Minerals, Moab, Utah, wanting to sell 2700 lbs. of U_3O_8 (98.52% U_3O_8). Atlas Minerals does not purchase the material because the individual cannot show proof of ownership.

Statement #4 cont.

6. On or about 9/10/70, twenty-five 5-gallon cans of uranium oxide are delivered to the owner of a Salt Lake City bookstore who would serve as broker for the material. The men delivering the material claim they can deliver at a rate of three thousand pounds per week up to a total of 400,000 pounds. The delivery men retained one can as a sample.
7. 9/11/70 - The FBI accepts jurisdiction for the investigation.
8. 9/12/70 - The FBI interviews the bookstore owner, the acting broker, and obtains a sample of the material which is analyzed as being 98.78% U_3O_8 .
9. 9/16/70 - The FBI is informed by the AEC that only three plants, one being Western Nuclear, were capable of producing the concentrate.
10. 9/18/70 - The twenty four cans containing U_3O_8 left at the bookstore are confiscated by the FBI at the bookstore. Total weight of 24 containers is 2,314 lbs.
11. 9/18/70 - An investigation reveals that two 55-gallon drums of U_3O_8 (totalling 1765.4 lbs. of material) are missing at Western Nuclear. The last inventory was 7/1-2/70. A sample of known lot of Western Nuclear missing U_3O_8 is compared with a sample of each of the twenty-four containers seized by the FBI and reveals they are chemically identical.
12. 12/70 - The President of Hydro-Jet Services (HJS) learns that a business partner may try to force him out of HJS so that HJS milling equipment can be used to process 500,000 lbs. of stolen yellowcake.

Statement #4 cont.

13. 2/19/71 - Two 55-gallon empty drums which had contained U_3O_8 missing from Western Nuclear are found in a remote desert area.
14. 7/71 - The President of HJS alleges a \$50,000 per month bribe was offered to use his milling equipment.
15. 10/13/71 - AEC notified of HJS President's allegations.
16. 10/15/71 - AEC notifies FBI of allegations by HJS.
17. 10/21/71 - FBI begins investigation of allegations.
18. 1/6/72 - FBI report states that their investigation does not disclose any stolen yellowcake or any clue to the existence of any in the area in question.

Comment

The 1765.4 pounds of uranium concentrate did not require physical protection and posed no significant threat to public health and safety. After a lengthy investigation, the FBI did not locate the alleged 400,000 pounds of yellowcake or any clue to its existence.

This event is also identified by Mr. Conran in Appendix J, statement 38.

Conran Attachment A Statement #5

"April 1969 - approximately 100 lbs depleted uranium, missing-presumed-stolen from Kulite Tungsten Co., N.J., offered for sale as HEU cubes in swindle attempt."

NRC Files Reflect

On 5/29/69 the AEC received the following information from the FBI:

An informant stated that he knew where 20 containers of uranium were located. The containers were cubed in shape (roughly 2" by 3"), weighing a total of about 100 pounds. The "containers" were lead-coated or gray in color and had "U.S. Govt." stamped on the top. The subject containers were reportedly stolen from a New Jersey laboratory. The informant was anxious to collect a reward.

At the time it was speculated that the "containers" were really cubes coated with plastic and could be depleted uranium or depleted uranium alloy. The New Brunswick Laboratory, National Lead, Oak Ridge and the Picatony Arsenal were contacted since they may have produced the described material. None of the firms reported any material missing.

On 6/3/69 the FBI provided to the AEC a 1-1/4" cube of metal that had been obtained from the informant. The subject cube had the appearance of having been coated with a plastic-type material and had "Caution - Radioactive Material - Uranium" stamped on one face of the cube. Enscribed on another face of the cube, apparently with a stylus, was the

Statement #5 cont.

number "TA-685." By using the gamma spectrometer, it was determined that the cube was either normal or depleted uranium and not special nuclear material.

The following morning, the cube was taken to the New Brunswick Laboratory for analysis. A density measurement (17.2 grams/cc) indicated that the cube was not pure uranium. Spectrographic analysis showed that it was depleted uranium (.4141% U-235) and that it contained a large percentage of molybdenum.

Both markings on the subject cube and the analysis supported the earlier suspicion that the material was depleted uranium and of an alloy composition used in the manufacture of counterweights (91% U, 8% Mo and 1% Ti). It was also suspected that the manufacturer was National Lead Company, Albany, NY, since they not only manufactured counterweights of this composition, but also they were the only commercial fabricator in the U.S. licensed to manufacture and distribute counterweights.

In view of the dollar value of the material and the fact that the material was not special nuclear material, the FBI did not plan to prosecute. The FBI did request that the AEC try and verify the name of the manufacturer. Accordingly, on 6/11/69 National Lead was contacted. National Lead management indicated that the cube had not been made by them and did not look like a counterweight to them. Further, National Lead personnel recalled a company in New Jersey that had attempted to get into the counterweight business a few years earlier, but had been unsuccessful. The company was Kulite Tungsten,

Statement #5 cont.

Ridgefield, NJ. National Lead volunteered that the cube itself was evidently cut from a larger piece of metal.

The last inspection of Kulite was held in 12/67 with no items of noncompliance found. The file was reviewed again in 3/68. By way of background, Kulite was involved in powder metallurgy work. In 8/66 Kulite embarked on a pilot program to make counterweights. At the conclusion of the program, Kulite decided to end the counterweight venture. However, at the time of the venture, Kulite had in storage 87 pounds of an alloy whose composition was approximately 92% depleted uranium and 8% nonradioactive material.

Comment

This event did not involve special nuclear material, and the material posed no threat to the public's health and safety or common defense and security. This event appears to be the same as those identified by Mr. Conran in Appendix J, statements 44 and 45.

Conran Attachment A Statement #6

"Nov. 1966 - Settlement made with AEC by NUMEC (~\$929,000) for operations over period Dec. 1957 - Dec. 1966. JHC developed information indicating existence of intelligence assessment that material had been diverted to the purposes of a foreign government."

NRC Files Reflect

Inventory differences occurred at NUMEC and are examined in the OIA/OGC Report, "Inquiry into Testimony of the Executive Director for Operations," dated February 1978.

Comment

In the 6/2/78 memorandum from S.J. Chilk (SECY) to L.V. Gossick (EDO), subject, "Commission Review of OGC/OIA Report," "Inquiry Into Testimony of the Executive Director for Operations," it is stated, "based on information available to the Commission at the present time, there is no conclusive evidence that a diversion of a significant amount of strategic SNM either did or did not take place."

DETAILED ASSESSMENT OF CONRAN ALLEGATIONS IN APPENDIX "J"

Conran Appendix J Statement #1

"Late Oct. - Early Nov. - Union Oil Company extortion threat involving IND, 20kt device claimed, and 5×10^6 dollar demand"

DOE Files Reflect

On 11/4/75 the Chairman of the Board, Union Oil Company, received an extortion letter threatening the use of a "nuclear device with a potential of 28 kilotons" and demanding one million dollars. Delivery of the money was to be made on 11/10/75. The deadline passed without incident.

Comment

NRC concludes that this event was an apparent hoax. As a result of an FBI investigation, a suspect was identified.

Conran Appendix J Statement #2

"Mid-to-late Oct. - N.Y.C. Pu dispersal device/extortion threat"

DOE Files Reflect

On 10/24/75 an anonymous extortion message was received. It stated, "Somewhere in Manhattan, on top of one of the buildings, a small box lies hidden containing a small measure of radioactive dust, three sticks of dynamite, a time device, and other elements to make it nice. It is set to explode at high noon on Friday, October 31, 1975 A.D."

Comment

NRC concludes that this event was an apparent hoax. The deadline passed without incident.

