

# RESPONSE TO FREEDOM OF

U.S. NUCLEAR REGULATORY COMMISSION	FOIA - 87-88				
ilulus.	RE	SPONSE TYPE			
TO FREEDOM OF	FINAL	APARTIAL 5 EN			
ACT (FOIA) REQUEST	DATE	OCT 1 6 1989			

DOCKET NUMBER(S) III applicable

10	/	e ai Oru			i, nedo.	
REQUESTER	Baun		6	4.)		

	Dauman, Sinda  PART !- AGENCY RECORDS RELEASED OR NOT LOCATED (See checked boxes)
	PART I'- AGENCY RECORDS RELEASED OR NOT LOCATED (See checked boxes)
	No agency records subject to the request have been located.
	No additional agency records subject to the request have been located.
	Requested records are available through another public distribution program. See Comments Section.
	Agency records subject to the request that are identified on Appendix(es) are already available for public inspection and copying in the NRC Public Document Room 2120 L Street, N.W., Washington, DC 20555.
X	Agency records subject to the request that are identified on Appendix(es)are being made available for public inspection and copying in the NRC Public Document Room, 2120 L Street, N.W., Washington, DC, in a folder under this FOIA number and requester name.
	The nonproprietary version of the proposal(s) that you agreed to accept in a telephone conversation with a member of my staff is now being made available for public inspection and copying at the NRC Public Document Room 2120 L Street, N.W., Washington, DC, in a folder under this FOIA number and requester name.
	Agency records subject to the request that are identified on Appendix(es)may be inspected and copied at the NRC Local Public Document Room identified in the Comments Section.
	Enclosed is information on how you may obtain access to and the charges for copying records placed in the NRC Public Document Room, 2120 L Street, N.W., Washington, DC.
	Agency records subject to the request are enclosed.
	Records subject to the request have been referred to another Federal agency(ies) for review and direct response to you.
	You will be billed by the NRC for fees totaling \$
	In view of NRC's response to this request, no further action is being taken on appeal letter dated
	PART II. A - INFORMATION WITHHELD FROM PUBLIC DISCLOSURE
X	Certain information in the requested records is being withheld from public disclosure pursuant to the exemptions described in and for the reasons stated in Part II, sections B, C, and D. Any released portions of the documents for which only part of the record is being withheld are being made available for public inspection and copying in the NRC Public Document Room, 2120 L Street, N.W., Washington, DC, in a folder under this FOIA number and requester name.
-	

COMMENTS

8910200025 891016 PDR FDIA BAUMAN87-88 PDR

SIGNATURE, DIRECTOR, DIVISION OF FREEDOM OF INFORMATION AND PUBLICATIONS SERVICES

#### PART II. D-APPEAL RIGHTS

The denial by each denying official identified in Part II.C may be appealed to the Appellate Official identified in that section. Any such appeal must be in writing and must be made within 30 days of receipt of this response. Appeals must be addressed as appropriate to the Executive Director for Operations or to the Secretary of the Commission, U.S. Nuclear Regulatory Commission, Washington, DC 20555, and should clearly state on the envelope and in the letter that it is an "Appeal from an Initial FOIA Decision.

FOIA-37-38 (5th Partial)

#### APPENDIX 1

#### PORTIONS DELETED

- 5/9/84 Letter to J. A. Long from J. Philip Stohr, w/enclosures. re: Report No. 70-113/84-05. (6 pages) - Exemption 4
- 5/9/84 Letter to J. A. Long from J. Philip Stohr, w/enclosures, re: Report No. 70-1113/84-06. (10 pages) \_ Exemption 4
- 3. 5/16/84 Memorandum to Charles N. Smith from Edward J. McAlpine, re:

  Recommendation Resulting from Region II, Inspection Report Nos.

  70-1113/83-28 and No. 70-1113/84-D6 at Genera! Electric

  (011 84-06-04). (2 pages) \_ Exemption 4
- 6/18/84 Letter to J. A. Long from J. Philip Stohr, w/enclosures, re: Report No. 70-1113/84-06. (ε pages) \_ Exemption 4

GOVERNMENT ACCOUNTABILITY PROJECT

1555 Connecticut Avenue, N.W., Suite 202 Washington, D.C. 20036

(202) 232-8550

GOVERNMENT ACCOUNTABILITY PROJECT MIDWEST OFFICE 3424 MARCOS LANE APPLETON, WISCONSIN 54911

December 28, 1986

FREEDOM OF INFORMATION ACT REQUEST

Director
Office of Administration
U.S. Nuclear Regulatory Commission
Washington D.C. 20210

EREEDOM OF INFORMATION
ACT REQUEST
FOIA-87-88

Cac Id 2-10-87

TO WHOM IT MAY CONCERN:

Pursuant to the Freedom of Information Act (FOIA), 5 U.S.C. 552, the Government Accountability Project (GAP) requests copies of any and all agency records and information, including but not limited to notes, letters, memoranda, drafts, minutes, diaries, logs, calanders, tapes, transcripts, summaries, interview reports, procedures, instructions, engineering analyses, drawings, files, graphs; charts, maps, photographs, agreements, handwritten notes, studies, data sheets, notebooks, books, telephone messages, computations, voice recordings, computer runoffs, any other data compilations, interim and/or final reports, status reports, and any and all other records relevant to and/or generated in connection with the listed inspections of General Electric Company's, Wilmington, N.C. facility.

