

The information on this page is considered to be appropriate for public disclosure pursuant to 10 CFR 2.790.

U. S. NUCLEAR REGULATORY COMMISSION

Region V

Report No. 70-25/83-02 (IE-V-553)

Docket No. 70-25 License No. SNM-21 Safeguards Group I

Licensee: Energy Systems Group, Rockwell International
8900 De Soto Avenue
Canoga Park, California 91304

Facility Name: Energy Systems Group, Atomics International

Inspection at: De Soto Facility

Inspection Conducted: March 7 through March 11, 1983

Date of Last Material Control and Accounting Inspection: November 29,
December 3, 1982

Type of Inspection: Material Control and Accounting

Inspectors: *A. V. Wieder* 3/18/83
A. V. Wieder, Safeguards Auditor Date Signed

Approved by: *L. R. Norderhaug* 3/18/83
L. R. Norderhaug, Chief, Safeguards Branch Date Signed

Inspection Summary:

Areas Inspected: Routine unannounced safeguards inspection of the following areas: Facility Operations; Shipping and Receiving; Inventory Verification; Records and Reports.

The inspection involved 34 inspector-hours onsite by one NRC inspector during regular and nonregular hours.

Results: There were no items of noncompliance with NRC requirements in the four areas examined.

b. MC 85208B Shipper-Receiver Verification

- (1) Reviewed each of Energy System Group's "Nuclear Material Transaction Reports" (from NRC-741) of special nuclear material shipments and receipts during the period 11/1/82 through 3/3/83.
- (2) Confirmed that the special nuclear material shipments did reduce the SNM inventory at the De Soto Avenue site to the less than one Kilogram of Uranium-235 referred to in Dr. M. E. Remley's December 21, 1982 letter to R. Reutschler, NRC Fuel Facility Licensing Branch.²

c. MC 85213 Inventory Verification

Performed an independent count and verification of the remaining items on inventory in Building 001, Vault Storage and Barrel Counting areas. Reconciled this data to the book inventory.

d. MC 85216B Records and Reports

- (1) Audited the Special Nuclear Material Inventory Report for the period 11/1/82 through 1/3/83, and
- (2) The Material Balance data for the physical inventory period 1/4/83 through 3/3/83.

2. 82ESG-8970, "Special Nuclear Material Inventory at Energy Systems Group." Exhibit 2.

~~CONFIDENTIAL~~



Rockwell
International

Energy Systems Group
8900 De Soto Avenue
Canoga Park, California 91304

Telephone: (213) 341-1000
TWX: 910-494-1237
Telex: 181017

RECEIVED
DEC 23 11:27
REGISTRATION

December 21, 1982

In reply refer to 82ESG-8970

Mr. Russel R. Rentschler, Acting Chief
Fuel Facility SG Licensing Branch
Division of Safeguards, NMSS
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Dear Mr. Rentschler:

Subject: Special Nuclear Material Inventory at
Energy Systems Group

This is to advise that, effective December 17, 1982, the inventory of high-enriched uranium at the Energy Systems Group headquarters facilities in Canoga Park was reduced to less than 1 kilogram of U-235. Following the achievement of that reduced inventory, the physical security requirements for the headquarters facilities were modified to comply with the requirements of Section 73.67(f) of 10 CFR, Part 73. Compliance with these requirements will continue until the inventory of special nuclear material at the facility is reduced to less than quantities of low strategic significance.

If, at some future date, our inventory is increased to quantities requiring increased security requirements, you will be advised and appropriate upgrading of the security requirements will be initiated.

Sincerely yours,

M. E. Remley
M. E. Remley, Director
Health, Safety & Radiation
Services

1177A/reg

cc: Robert Engelken, Administrator
Region V Office
U.S. NRC

8301170029

~~CONFIDENTIAL~~

10 CFR [REDACTED] INFORMATION



Rockwell
International

Energy Systems Group
8900 De Soto Avenue
Canoga Park, California 91304

Telephone: (213) 341-1000
TWX: 910-494-1237
Telex: 181017

December 17, 1982

In reply refer to 82ESG-8965

Mr. R. G. Page, Chief
Uranium Fuel Licensing Branch
Division of Fuel Cycle and Material Safety
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555

Reference: Application dated August 25, 1982, for
Renewal of Special Nuclear Materials License
No. SNM-21, Docket 70-25

Dear Mr. Page:

Subject: Renewal of Special Nuclear Materials License
No. SNM-21, Docket 70-25

Application for renewal of the Energy Systems Group Special Nuclear Materials License No. SNM-21 pursuant to Section 70.33 of Part 70, Title 10, Code of Federal Regulations was made by our letter of transmittal dated August 20, 1982. Subsequent to that submission, our business situation has changed significantly, and it is now appropriate to modify the application to describe more accurately the activities and facilities to be authorized by the license for our future programs.