Conran Appendix J Statement #3

"9/13/75 - Threat to explode IND in Boston"

DOE Files Reflect

The DOE file on nuclear threats does not include the above item. However, in 8/75 an airline employee at an international airport in Florida reported receiving several anonymous threatening telephone calls. The messages consisted of threats against the black race and the statement that the caller had an "atomic bomb in Boston set to go off in 24 hours."

Comment

NRC concludes that this event was an apparent hoax. Federal and local law enforcement agencies were notified. No further communication was received from the anonymous caller.

Conran Appendix J Statement #4

"9/1/75 - Zion guards intercept radio message (CB) concerning bomb plot - two unidentified intruders"

NRC Files Reflect

At 1:10 AM on 9/1/75, the station security force at Zion nuclear power plant overheard a man say on their security radio frequency, "What time does the bomb go off?" At 1:20 AM a voice was heard to say, "Watch out for the camera pointed at the reactor." Based on this suspicious conversation, the Zion emergency plan for bomb threats was put into action. Additional guards were called in and patrol frequency was increased. During a patrol at the far west fence surrounding the owner controlled area, a guard reportedly observed two young men in the area outside the fence. The guard called for support and when it arrived, the two young men had disappeared in the underbrush. The Zion police were called and searched the general area, but no suspects were located. The FBI was notified.

All Station security force radios were accounted for at the time of this event. The radios are an "industrial band" low frequency FM which is not generally available to the public, but which may be used by other companies in industrial applications.

There is no evidence of a connection between the two youths sighted and the radio transmission received. There were many campers present in the adjacent Illinois Beach State Park on the night of the incident.

Statement #4 cont.

Comment

This event was an apparent hoax, and there appeared to be no threat to the public's health or safety. There was no indication the boys attempted to penetrate the fence around the owner controlled, not protected, area.

Conran Appendix J Statement #5

"8/8/75 - D.R.H. showed ERDA employee bomb sketch (IND) - adversary group claimed to have Pu, ERDA facility sabotage planned in 1976"

DOE Files Reflect

"In 8/75, a contractor employee of ERDA was advised during a commercial flight to Los Angeles by a fellow passenger with whom he had struck up a conversation that "the ERDA site would be bombed during the year of 1976 or sometime during the centennial year."

Who was to do the bombing was not identified other than the Lebanese Army and depressed people who would like to disrupt the U.S. Empire. The passenger displayed a drawing of a home-made atomic bomb and inquired as to whether it would actually work. He stated that 'they' already have the plutonium. He also stated that incendiaries and bombs (not identified) could be purchased at any K-Mart. He said that 'they' have incendiaries already made, which could be left in an office and would not ignite for six months.

The details of the incident were reported to Federal authorities. A representation of the drawing observed on the plane was forwarded to Headquarters for examination."

Comment

NRC concludes that this event was an apparent hoax. DOE did not include this event in its nuclear incident summary because the circumstances of the threat were not considered credible. Further, the sketch of the bomb was very similar in appearance to a hoax bomb drawing carried in a West Coast underground newspaper earlier in the year.

Conran Appendix J Statement #6

"7/7/75 - Threat to detonate IND on large Amer. City (L.A., San Diego, Houston, Chicago, El Paso); IND device & D&T component included - Gun & Implosion Assembly System sketches provided."

DOE Files Reflect

On 7/7/75 a hand written letter with illustrations was delivered to Federal authorities in Los Angeles. The letter claimed that the two extremist groups authoring it now had "the ability to construct, arm and detonate Nuclear and Thermo-nuclear weapons." When construction of the bomb was completed it would be detonated in one large city in an act of revenge for the Symbionese Liberation Army.

Federal agencies in Los Angeles were notified of the threat letter and copies were provided to the Headquarters, FBI and ERDA for further examination. An investigation was initiated in an attempt to identify the letter writer.

Comment

NRC concludes that this event was an apparent hoax. It is similar in context to an incident reported in 8/74. The above threat letter did not specifically identify any of the cities mentioned in Mr. Conran's allegation as possible targets.

Conran Appendix J Statement #7

"7/3/75 - Threat to use IND against Chase Manhattan - 30×10^6 dollar demand - "()" (Levy/BNL - regarding CFE design)"

DOE Files Reflect

In early July, an anonymous message with drawings was received threatening to detonate an atomic bomb at 6 p.m. on 7/10/75 unless \$30 million was delivered to a specific location.

New York FBI requested assistance to determine the credibility of the bomb diagram which accompanied the threat letter, and FBI Headquarters advised appropriate government agencies. An extensive investigation was conducted to determine the identity of the perpetrators, and the drop site was placed under surveillance. No attempt was made to recover the dummy ransom, and no further communications were received from the extortionist.

Comment

NRC concludes that this event was an apparent hoax.

Conran Appendix J Statement #8

"May - June/75 - known active criminal infiltrated K-M guard force; eventually discovered/discharge - subsequently involved in robbery/shootout."

NRC Files Reflect

The subject, using an alias, was employed by Kerr-McGee from 4/4/74 to 6/15/74 and was in a training course in Oklahoma City and not physically assigned guard duties at the Crescent facility until mid-May. There is no indication of unescorted access to the material access area at the plutonium plant. The subject resigned voluntarily when confronted with the knowledge that K-M suspected that he had used an alias when obtaining employment and after being informed that K-M would institute further checks. The existence of a criminal record for the individual became known subsequent to his resignation. K-M pre-employment check under the given alias consisted of one 15 year favorable employment check and one favorable personal reference. No adverse information was developed, and a name check with the local police revealed no record. The probability of his having another name came to light when a credit bureau telephoned K-M requesting verification of employment under the subject's real name.

The subject resigned on 6/15/74. Sixteen months later in October 1975, the subject was arrested for his involvement in an attempted robbery and shooting incident at a Savings and Loan.

Statement #8 cont.

Comment

There appears to be no evidence to support the contention that the individual "infiltrated" the guard force or that the individual sought employment at Kerr-McGee with an ulterior motive in mind.

Conran Appendix J Statement #9

"6/13/75 - Incendiary bomb found in LBL employee's car gas cap - removed and detonated by FBI (cricket lighter)"

DOE Files Reflect

On the morning of 6/9/75, a Monday, an employee of the Lawrence Berkeley Laboratory (LBL) noticed that the gas cap on a government pickup truck was missing. He looked into the gas filler tube and discovered that a "cricket" throw-away cigarette lighter had been placed in the tube. The device was about one inch from the mouth of the tube and was prevented from dropping into the gas tank by an anti-siphoning device. The employee immediately reported the discovery to the LBL guard force. The University of California bomb squad was called in because the San Francisco area security offices had been alerted to the fact that local radical groups were making delayed incendiary devices out of Cricket lighters (by packing them with white phosphorous). The lighter was examined and determined to be an incendiary device of the type described.

The device was detonated electronically by the bomb squad, and the FBI collected the fragments and residue for laboratory analysis. The FBI investigators and bomb specialists speculated that the device did contain explosive/incendiary material, such as phosphorous.

The government truck on which the incendiary device was found was located in a parking lot within the facility's perimeter fence.

Statement #9 cont.

A guard is stationed at the perimeter gate, but cannot observe the parking lot. The vehicle was parked approximately 60 feet from a building used principally for storage of LBL's retired records. If the device had exploded, it probably would have damaged adjacent vehicles and possibly could have ignited the record storage building.

Comment

While some damage could have resulted if the lighter had detonated in the truck's gas tube, the threat to nuclear material appears to have been remote or non-existent. LBL is an unclassified facility; its employees are not required to have clearances but carry employee identification. It could not be determined when or where the lighter was placed in the gas tube. This event involved neither the theft of nuclear material nor a violation of safeguards regulations.

