U. S. NUCLEAR REGULATORY COMMISSION

REGION II

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License No.:	SNM-1097
Report No.:	70-1113/97-02
Licensee:	General Electric Company
Facility:	Nuclear Energy Production
Location:	Wilmington, North Carolina
Dates:	March 3-7, 1997 March 17-21, 1997
Inspector:	G. L. Troup Sr. Fuel Facilities Inspector
Approved by:	E. J. McAlpine, Chief Fuel Facilities Branch Division of Nuclear Materials Safety

Enclosure

EXECUTIVE SUMMARY

General Electric Nuclear Energy Production
NRC Inspection Report 70-1113/97-02

This routine, announced inspection was focused on the status of the new Dry Conversion Facility (DCF), including operations, training, completion of construction, training and functional testing of systems. Review of previously identified items and reported occurrences was also conducted. Back shift inspections were conducted on March 17, 18, 19, and 20. The inspection was focused on the safe operation of the facility.

Within the scope of the inspection, no violations or new inspector follow-up items (IFIs) were identified.

Plant Operations

- The long-term corrective actions for calciners were completed. The corrective actions for No. 6 calciner were also completed.
- The actions to identify and control an improperly identified shipment of radioactive material from a foreign shipper was thorough and timely.
- The actions to identify and quarantine possibly defective valves for UF_6 cylinders was thorough and timely.

Training

- The training program for the operators in the Dry Conversion Facility has been completed and the pre-qualification phase has started.
- Special training on hydrofluoric acid accidents, including emergency personnel and off-site support groups, is a positive action.

Dry Conversion Facility Construction

- Construction of process line 1 and the acid recovery facility is complete. Pre-operational testing has begun.
- The adequacy of criticality warning system and the stationary air samplers has not been demonstrated.

Process Safety Analysis

- The safety analysis was a thorough in-depth evaluation of potential hazards and safeguards against the hazards.

Attachments
Partial List of Persons Contacted
Inspection Procedures Used
List of Items Opened, Closed and Discussed
List of Acronyms

REPORT DETAILS

Summary of Plant Status

This report covers two one week periods.

On March 11, the FMO/FMOX building was evacuated when the Criticality Warning System (CWS) alarmed, although it was a false alarm (Paragraph 1.d).

Construction and testing activities for the Dry Conversion Facility (DCF) were progressing.

The State of North Carolina materials license 065-017-1 was renewed on March 3, 1997. This renewal permits operation of the DCF with natural uranium.

An NRC Material Control and Accountability (MC&A) inspection was conducted on March 3-7, 1997 (report 70-1113/97-201). Additionally, the license reviewer for chemical safety was on site on March 18-19, 1997, as part of the license renewal review for license SNM-1097.

1. Review of Previous Events (88020)

a. Calciner Tube Failure

(1) Inspection Scope

The inspector reviewed the licensee's corrective actions resulting from the failure of the tube in the Line 3 calciner.

(2) Observations and Findings

The Line 3 calciner tube failure reported to NRC on December 3, 1996, and reviewed in NRC Inspection Report (IR) 70-1113/96-12, prompted the licensee to consider a number of long- and short-term corrective actions to preclude a similar event. These corrective actions were documented by letter to Director, Division of Nuclear Materials Safety, Region II, dated December 11, 1996. Attachment III of the letter lists nine corrective actions, the first five of which were to be completed prior to restarting each calciner which processes wet material.

Implementation of the corrective actions was reviewed and documented in NRC IR 70-1113/97-01. At that time, three of the corrective actions had not been completed. During this inspection, the inspector reviewed the completion of these items and the completion of all items for No. 6 calciner.

Corrective action #6 was to be implemented by explicitly modeling material accumulations within the calciner annulus beyond the 25 kilogram (kgs) hemisphere previously analyzed. The analysis (file no. CR #97.NRC) was completed and

reviewed on March 19, 1997. The results of the analysis show that with the tube ½-full of optimally moderated UO_2 powder at 5% enrichment and material accumulated in the annulus up to 5.25 inches the entire length of the calciner, k_{eff} remains less than 0.97. The total mass of powder for this configuration is 1,145 kgs. for the system, of which 736 kgs. are in the annulus. The previous actions to monitor the tube rotation and the off-gas should identify upset conditions before this limit is reached.