The changes in the modified license application include the following:

1. Removal of Building 001 at Headquarters and Building 055 at the SSFL site as authorized facilities for manufacturing and R&D activities, respectively, but retention of them as contaminated facilities until they are decontaminated and released for unrestricted use.
2. Reduction of the possession limit for U-235 from 1500 kg to 10 kg.
3. Deletion of the authorization to manufacture nuclear fuel elements.

8301170021

[REDACTED]



Rockwell
International

82ESG-8965
December 17, 1982
Page 2

4. Deletion of the authorization to possess U-233.

These changes have been discussed in some detail in meetings with you and your licensing staff during the last few weeks. This letter is to transmit formally the modifications to the license renewal application as agreed in those discussions.

The requested modification to the license renewal application as originally submitted August 25, 1982, is submitted in Enclosure 1 for your review and approval.

An attachment to Enclosure 1 includes revised replacement pages for those portions of Section 1.0, Part 1, of the supporting technical information for the application; i.e., ESG-82-33, "Health & Safety Sections for Renewal Application of the Special Nuclear Materials License SNM-21, Docket 70-25, Issued to the Energy Systems Group of Rockwell International." The revised portions of the pages are indicated by vertical bars in the right margins of the pages.

Enclosure 2, consisting of annotated revised replacement pages for the original license renewal application; is included to provide a clearly marked up modified application for your convenience. The deletions in the original application are indicated with dashes throughout the text, while all additions to the text are identified by underlining.

Ten copies of each of the enclosures are included here.

The renewal application as originally submitted was applicable to a Category 1.A license, as defined in Section 170.31 of 10 CFR 170. Accordingly, we submitted a license renewal fee of \$76,800 with the application. The enclosed application modification changes the license to a Category 1.E under 10 CFR 170.31. The renewal fee for this latter license is only \$38,100. Therefore, a refund of \$38,700 is due. This change in the category of the license has been discussed with Mr. William O. Miller, Chief, License Fee Management Branch, and he indicated that he concurred in this evaluation of license application modification. We would appreciate your and his attention to the refund of the excess fee submitted with our original renewal application.



Rockwell
International

82ESG-8965
December 17, 1982
Page 3

If you have questions or require additional information relative to these changes in our license renewal application, please contact me at (213) 700-4439.

Sincerely yours,

M. E. Remley, Director
Health, Safety & Radiation
Services
Energy Systems Group

1146A/reg

Enclosures (1) Modification to SNM License Renewal Application (10)
(2) Annotated Revised Pages to SNM License Renewal Application (10)

cc w/o enclosure: William O. Miller, NRC Headquarters



DATE [REDACTED]
[REDACTED]
UNITED STATES
NUCLEAR REGULATORY COMMISSION
REGION V
1450 MARIA LANE, SUITE 210
WALNUT CREEK, CALIFORNIA 94596

JUN 12 1984

Docket No. 70-25

Energy Systems Group
Rockwell International
8900 De Soto Avenue
Canoga Park, California 91304

Attention: Mr. Frank W. Feiler
Vice President and Controller

Gentlemen:

This letter refers to the routine material control and accounting safeguards inspection of your activities authorized under NRC License No. SNM-21 conducted by Messrs. A. V. Wieder and G. B. Nelson of this office, March 21-23, 1984. It also refers to the discussion of the inspection findings with you and members of your staff March 23, 1984.

Areas examined during this inspection are described in the enclosed inspection report. Within these areas, the inspection consisted of selective examinations of procedures and records, interviews with facility personnel and observations by the inspector.

Within the scope of this inspection, no items of noncompliance were observed.

In accordance with Section 2.790(d) of NRC's "rules of practice," Part 2, Title 10, code of federal regulations, documentation of the findings of your control and accounting procedures for safeguarding special nuclear material are exempt from public disclosure; therefore, the enclosed inspection report will not be placed in the public document room.