Conran Appendix J Statement #10

"5/29/75 - Prairie Is. overflight/reconnaissance photo by known criminal."

NRC Files Reflect

On May 28, 1974 at 1:40 PM, NRC Region III received a telephone call from a Special Agent, FBI Minneapolis Field Office. The agent advised that he was working on a complaint received from the Northern States Power Company concerning low overflights by a private plane at the Prairie Island site. The agent inquired if the AEC had any regulations to restrict air traffic in the vicinity of reactor sites, and in particular, for Prairie Island. Region III responded that it had no knowledge of any such restrictions.

The agent advised that the plane flew over the Prairie Island site several times at such low altitude that ground observers read the identification numbers on its tail. It appeared to observers that an occupant of the plane was taking pictures. The FBI identified the owner of the plane as a nefarious "fence and narcotics dealer" from the Red Wing (Minnesota) area.

The agent stated that the FBI wanted to talk to the plane's owner to ascertain the purpose and intent of the "fly-overs," and, if there were any Federal laws or regulations to prohibit these "fly-overs," he would want to discuss these possible violations with him.

Statement #10 cont.

The subsequent FBI investigations did not reveal any malevolent intention or violation of the law. An AEC note dated 8/12/74 indicates that the FBI investigation had been closed out and no further action was indicated by the FBI.

Comment

This event, which did not go undetected, did not result in theft or sabotage of nuclear material.

Conran Appendix J Statement #11

"5/24/75 - Zion guard shot at by four men in a car."

NRC Files Reflect

A guard at the Zion nuclear power plant claimed that at approximately 1:58 a.m. on May 24, 1975, a car with high beams on and containing four persons approached to within 75 to 100 feet of the Zion 1 & 2 Illinois north gate station. This station is the entrance to the owner controlled area, not protected area, and is used for traffic monitoring purposes. The protected area fence is 150 feet south of north gate station, while the entrance to the protected area is still further from the scene of the event.

One of the occupants of the car got out and allegedly fired a shot. The guard assumed the prone position. A second shot allegedly was taken at the guard. The guard did not return the fire. A second guard manning the north gate station was on patrol in the area and did not hear any shots. The car immediately departed the area. Zion police responded within one minute (the police station is five blocks from north gate station), but could not locate the car. The police found no spent cartridges nor points of impact where the bullets allegedly hit.

Comment

All information concerning this event came from the guard manning the gate at the time. There were no witnesses who could provide additional information or corroborate the guard's narrative.

Conran Appendix J Statement #12

"5/6-7/75 - JCPL (Forked River) bomb threat, sketch of bldgs, and area provided in extortion note. Guards found lock missing in perimeter fence and at Met. tower (evidence of break-in)"

NRC Files Reflect

On 5/6/75 the Jersey Central Power Company received an apparent hoax bomb threat in the mail. The FBI, State and local authorities were notified. At 3 a.m. on 5/7/75, the Forked River security guards found a lock missing at the entrance gate to the Forked River site. A lock was also missing from the meteorology tower fence, and there was evidence of an attempted break-in of the shack. The locks were replaced and the local law was notified. The FBI was notified of these further developments.

Forked River was under construction and had no fuel requiring safeguards on site at the time of this event.

Comment

The bomb threat letter was considered to be a hoax. The connection, if any, between the letter and the missing lock was not determined.

Conran Appendix J Statement #13

"4/25/75 - Threat to detonate IND in large Amer. city if U.S. does not intervene against Vietnam takeover"

DOE Files Reflect

On 4/28/75 a Los Angeles newspaper forwarded to federal authorities an extortion threat it had received. It stated, "We will explode an atomic bomb hidden in one of the big cities of the United States, if in 15 days from now any powerful and effective military intervention from the U.S. is not made against North Viet Nam and the Viet Cong to save the South and restore freedom."

Comment

NRC concludes that this event was an apparent hoax.

Conran Appendix J Statement #14

"4/11/75 - Threat to use IND against PG&E facility. \$300K demand."

DOE Files Reflect

"An anonymous message dated 4/11/75 received by a West Coast utility was telephonically reported to ERDA Headquarters by the local ERDA office.

The message was reported to contain the following language:

'We have a bomb to destroy one of your power plants. We don't have the bomb now but, since you are having lots of problems with consumers, we propose you pay us \$300,000 or we'll write to all the news media saying we will set off nuclear bomb at one your nuclear power plants. If you don't pay you'll really have problems.'

The message writer gave a phone number of a San Francisco phone booth, stating further instructions would be made at noon on 5/13/75. The San Francisco Police Department was notified and placed a surveillance on the phone booth. No further contacts were reported."

Comment

NRC concludes that this event was an apparent hoax. In releasing the above information to the public, a DOE official stated that this event is not included on the DOE nuclear incident summary because the follow-up action indicated that the threat could be discounted as a hoax and no follow-up information was to be expected.

Conran Appendix J Statement #15

"4/7/75 - Point Beach - Guard shack fired on - Alarm wire cut"

NRC Files Reflect

No record of an event occurring on 4/7/75 could be located, but on or about 4/4/75, an unknown person(s) fired rifle or pistol shots into a junction box located on Wisconsin Michigan Power Co.-owned land at Point Beach, Wisconsin (totalling several hundred acres around the site). The junction box was not located within the protected area. The event occurred approximately one-half mile from the actual boundary of the protected area. One of the lines, a telephone line cut by the shots into the junction box, carried an alarm signal from an outbuilding where gauges and other valuable non-nuclear items were stored. The junction box and alarm line were nonessential to the site's safeguards. As a footnote, Region III reported that Point Beach is located in an area popular with hunters due to the abundance of deer and pheasant.

Comment

NRC files contain no information to support the allegation that a Point Beach guard shack was "fired on." A nonessential junction box one-half mile from the facility and not a guard shack was involved and was the object of vandalism. There appears to have been no threat to the licensee or nuclear material as a result of this event.

Conran Appendix J Statement #16

"4/8/75 - Threat to use IND to blow up Ohio water supply (Place in camper/pickup and park near dam)."

DOE Files Reflect

On April 8, 1975, an individual revealed to the Akron, Ohio, police that he knew of a plot to destroy numerous water supply areas within the state. Further, the individual claimed to be a "spy." The plot involved nuclear devices in campers that would be parked near various water supply areas and detonated from a plane on 4/9/75. The individual displayed numerous geodetic survey maps and probable targets. He also proposed various plans to defeat the plot, including using nerve gas and low frequency reflecters. The individual stated that he had never been in a mental institution and did not use drugs.

Comments

NRC concludes that this event was an apparent hoax. The circumstances of the plot were not considered credible by the Department of Energy.

Conran Appendix J Statement #17

"3/27/75 - PG&E tower bombed"

FBI Files Reflect

Electrical towers and utility substations have been and continue to be an appealing target for extremist protest bombings. Within a fifteen day period, 3/20/75 thru 4/8/75, five bombings occurred. In two incidents occurring on 3/20, six electrical transmission towers were bombed in Alameda County, California and an unincorporated area outside San Bruno, California. Damage was limited to the support stanchions of the towers. On 3/27/75, five explosions occurred at a PG&E utility substation in San Jose, California. No injuries occurred, but power was interrupted. On 3/29/75 a PG&E transformer bank was bombed, and on 4/8/75, the PG&E substation was bombed a second time.

Comment

None of these bombings posed a radiation threat to the public health and safety or involved nuclear materials or facilities. There is no evidence that a licensed facility was targeted.