Corrective action #7 was to revise the purchase specification for replacement tubes to require a final stress relief after welding. During the review in January, 1997, it was not anticipated that any new tubes would be ordered in the near future.

However, the calciner tube is carried in the licensee's spare parts computer inventory. When the replacement tube was drawn from spare parts for installation in No. 3 calciner, the computer system initiated purchase of a new one since the inventory was now depleted. A purchase order was initiated in December, 1996. The price quotation was received from the vendor on January 17, 1997. At the time, licensee representatives recognized that the specification had not been revised before the request for quotation had been sent out. On January 22, 1997, the vendor was advised by telephone that annealing after welding was required; this was confirmed by a FAX the same day. A revised quotation was received from the vendor on February 5, 1997, which stated that the tube would be annealed after welding.

The inspector questioned whether the corrective action had been completed as stated in the licensee's letter of February 25, 1997, in response to the Notice of Violation in IR 70-1113/96-12. After discussions, it was determined that the purchase was not complete until the quotation was confirmed by a purchase order, and the requirements had been changed in January, so the specification had been changed before the next tube was "ordered." However, licensee representatives acknowledged that the specifications for the tube in Stores File should be revised so that they would be correct if it became necessary to order another tube. On March 5, 1997, drawing 0166D91, "Alloy Defluorinator Tube," was revised (Revision 3) to include "NOTE; General Electric requires annealing after roll tube final welds are completed." The Stores File was revised on March 6, 1997, to include Revision 3 of the drawing and the requirement that "tube must be annealed after completion of welding" was added to the specification.

Corrective action #8 was to revise the change control system to require review of any impacts of material changes in process equipment. On February 11, 1997, a mandatory modification was issued to Practices and Procedures (P/P) 10-10, "Configuration Management Program - Fuel Manufacturing," which requires that the Area Engineer is responsible to "evaluate the impact of materials property changes on identified failure modes and safety basis." This completed Corrective Action #8.

No. 6 calciner was not modified when the others were because it was out of service and only processed dry material (recycled powder). No. 6 calciner was brought up to standard by modifying the control system to automatically close the rotary airlock valve from the feed hopper if the tube rotation switch timed out. The control system was also modified to shut the rotary airlock valve if the necessary air sample data is not entered at the required frequency. Software Service Request (SSR) 13937 was implemented for these control changes and approved by the software engineer on February 13, 1997, and accepted by the system "owner" on February 14, 1997. Functional Test Instructions (FTIs) 3C8DF8 and 3C8DF4 were performed on February 13, 1997, to verify that the system functioned. No. 6 calciner was approved to operate by the Area Engineer, Area Manager and Manager, Nuclear Safety on February 13, 1997. The inspector reviewed the FTI results, the check lists for the modification, the SSR, the revised technical report and operating procedure and had no further questions.

(3) Conclusions

The modification to No. 6 calciner was completed in accordance with the licensee's commitments and internal procedures.

b. Improper Material Shipment

(1) Inspection Scope

The inspector reviewed the circumstances involving the receipt of improperly labeled material from a foreign shipper.

(2) Observations and Findings

On March 7, 1997, while unloading a seavan shipping container which contained 150 Model BU-J shipping containers, licensee employees observed that two of the BU-Js had tampersafe seals attached to the bolting ring. These containers were supposedly empty and did not require tampersafe seals. The employees notified the cognizant

personnel. The BU-J containers were moved to a work area and opened. Both BU-Js were found to have two 5-gallon cans inside which were labeled with the content weight. Surveys indicated that the contents were radioactive. A visual examination of the remaining BU-Js did not identify any more which had tampersafe seals but subsequent radiation surveys identified an additional BU-J which contained radioactive material. This container was moved to the work area and confirmed to have two 5-gallon cans inside containing material.