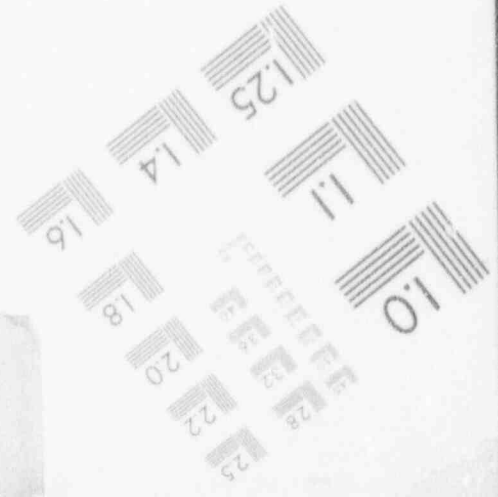
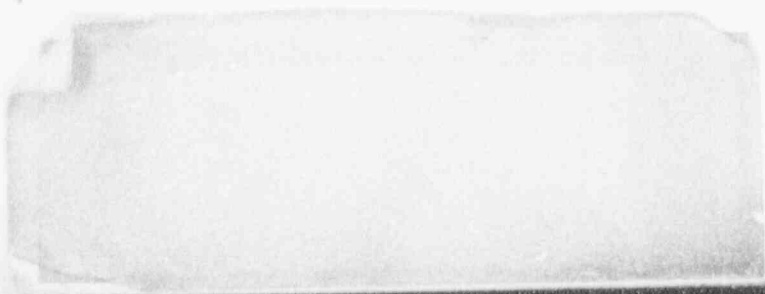
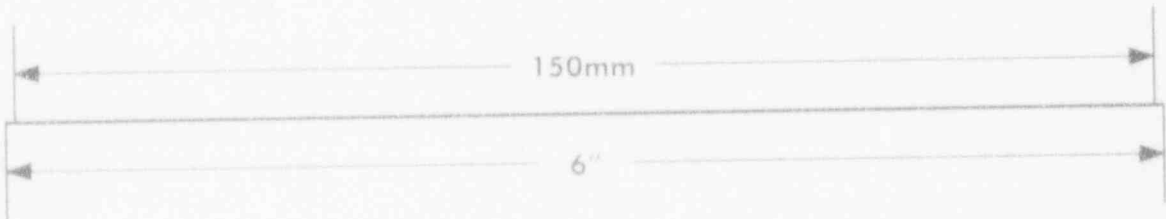
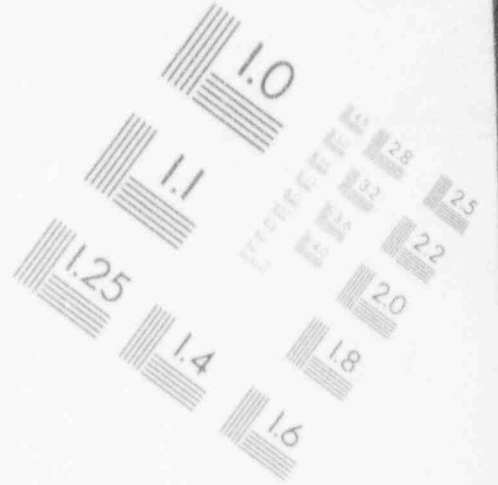
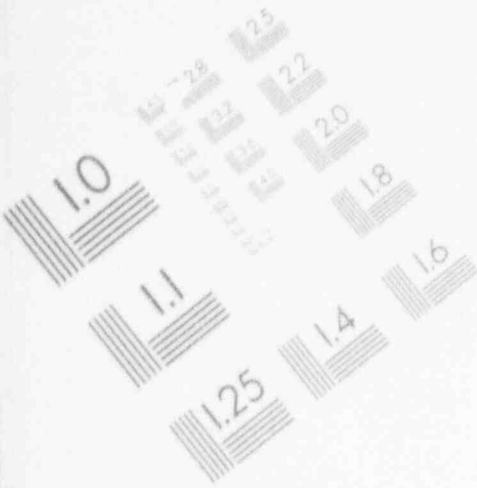
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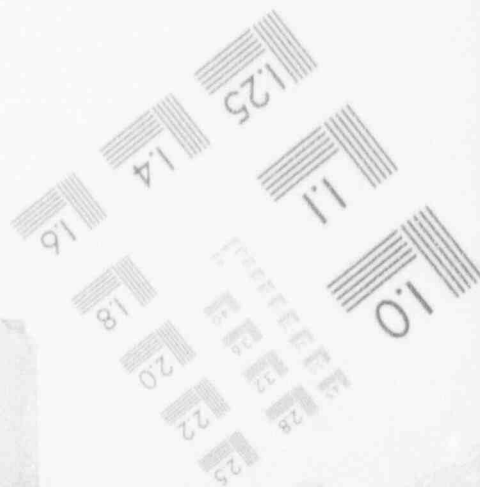
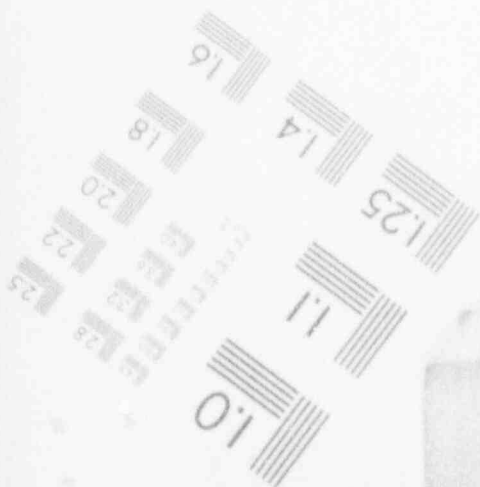
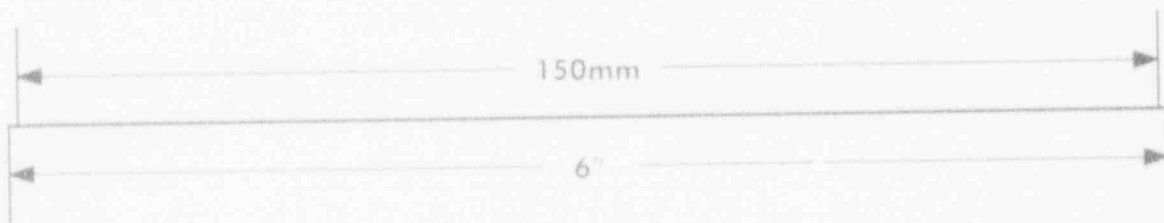
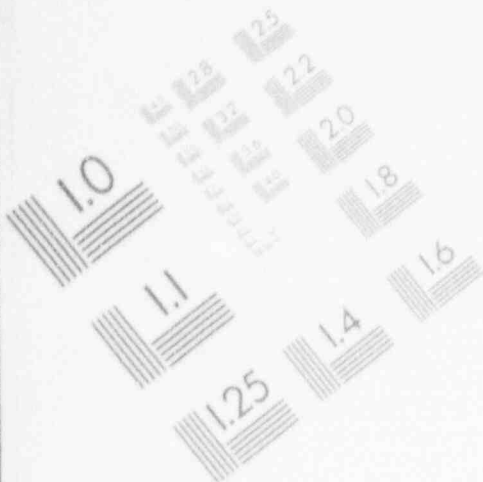
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IMAGE EVALUATION TEST TARGET (MT-3)