70-1113/82-18

70-1113/84-04

70-1113/84-05

70-1113/84-06

70-1113/84-13

This request includes all agency records as defined in 10 C.F.R. 9.3a (b) and the NRC Manual, Appendix 0211, Parts 1.A.2 and A.3 (approved October 8, 1980) whether they currently exist in the NRC "official, working", investigative or other files, or at any other location, including rivate residences.

If any records, as defined in 10 C.F.R. 9.3a(b), and the NRC Manual, supra and covered by this request have been destroyed and/or removed after this request, please provide all surrounding records, including but not limited to a list of all records which have been or are destroyed and/or removed, a description of the action(s) taken relevant to, generated in connection with, and/or issued in order to implement the action(s).

89 9323 pp 13 Gps

GAP requests that fees be waived, because "finding the information can be considered as primarily benefiting the general public," 5 U.S.C. 522 (a) (4) (a). GAP is a non profit, non-partisan public interest organization concerned with honest and open government. Through public outreach, the Project promotes whistleblowers as agents of government accountability. Through it Environmental Whistleblower Clinic, GAP offers assistance to local public interest and citizens groups and intervenors in the concern for safety at nuclear power plants.

We are requesting this information as part of an ongoing monitoring project of the NRC's efforts to protect public health and safety at and near nuclear processing plants and radioactive waste facilities.

For any documents or portions that you deny due to a specific FOIA exemption, please provide an index itemizing and describing the documents or portions of documents withheld. The index should provide a detailed justification of your grounds for claiming each exemption, explaining why each exemtion is relevant to the document or portion of the document withheld. This index is required under Vaughn v.

Rosen (I), 484 F2d 820 (D.C. Cir. 1973), cert. denied, 415 U.S. 977 (1974).

We look forward to your response to this request within ten (10) working days.

Sincerely,

Linda Bauman FOIA Coordinator

Yinda Bauman

Midwest Office

Responses to this request should be mai.ed to :

Government Accountability Project
Midwest Office
3424 Marcos Lane
Appleton, Wisconsin 54911

General Electric Company ATTN: Mr. J. A. Long, General Manager Wilmington Manufacturing Department P. O. Box 780 Wilmington, NC 28402

Gentlemen:

from the st

SUBJECT: REPORT NO. 70-1113/84-06

On April 2-6, 1984, NRC inspected activities authorized by NRC License No. SNM-1097 for your General Electric Company, Wilmington Manufacturing Department. At the conclusion of the inspection, the findings were discussed with those members of your staff identified in the enclosed inspection report.

Areas examined during the inspection are identified in the report. Within these areas, the inspection consisted of selective examinations of procedures and representative records, interviews with personnel, and observation of activities in progress.

The inspection findings indicate that certain activities violated NRC requirements. The violations, references to pertinent requirements, and elements to be included in your response are presented in the enclosed Notice of Violation.

Violation 2 described in the enclosed Notice of Violation is similar to a violation contained in a Notice of Violation sent to you with our letter dated August 16, 1983. Since "similar violations" as described in the NRC Enforcement Policy are of significant concern to the NRC, in your response, please give particular attention to the identification and remedy of the root cause of the violation so that its recurrence may be precluded.

In accordance with 10 CFR 2.790(d) and 10 CFR 7 safeguards activities and security measures are exempt from public disclor .herefore, the enclosures to this letter, with the exception of the rep nonexempt summary, will not be placed in NRC

er page which presents a c Document Room.

The responses directed by this letter and t osures are not subject to the clearance procedures of the Office of Management and Budget issued under the Paperwork Reduction Act of 1980, PL 96-511.

Should you have any questions concerning this letter, please contact us.

Sincerely.

HOT IN POP

Enclosures: (See Page 2)

J. Philip Stohr, Director Division of Radiation Safety and Safeguards

Information in this record was deleted in accordance with the Freedom of Information FO 1A 87-88

MATTER TO THE THE HEREWITH CONTINUE LUYO INFORMATION

8910200028 891016 PDR FDIA PDR BAUMAN87-88

General Electric Company

Enclosures:

1. Notice of Violation

(Exempt from Disclosure)

 Inspection Report No. 70-1113/84-06 (Exempt from Disclosure)

cc w/encls:

C. M. Vaughan, Manager Licensing and Nuclear Materials Management Unit

bcc w/encls:
Document Control Desk
Safeguards and Materials Program
Branch, EWW-359
Fuel Facility Safeguards Licensing
Branch, 881-SS

bcc w/Inspection Summary: State of North Carolina

bcc w/o encl: License Fee Management Branch

RII 812 BRichards:dr 5/8/84 RII Manie 5/ y/84 EMCAlpine

RII KPBarr 3/9/84 JPStohr 5/9/84



Copy Of Copies

This Document is not to be reproduced without specific approval of IE:II

#### ENCLOSURE 1

#### NOTICE OF VIOLATION

General Electric Company Wimlington Manufacturing Department Docket No. 70-1113 License No. SNM-1097

The following violations were identified during an inspection conducted on April 2-6, 1984. The Severity Levels were assigned in accordance with the NRC Enforcement Policy (10 CFR Part 2, Appendix C).