The licensee notified the shipper, Empresa Nacional del Uranio, SA (ENUSA), a Spanish company, when the two BU-Js were found with the tampersafe seals. ENUSA reviewed their records and confirmed that the two containers contained uranium material. The ENUSA records search also identified the third container. From the ENUSA records, a total of 102.41 kgs. of uranium oxide with a maximum enrichment of 4.4% had been shipped. Following notification of the improper shipment by the licensee, ENUSA notified the Consejo de Seguridad Nuclear, the Ministerio de Industria y Energia and EURATOM of the improper shipment. The licensee notified the NRC, the Department of Transportation and the State of North Carolina.

The licensee installed tampersafe seals on the three BU-Js and placed them in temporary storage. An Unusual Incident Report (UIR) DCP-9701 was generated and corrective actions identified.

At the conclusion of the inspection, the investigation report from ENUSA had not been received.

(3) Conclusions

The actions of the licensee employees to identify an unusual condition was exemplary.

The licensees actions to quarantine the shipment and to conduct surveys to identify any additional containers was thorough and timely.

c. <u>UF_6 Cylinder Valves</u>

(1) Inspection Scope

The inspector reviewed the licensee's action after being notified of a materials problem with valves which might be installed on UF_6 cylinders at the facility.

(2) Observations and Findings

On March 14, 1997, the U. S. Enrichment Corporation (USEC) gaseous diffusion plant at Paducah, Kentucky notified the NRC Operations Office of a stress corrosion cracking problem with the packing nut on Hunt Valve Co. valves (NRC event number EN 31954). In particular, Hunt Valve Co. valves with the packing nut made of Alloy 636 had experienced cracking of the nut, had failed and, in one case, resulted in the release of UF_6.

On March 21, 1997, NRC Region II notified facilities in the region of the problem and requested that the licensees determine if they had any of the valves in question.

The licensee's initial action was to check all valves in the spare parts inventory (55) and the cylinders on the loading dock (about 30). All Hunt Valve Co. valves had nuts of Alloy 613 although some valves manufactured by Superior or Descote had Alloy 636 nuts.

The licensee contacted both USEC Paducah and Hunt Valve Co. and determined that the problem appeared to be limited to Hunt valves. Also, Hunt Valve Co. stated that they had switched to Alloy 613 nuts in about 1991.

During the week of March 17, the licensee inspected the valves on all UF_6 cylinders on site (approximately 275) and found nine Hunt valves with nuts of Alloy 636. Eight were empty and will be returned to the owner for replacement of the valves. One full cylinder was subsequently placed in the cold trap and the valve replaced before it was sent to a vaporizer for processing.

USEC Paducah stated that they would not fill any cylinders with Hunt valves with Alloy 636 nuts. However, Hunt Valve Co. estimates that there could be up to 5,000 valves in circulation with Alloy 636 nuts. The licensee issued a Temporary Operating Instruction (TOI) to inspect all incoming cylinders for the Hunt valves with Alloy 636 nuts because UF_6 cylinders come from sources other than USEC Paducah. The TOI will be evaluated after several months to determine if continued action is necessary.

(3) Conclusions

The licensee took thorough and effective actions to identify the scope of the problem and to take corrective actions to preclude the processing of cylinders with suspect valves.

d. Criticality Warning System

(1) Inspection Scope

The inspector reviewed the cause and corrective actions taken after a false signal from the criticality warning system (CWS) in the Dry Conversion Facility (DCF) caused the evacuation of the fuel manufacturing facility on March 11.

(2) Observations and Findings

On March 11, 1997, a technician was trouble-shooting a problem with the Data Acquisition Module (DAM) on the CWS in DCF. He placed the control switch in "maintenance" to turn off the power, then pulled the suspect Input/Output (I/O) board. Placing the switch in "maintenance" should have deactivated the DAM and given a signal in the Radiation Protection office and in the Emergency Control Center (ECC).

However, when the I/O board was pulled, the CWS for the Fuel Manufacturing Operation activated and sounded the plant evacuation alarm. All fuel operations were properly evacuated and the ECC was manned until the problem could be evaluated. Radiation surveys and review of the CWS detector read-outs revealed that the alarm was false and no criticality had occurred.