Conran Appendix J Statement #18

"2/26/75 - Two person penetrated fence at NFS Erwin - detected by IR beam"

NRC Files Reflect

An NRC investigation report states that an investigation was initiated on 2/27-28/75 to ascertain the licensee's compliance or noncompliance with NRC regulations and license requirements regarding physical protection relating to the intrusion of Nuclear Fuel Services (NFS) protected area fence on 2/23/75. The summary of facts noted that, on the evening of February 23, 1975, NFS notified the NRC that two unknown individuals had been detected inside the protected area fence. The entry was detected when a beam of the detection system was broken on the west side of the plant. This followed one minute later when the beam was reported as having been broken again. NFS reported that a guard responded in the security vehicle at this time. About two minutes later, as the vehicle started down the west side of the fence, the beam was broken again, and the responding guard observed two figures leap from the top of the fence and run off in a northwesterly direction. The guard was about 700 feet away when the individuals departed the protected area. The guard observed the intruders depart the immediate area via a railroad spur that enters the NFS protected area at the point of escape. The guard did not pursue the intruders immediately, although a general search of the area was reportedly made later. The Unicoi County Sheriff's

Statement #18 cont.

Office was contacted and a deputy responded. The deputy assisted in the search. Except for footprints near the apparent point of entry, no evidence was found. The licensee searched the protected area, checked doors and tested intrusion alarms for operability. No problems were detected.

Comment

The intrusion was detected immediately. While the motivation behind this intrusion into the protected area is unknown, no building within the protected area containing licensed material was penetrated.

Conran Appendix J Statement #19

"May, 1975 - Fessenheim (French) Reactors sabotaged/explosives in reactor bldg. under construction"

NRC Files Reflect

The following is extracted from "Attributes of Potential Criminal Adversaries of U.S. Nuclear Programs" dated February 1978 prepared by the Rand Corporation:

"In May 1975, two bombs exploded at a nuclear power station under construction in Fessenheim, France. The explosions started a fire that damaged a peripheral area of the nuclear reactor complex. The reactor itself did not yet contain fissionable material. Shortly before the bombs exploded, a caller identified himself as a member of an unknown group that took its name from two known anarchists. In the months preceding the bombing, there had been local opposition to the construction of nuclear power stations in the area.

Comment

The explosion did not delay the completion of the reactor and, since no radioactive material was present, there was no threat to the public's health and safety.

Conran Appendix J Statement #20

"4/30/75 - Several possible attempts of theft reported of nuclear weapons from NATO EUCAM storage sites - intrusion attempts, surveillance operations, guards have fired on intruders (Source - Cong. Record)"

The Congressional Record Reflects

As a result of publicity in the media concerning the protection of nuclear weapons in Europe, on 4/30/75 Senator Pastore released an unclassified version of the report of his tour of nuclear weapon storage areas in Europe made in the spring of 1973.

In 1973, during Senator Pastore's and Senator Baker's tour, the following concerns were noted:

- 1) Nuclear Weapons sites appeared to be vulnerable to terrorist attack.
- 2) Certain nuclear weapons sites appeared to be particularly vulnerable to surprise attack by Communist forces.
- 3) Nuclear weapons were stored at a barracks with minimum protection.
- 4) The storage of nuclear depth bombs at [deleted] raised the question of their possible usefulness vs. their apparent vulnerability.
- 5) There had been sightings of unauthorized personnel approaching SAS sites. The Senators were advised that individuals had been fired on by guards at two sites. In one

Statement #20 cont.

incident a sentry challenged an individual seen in the area of a site and when the individual did not stop he was fired on but not apprehended. In the second incident, sentries had fired on but not hit "apparent intruders or observers." It appeared that some sort of surveillance of the site may have been the motivation.

6) The use of atomic demolition munitions may have been restricted due to political constraints.

7) SAS site locations were based on the availability of land and buildings rather than the best and most secure area to protect nuclear weapons.

8) Nuclear storage sites were easily identifiable.

9) Personnel involved in nuclear weapons duty had been removed from the Human Reliability Program as a result of drug abuse.

The following statements were made on 4/30/75 by Senator Pastore when he placed the 1973 report in the Congressional record:

"Two years have passed since Senator Baker and I visited NATO installations to examine the vulnerability of our nuclear weapons overseas to terrorist attack. I am very pleased to note that based on our report, the Defense Department has taken steps to improve the security and protection of nuclear weapons in NATO."

"While considerable improvements have been made, much more needs to be done and I call on the Department of Defense to continue to reduce the number of bases where nuclear weapons are located and, further, I am calling for a reduction in the number of nuclear weapons in NATO countries, particularly in areas where their usefulness in the event of war is highly questionable."

Statement #20 cont.

"...I would like to compliment the Secretary of Defense for recognizing the scope and magnitude of the vulnerability of nuclear weapons abroad and reacting immediately to correct the most outstanding deficiencies."

In a letter dated 4/24/75 from the Assistant Secretary of Defense (Atomic Energy) to Senator Pastore, it is stated that the 1973 report:

"...assisted us (DOD) in identifying deficiencies in a critical area of our defense posture. I believe that you will be interested to learn that for each deficiency cited we have subsequently taken corrective action that has had general application across our full deployment of nuclear weapons."

Also, mentioned was the fact that the number of nuclear storage sites had been reduced by 20% with an additional 10% to 15% reduction expected.

Comment

The 1973 report reveals that unidentified individuals had been observed near storage sites, and in two incidents it was reported that shots were fired by security personnel guarding storage sites. The question of whether these incidents were attempts to steal nuclear weapons is debatable. Storage areas have often attracted the attention of curious citizens and also foreign intelligence personnel, and to characterize these occurrences as attempted thefts or "possible attempts of theft" may be misleading.

Over the years, unidentified individuals have been observed near storage areas, but these events have not culminated in malevolent acts such as attempted thefts of nuclear weapons.

Conran Appendix J Statement #21

"12/16/74 - LEU pellets found outside bldg at K-M: Zip-gun found in locker inside plant."

NRC Files Reflect

At about 1:20 p.m. on 12/16/74, two employees of the Kerr-McGee Cimarron facility found several low-enriched uranium pellets and pellet fragments on the ground near the Safeguards Office building. The discovery prompted a thorough search of about 7500 square feet of area which resulted in the retrieval of pellet material equivalent to about twenty-five pellets (310 grams valued at \$84), all within the Cimarron facility perimeter fence, but the major portion outside the protected area fence that surrounds the uranium manufacturing building. Kerr-McGee management concluded that the cause for the pellets being there could not have been accidental. The AEC and FBI were notified and investigated this event.

The material, averaging less than 3% enrichment, was probably thrown from two emergency exit doors in the uranium pellet manufacturing building. Soon after finding the the pellets, supervisors of the uranium facility conducted a search for any means by which pellets could have been shot or propelled to the locations where they were found. The search disclosed only a small homemade pellet gun made of pipe fittings and a spring and held together with plastic tape. An effort to use the device disclosed that it would propel a uranium pellet less than three feet. The Superintendent of the uranium facility explained the presence of this object.

Statement #21 cont.

He said that although he had not known of its existence, several supervisors and operators had known it existed. It was common knowledge that the device had been made by an inventive employee about two or three years earlier, then had been abandoned and left in a maintenance cabinet where it had been found during the search. The employee who had made the pellet gun was polygraphed, and no deception was indicated on his part relative to the pellet scattering incident. He admitted making the pellet gun and having in the past -- prior to the incident -- shot the pellet gun at targets within the uranium plant utilizing fuel pellets for ammunition. These admissions concerned apparent "horse play." There was no indication that the pellet gun had been recently utilized.

As part of the investigation over 270 employees were polygraphed. Four individuals who had access to the fuel pellets declined to be polygraphed, but were questioned. No leads or suspects could be identified as a result of the FBI/Kerr-McGee investigations.