 License Condition 2.1 of Safeguards Amendment No. MPP-3 to Special Nuclear Materials License No. SNM-1097 requires the licensee to follow the current revision of his Fundamental Nuclear Material Control Plan. Section 8.2.3.1 of that plan requires

Contrary to the above, significant shipper-receiver differences (for both the individual cylinders and the shipment totals) on a shipment of uranfum hexafluoride received December 6, 1983, were not

This is a Severity Level V violation (Supplement III).

 License Condition 2.1 of Safeguards Amendment No. MPP-3 to Special Nuclear Materials License No. SNM-1097 requires the licensee to follow the current revision of his Fundamental Nuclear Material Control Plan.

require the licensee to enter limits of error (95% confidence interval) on DOE/NRC-741 forms.

Contrary to the above, the licensee failed to correctly calculate limits of error which were entered on DOE/NRC-741 form ZQM-YLJ 273 for a shipment of uranyl nitrate solution received February 20, 1984. The licensee applied incorrect parameters to the limit of error calculations which resulted in limits of error being reported that were not determined at the 95% confidence level.

A similar violation was disclosed during an inspection conducted July 25-29, 1983, and reported in Inspection Report No. 70-1113/83-21. The licensee's corrective actions for this violation were not adequately implemented to prevent recurrence. This is a repeat violation.

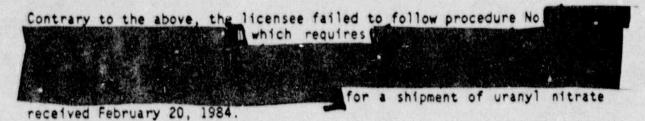
8910200030 891016 PDR F0IA BAUMAN87-88 PDR





General Electric Company Wimlington Manufacturing Department Docket No. 70-1113 License No. SNM-1097

 10 CFR 70.58(g)(1) requires the licensee to follow procedures for assuring accurate identification and measurements of the quantities of special nuclear material received.



This is a Severity Level V Violation (Supplement III).

Pursuant to 10 CFR 2.201, you are required to submit to this office within 30 days of the date of this Notice, a written statement or explanation in reply, including: (1) admission or denial of the alleged violations; (2) the reasons for the violations if admitted; (3) the corrective steps which have been taken and the results achieved; (4) corrective steps which will be taken to avoid further violations; and (5) the date when full compliance will be achieved.

Security or safeguards information should be submitted as an enclosure to facilitate withholding it from public disclosure as required by 10 CFR 2.790(d) or 10 CFR 73.21.

Date: \_\_\_\_\_



# (32)

# CONTAINS 2790 INFORMATION

#### NUCLEAR REGULATORY COMMISSION

REGION II 101 MARIETTA STREET, N.W ATLANTA, GEORGIA 30303

MAY 9 1984

Report No.: 70-1113/84-06

Docket No.: 70-1113 License No.: SNM-1097 Safeguards Group No. III

Licensee: General Electric Company

P. O. Box 780

Wilmington, NC 28402

Inspection Conducted: April 2-6, 1984

Inspection conducted. April 2 of 1101

B. L. Richards, Statistician

Date Signed

5/8/84

Date Signed

Approved by:

E. J. McAlpine, Chief, Material Control and Accountability Section, Nuclear Materials

Safety and Safeguards Branch

Division of Radiation Safety and Safeguards

#### Inspection Summary

Areas Inspected: Followup on Items of Noncompliance and Previous Inspection Findings.

The inspection involved 31 inspector hours on site by one NRC inspector and was begun during the regular hours.

Results: The licensee was found to be in compliance with NRC requirements in the areas examined during the inspection except for the following items:

- Failure to notify appropriate licensee management when significant shipperreceiver differences occured.
- Failure to correctly calculate limits of error associated with a receipt of uranyl nitrate solution.
- Failure to complete sample request form in accordance with written procedure which resulted in improper analysis of a receipt of uranyl nitrate solution.

8910200033 891016 PDR F01A BAUMAN87-88 PDR

#### 4. Exit Interview

The inspection scope and findings were summarized on April 6, 1984, with those persons indicated in paragraph 1 above.