The licensee's investigation and discussions with the vendor determined that the DAMs which had been provided included a redundant fail safe relay in the circuit. The licensee had requested that the vendor install the switch with "maintenance" mode. However, the switch did not override the relay. The sub-contractor who ordered the DAMs apparently was not aware of the effect of the relay. With the switch in "maintenance", detectors could be replaced but any maintenance on the DAM required that the system be shut down because of the relay. However, the licensee expected that the DAMs would activate on a true signal or upon a failure.

After discussions with the vendor, vendor representatives were on site on March 18, 1997, and removed the relay circuit from the DAMs. Now, the licensee can work on the boards using the "maintenance" mode on the switch.

(3) Conclusions

No defect was present in the equipment received.

The licensee's investigation as to the cause of the alarm was thorough and adequately resolved the problem.

2. Training (88010)

a. Operator Training

(1) Inspection Scope

The inspector reviewed the training and qualification program to qualify supervisors, operators and technical support personnel for the Dry Conversion Facility (DCF).

(2) Observations and Findings

The DCF represents a new process technology. Selected members of the staff were sent to the supplier's facility in France for initial training.

Operators and maintenance personnel assigned to the operating shifts attended a training program consisting of approximately 450 hours of classroom instruction. This formal training was completed on March 14, 1997. This training consisted of four general groups: lay-out, controls, general and supplemental. Lay-out training was concerned with the facility and system arrangement. Controls training concerned the various controls associated with the operations and how the process operates. General training was training on a variety of topics including the metric system, instrumentation, the Integrated Safety Analysis, Piping and Instrumentation Diagrams (P&IDs) as well as a variety of subjects such as material control and accountability, radiation safety, nuclear criticality safety, and industrial safety. Supplemental training was additional training on specific topics, including additional training on chemical safety.

Each of the sessions was followed with a learning evaluation. The evaluation was similar to a written examination which was used to assess the learner's understanding of the subject material. The evaluations were used to determine subject areas which required additional individual instruction.

Once the classroom training was completed and shift coverage began, the operators started work on the completion of qualification cards for eleven different stages. Because no uranium or utility service were in use during part of this stage, qualification was only "simulated" at this stage. When the classroom and simulated qualifications (in addition to additional supplemental training) were completed, the pre-qualification summary is signed by the Operations

Resource (OR) and the Area Manager. (The OR acts as a coordinator for the shift team and performs many of the functions associated with the Area Coordinators (ACs) in other plant areas.)

Specialized training was also provided for instrument technicians (8 weeks) and maintenance personnel (2 weeks).

(3) Conclusions

The training program was a major effort which addressed the various safety and operations topics.

Completion of the training and pre-qualification program appears to provide the basic knowledge for the safe operation of facility.

b. Specialized Training

(1) Inspection Scope

The inspector reviewed the special training conducted in association with the start-up and operation of the DCF.

(2) Observations and Findings

The DCF uses hydrogen gas and nitrogen gas and produces hydrogen fluoride, which is converted to concentrated hydrofluoric acid (HF). Specialized training was conducted for the safety of these materials.

The licensee contracted with outside experts to conduct specialized chemical safety training. On March 3, specialized training was conducted on safety for hydrogen gas and nitrogen gas. This training was also given to members of the Emergency Response Team (ERT) and the Emergency Medical Team (EMT). On March 4, training, including practical exercises, was provided to the operators, EMT, ERT and other selected site personnel on HF. In addition, members of the regional North Carolina Hazardous Materials (HazMat) team attended the training.

Specialized training on treating injuries associated with HF will be conducted for the local hospital personnel. This training is scheduled for early April.

(3) Conclusions

Specialized training in new chemicals associated with the DCF is a strong action by the licensee.

The inclusion of emergency response (EMT, ERT) personnel and off-site personnel (state and hospital personnel) is a positive action by the licensee.

3. Dry Conversion Facility Construction (88020)

a. Roof Construction

(1) Inspection Scope

The inspector reviewed the status of the completion of the roof membrane and the installation of the leak detection system.