Comment

This event occurred during a time when a labor/management dispute over plant safety at Kerr-McGee was in progress. It appears unreasonable to characterize this event as an attempt to divert material for sale or extortion purposes. The pellet gun was not a deadly weapon and posed no threat to the facility's safeguards. It was suggested by Kerr-McGee management that the motivation behind this event was embarrassment, since the pellets were thrown into an area adjacent to the building housing the facility's Safeguards Unit that was responsible for material accountability.

Conran Appendix J Statement #22

"Dec. '74 - LLL Insp. reports cite open gates, no patrol, unchallenged U-Haul truck parked near gate"

NRC/DOE Files Reflect

No data was developed on the above event in either NRC or DOE files that were examined. Two memoranda were written to Mr. Conran on March 10 and 28, 1978, requesting any additional information in his possession that would aid in publicly clarifying his statements. Mr. Conran provided no information in response to these two requests.

Conran Appendix J Statement #23

"9/10/74 - NFS guards strike"

NRC Files Reflect

On 8/29-30/74, AEC officials visited the Nuclear Fuel Services, Erwin facility to investigate the status of an impending strike by the Wackenhut contract guard security force and the impact that a strike would have on the protection of the NFS plant.

The Wackenhut Guards at NFS (local residents) had decided prior to 8/20/74 to try to obtain additional benefits from Wackenhut. On 8/27-29/74 the Wackenhut Company presented its offer, but this offer was rejected by the guards and they set a strike deadline at 10 p.m. 9/8/74. This meant that the guards agreed not to strike before the deadline, but after that date they could strike at any time. In preparation for the strike deadline, Wackenhut planned to have backup guards in place inside the NFS plant by 10 p.m., 9/8/74, with mobile housing, and prepared to remain onsite until the strike was over.

Because the possibility existed that the NFS guards might not honor the 9/8/74 strike deadline and strike before 9/8/74, the Unicoi County Sheriff was contacted and agreed to furnish assistance on getting backup guards into the plant and furnishing temporary protection until backup guards could be obtained from other areas. Plans were formulated to coordinate this response further by written emergency procedures including familiarizing the Sheriff's men with the NFS site and establishing with them specific duties to be performed during emergency conditions.

Statement #23 cont.

On 9/8/74, an AEC official arrived at the NFS site at 9:00 p.m. NFS Supervisory personnel were inside the plant receiving assignments according to the emergency operating plan for the safe shutdown of the facility. Everything was quiet and proceeding as planned.

At 10:00 p.m., the guards on duty turned over their weapons, ammunition and keys, changed clothes and a picket line was set up at both entrances to the NFS plant. Supervisory personnel proceeded to shut down the plant in accordance with the emergency operating plan.

At about 10:00 a.m. on 9/11/74, a tentative agreement was reached. The picket line was removed and NFS employees began returning. The striking guards returned to work at 6:00 a.m. on 9/12/74.

Comment

This incident should be regarded as an example of the effectiveness of the plant's safeguards program. The AEC, NFS management, and local law-enforcement agents were all aware of the possibility of a strike well before it actually occurred. Accordingly, preparations were made and in effect prior to the strike so that site safeguards would not be degraded.

Conran Appendix J Statement #24

"9/5/74 - () samples stolen from railcar shipment GJ0 to National Lead"

NRC Files Reflect

Reported loss of two samples of uranium concentrate from a rail shipment between Grand Junction, Colorado, and the National Lead, Ohio. The rail car had arrived with a replacement seal. From an inspection it appeared that at least one sample jar was missing. One of the two boxes of samples in the shipment had been opened, packing paper had been removed, and there was an indentation indicating that a jar had been moved. The car left Grand Junction August 6, arrived at National Lead August 16, and unloading began August 30.

It was determined that two sample jars were missing and that a second car had a replacement seal, but no material was missing. The book value of the missing concentrate was \$4.32. Total loss involved .47 pounds of natural uranium.

Comment

This event did not involve special nuclear material. The loss of less than 1/2 pound of uranium concentrate did not represent any threat to the public's health and safety or national security.

Conran Appendix J Statement #25

"8/29/74 - Incendiary explosive found at Pilgrim"

NRC Files Reflect

At 5:11 p.m., 8/26/74, two distinct shots were heard, the second of which sounded much like an explosion. Upon examination, a small fire was observed in a heavily wooded area adjacent to the plant. The local fire department was summoned and extinguished the brush fire. A fragment of a can was located and subsequently determined to have been a propane gas tank approximately 12" long and 3" in diameter. The tank apparently had been tied to a tree and fired on. Upon further examination a slug was found embedded in a second tree. There was no penetration of the protected area, and the event occurred approximately 200 feet from the fence. The wooded area where the explosion occurred is owned or controlled by the Boston Edison Company and is in a public access area. The wooded area is at least 1/4 mile from the power station itself.

Comment

The motivation behind this event is unknown. Regardless of motivation, there appears to have been no threat to the Pilgrim reactor.

Conran Appendix J Statement #26

"6/15/74 - Apollo Facility - Inspector found double vehicle gate open/unattended and other serious security violations cited"

NRC Files Reflect

During an AEC inspection on 5/7/74 an AEC inspector found the double vehicle gate at the shipping and receiving entrance open and unattended. The truck gates should have been maintained in a locked condition except during movement of vehicles through them. The gate was entered, and the inspector proceeded to doors that would have allowed access to a material access area. These doors were found locked.

Other violations included the failure to search the inspectors' brief cases and to respond properly to alarms. (Apollo had installed an elaborate approved alarm system covering all access points to the protected area and material access areas. However, because of a lack of close supervision and inadequate training, the system was not properly used.)

As a result of the cited violations, Apollo personnel were reinstructed in admittance and hand-carried package search procedures. Response procedures were reformulated. Written check lists were developed for use by security guards. Disciplinary action was taken in several instances and, finally, faulty locking mechanisms on doors were modified so that they would function correctly.

Statement #26 cont.

Comment

The apparent violations were identified during a routine inspection. No adversaries were involved, and no threats were or had been made at the Apollo facility during the time of the inspection. Subsequent to the inspection, procedures at Apollo were improved, and faulty equipment was modified so it would operate correctly.

Conran Appendix J Statement #27

"6/5/74 - Possible theft of SNM pellets from K-M - reported (alleged to have occurred in 1970)."

NRC Files Reflect

It was alleged in May 1974 that one Kerr-McGee (K-M) employee had given another K-M employee two pellets in the summer of 1970. An investigation was conducted by Federal authorities, and no information was developed that a theft had occurred. Employees working at the plant at that time (1970) were interviewed and knew of no theft of pellets.

The following information was provided on the types of pellets on hand during the period April - October 1970:

<u>Uranium</u>			
<u>Enrichment</u>	<u>Density</u>	<u>Length (in inches)</u>	<u>Diameter (in inches)</u>
2.00	10.25	.7	.37
2.01	10.25	.7	.37
2.15	10.25	.7	.37
3.17	10.25	.6	.3815
2.38	10.25	.16	.3815

<u>Uranium Plutonium</u>			
<u>Plutonium Content</u>	<u>Density</u>	<u>Length (in inches)</u>	<u>Tapered Diameter (in inches)</u>
13%	15.71	.569	.337 - .338
13%	15.71	.573	.335 - .339 .337 - .341

Statement #27 cont.

Comment

This event falls into the category of an unsubstantiated rumor. The investigation revealed no information to support the allegation that a theft had occurred.

Conran Appendix J Statement #28

"5/29/74 - Gulf Nuclear, New Haven - Intrusion and breakin (sic) of bldg in which SNM processed/stored."