#### REPORT DETAILS

#### Report No. 70-113/84-06

#### Key Persons Contacted

R. L. Bruce, Analyst, Licensing and Nuclear Materials Management

\*J. L. Harmon, Manager, Manufacturing Technology and Engineering Operations

W. B. Haverty, Analyst, Licensing and Nuclear Materials Management
\*W. J. Hendry, Manager, Regulatory Compliance

\*G. R. Mallett, Senior Engineer, Measurements and Statistics

\*R. M. Mclvor, Acting Manager, Planning and Projects \*R. C. Pace, Acting Manager, Fuel Chemical Operations

\*R. I. Parnell, Engineer, Chemet Laboratory

\*H. Stern, Acting Manager, Manufacturing Technology and Engineering Operations

\*C. M. Vaughan, Manager, Licensing and Nuclear Materials Management

\*J. R. Watkins, Acting Manager, Powder Production

\*T. P. Winslow, Manager, Chemet Laboratory

MP. E. Younghans, Manager, Materials Operations

#### \*Denotes those present at the exit interview

2. MC 92701B Followup on Previous Inspection Findings

(Open) 83-17-03 (Inspector Followup Item) Resolution of shipper-receiverdifferences caused by discrepancies in gross heel weights.

During the inspection conducted June 13-17, 1983 (reference NRC inspection report 70-1113/83-17), it was determined that

Upon receiving uranium hexafluoride cylinders from the gaseous diffusion plants, the licensee empties the cylinders except for some residual material in the bottom of the cylinder referred to as a heel. The licensee ships the cylinders containing the heels back to the gaseous diffusion plants with a measured gross heel weight, determined prior to shipment. The gaseous diffusion plants, upon receipt of the heels, gross weighs each of the cylinders containing the heels. The gross heel weight, as determined by the gaseous diffusion plant, was found in a number of cases to be

was found in a number of cases to be In addition to noted in the gross heel weight, it has been determined that for some cylinders the The The Table 1 and 1 an

These types of discrepancies cause significant SRDs which the gaseous diffusion plants do not reconcile.



Thus, when the gaseous diffusion plants refil? the cylinders with uranium hexafluoride to ship back to the licensee, these weight

The licensee performed a study comparing the tare weights associated with apply uranium hexafluoride cylinders determined by the licensee and the gaseous diffusion plants. The licensee presented their findings to the Office of Nuclear Material Safety and Safeguards (NRC Headquarters) in a letter dated January 5, 1984. Included in the letter was an evaluation of the resulting data and comments on the licensee's review of the gaseous diffusion plants' procedures. Among the observations that the licensee presented was the gaseous diffusion plant's apparent use of steel standards (as opposed to the licensee's use of artifact standards), which caused tare weights to be understated. The NRC is currently reviewing the licensee's study and will direct further corrective actions. Therefore, this item remains open.

- 3. MC 92702B Followup on Items of Noncompliance
  - a. (Open) 83-17-01 (Violation) Failure to investigate and reconcile significant shipper-receiver differences.

During an inspection conducted June 13-17, 1983 (reference NRC Inspection Report 70-113/83-17), it was determined that the licensee failed to properly investigate and reconcile significant shipper-receiver differences (SRDs). Among the corrective actions to which the licensee committed was a modification of the applicable procedure to assure compliance with the appropriate requirements, and an internal memorandum to appropriate staff members which addressed the deficiencies referenced in the Notice of Violation. These modifications were reviewed and appeared to be adequate with regard to correcting the deficiencies referenced in the Notice of Violation. During this inspection, an in-depth review of current NRC-741 forms was performed to determine whether the licensee was investigating and reconciling significant SRDs. In most instances.

concern was addressed in paragraph 2 above.

This

While examing the licensee's program for evaluating SRDs with regard to the existing violation, a new

Section

It further states that if the

("Nuclear Material Receipts", revision 10) implements this requirement.

Section 5.2.13.2 of the procedure specifies that The inspector determined, however, that significant SRDs that occured on a shipment of uranium hexafluoride received December 6, 1983 from Goodyear Atomic were not canorted to the Manager, Linkm. This is a violation (84-06-01). occured in this receipt for both the total shipment and for individual cylinders. The reason for the violation appeared to be failure to follow procedure. Although this concern is similar to the concerns associated with the violation issued during the June 13-17, 1983, inspection, the causes are different. Therefore, this violation is not a repeat violation, but rather an additional violation in the area of SRD evaluations. The violation issued during the June 13-17, 1983, inspection will remain open pending licensee's corrective actions to adequately investigate and reconcile SRDs.

 b. (Closed) 83-17-02 (Violation) Failure to reweigh cylinders of uranium hexafluoride receipts in accordance with written procedure when gross weight discrepancies occur.

During the inspection conducted June 13-17, 1983, the licensee's methods for receiving uranium hexafluoride cylinders were examined. It was determined that the licensee had failed to reweigh individual cylinders when gross weight discrepancies occurred between the licensee and the shipper for several receipts, as required by an internal procedure (Procedure 109, "Nuclear Material Receipts). The licensee's corrective actions included a

review of current receipts of uranium hexafluoride showed that the licensee was reweighing cylinders and taking appropriate actions when gross weight discrepancies occurred. This item is closed.

c. (Open) 83-21-01 (Violation) Failure to correctly calculate limits of error associated with receipts of uranyl nitrate solution.