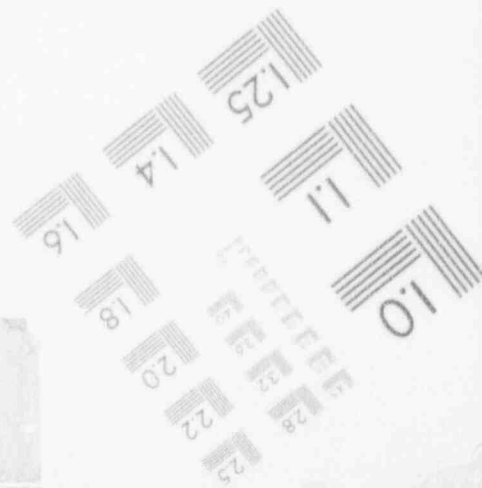
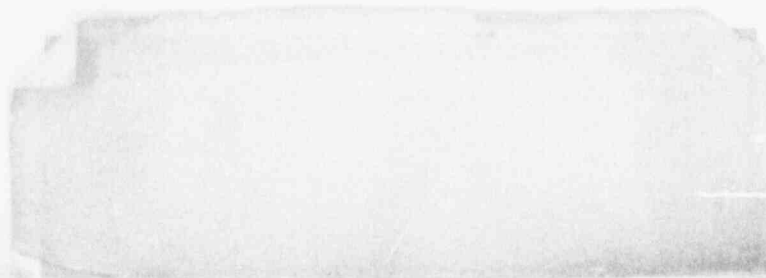
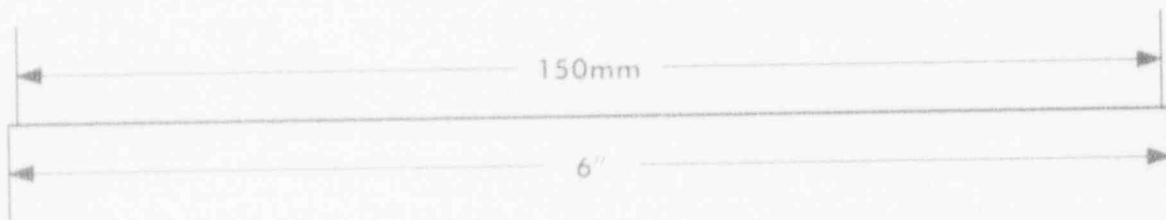
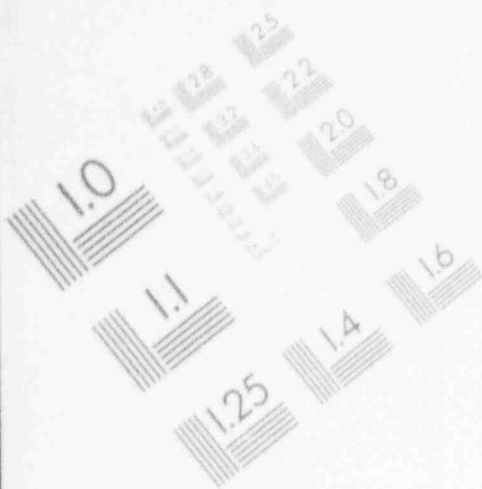
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IMAGE EVALUATION TEST TARGET (MT-3)