NRC Files Reflect

On 5/27/74, a guard fabricated an intrusion event. He admitted that he had made it appear that a break-in and attempted burglary occurred in order to improve his chances for promotion. No material was stolen as a result of this ruse.

Comment

No material was stolen. A desire for promotion and not the theft of material can reasonably be assumed as the motivation behind this ruse.

Conran Appendix J Statement #29

"3/29/74 - 5/29/74 - Attempted breach of fence at NFS, Erwin; 2 men with 12' 2 x 4 heard and seen."

NRC Files Reflect

On 5/16/74, at 12:50 a.m., a Nuclear Fuel Services guard making a tour heard a mature male voice say, "Oh Lord, somebody is coming." The guard saw two individuals, one on the ground outside the fence and another climbing the outside of the fence about two feet from its top. The person near the top of the fence was being supported by a plank, 2" x 4" x 8', laying against the outside of the fence on an inclined angle. The plank had been picked up by the intruders at a location near the railroad access road. Almost instantaneously, the two individuals started running from the area. Additional security personnel were summoned by the guard, and the local police were notified.

Comment

The motivation behind this event is unknown. This event followed a series of industrial and school break-ins which had been reported in the local press as having occurred in the area.

Conran Appendix J Statement #30

"date ? ? ? - U.S. Nuclear, Tennessee - Noise attracted guard - shadowy figure seen - messenger wire cut."

NRC Files Reflect

On 9/4/74, a noise and a moving shadow were observed by a guard performing a routine inspection of the fence. A messenger wire was found cut in one spot at the bottom of the fence fabric. It was determined that a penetration of the fence had not been achieved. No alarms from material access area doors occurred. Additional security personnel and local law enforcement personnel responded.

Comment

The motivation behind this event is unknown. Regardless of motivation, no theft of licensed material resulted.

Conran Appendix J Statement #31

"3/15/73 - Break-in of Fuel Storage bldg. at Ocononee (sic) - No fuel believed stolen!!"

NRC Files Reflect

On 3/15/73, the licensee (Oconee, Duke Power Co.) informed AEC that a forcible entry into the fuel storage area which contained fuel of Oconee Unit 2 had occurred. The fuel was being stored in a temporary Butler structure. The licensee reported that between 11:30 p.m. on March 14, and 1:30 a.m. on March 15, a person or persons had broken into the Butler structure by removing the door. The licensee further reported that his initial audit of the fuel indicated that none of the fuel had been disturbed. It was presumed that the entry into the building was for the purpose of stealing tools or other equipment because theft of nuclear fuel assemblies would have required special handling equipment (the fuel assemblies are heavy and unwieldy - eight inches square by about thirteen feet long and each weighing about 1,500 pounds). Sabotage of the reactor was impossible because the fuel was stored at some distance from the reactor, and sabotage of the fuel itself for harassment purposes was discounted because all the fuel was present and undamaged.

Comment

No material was stolen, and no material was damaged. It was presumed that entry into the building was for the purpose of stealing tools or other equipment.

Conran Appendix J Statement #32

"7/7/72 - Torn tarp & broken seals on UF-6 container - Shipment
British Nuclear Fuels to ORO (Edlow)"

NRC/DOE Files Reflect

No data on the above event was developed from either the NRC or
DOE files that were examined. Two memoranda were written to Mr. Conran
on March 10 and 28, 1978, requesting any additional information in
his possession that would aid in publicly clarifying his statements.
Mr. Conran provided no information in response to these two requests.

Conran Appendix J Statement #33

"4/7/72 - Reported availability of 4 drums (750 gms each) HEU for sale by American Consul Luanda - reported stolen in Zaire - shipped to Angola - asking 1.2×10^6 dollars."

Department of State Files Reflect

An American citizen related that according to his contact, four drums of radioactive material were stolen in the Republic of Zaire and in some manner transported to Angola. Each drum measured 13.5 centimeters in height, contained 750 grams of radioactive material encased in a larger lead container. The asking price for the four drums was reportedly \$1.25 million. The containers also were reportedly labelled "Dennison MFG., Co. USA" and "Ohmart, Cincinnati, Ohio."

The State Department assumed that the material may have been radioactive isotope sources on shielded containers as part of a nuclear gauging instrument made by Ohmart Corp., Cincinnati, Ohio. Value of the material was considered modest. Dennison MFG. Co. produced paper products and its involvement could not be explained.

Comment

AEC files reflected that this event was dismissed as a hoax.

Conran Appendix J Statement #34

"3/23/72 - Former United Nuclear Corp., New Haven employee approached by acquaintance with criminal record and solicited to be involved in theft of uranium for money."

NRC Files Reflect

On 3/23/72, AEC learned of a rumored theft attempt that was an apparent hoax. A former employee of United Nuclear Corp. informed a United Nuclear Corp. official that a theft of nuclear material was being planned. The matter was investigated by federal authorities, and no plan to steal material was discovered.

Comment

The event was considered to be an unsubstantiated rumor and hoax.

Conran Appendix J Statement #35

"Nov. 1971 - Arson at Indian Point #2 - 5×10^6 dollar damage"

NRC Files Reflect

A fire, resulting from arson, caused \$5 million damage to Consolidated Edison's Indian Point No. 2 plant. The fire was set on the first floor of an auxiliary building which housed control panels, cables, and pumps for the facility. The reactor building and generator building at the site were not endangered by the fire, and there was no release of radioactive material. An operating mechanic at the plant was arrested for the crime and later pleaded guilty to arson in the third degree. The man was on duty at the plant at the time and was reported to be one of the first persons on the scene of the fire.

Comment

This arson occurred some distance from the reactor and generators that were nearing completion. The fuel was not endangered nor was the operational unit #1 threatened.

Conran Appendix J Statement #36

"8/30/71 - Theft of 0.5 gm HEU + 1.5 gm Thorium from Gulf Eng. & Env. Sys. San Diego"

NRC Files Reflect

On 8/31/71, the AEC was informed that a quantity of platinum had been stolen by an unknown person or persons from the Fuel Operations Department (Sorrento Valley facility). A platinum boat and several platinum crucibles had been stolen. The crucibles had been decontaminated and the platinum boats cleaned in preparation for repairs. He estimated that the maximum contamination remaining on the crucibles was about 0.5 grams uranium (93% enriched) and 1-1/2 grams of thorium. Site management believed that these quantities did not present a public health hazard.

The Gulf official stated that the three platinum buyers in the San Diego area had been alerted to the theft and requested to inform Gulf if an attempt was made to sell material of its description. The value of the platinum was approximately \$1,800.00.

On 9/13/71, Gulf stated that approximately 400 grams of platinum in the form of the small crucibles had been found in a paper bag located at the bioassay sample container pickup station in the Fuel Operations Department, and an arrest had been made.

Comment

This theft of a small quantity of high-enriched uranium was incidental to a theft of a valuable metal (platinum) on which the uranium was a contaminant. AEC concluded that no hazard to the general public was present as a result of the above circumstances and considered the case closed.

Conran Appendix J Statement #38

"1970-1973 - Yellow cake thefts and series of attempted swindles which resulted.

- a. Also involved alleged (sic) 50K bribe of a mill owner to use his equipment to upgrade and reintroduce into legitimate fuel cycle.
- b. Flora (Denver Compliance Office) 'Possible existence of 400 lbs. stolen yellowcake . . . 'we believe material exists because . . .'
- c. 2700 lbs. (two 55 gal. drums) stolen from Western Nuclear, Jeffrey, Wyo. - recovered by FBI Salt Lake Central Book Exchange - attempts to prosecute - Hahn (ERDA says 2 men jailed)."

Comment

This item is the same as item #4 in Attachment A and, therefore, has already been addressed.