During an inspection conducted July 25-29, 1983 (reference NRC Inspection Report 70-1113/83-21), the licensee's methods for calculating limits of error associated with receipts of uranyl nitrate solution were examined. It was determined that the licensee had incorrectly calculated limits of error for a number of receipts. The licensee had applied

their response to the violation, the licensee stated that procedure 109 "Nuclear Material Receipts" would be modified to include an instructional requirement for

would assure that the parameters being used were consistent with the actual weighing, sampling, and analytical methods applied to each receipt. The licensee committed to be in full compliance by November 1, 1983.





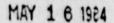
The licensee has received two shipments of uranyl nitrate solution since November 1, 1983. The limit of error reported on NRC-741 form ZOM-YLJ 273 (received February 20, 1984) was examined and found to be incorrectly calculated. The uranium concentration which was applied to the batch was determined from Lanalyses. The licensee incorrectly applied a factor of to the random analytical (uranium) error component used in calculating the limit of error. The licensee made a similar mistake in determining the limit of error for grams U-235. This incorrect parameter caused the limits of error to be understated by the for the limit of error (uranium) and for the limit of error (U-235). The licensee's failure to correctly calculate limits of error associated with uranyl nitrate receipts is a violation (84-06-02). This is a repeat of the violation issued during the July 25-29, 1983, inspection.

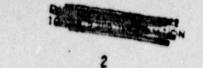
Discussions with licensee staff members and management indicated that concerning the original violation detected during the July 25-29, 1983, inspection. Therefore, procedural modification which attempted to prevent recurrence of this violation.

A contributing factor in the licensee's use of incorrect parameters is noted as follows. Procedure 2.1.1.18 (Prod 10.96) entitled "UNH Transfer", revision 4, requires specifying Isamples per shipment and on each sample for receipts of uranyl nitrate. It was disclosed that for the shipment of uranyl nitrate received February 20, 1984, the sample request form did not specify as required by the procedure. Therefore, each sample was only analyzed the licensee's failure to complete the sample request form in accordance with the written procedure is a violation (84-06-03). The number of analyses used to determine the uranium concentration in this case was samples obtained and each analyzed as discussed previously. If the licensee had followed the sample request procedure, samples obtained and each analyzed would have been applied for this receipt. Because of the licensee's departure from the routine sampling and analytical technique, the limits of error were incorrectly calculated as noted previously. The licensee's modification to procedure 109 was not adequately implemented, as it did not prevent recurrence of the repeat violation. It is apparent that the two violations issued during the current inspection relating to uranyl nitrate receipts were caused by weaknesses in two different areas, and that their occurrences resulted from disparate causes. The violation issued during the July 25-29, 1983, inspection will remain open, pending the licensee's corrective actions.

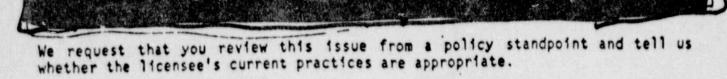


UNITED STATES TION NUCLEAR REGULATORY COMMISSION REGION II 101 MARIETTA STREET, N.W. ATLANTA, GEORGIA 30303 Thir Dogin to a fanct to be MAY 1 8 1984 reproduced rithant specifio approvel of IE:II PROPANDUM FOR C Charles M. Smith, Nuclear Materials Control Licensing Section, Fuel Facility Safeguards Licensing Branch Diston of Gareguards, Office of Muclear Material Safety and Safeguarda 🍾 the state of the s Overd J. McAlpine, Chief, Material Control and Accountability Section, Nuclear Materials Safety and Safeguards Branch Division of Radiation Safety and Safeguards 64 Res to RECOMMENDATION RESULTING FROM REGION IT, INSPECTION REPORT NOS. SUBJECT: 70-1113/83-28 AND NO. 70-1113/84-06 AT GENERAL ELECTRIC (OIL - A-06-04) Based on inspection findings, the following policy issue needs resolution. The licensee's current delegation of 8910200038 891016 PDR FDIA PDR FOIA BAUMAN87-88 The licensee's current practice also appears to be inconsistent with the FNMC The licensee does not follow this practice. The review criteria in this section further states that CONTACT: B. L. Richard 242-5574 Information in this record was deleted in accordance with the Freedom of Information Act, exemptions





es N. Smith



Edward J. McAlpine

cc: L. Cobb, IE:HQ



#### UNITED STATES JCLEAR REGULATORY COMMISSION

REGIONIL 101 MARIETTA STREET, N.W. ATLANTA, GEORGIA 30303

> MAY 9 1984

General Electric Company

ATTN: Mr. J. A. Long, General Manager Wilmington Manufacturing Department

P. O. Box 780

Wilmington, NC 28402

Gentlemen:

REPORT NO. 70-1113/84-05 SUBJECT:

ackson. Pt 53 GE Employee

On March 26-29, 1984, NRC inspected activities authorized by NRC License No. SNM-1097 for your Wilmington Manufacturing Department. At the conclusion of the inspection, the findings were discussed with those members of your staff identified in the enclosed inspection report.

Areas examined during the inspection are identified in the report. Within these areas, the inspection consisted of selective examinations of procedures and representative records, interviews with personnel, and observation of activities in progress.

Within the scope of the inspection, no violations or deviations were identified.