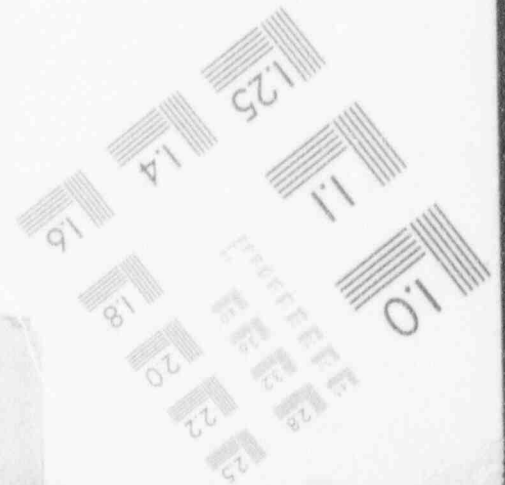
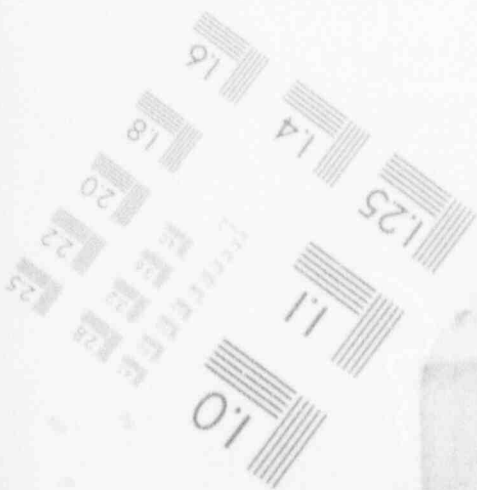
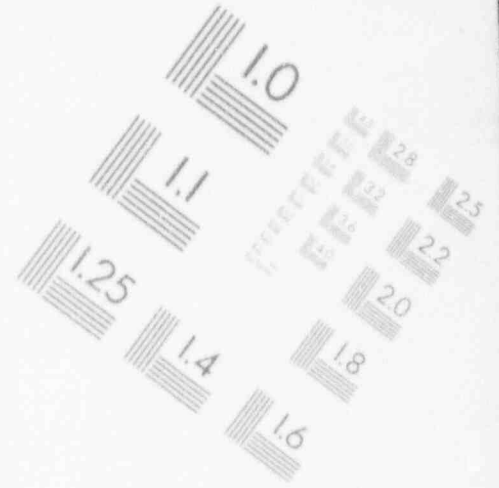
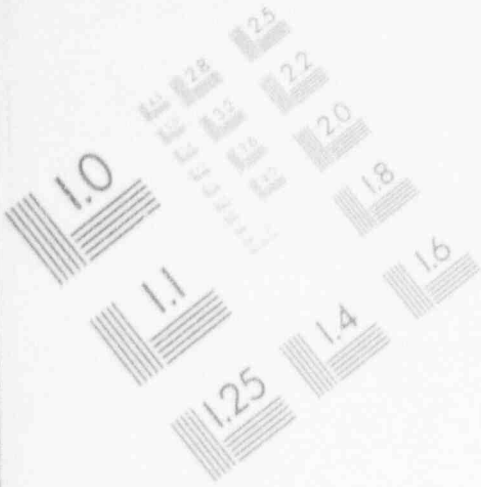
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IMAGE EVALUATION TEST TARGET (MT-3)