Conran Appendix J Statement #37

"2/16/71 - Theft of 50 lbs. depleted uranium and small amounts HEU by NUMEC employee (recovered)"

NRC Files Reflect

On 2/16/71 thirty-five pounds of depleted uranium and less than three grams of HEU were found in a NUMEC employee's home. Material was scrap and waste of no apparent use in weapons or nuclear research. The employee wanted an oak crate that was identified for disposal. The employee claimed that he took the crate because he wanted the crate and found the material in it when he got the crate home. He was afraid to return it, so he hid it in his home. The material was all recovered.

Comment

In view of the nature of the material involved and the employee's explanation, it appears reasonable to assume that the theft of material for construction of an improvised nuclear device IND (improvised nuclear device) or other harmful purposes was not the motivation. The Files did not reveal the manner in which the material was removed from the site nor how the absence of the material was detected.

Conran Appendix J Statement #39

"Feb.-Aug., 1971 - FBI advised AEC of offer to sell 2-1/2 lbs.

HEU

- a) Reported in N.J. and Brooklyn
- b) Involved FBI informant/infiltrator of mafia org.
- c) Offered for sale to Russians for \$400K - ($2 \cdot 10^6$ worth)
- d) Alleged obtained in J.F.K. Airport theft"

DOE Files Reflect

The FBI furnished a report indicating that a source of information advised the FBI on 2/5/71 that he had been contacted by an individual who formerly operated a business in Elizabeth, NJ, now bankrupt. The individual told the source that a Frank and John (last names unknown) claimed to be in possession of 2-1/2 pounds of 92% pure uranium, which originated in Pennsylvania, and was valued in excess of two million dollars. John and Frank wanted to fence the uranium for \$300,000.

The source stated that he was contacted for the purpose of locating someone with the ability to make an appraisal of the uranium. The source was given two telephone numbers to use to arrange a contact when he located an appraiser. The source claimed the phone numbers were the Italian Anti-Defamation League in New York City and the girl friend of Frank or John.

Statement #39 cont.

The source described himself as a gambler who had a great deal of trouble with local authorities and had a record of numerous arrests for gambling and assault and battery.

On 8/23/71 the IRS informed the AEC that 2-1/2 pounds of 93% pure uranium was reportedly available for sale in Brooklyn, NY. This incident appears to be the same incident reported to the AEC by the FBI on 2/5/71. The IRS source, working undercover, had infiltrated a racketeer group (also referred to in other reports as the "Mafia" and an Italian-American organization). The source indicated that he had learned from one of the racketeers that the organization had accidentally come into possession of the uranium during a theft at Kennedy International Airport. The material was reportedly in two containers in a lead lined box, 6" x 12". The source was told that the material had been analyzed and found to be 93% pure uranium valued at 2-1/2 million dollars.

Source reported that the material had been offered to Russia for \$800,000 (another report set the amount at \$400,000) and he and another member of the underworld organization had met with two individuals he understood were Russians to discuss the possible sale. The individual attempting to sell the material told the Russians that if they did not buy the material it would be taken to Canada and an attempt would be made to sell the material to Red China.

It was also stated that a box containing a number of vials of radium were also included in the items stolen from Kennedy Airport.

Statement #39 cont.

Comment

The files concerning this event did not contain a close-out report indicating whether the material actually existed or not. However, NRC files on the shipment of material through JFK Airport from December 1970 through October 1971 were examined. There were 43 shipments of more than 200 grams of HEU through the airport. However, only the two smallest shipments, 1860 grams and 1866 grams (about four pounds each), approximated the amount and type of material mentioned in the attempted sale. There was not a significant shipper/receiver difference for any of the 43 shipments. The largest shipper/receiver difference during this period was 38 grams or just over one ounce of material out of a total of over 10,000 grams in the shipment. Although the possibility cannot be completely dismissed that actual material may have been involved in the attempted sale, it appears reasonable to assume that this attempted sale of 2-1/2 pounds of 93% enriched material was a fraud, similar to other attempted sales based on the alleged possession of material.

Conran Appendix J Statement #40

"10/1/69 - Border Patrol had informant information that Pu-calibration source offered (sic) for sale:

- a) Stolen from J.F.K. on Aug. 1969 - identified as property of Atom Chem. Corp.
- b) Informant had seen cannister and shipping papers"

NRC Files Reflect

On 8/5/69, a shipment between the Naval Radiological Defense Lab, San Francisco, CA and ATOMCHEM, Plainview, NY never arrived at its destination. Involved were two calibration sources each containing 818.1 micrograms of Pu-239. On September 4, the U.S. Border Patrol reported that some stolen material was in the vicinity of Montreal, Canada, and an invoice accompanying this material was later identified as that accompanying the shipment. It was not known from where in the U.S. the shipment was stolen or whether its theft was incidental to a theft of other items of value. The individual who produced the invoice claimed the material was stolen from either J.F.K. Airport or Newark, NJ. The calibration sources cost about \$500 and did not present any hazard of safeguards' significance.

Comment

The event involved two calibration sources, each containing less than one-thousandth of a gram, that are used in mining and prospecting. Theft of them, whether intentional or incidental, would not appear to be a threat to the public health and safety.

Conran Appendix J Statement #41

"7/16/69 - Truck hijacked - shipment to Mound Lab aboard - Pu -
Be source stolen"

NRC Files Reflect

On 7/11/69, a shipment, a 15-gallon steel drum containing a Plutonium-238 Beryllium neutron source as PuO₂ powder milled with Beryllium powder and encapsulated in a stainless steel capsule (four curies in 1/4 gram of Pu-238), was in a truck that was stolen. The truck with the source intact was recovered on 7/12/69. All the trucks cargo except the source had been stolen. No radiation exposures involved.

Comment

It appears that the 1/4 gram of licensed material was not the object of the theft, but rather, was incidentally stolen. The source was recovered intact, and no threat of radiation occurred.

Conran Appendix J Statement #42

"6/27/69 - 7/2/69 - Theft of 7 depleted uranium plates and 19.98 gms
HEU powder at MIT"

Comment

This item is the same as item #1 in Attachment "A" and, therefore,
has already been addressed.

Conran Appendix J Statement #43

"6/9-10/69 - FBI notified AEC of recovery of hijacked truck in Newark, NJ area

- a) Manifest showed 11 lbs. HEU powder alloy in cargo - shipment B&W/KAPL
- b) HEU not recovered with truck - flap ensued - found later had been removed prior to hijack but papers not changed"

NRC Files Reflect

On 6/8/69 a trailer truck travelling from B&W Lynchburg, VA to KAPL, Schenectady, NY was hijacked. The trailer truck was recovered within 24 hours. An REA crib was on the truck with a manifest indicating two items of interest to the AEC: (1) 100 grams of U-235, and (2) a five-gallon drum containing one pound of radioactive material. These two items were missing from the crib. A check at KAPL indicated that they were already in receipt of both items. This meant that the items on the manifest had not been on the truck when it was hijacked. The manifest for some reason still showed, incorrectly, the two items in the truck that was hijacked.

Comment

There was clearly no threat of safeguards significance in this event. Nuclear material was not involved in this hijacking.

Conran Appendix J Statements #44 and #45

44. "6/3/69 - FBI reported to AEC attempt to sell cubes of uranium stolen from National Lead."
45. "4/4/69 - 100 lbs depleted uranium stolen from Kulite Tungsten Corp. cut into cubes.
 - a) offered for sale as 26 lbs. pure uranium in NYC
 - b) alleged contact with Isreal (sic) Consulate
 - c) FBI informant"

Comment

Apparently, the same event has been mistaken for two different events. This item is the same as item #5 in Attachment A and, therefore, has already been addressed.