In accordance with 10 CFR 2.790(d) and 10 CFR 73.21, safeguards activities and security measures are exempt from public disclosure; therefore, the enclosures to this letter, with the exception of the report cover page which presents a nonexempt summary, will not be placed in NRC's Public Document Room.

Should you have any questions concerning this letter, please contact us.

Sincerely.

for Rouglas M. Collins J. Philip Stohr, Director

Division of Emergency Preparedness and Materials Safety Programs

Enclosure: Inspection Report No. 70-1113/84-05 (Exempt from Disclosure)

cc w/encl: C. M. Vaughan, Manager Licensing and Nuclear Materials Management Unit

> Information in this record was deleted in accordance with the Freedom of Information Act, exemptions \_ FOIA 87-88

#### UNITED STATES .. JCLEAR REGULATORY COMMISSION

#### REGION II 101 MARIETTA STREET, N.W. ATLANTA, GEORGIA 30303

9 1984

Report No. 70-1113/84-05

Docket No. 70-1113

License No. SNM-1097

Safeguards Group No. III

Licensee: General Electric Company

Wilmington, NC 28401

Date of Inspection: March 26-29, 1984

Type of Inspection: Special Unannounced Material Control and Accountability

Approved by:

E. J. McAlpine, Chief, Material Control and Accountability Section, Safeguards Branch

5/9

Division of Radiation Safety and Safeguards

#### Inspection Summary

Areas Inspected: Measurements and Internal Controls

The inspection involved 54 inspector hours on site by two NRC inspectors and was begun during the regular hours.

Results: The licensee was found to be in compliance with NRC requirements in the two areas examined during the inspection.

8910200051 891016 PDR FDIA PDR BAUMAN87-BB

La Proposition and desired to the last of the last of

Copy 5 of 8 Copies

This is a copies

The contract of the copies

represed of 11:11

#### REPORT DETAILS

Report No. 70-1113/84-05

#### 1. Key Persons Contacted

W. J. Hendry, Manager, Regulatory Compliance

\*C. M. Vaughan, Manager, Licensing and SNM

\*R. H. D. Foleck, Licensing Specialist

R. I. Parnell, Supervisor, Chemical Laboratory

T. P. Winslow, Manager, Chemical Laboratory

R. C. Church, Manager, Manufacturing System Operations

The inspectors also interviewed several other licensee employees.

\*Denotes those present at the exit interview

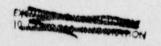
#### 2. Review of Concerns Regarding Measurements and Internal Controls

During the initial meeting with licensee management to discuss the scope of the review relative to the receipt by NRC of allegations pertaining to the GE facility, the inspectors were apprised that GE management was also in receipt of certain alleged improprieties from one of their employees. Since the allegations received by NRC and the allegations received by GE were in similar areas, the inspectors incorporated the stated concerns from both sources into their review.

#### a. MC 85206 Measurements

It was asserted by a General Electric Wilmington Manufacturing Department employee, that on two different occasions calibrations/verifications were not performed on enrichment analyzers following a detector change. Enrichment analyzers are used to determine the percent uranium-235 in a wide variety of low enriched UO2 powder and pellet samples in which the sample is converted to urano uranic oxide, chemically treated, and a portion of the sample transferred to a counting tube for analysis.

The written procedure for this measurement entitled Isotopic U-Count Limit Change Criteria No. COl 411, Revision 3, dated February 9, 1983, specifies that at the beginning of a detector calibration, following a hour burn-off, a calibration will be performed using that span the range of operation followed by a verification of sample standards that also span the range of operation. If the count rate remains in specified limits, the laboratory technician may then begin measuring a maximum of sunknown production samples. Each



series of roduction samples must be followed by either remeasurement of the calibration or verification standards to obtain an aggregate of high standard values that are used for the calculation of uranium count and the minimum uranium count limit.

The concerned employee asserted that the measurement of calibration standards was not being performed according to procedure. It was determined that the understanding of the employee concerning the calibration procedure was interior. It was later determined through verification of counting data records that combinations of calibrations and verifications were measured during the period when isotopic analyses of production samples were performed. These measurements of calibration/verification standards were performed a total of times as specified by the licensee's procedure. That production counting logs did not contain calibration data, indicated to the employee that calibrations had not been performed. This lack of data in the counting logs was evident only in instances where calibrations were being performed and production samples were not being analyzed. This appears to have given the concerned worker the misconception that calibrations/verifications were not being properly performed.

Through inquiry of laboratory managers, it was determined that the subject calibration log book entries are categorized as working documents that are generated during production sample analyses as a readily available summary of counting data to be used in analyzing system stability and trouble shooting during periods when minimum uranium limits are exceeded. The log was not intended to record all calibration and verification standards data as recorded by the printed Laboratory Measurement Control System (LMCS) tape.