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IMAGE EVALUATION TEST TARGET (MT-3)



JUN 12 1984

Should you have any questions concerning this letter, we will be glad to discuss them with you.

Sincerely,

Original signed by
L. R. Norderhaug
Leroy R. Norderhaug, Chief
Safeguards and Emergency
Preparedness Branch

Enclosure:
Inspection Report
No. 70-25/84-02 (IE-V-614)

cc: Dr. M. E. Remley, Manager
Health Services and Radiation Safety

bcc: RSB/Document Control Desk (RT -)

Distributed by RV:
JBM
State of California

RV *RV*
A. Wieder:dh
6/11/84

G. Nelson
G. Nelson
6/5/84

L. Norderhaug
L. Norderhaug
6/11/84

R. Scarano
R. Scarano
6/21/84

U. S. NUCLEAR REGULATORY COMMISSION

REGION V

Report No. 70-25/84-02 (IE-V-614)

Docket No. 70-25 License No. SNM-21 Safeguards Group V

Licensee: Energy Systems Group
Rockwell International
8900 De Soto Avenue
Canoga Park, California 91304

Inspection at: De Soto and Santa Susanna Facility

Inspection conducted: March 21-23, 1984

Date of Last Material Control and Accounting Inspection: March 7-11, 1983

Type of Inspection: Routine Unannounced

Inspectors:

A. V. Wieder

A. V. Wieder, Safeguards Auditor

6/11/84

Date Signed

G. B. Nelson

G. B. Nelson, Chemist

5-5-84

Date Signed

Approved By:

L. R. Norderberg

L. R. Norderberg, Chief
Safeguards and Emergency Preparedness Branch

6/11/84

Date Signed

Inspection Summary:

Areas Inspected: Review of periodic and special reports, independent inspection, measurement controls, shipper/receiver verification, annual management review.

The inspection involved 34 inspector-hours onsite by two NRC inspectors during regular hours.

Results: There were no items of noncompliance with NRC requirements in the five areas examined.

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██████████████████████████████ ION

DETAILS

1. Persons Contacted

- *F. W. Feiler, Vice President and Controller
- *M. E. Remley, Director, Health, Safety and Radiation Services
- *V. J. Schaubert, Manager, Nuclear Materials Management
- D. C. Allen, Engineer, Nuclear Materials Management
- S. J. Wode, Management Systems Specialists
- J. Kir, Statistician
- F. C. Schrag, Manager, Nuclear Operations
- D. J. Elliott, Engineering Staff
- R. L. Jaseph, QA Audits and Controls
- J. D. Moore, Health and Safety Engineer

*Denotes those attending the exit interview.

2. Licensee Action on Previous Inspection Findings

Not applicable.

3. Exit Interview

Mr. Feiler, Dr. Remley, and Mr. Schaubert acknowledged the inspectors findings of no items of non-compliance.

4. MC-90713B Review of Periodic and Special Reports

Energy Systems Group's inventory difference data for the material balance periods, September 7, 1983 through November 7, 1983 and Janaury 4, 1984 through February 1, 1984 were examined during this inspection. Energy Systems Group had closed each of these material balance periods with a plant physical inventory difference exceeding its respective calculated limit of error. Both inventory differences were gains of special nuclear material which Energy Systems Group attributed to decontamination and decommissioning work at either the Canoga Park or Santa Susana locations. Notices of those occurrences were documented according to Inspection and Enforcement procedure 92718-021a.(1) or 92718-021c.1. (refer to PNS-V-83/12 of 11/29/83 and Region V Morning Report of 2/27/84).