Conran Appendix J Statement #46

"Jan., 1969 - 80 plates and 72 platelets and a foil missing at ID

- a) Cause unknown
- b) Assumed buried by mistake
- c) One of many such at ID"

DOE Files Reflect

On 1/13/69, 194 grams of 93% enriched uranium in 80 plates were discovered missing at the Idaho Nuclear Corp., Idaho. On 1/24/69, 195 grams of U-235 in 72 platelets were discovered missing and on 1/31/69, 8 grams of enriched uranium foil was discovered missing.

In a 4/23/69 letter from the AEC Director, Office of Safeguards and Materials Management, to E. J. Bauser, Executive Director for the Joint Committee on Atomic Energy, it was concluded:

- 1) The 80 nickel-clad fuel plates containing about 194 grams of U-235 were included in the WAPD subassembly when it was buried, and not recorded, in the NRTS burial ground in 1964.
- 2) The 72 platelets containing approximately 195 grams of U-235 were disposed of, but not recorded, in the NRTS burial ground.

The metal foil was found in a measurement chamber on 2/1/71.

AEC also concluded that the material involved did not pose a significant health hazard.

Statement #46 cont.

Comment

As a result of this incident, inventory procedures were revised. The HEU in the plates and platelets presumably was buried inadvertently. Even if the HEU contained in the plates had been stolen, it would have been only a fraction of the amount needed for an improvised nuclear device (IND).

Conran Appendix J Statement #47

"9/20/68 - Chalk River - fuel Element missing from storage

- a) Cause unknown
- b) 177 gms HEU & 109 gms ThO₂"

DOE Files Reflect

On 9/18/68 a Zircalloy-clad enriched UO₂-ThO₂ unirradiated fuel rod was reported missing at Chalk River. The rod contained 176.8 grams of 93% enriched uranium plus 109 grams of ThO₂. The rod was a backup rod for an irradiation experiment and was never installed in a reactor and hence was unirradiated.

In the few months prior to 9/68, the NRX operating group had been attempting to clear the storage area to eliminate unused material. Westinghouse Bettis was contacted and requested to issue the necessary papers so that the rod might be returned to their custody. When the required paperwork came through from Bettis, the storage container supposedly containing the rod was opened and found empty.

The investigation was conducted by Atomic Energy of Canada, Ltd., Chalk River personnel, Westinghouse Bettis and personnel from Atomics International and General Atomics of California through Bettis, and the AEC through its resident engineer at Chalk River.

Presence of the fuel rod was verified when Chalk River first received it, and nuclear materials surveys made during the term of storage evidently considered the rod present in the container. The fuel rod was definitely last seen on or about 4/28/66 when it was removed

Statement #47 cont.

from the container for tests. It was assumed that the rod was returned to storage. The investigation revealed that the NRX rod crew had discovered the rod container to be empty sometime in July 1968. An extensive search of the Chalk River installation was conducted without results. In a letter dated 10/11/68 from the AEC scientific representative, it was stated, "at the present time it is concluded that the fuel disappeared sometime between 4/28/66 and 9/18/68..."

Comment

We have no assurance that the fuel rod was not stolen. The small quantity of HEU contained in the fuel rod was only a fraction of the amount required to fabricate a nuclear explosive device.

Conran Appendix J Statement #48

"8/31/68 - LASL Disappearance of six fuel plates

- a) 355 HEU
- b) Cause unknown - investigation continuing
- c) One of several at LASL"

DOE Files Reflect

On 8/31/68 it was discovered that 355 grams of HEU in the form of six thin metal discs approximately 1-1/2" in diameter and weighing about 58 grams each was missing. According to AEC officials, the discs did "not represent a health and safety hazard." LASL personnel reported that the discs were heavily oxidized and possibly were disposed of along with rubber gloves, kimwipes, and other waste during a clean-up of the area. A complete search of the facility was conducted with negative results.

Comment

These laboratory specimens were not "fuel plates" as stated. Although heavily oxidized specimens could easily be mistaken for trash and be inadvertently disposed of with other wastes, we have no assurance that the material was not stolen. The quantity of HEU contained in the specimens would be only a fraction of that needed for IND.

Conran Appendix J Statement #49

"1/29/68 - Suspected theft of ETR Fuel Plates at National Lead.

a) 55 gms HEU

b) Cause unknown - investigation continuing"

Comment

This item is the same as item #2 in Attachment A and, therefore, has already been addressed.

Conran Appendix J Statement #50

"1966-67-68 - NFS - 74 kg NUMEC-67k HEU MUF

- a) Intel. report that NUMEC material diverted said to exist
- b) - \$10⁶ settlement each - Regulations changed - Congress came unglued
- c) GAO/JCAE/AEC/FBI/CIA investigations
- d) Arguments for NRC/Licensee Management/Guard collusion analysis derive in part from these fiascos"

NRC Files Reflect

Inventory differences have occurred at various facilities and in some instances investigations were conducted.

Comment

The question of diversion of material has been investigated on numerous occasions. In the 6/2/78 memorandum from S.J. Chilk (SECY) to L.V. Gossick (EDO) subject, "Commission Review of OGC/OIA Report, "Inquiry into Testimony of the Executive Director for Operations," it is stated, "based on information available to the Commission at the present time, there is no conclusive evidence that a diversion of a significant amount of strategic SNM either did or did not take place."

ENCLOSURE 3

ADDITIONAL EVENTS REFERENCED IN LETTER TO
CHAIRMAN HENDRIE FROM THOMAS B. COCHRAN,
DATED JULY 18, 1978

A. Events Cited From Memorandum, J. H. Conran to W. E. Forehand,
Dated November 30, 1977

Subsequent to its review of Attachment A and Appendix J, NMSS undertook a survey of additional material consisting largely of background notes prepared by Mr. Conran and provided by him to the Division of Rules and Records through the Office of Standards Development on November 30, 1977, in response to two FOIA requests. These rough notes are largely handwritten, often cryptic, and difficult to interpret. A preliminary review of this additional material revealed that many of the events are duplicative, a number appear to involve ID's, and others are too obscure to be interpreted. Excluding from consideration duplicative events and those pertaining to license-exempt material, the following three events were identified that might be pertinent to this assessment;

11/20/67 (160) X
1.248 kg U-235 (93%) in Fuel. U.S. 16 Not Rec'd

4/27/64 (87)
4/23/64 Lost 8kg UO₂ (93%) in fuel. U.S. 16 Not Rec'd
down in Transit

9/29/70 (112)
1.193 kg HEU (64%) 790 gm U-235 in UNII silk Not rec'd FBI JCRC

From the recent data available, it appears that these three events involve 1) a possible lost fuel bundle, 2) material lost in transit, and 3) U-235 in less than formula quantity. However, since location and other clarifying details are not provided for these three events, the staff was unable to develop additional information and, therefore, no staff judgment as to their relevance can be made at this time.

- B. Events Cited In Paragraph 5(a), Page 240, of the Report of the Subcommittee on Energy and the Environment, entitled "Allegations Concerning Lax Security in the Domestic Nuclear Industry," dated July 29, 1977

Paragraph 5(a) on page 240 of the above report contained references to "(a) an armed attack on a non-licensed weapon material transportation operation in the early 1970's; (b) theft of a truck involved in non-licensed weapon shipment, in which the guards' weapons were stolen sometime in early-to-mid 1970's and (c) an alleged incident of attack or attempt to penetrate a NATO weapon storage site, reported in the BDM Threat Analysis Study for the Special Safeguards Study." Items (a) and (b) concern license-exempt material. NRC has no information concerning these alleged events. The Department of Energy has been requested to furnish any information that they may have on these events. Item (c) is addressed in Enclosure 2, Appendix J, Statement 20, of this document.