It was determined through independent review of the calibration recording tape that during periods when the calibration log pages were blank, the Laboratory Measurement Control Program was recording the calibration data as performed.

b. MC 85210 Internal Control

#### Computer Access Controls

It was asserted by an employee of the General Electric Wilmington Manufacturing Department that data stored in the computer from isotopic analyses performed in the chemical laboratory are accessible and could be altered. Specifically, it was asserted that transaction codes assigned to laboratory supervisors that allow changes to analytical data associated with uranium samples were being used by laboratory technicians and that this practice was condoned by supervisors. Additionally, it was asserted that individual technician's password



that allow transaction entry into the Laboratory Measurement Control System (LMCS) were being used by fellow laboratory technicians to create false data or to release data created by other technicians.

Through inquiry of laboratory management and selected laboratory technicians together with a review of pay number, password, and transaction controls, the inspectors were able to determine the following:

These transaction codes are referred to as LMCS 902/903 transactions entitled "Update of the Sample and Test Records." the instructions for which are dated August 4, 1983, and July 14, 1983, respectively. The transaction codes identified above allow the user to

It was acknowledged by laboratory management that 902/903 transactions were used by laboratory technicians in the
but that the authority to do so had been granted
to them through a verbal delegation. This delegation was normally
granted during weekends, a time when
normally be present in the laboratory. Interviews of several
laboratory personnel substantiated the use of verbal delegations
by regarding the use of 902/903 transactions. When
apprised of the fact that the use of these transactions did not
provide traceability for determining who actually corrected the
data or why the changes were made, the licensee modified his
operational procedures regarding restricted access to these
transaction codes.

In a laboratory policy memorandum dated January 19, 1984, the licensee restated that the identified transaction codes could not be used to change results of standards; re-emphasized to supervisors the need for restricting access to the codes; indicated that supervisors have been instructed to not divulge their passwords for any reason; and specified that at anytime, a supervisor feels his password has become known to change it; and in the event of suspected password use, he/she shall investigate the condition immediately.

This measure and its timely implementation was deemed by the inspectors to be appropriate and acceptable for improved administrative controls over laboratory measurements.



(2) When the use of the computer was initiated in November 1982.

Since the sample measurement process usually spanned beyond a single work shift the individual who actually released the sample results would not normally be the same individual who had actually prepared the sample or performed the measurement. It is possible that a shift technician who transacts data from the to LMCS could innocently allow incorrect data to be transmitted.

Because of this the indiscriminate use by technicians of each other's passwords was necessary to promptly release sample measurement data from the to LMCS.

The licensee modified his procedure for password control on January 25, 1984, and modified the transmitting identifier within the computer on January 17, 1984. These referenced modifications will restrict the issuance and changing of passwords to a single authorized individual. Also transactions between the and the

The inspectors detected no evidence of intentional creation of false data within LMCS. The modifications as implemented by the licensee were deemed by the inspector's to be an appropriate system improvement to the administrative controls and appear to be consistent with the generally accepted intent of the principles of computer surety.

The evaluation of the results of these modifications and related laboratory systems, will be performed during subsequent inspections (84-05-01).

#### 3. Exit Interview

The inspection scope and findings were summarized on March 29, 1984, with those persons indicated in paragraph 1 above.

### JUN 1 8 1984

General Electric Company
ATTN: Mr. J. A. Long, General Manager
Wilmington Manufacturing Department
P. O. Box 780
Wilmington, NC 28402

Gentlemen:

SUBJECT: REPORT NO. 70-1113/84-06

Thank you for your response of June 7, 1984, to our Notice of Violation issued on May 9, 1984, concerning activities conducted at your Wilmington facility. We have evaluated your responses and found that it meets the requirements of 10 CFR 2.201. We will examine the implementation of your corrective actions during future inspections.

We appreciate your cooperation in this matter.

Sincerely.

J. Philip Stohr, Director Division of Radiation Safety and Safeguards

cc: C. M. Vaughan, Manager Licensing and Nuclear Materials Management Unit

bcc: Document Control Desk
Safeguards and Material Program
Branch, EWW-359
Fuel Facility Safeguards Licensing
Branch, 881-SS
License Fee Management Branch
State of North Carolina

With hold Portions Ex 4

| RII | RIII

PDR ADOCK 07001113 C Not =- Information in this record was deleted in accordance with the Freedom of Information Act, exemptions FOIA. 87-88

I.4 I=03

# GENERAL ELECTRIC

CENERAL EFECTRIC COMMINA SE OLDER 1882-ANTHING DEBALLMENT (919) 343-5656 .

June 7, 1984

Mr. J. Philip Stohr, Director Division of Emergency Preparedness & Materials Safety Programs U. S. Nuclear Regulatory Commission, RII Post Office Box 2203 Atlanta, Georgia 30301

Dear Mr. Stohr:

References:

- (1) NRC License SNM-1097, Docket 70-1113
- (2) NRC Inspection Report 70-1113/84-06 dated 5/9/84

Thank you very much for your letter reporting the results of the inspection conducted at our licensed fuel fabrication plant by Mr. B. L. Richards of your office on April 2-6, 1984.

Pertaining to the items of apparent noncompliance with NRC requirements in your letter, the replies to these items are given in the attachment to this letter.

We appreciate your inspector's comments and suggestions related to our safeguards programs. These comments and suggestions are helpful to us in our constant efforts to maintain and, where necessary, improve these programs and to ensure the continuation of a successful safeguards effort at our plant.