(2) Observations and Findings

The facility is designed as a "moderation exclusion" area where no moderating materials will be permitted, except under specifically designated conditions, in those areas where UO_2 powder is produced or handled. A principal feature of the "moderator exclusion" principle is the construction of a roof which precludes any leaks of rain into the facility. Details of the roof construction are described in JCC drawings in the A21-ARXX series of drawings and the roofing material supplier project description. The DCF roof is designed to provide multiple barriers to any leakage or seepage of external moisture into the DCF. Details of the roof design and construction are discussed in IR 70-1113/96-02, Paragraph 4.

The inspector observed the installation of the roof edge seal and trim. The installation of the seal and trim appeared to be in accordance with the project drawings and detailed sketches provided by the contractor.

As part of the roof construction, a leak detection system is installed to indicate leakage through the first membrane and the upper slab. The inspector observed that the drain pipes have been installed in three locations on the drain trough. However, the drain collection columns have not yet been installed.

(3) Conclusions

The roof upper membrane and edge trim were installed in accordance with the project drawings.

b. Process System Installation

(1) Inspection Scope

The inspector reviewed the installation of the process systems in the DCF to determine that the systems were in accordance with the process drawings.

(2) Observations and Findings

The inspector selected components and instruments which had been identified by the licensee as having a safety function. This identification was based on the Active Engineered Controls (AEC) draft list or the hazards analysis evaluation.

The inspector then took the P&IDs for the various systems (vaporization, conversion, acid recovery, etc.) and walked down the systems for process line 1 to verify that the equipment was installed and was shown on the P&ID. The inspector also traced out flow pathways to confirm that the process lines were as shown.

All of the valves, instruments and major components were installed as shown. The inspector also verified that switches or contacts which are used to align moveable equipment and permit valves to open when the equipment is in proper alignment (limit switches) were installed as shown.

In the Hydrofluoric Acid Facility, the inspector walked down the common system for process lines 1 and 2. The inspector observed that a system modification had been made which incorporated an additional in-line uranium monitor to the common process header. This provides two independent measurements of uranium concentration before the recovered acid is released to non-favorable geometry tanks as the acid recovery line from each process line also has an in-line monitor.

In reviewing the systems for the powder cooling hoppers, the inspector observed that each hopper has a pressure relief valve to prevent overpressurization of the hopper. However, there is a manually operated valve located downstream of the relief valve where the discharge line connects into a vent header. The inspector questioned this installation because with the manual valve in the "closed" position, the relief valve would not function properly. Licensee representatives stated that all of the lines connecting to the vent header had isolation valves so the vents could be closed when a powder collection container had to be removed. However, they agreed that the relief valve discharge should not be blocked and stated that the subject valves would be locked

open until they could be removed.

(3) Conclusions

The identified AECs and related instrumentation were installed as shown on the P&IDs.

The installation of a second in-line monitor for recovered acid provides additional assurance that nuclear safety limits for the tanks are maintained.

c. Criticality Warning System

(1) Inspection Scope

The inspector reviewed the adequacy of the installation of criticality detectors and the status of system completion.

(2) Observations and Findings

During walkdown of the process systems, the inspector also observed the location of the criticality warning system detectors to assess if they provided adequate coverage. The inspector reviewed the figures in Nuclear Safety Instruction 0.4.0 and compared the actual installation locations. Two detectors were found to have been installed in different locations than shown in the figures although they were within approximately ten feet of the location shown. Licensee representatives stated that the figures would be revised to show the actual location during the current revision.

The process systems and major components are located in individual rooms. However, all but three of the detectors are located in open areas outside the equipment rooms. The structural walls will provide attenuation of radiation. The inspector asked for the documentation that demonstrates that the detectors are capable of meeting the requirements of 10 CFR 70.24 for criticality warning systems. Licensee representatives stated that the analysis to demonstrate the adequacy of the location of the detectors had not been completed but would be performed.

(3) Conclusions

The adequacy of the criticality warning system has not been demonstrated.

d. Air Sampling System

(1) Inspection Scope

The inspector reviewed the basis for the installation of the air sampling system.

(2) Observations and Findings

Stationary air samplers (SAS) are installed in various locations to monitor airborne concentrations and to assess exposures of workers. The samplers have been installed throughout the DCF.