A fuel waste evaluation report and supporting data sheets disclosed Energy Systems Group had nondestructively assayed (NDA'd) numerous drums and large wooden boxes. Each contained an assortment of items such as; concrete, paper/trash, plastic pipe, electrical conduit, HEPA filters, prefilters and other noncombustible waste. All of the inventory differences for these two periods originated with the Special Nuclear Material contained waste from decontamination and decommissioning activities.

5. MC-92713B Independent Safeguards Inspection

No items of noncompliance were noted.

██████████████████████████████

Inspected the Santa Susana Rockwell International Hot Laboratories (RIHL) and the decontaminated Plant 1.

6. MC-85206B Measurement Controls

No items of noncompliance were noted.

Inspected the Rockwell International Hot Laboratories (RIHL) and reviewed the intended decladding of EBR II blanket fuel. The material is irradiated depleted U metal that contains some Pu. The fuel consists of 285 subassemblies and some assorted old and new rods. Each subassembly contains 19 rods and each rod contains five slugs. The accountability unit is five slugs, weighing 2.5 kg.

The unit of accountability for material control and inventory purposes will be the weight of five slugs. The scale to be used in the hot cell will be calibrated using standard weights. The error components, random and systematic, will be calculated by the licensee using the calibration data. These error components will be utilized in calculating the limit of error of the inventory difference (LEID) for each inventory period. The statistical validity of the calculation to estimate the random and systematic error components will be reviewed during the next MC&A inspection (Open Item 84-02-03).

7. MC-85208B Shipper and Receiver Verification

No items of noncompliance were noted.

1. All of Energy Systems Group shipments and receipts activity for the period March 4, 1983 through February 29, 1984 were reviewed. There were no shipper receiver differences of statistical significance.
2. Resolution is still pending on the UAl_x scrap powder shipped to Oak Ridge for recovery. (See Inspection Report 70-25/82-10 (IE-V-531) for background information). Oak Ridge had informally notified Energy System Group that it had completed its recovery of U in the scrap material. But neither Energy Systems Group nor Region V safeguards have seen the final measurement results.

8. MC-85218B Management of Materials Control System

No items of noncompliance were noted.

Reviewed the licensee's management review of nuclear material control dated March 22, 1983. The audit pointed to the need for an organizational chart and an internal SNM handling procedures. The only handling of SNM is the intended decladding of EBR-II blanket fuel at RIHL and a procedure has been written (AI-74-44 Sup 5 July 1983). The organizational chart was not reviewed, this will be done during the next inspection (Open Item 84-02-01). The management review for March of 1984 was not available and will be inspected during the next inspection (Open Item 84-02-02).

WILDER Arnold V

INSPECTOR'S REPORT

Office of Inspection and Enforcement

REVIEWER

Le Roy R. Norderhaug

INSPECTORS

Arnold V. Wieder
Gilbert B. Nelson

LICENSEE VENDOR

Energy Systems Group
Rockwell International
8900 De Soto Avenue
Canoga Park CA
91304

TRANSACTION TYPE

- I - INSERT
- M - MODIFY
- D - DELETE
- R - REPLACE

DOCKET NO (8 digits) OR LICENSE NO (BY PRODUCT) (13 digits)

017000025 8402

REPORT NO

SEQ

NEXT INSP DATE

MO	YR

PERIOD OF INVESTIGATION / INSPECTION

FROM			TO		
MO	DAY	YR	MO	DAY	YR
03	27	84	03	23	84
20		25	26		31

INSPECTION PERFORMED BY

- 1 - REGIONAL OFFICE STAFF
- 2 - RESIDENT INSPECTOR
- 3 - PERFORMANCE APPRAISAL TEAM

ORGANIZATION CODE OF REGION/HQ CONDUCTING ACTIVITY (See IEMC 0530 "Manpower Reporting - Weekly Manpower Reporting" for code.)

REGION	DIVISION	BRANCH
33	34	35

REGIONAL ACTION (Check one box only)

- 1 - NRC FORM 581
- 2 - REGIONAL OFFICE LETTER

TYPE OF ACTIVITY CONDUCTED (Check one box only)

- 02 - SAFETY
- 03 - INCIDENT
- 04 - ENFORCEMENT
- 05 - MGMT AUDIT
- 06 - MGMT. VISIT
- 07 - SPECIAL
- 08 - VENDOR
- 09 - MAT ACCT
- 10 - PLANT SEC
- 11 - INVENT. VER
- 12 - SHIPMENT/EXPORT
- 13 - IMPORT
- 14 - INQUIRY
- 15 - INVESTIGATION