We also welcome further discussion with your staff on the items in your letter and in our related replies, if necessary, for further clarification.

Pursuant to 10 CFR 2.790(d), General Electric Company requests that the attachment to this letter be withheld from public disclosure since this attachment identifies details of General Electric's control and accounting procedures for safeguarding licensed special nuclear material.

Very truly yours,

GENERAL ELECTRIC COMPANY

harles M. Daughan

Charles M. Vaughan, Manager

Licensing & Nuclear Materials Management M/C J26

CMV : cd SGD-I Attachment

8910200053 891016 PDR FOIA BAUMAN87-88 PDF

lips wer

PDR

# GENERAL & ELECTRIC

Mr. J. Philip Stohr June 7, 1984

#### ATTACEMENT

The information given below refers to the items in Enclosure 1 - Notice of Violation, in the NRC Inspection Report 70-1113/84-06, dated 5/9/84.

1. License Condition 2.1 of Safeguards
Amendment No. MPP-3 to Special Nuclear
Materials License No. SNM-1097 requires the
licensee to follow the current revision of
his Fundamental Nuclear Material Control
Plan.

Contrary to the above, significant shipperreceiver differences (for both the
individual cylinders and the shipment
totals) on a shipment of uranium
hexafluoride received Dagember (

This is a Severity Level V violation (Supplement III).

General Electric admits the violation as stated above. The specific shipper-receiver differences (SRDs) report cited in this violation represented situations that were similar to other SRDs that had been observed and the appropriate corrective actions were and indicate this corrective actions were

Was set aside and subsequence, everticated.

The has since reviewed this particular incident and determined that the SRDs were correctly handled and has signed-off on the form.

and the form

## GENERAL @ ELECTRIC

Mr. J. Philip Stohr June 7, 1984 Attachment - Page 2

In order to prevent this type of situation from reoccurring, the Manager, Lanmm will instruct the responsible individuals, in writing, that they are to follow the procedures with particular emphasis on obtaining when required.

Pull compliance will be achieved for this item by June 30, 1984.

2. License Conditon 2.1 of Safeguards
Amendment No. MPP-3 to Special Nuclear
Materials License No. SMM-1097 requires the
licensee to follow the current revision of
his Fundamental Nuclear Material Control
Plan.

instructions, NUREG/BR-0006, require the licensee to enter limits of error (950 confidence interval) on DOE/NRC-741 forms.

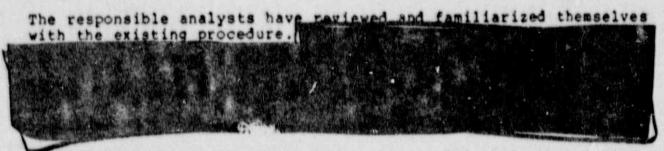
Contrary to the above, the licensee failed to correctly calculate limits of error which were entered on DOE/NRC-741 form 2QM-YLJ 273 for a shipment of uranyl nitrate solution received February 20, 1984. The licensee applied incorrect parameters to the limit of error calculations which resulted in limits of error being reported that were not determined at the 95% confidence level.

A similar violation was disclosed during an inspection conducted July 25-29, 1983, and reported in Inspection Report No. 70-1113/83-21. The licensee's corrective actions for this violation were not adequately implemented to prevent recurrence. This is a repeat violation.

## GENERAL @ ELECTRIC

Mr. J. Philip Stohr June 7, 1984 Attachment - Page 3

General Electric admits the violation as stated above. The reason this violation occurred was that the analysts responsible for inputting the data did not follow the newly revised internal procedure.



General Electric is currently in compliance and no further action is planned.

It should be noted that the final LE which resulted from the calculation in question and in the prior cited example was a conservative value. Notwithstanding the significance of the deviation from the procedure, it is difficult in routine practice to err such that non-conservative LE values are generated by the failure mode observed in this instance.

 10 CFR 70.58(g)(1) requires the licensee to follow procedures for assuring accurate identification and measurements of the quantities of special nuclear material received.

Contrary to the above, the licensee failed to follow procedure Now which requires request forms the completed and submitted specifying the Wanalysis on samples taken from branyl nitrate receipts. The sample request form was incorrectly completed in that analyses were not requested as required, and as a nacult each sample was only analyzed for a shipment of uranyl nitrate received February 20, 1984.

This is a Severity Level V Violation (Supplement III).

## GENERAL & ELECTRIC

Mr. J. Philip Stohr June 7, 1984 Attachment - Page 4

General Electric admits the violation as stated above. The reason this violation occurred was due to an operator misinterpreting the instruction included in the PROD. The operator took samples but did not request analysis.

All operators who are currently involved with obtaining UNH samples and filling out have been instructed by supervision as to the intent of the procedure and the appropriate method to be used.

Additionally, review of this PROD will be scheduled for inclusion in supervision to employee discussions (Roundtable Meetings) and this particular sampling method will be highlighted in WMD's sampling training program.

Full compliance will be acheived by July 2, 1984.

CMV/RHDP

/cd