The inspector discussed how the locations were determined and how it was determined that values derived from the samplers would be representative of the actual exposures of the workers. Licensee representatives stated that the current locations for the SASs was based on observations of the equipment and the areas where workers would be relative to potential sources of airborne material. These were not necessarily the final locations as tests will be made of air flow patterns once the final balancing of the ventilation is complete. Checks will also be made as equipment, such as the vaporizers, are heated up. SASs will be relocated based on smoke tests. Until the representativeness of the SAS values is determine, workers will also wear portable air samplers to assess their actual exposures.

(3) Conclusions

The stationary air sampling system has not yet been demonstrated to provide representative sampling data.

4. Functional Testing (88025)

a. Test Administration and Control

(1) Inspection Scope

The inspector reviewed the administrative controls for preparing and conducting functional tests of AECs.

(2) Observations and Findings

The primary document is Practices and Procedure (P/P) 10-12, "Functional Test Instructions", which defines the requirements for the procedure and the test program. Section Administrative Routine (SAR) 350-28, "Functional Test Administration" had been issued by the manager of the Chemical Product Line to implement the functional test program. On March 5, 1997, revision 5 to the SAR was issued

which makes it applicable to the Dry Conversion Product Line as well. Functional testing for the DCF will be performed in accordance with the SAR.

(3) Conclusions

Adequate administrative controls are in place to implement the functional test program.

b. Functional Test Instructions

(1) Inspection Scope

The inspector reviewed the status of the functional test instructions (FTIs) to perform tests of AECs and other safety interlocks.

(2) Observations and Findings

During the inspection period, no FTIs for vaporization, conversion or HF recovery had been approved or conducted. The AEC List was being revised and up-dated. The FTIs will change based on the AEC list. Also, the program code for the process control system was being revised to implement controls over accessing and modifying the set points or actions controlled by the process control system.

Tests had been conducted on portions of the system controlled by programmable controllers. However, some controllers were being changed and the code was also being revised based on the initial test results. These tests will have to be conducted again.

Properational tests of the system using the vendor's procedure no. U01.1320, "Manual for No-Load Tests" were scheduled to begin for the vaporization portion of the system but this is dependent on completion of the revision of the program code for the process control system.

(3) Conclusions

Functional testing of the safety interlocks and controls is lagging due to changes in the process control system code and changes in the scope of the AEC list.

5. Process Safety Analysis (88020)

a. Analysis Program

(1) Inspection Scope

The inspector reviewed the administrative program for conducting the safety analysis, documenting the findings and resolving the findings.

(2) Observations and Findings

In the renewal application for license SNM-1097, dated April 5, 1996, the licensee committed to conducting an Integrated Safety Analysis (ISA) for the Dry Conversion Process as well as other plant areas once a baseline is established. A P/P has been written to implement the ISA once the license is renewed.

The licensee conducted a Process Safety Analysis for the DCF systems and areas primarily using the Hazard and Operability Analysis (HazOp) methods. This was in accordance with P/P 80-62, "Hazard and Operability Analysis." Other techniques were used in conjunction with the HazOp.

The analyses were performed by teams with a wide range of expertise in safety and operations. For example, the analysis which was performed during March 11-13 for the transition work in FMO and the installation of the Dry Recycle Facility consisted of eleven people. The evaluations of potential hazards and the identification of controls was very detailed and thorough. Evaluated hazards were then ranked according to the likelihood of occurrence and the severity of the consequence.

A summary of the DCP ISA was submitted to the NRC on February 19, 1997, in support of the license renewal.

(3) Conclusions

The safety analysis was conducted by qualified personnel using generally accepted evaluation methods.

The safety analysis was a very thorough in-depth evaluation of the facility systems and potential operator actions.

b. Safety Analysis Implementation

(1) Inspection Scope

The inspector reviewed how the safety analysis findings were translated into safety controls.

(2) Observations and Findings

In the Safety Analysis worksheets, various items were identified as "safeguards" or actions which would occur when instrumentation sensed an upset condition to preclude the identified consequence.