INSPECTION INVESTIGATION FINDINGS (Check one box only)

A	B	C	D
1			

TOTAL NUMBER OF VIOLATIONS AND DEVIATIONS

A	B	C	D
0	0		

ENFORCEMENT CONFERENCE HELD

A	B	C	D
0			

REPORT CONTAIN 2790 INFORMATION

A	B	C	D
1			

LETTER OR REPORT TRANSMITTAL DATE

NRC FORM 581 OR REG LETTER ISSUED			REPORT SENT TO HQ FOR ACTION		
MO	DAY	YR	MO	DAY	YR
			06	12	84

MODULE INFORMATION

REC ORD	MODULE NUMBER INSP					PRIORITY	DIRECT INSPEC. EFFORT IN STAFF HOURS EXPENDED THIS INSPECTION	PERCENTAGE COMPLETED	STATUS	MODULE REG FOLLOWUP										
TYPE	NUMBER	PHASE	MANUAL CHAPTER	PROCEDURE NUMBER	LEVEL					PHASE	MANUAL CHAPTER	PROCEDURE NUMBER	LEVEL							
B	53	07	03	6	A	H														
	ENTRANCE + EXIT																			
B	59	07	13	6	A	10														
	REVIEW OF PERIODIC + SPECIAL REPORTS																			
B	59	27	11	8	A	16														
	INDEPENDENT INSPECTION																			
B	58	52	06	8	A	H														
	MEASUREMENT CONTROLS																			

MODULE INFORMATION

REC ORD	MODULE NUMBER INSP					PRIORITY	DIRECT INSPEC. EFFORT IN STAFF HOURS EXPENDED THIS INSPECTION	PERCENTAGE COMPLETED	STATUS	MODULE REG FOLLOWUP										
TYPE	NUMBER	PHASE	MANUAL CHAPTER	PROCEDURE NUMBER	LEVEL					PHASE	MANUAL CHAPTER	PROCEDURE NUMBER	LEVEL							
B	58	52	06	8	A	8														
	SHIPPER / RECEIVER VERIFICATION																			
B	58	52	18	8	A	2														
	MANAGEMENT REVIEW																			

* CIRCLE SEQUENCE IF VIOLATION OR DEVIATION

SEP 17 1986

Docket No. 70-25

Rocketdyne Division
Rockwell International Corporation
6633 Canoga Avenue
Canoga Park, California 91304

Attention: Mr. John S. McDonald
Division Director,
Atomics International,
Rocketdyne Division

Gentlemen:

Subject: NRC Safeguards Inspection

This letter refers to the routine safeguards inspection of your activities authorized under NRC License No. SNM-21 conducted by Mr. G. B. Nelson of this office on August 25 through 29, and September 4, 1986. It also refers to the discussions of our inspection findings held by the inspector with members of your staff on August 29, 1986.

The inspection included examination of activities related to your program for the control and accounting of special nuclear material in accordance with applicable requirements of Title 10, Code of Federal Regulations, Part 70, "Domestic Licensing of Special Nuclear Material," and pertinent license conditions as described in the enclosed inspection report. Within these areas, the inspection consisted of selective examinations of procedures and records, interviews with facility personnel, and observations by the inspectors.

Within the scope of this inspection, no violations were observed.

In accordance with Section 2.790(d) of the NRC's "Rules of Practice," Part 2, Title 10, Code of Federal Regulations, documentation of the findings of your control and accounting procedures for safeguarding special nuclear material are exempt from public disclosure; therefore, the enclosed inspection report will not be placed in the Public Document Room.

~~8609240256~~

B 43

Rocketdyne Division

Should you have any questions concerning this letter, we will be glad to discuss them with you.

Sincerely,

Original Signed

James L. Montgomery, Chief
Nuclear Materials Safety and
Safeguards Branch

Enclosure:
Inspection Report No. 70-25/86-04 (IE-V-767)

cc w/enclosure:
L. J. Auge, Chief Engineer, A.I. Rocketdyne Division
Dr. M. E. Remley, Director, Nuclear Safety and Licensing

cc w/o enclosure:
State of CA

bcc w/enclosure:
RSB/Document Control Desk (RIDS)
B. Faulkenberry
J. Martin

bcc w/o enclosure: G. Cook
LFMB

Region V
GBN
GNelson/norma
9/16/86

MSchuster
MSchuster
9/17/86

JMontgomery
JMontgomery
9/17/86