The inspector selected approximately fifteen of these safeguards from the safety analyses for vaporization, conversion and HF recovery and compared them to the draft AEC list. All of the identified safeguards were listed on the draft AEC list and identifed with FTIs to verify that the safeguard responded properly.

Verification that the safeguards function properly will be reviewed as part of pre-operational testing. Those actions which require operator actions will be reviewed in conjunction with the operating procedure review.

(3) Conclusions

The safeguards appeared to be addressed in the test program. However, the AEC list and FTIs are still in draft.

6. Exit Interview Summary (88020)

On March 21, 1997, the inspection scope and findings were summarized with licensee representatives. The inspector discussed in detail the areas inspected, the findings and concerns which had been identified. There were no dissenting comments expressed by licensee representatives.

ATTACHMENT

PARTIAL LIST OF PERSONS CONTACTED

Licensee Personnel

*M. Chilton, Manager, Joint Conversion Project
*T. Flaherty, Manager, DCP Operation
*R. Foleck, Sr. Licensing Specialist
C. Kipp, General Manager, GE-NEP
*J. Kline, Manager, Powder Product Line
A. Mabry, Program Manager, Radiological Safety
*R. Martyn, Manager, Material Control and Accountability
C. Monetta, Manager, GE-NE Environment, Health & Safety
*S. Murray, Team Leader, UO_2 Production Team
*L. Paulson, Manager, Nuclear Safety
*L. Quintana, Manager, Fabrication Product Line
*R. Reda, Manager, Fuels and Facility Licensing
*G. Smith, Team Leader, FMO Maintenance Support
*D. Snell, Manager, Service Components Product Line (Acting GM - GE-NEP on March 21, 1997)
C. Tarrer, Team Leader, Configuration Management & ISA
C. Vaughan, Project Manager, EH&S- New Facility Licensing/Safety

*Attended exit meeting on March 21, 1997.

INSPECTION PROCEDURES USED

IP 88010	Operator Training/ Retraining
IP 88020	Operations Review
IP 88025	Maintenance/ Surveillance Testing

LIST OF ITEMS OPENED, CLOSED, AND DISCUSSED

Opened

None

Closed

None

Discussed

None

LIST OF ACRONYMS

AC	Area Coordinator
AEC	Active Engineered Control
CFR	Code of Federal Regulations
ChPL	Chemical Product Line
CR	Change Request
CSA	Criticality Safety Analysis
CWS	Criticality Warning System
DCF	Dry Conversion Facility
DCP	Dry Conversion Project
ECC	Emergency Control Center
EH&S	Environment, Health & Safety
EMT	Emergency Medical Team
EN	Event Number
ENUSA	Empresa Nacional del Uranio, SA
ERT	Emergency Response Team
FMO	Fuel Manufacturing Operation
FTI	Functional Test Instruction
GE-NE	General Electric- Nuclear Energy
GE-NEP	General Electric- Nuclear Energy Production
HazMat	Hazardous Materials
HF	Hydrogen Fluoride <u>or</u> Hydrofluoric Acid
IFI	Inspector Follow-up Item
IP	Inspection Procedure
IR	Inspection Report
ISA	Integrated Safety Analysis
JCC	Joint Conversion Company
KGS	Kilograms
MC&A	Material Control & Accountability
NCS	Nuclear Criticality Safety
NCV	Non-Cited Violation
NRC	Nuclear Regulatory Commission
NSI	Nuclear Safety Instruction
NSR/R	Nuclear Safety Requirements/Release
ONMSS	Office of Nuclear Materials Safety and Safeguards
OP	Operating Procedure
OR	Operations Resource
PA	Public Address
P/P	Practices & Procedures
P&ID	Piping and Instrumentation Diagram
RP	Radiation Protection
SAR	Section Administrative Routine
SAS	Stationary Air Sampler
SNM	Special Nuclear Material
SSR	Software Service Request
TOI	Temporary Operating Instruction
UF_6	Uranium Hexafluoride
UIR	Unusual Incident Report
UO_2	Uranium Dioxide
USEC	U. S. Enrichment Corporation